

Annual Report & Annual Accounts

Financial Year 2022-23



(Authenticated)

Minister of State in the Ministry of Education
Government of India
New Delhi

Dated:

National Institute of Technology
Andhra Pradesh - 534101



Smt. Draupadi Murmu Garu
Hon'ble President of India
Government of India



Shri. Narendra Modi Garu
Hon'ble Prime Minister
Government of India



Shri. Dharmendra Pradhan Garu
Hon'ble Education Minister
Government of India

Vision

To nurture and produce highly competent engineers, scientists and entrepreneurs committed towards catering to futuristic societal challenges through holistic education synergetic with innovations and vibrant research eco-system.

Mission

- To implement best practices in teaching-learning methodologies for establishing dynamic knowledge-connected society.
- To create a conducive environment for carrying out research in multi-disciplinary areas and thereby nurturing novel thinking capabilities.
- To strengthen industry-institute interface to inculcate entrepreneurship abilities.
- To address all technological needs of the Nation for self-sustenance.

Director's Note

I am glad to present the annual report for the year 2022-23. This academic year NIT Andhra Pradesh has admitted a total of 716 undergraduate students into eight disciplines. A total of 15 students have been admitted to the M. Tech program. The Institute has conducted admissions into the research programs twice in the year. A total of 21 students have been admitted into the PhD program which includes 18 students in the full-time category and 2 students in the project category.

I am delighted to share with you that our institute is recognized as one of the top hundred local chapters of NPTEL and is recognized as an active local chapter. A total of 1,156 students have enrolled for NPTEL courses in the academic year.

Our Institute is committed in implementing the NEP 2020, and all the departments and schools have redesigned the curriculum. To promote research-based local community service projects, in line with the NEP 2020, Godavari regional cluster is formed in collaboration with state universities of East and West Godavari districts of Andhra Pradesh.

The NIT Andhra Pradesh has achieved tremendous strides in terms of research. In this academic year, faculty members have presented 63 conference papers and published over 140 research articles in international journals. Besides, the members of faculty have contributed 27 chapters for edited volumes. Six sponsored research projects, worth 222.5 lakh rupees have been received from national funding agencies such as DST, SERB, MEITY, and LinkedIn. One of these projects is in collaboration with IIT Bhubaneswar, and IIIT Bhubaneswar. Consultancy projects worth 45.4 lakh rupees have been undertaken by our faculty. Through Institute innovation council (IIC), NIT Andhra Pradesh has conducted several events to create awareness about start-ups. The Institute has signed six MoUs in the academic year.

NIT Andhra Pradesh is dedicated to carrying out government initiatives such as Atma Nirbhar Bharath, Make in India, and Swachtha Pakhwada. The institute has celebrated the Azadi Ka Amrut Mahotsav in great fervour. Days of national importance such as

National Unity Day, B.R. Ambedkar Jayanthi, Constitution Day, Mathrubhasha Day, Women's Day, Youth Day, and International Yoga Day are all celebrated with zeal and reverence. The institute's techno-cultural festival, Vulcanzy 2023, was organized with great enthusiasm.

Amidst regressive job market conditions, with a top offer being 44 lakhs per annum, 76% of the students opted for placements have found employment. A total of 177 firms have visited the campus. The average package is 8.13 lakhs per year. Several other students have received admissions from Indian and foreign universities for higher studies.

Jai Hind!!

Prof. Pramod M. Padole,

Director (I/C), NIT Andhra Pradesh.

Introduction

National Institute of Technology, Andhra Pradesh is the 31st institution among the chain of NITs started by the Government of India. NIT Andhra Pradesh is established in the state of Andhra Pradesh in the academic year 2015 – 2016.

The permanent campus has been established with 172.6 acres of land adjacent to Chennai-Kolkata Highway (NH-16) in the air-strip lands of Tadepalligudem. CPWD had taken up the construction activity for all the buildings using Prefabrication construction technology. The construction work of Academic buildings, laboratory complexes, hostels, faculty, and staff quarters has been completed in Phase 1A and Phase 1B. The institute has been equipped with roof-top solar panels to serve needs of the institute.

The National Institute of Technology Andhra Pradesh has started with undergraduate program in eight streams namely Biotechnology Engineering, Chemical Engineering, Civil Engineering, Computer Science and Engineering, Electrical Engineering, Electronics and Communication Engineering, Mechanical Engineering, and Metallurgical and Materials Engineering. In the academic year 2022-23, a total of 716 students have taken admission into these undergraduate programs. Apart from the undergraduate programmes, the Institute is offering postgraduate programs, MS and PhD since the academic year 2019-20. The Institute has started another postgraduate programme, M. Tech in nine streams. The Institute is sanctioned with a total intake of 85 for M.Tech program.

The Institute is committed to the new education policy (NEP 2020) proposed by the Ministry of education. Each department has revised their curricula with multiple exit options as proposed in the NEP 2020. Also, several minor programs have been introduced to equip the students with interdisciplinary skills. The revised curriculum and NEP are implemented from the academic year 2020-21.

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1 BOARD OF GOVERNORS

S.No	Nomination under NITSER Act 2007	Name and Designation	Role
1	Section 11 (a)	Ms. Mridula Ramesh , Executive Director, Sundaram Textiles, Madurai	Chairperson
2	Section 11 (b)	Director, NIT Andhra Pradesh	Ex-Officio Member
3	Section 11 (c)	Joint Secretary (NITs), Dept. of Higher Education, Ministry of Education, Government of India OR his/ her Nominee	Member
4	Section 11 (c)	Joint Secretary & Financial Advisor, Ministry of Education, Government of India OR his/ her Nominee	Member
5	Section 11 (d)	Prof. K. Hemachandra Reddy , Chairman, Andhra Pradesh State Council of Higher Education (APSCHE), Government of Andhra Pradesh	Member
6	Section 11 (d)	Shri Vudumula Lakshmi Narayana Reddy , Chairman, S.V Group of Industries, Hyderabad	Member
7	Section 11 (f)	Dr. N. Jayaram , Assistant Professor Gr-I, Dept. of Electrical Engg., NIT Andhra Pradesh	Member
8	Section 11 (g)	Director, IIT Tirupati OR his/ her Nominee	Ex-Officio Member
9	Section 18 (2)	Registrar, NIT Andhra Pradesh	Member Secretary

2 Committees

2.1 Finance Committee

S.No	Nomination under Statutes for NIT, Andhra Pradesh 2017	Name and Designation	Role
1	Clause 10 (1)(i)	Ms. Mridula Ramesh , Executive Director, Sundaram Textiles, Madurai	Chairperson
2	Clause 10 (1)(ii)	Director, NIT Andhra Pradesh	Ex-Officio Member
3	Clause 10 (1)(iii)	Joint Secretary (NITs), Dept. of Higher Education, Ministry of Education, Government of India OR his/ her Nominee	Ex-Officio Member
4	Clause 10 (1)(iii)	Joint Secretary & Financial Advisor, Ministry of Education, Government of India OR his/ her Nominee	Ex-Officio Member
5	Clause 10 (1)(iv)	Prof. K. N. Satyanarayana, Director, IIT Tirupati & Member, BOG, NIT Andhra Pradesh	Member
6	Clause 10 (1)(iv)	One more person to be nominated by the Board from amongst its members	Vacant
7	Clause 10 (1)(v)	Registrar, NIT Andhra Pradesh	Ex-Officio member Secretary
8	-	Dean, Planning & Development, NIT Andhra Pradesh	Special Invitee

2.2 Buildings and Works Committee

S. No.	Nomination under Statutes for NIT, Andhra Pradesh 2017	Name and Designation	Role
1	Clause 12 (1)(i)	Director, NIT Andhra Pradesh	Ex-Officio Chairperson
2	Clause 12 (1)(ii)	Director or Deputy Secretary or his nominee dealing with the National Institute of Technology in the Ministry	Ex-Officio Member
3	Clause 12 (1)(ii)	Director or Deputy Secretary or his nominee dealing with Finance of National Institute of Technology in the Ministry	Ex-Officio Member
4	Clause 12 (1)(iii)	Dr. T. Ramesh, Assistant Professor, Dept. of Electrical Engg., NIT Andhra Pradesh	Member
5	Clause 12 (1)(iv)	Registrar, NIT Andhra Pradesh	Ex-Officio Member Secretary
6	Clause 12 (1)(v)	Dean, Planning & Development, NIT Andhra Pradesh	Ex-Officio Member
7	Clause 12 (1)(vi)	Shri Abhay Kumar, Executive Engineer (Civil), CPWD, Rajamahendravaram	Member
8	Clause 12 (1)(vi)	Shri. B. Satyanarayana, Executive Engineer (Electrical), CPWD, Vijayawada	Member
9	-	Associate Dean, P&D, NIT Andhra Pradesh dealing with Estate Civil Affairs	Special Invitee
10	-	Associate Dean, P&D, NIT Andhra Pradesh dealing with Estate Electrical Affairs	Special Invitee
11	-	Executive Engineer, NIT Andhra Pradesh	Special Invitee

2.3 Senate

S. No	Name and Designation of nominated persons	Will serve as
1	Prof. Pramod M Padole, Director (I/c), NIT Andhra Pradesh	Ex-Officio Chairman
2	All Professors of NIT Andhra Pradesh	Members
3	Prof. V. R. Pedireddi, School of Basic sciences, IIT Bhubaneswar	External Member
4	Prof. D. M. Vinod Kumar, Prof. of EEE, NIT Warangal	External Member
5	Dr. K. Padma, School of Management, NIT Warangal	External Member
6	All Deans/ Associate Deans of NIT Andhra Pradesh (who are not Professors)	Invitees
7	All Heads of the Departments/Schools, NIT Andhra Pradesh (who are not Professors)	Invitees

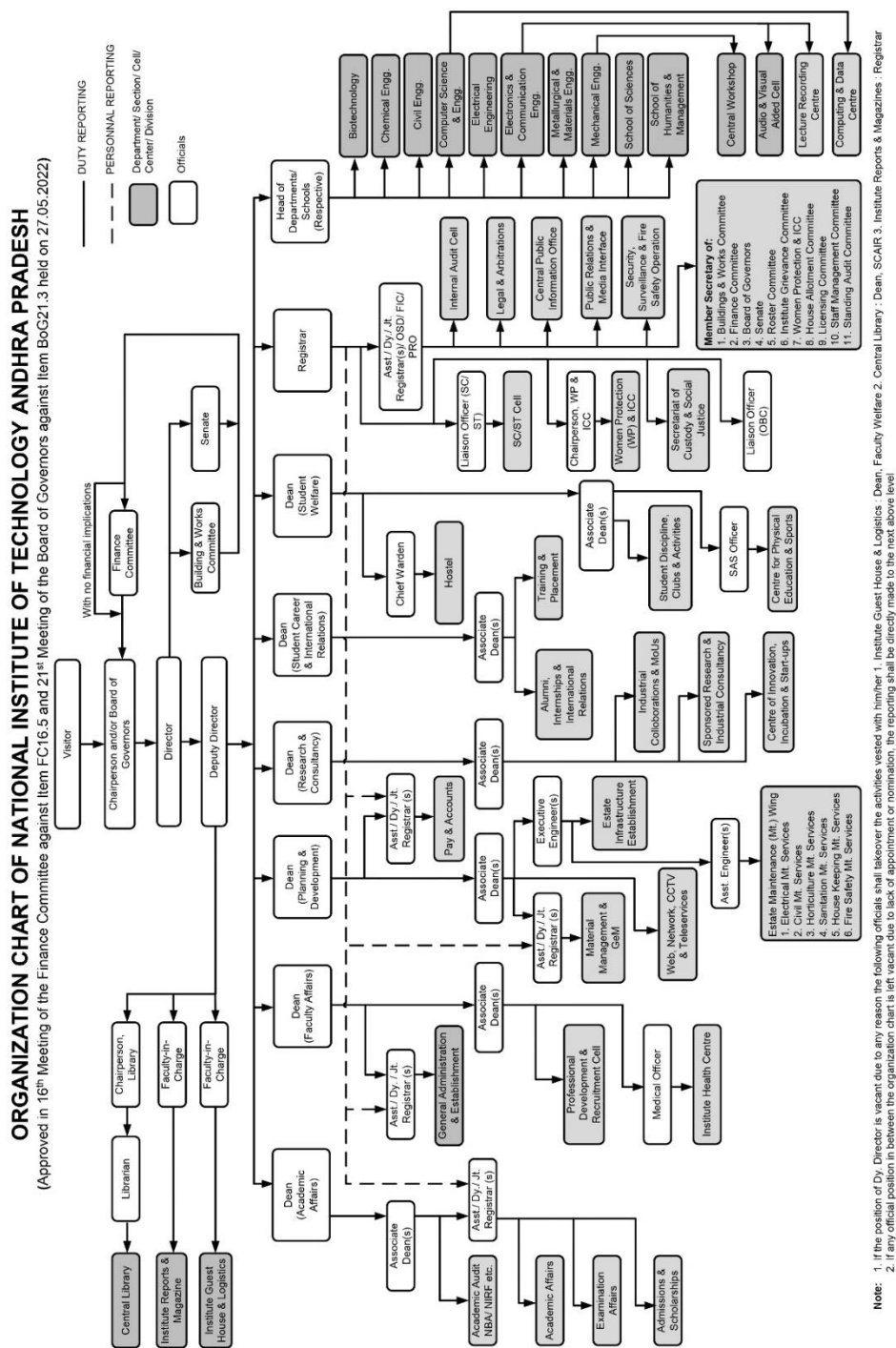
2.4 Standing Committee for Senate Affairs

Chairman **Dean, Academic Affairs, NIT Andhra Pradesh**

Members **Immediate Previous Dean. Academic Affairs**
Dean, Student Welfare
Heads of all the Academic Departments
All Associate Deans of Academic Affairs

Member & Secretary **Associate Dean, Academic Affairs (Examinations)**

3 Organizational chart and Administration



3.1 Administration

ACADEMIC AFFAIRS	DEAN Dr. Kurmayya Tamminana Associate Professor School of Sciences (Mathematics)	ASSOCIATE DEAN ACADEMIC & EXAMINATIONS (U.G) DR. NAGESH BHATTU SRISTY Assistant Professor Department of Computer Science and Engineering
		ASSOCIATE DEAN ACADEMIC & EXAMINATIONS (P.G & Ph. D) DR. RAMUDU MACHAVARAPU Assistant Professor (Physics) School Of Sciences
		ASSOCIATE DEAN ADMISSIONS, SCHOLARSHIPS & Liaison Officer (OBC cell) DR. TAPAS PARAMANIK Assistant Professor (Physics) School Of Sciences

FACULTY AFFAIRS	DEAN & REGISTRAR (I/C) DR. DINESH P. SANKAR REDDY Associate Professor Department of Chemical Engineering	ASSOCIATE DEAN PROFESSIONAL DEVELOPMENT & RECRUITMENT CELL DR. KRISHNA CHAITANYA. A Assistant Professor Department Of Electronics and Communication Engineering
		ASSOCIATE DEAN INSTITUTE HEALTH CENTER AFFAIRS DR. SURENDRA H M Assistant Professor Chemistry School Of Sciences

PLANNING AND DEVELOPMENT	DEAN DR. JAYARAM N. Assistant Professor Department of Electrical and Electronics Engineering	ASSOCIATE DEAN ESTATE ELECTRICAL AFFAIRS DR. TEJAVATHU RAMESH Assistant Professor Department Of Electrical and Electronics Engineering
		ASSOCIATE DEAN ESTATE CIVIL AFFAIRS DR. JAYANTHI N. V. PRATHYUSHA Assistant Professor Department Of Civil Engineering
		ASSOCIATE DEAN MATERIAL MANAGEMENT AND BUYER, GOVERNMENT E-MARKETING DR. R. SUNIL KUMAR Assistant Professor Department Of Material and Metallurgy Engineering
		ASSOCIATE DEAN WEB, NETWORK, TELESERVICES & CCTV MAINTENANCE DR. SRI PHANI KRISHNA KARRI Assistant Professor Department Of Electrical and Electronics Engineering

RESEARCH & CONSULTANCY	DEAN DR. G. RAVI KIRAN SASTRY Professor Department of Mechanical Engineering	ASSOCIATE DEAN RESEARCH & INDUSTRIAL CONSULTANCY DR. SANKAR PEDDAPATI Assistant Professor Department Of Electrical and Electronics Engineering
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		ASSOCIATE DEAN INDUSTRIAL COLLABORATIONS & ALL MoUs DR. V. SANDEEP Assistant Professor Department Of Electrical and Electronics Engineering
		ASSOCIATE DEAN INNOVATION, INCUBATION & START-UP POLICY AND AFFAIRS DR. V. SUDARSHANA DEEPA Assistant Professor Department Of Bio-Technology Engineering

STUDENT CAREER, ALUMNI & INTERNATIONAL RELATIONS	DEAN DR. KARTHICK. S Assistant Professor Department of Computer Science and Engineering	ASSOCIATE DEAN TRAINING & PLACEMENT AND ACTIVITIES DR. T. KARTHIKEYA SHARMA Assistant Professor Department Of Mechanical Engineering
		ASSOCIATE DEAN ALUMNI, INTERNSHIPS & INTERNATIONAL RELATIONS DR. SANTHOSH KUMAR GUGULOTHU Assistant Professor Department of Mechanical Engineering

STUDENT WELFARE	DEAN DR. VEERESH KUMAR G. B. Assistant Professor Department of Mechanical Engineering	ASSOCIATE DEAN PHYSICAL EDUCATION & SPORTS ACTIVITIES DR. KIRAN TEEPARTHI Assistant Professor Department Of Electrical and Electronics Engineering
		ASSOCIATE DEAN STUDENT DISCIPLINE, CLUBS & ACTIVITIES DR. TALARI RESHMA Assistant Professor Department Of Civil Engineering

3.2 Heads of Department (HoDs)

DEPARTMENT	HEAD OF THE DEPARTMENT
BIO-TECHNOLOGY ENGINEERING	DR. T. JAGAN MOHAN RAO Assistant Professor
CHEMICAL ENGINEERING	DR. VINOTH KUMAR RAJA Assistant Professor
CIVIL ENGINEERING	DR. BARANIDARAN SUNDARAM Assistant Professor
COMPUTER SCIENCE AND ENGINEERING	DR. K. HIMABINDU Assistant Professor
ELECTRICAL AND ELECTRONICS ENGINEERING	DR. V. SANDEEP Assistant Professor
ELECTRONICS AND COMMUNICATION ENGINEERING	DR. KIRAN KUMAR GURRALA Assistant Professor
MECHANICAL ENGINEERING	DR. THELLA BABU RAO Assistant Professor
MATERIAL AND METALLURGY ENGINEERING	DR. R. SUNIL KUMAR Assistant Professor
SCHOOL OF SCIENCES	DR. ARUN KUMAR R. Assistant Professor (Physics)
SCHOOL OF HUMANITIES & MANAGEMENT	DR. SOUMYA JOSE Assistant Professor (English)

4 ACADEMIC PROGRAMMES

The Institute has several committees at the institute level and departmental level for smooth completion of academic activities. They are presented in the next section.

4.1 Academic committees

- Departmental Academic Committee (UG/PG - DAC)
- Class Review Committee (CRC)
- Departmental Academic Appeals Committee (DAAC)
- Departmental Board of Studies (Bos)
- Departmental Committee (DC)
- Doctoral scrutiny committee (DSC)
- Institute academic committee (IAC)
- Scrutinizing the fee remission application committee
- Roster committee

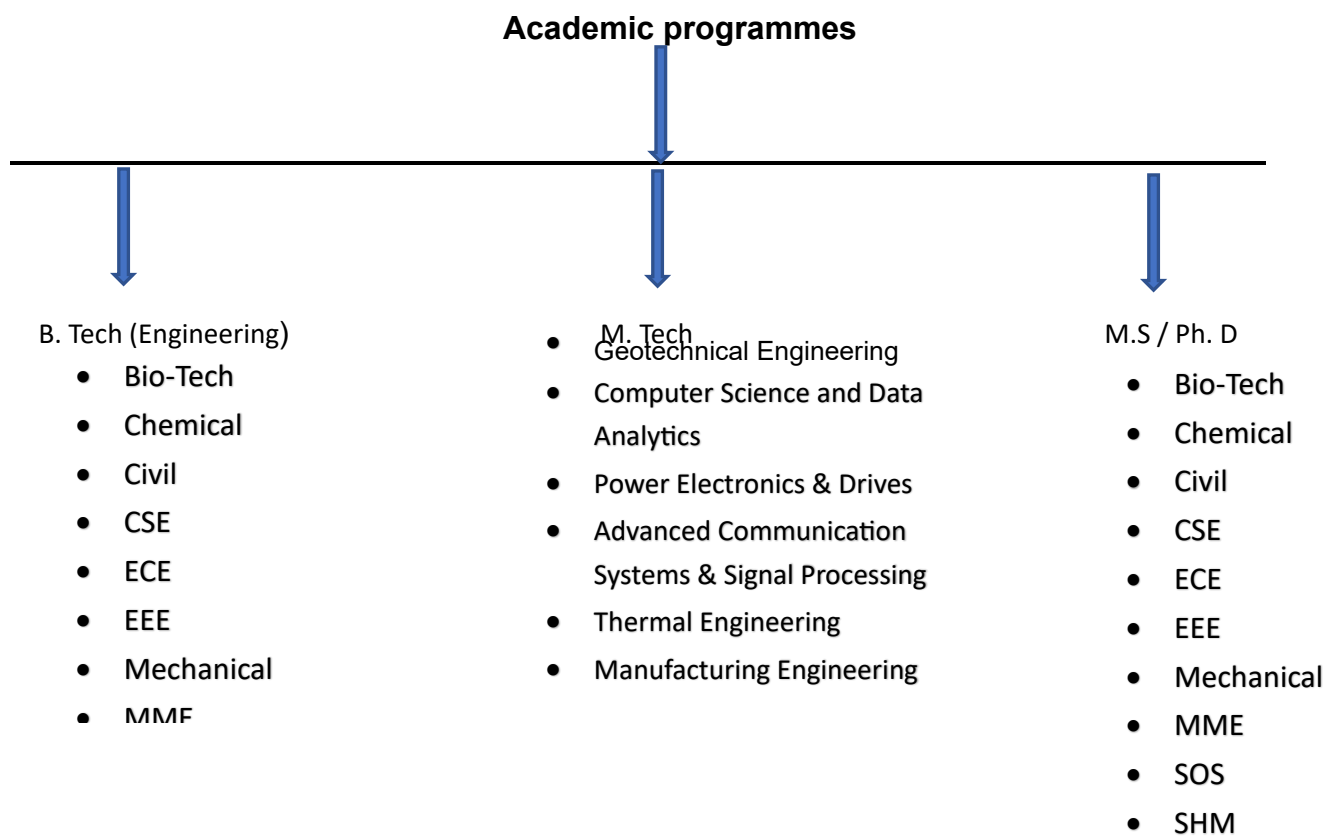
4.2 Academic Details

NIT Andhra Pradesh is offering various academic programmes at undergraduate level and graduate level. The Institute offers B.Tech. programme in eight engineering branches, Bio-Technology, Chemical Engineering, Civil Engineering, Computer Science & Engineering, Electrical Engineering, Electronics & Communication Engineering, Mechanical Engineering, and Metallurgical & Materials Engineering, and M. Tech. programme in eight specializations. The Institute also offers Ph.D. (both under Full-time and Part-time modes) programme in the above-mentioned engineering branches, Sciences, Humanities and Management, viz., Mathematics, Physics, Chemistry and English and M.S. (by Research) programme in the above- mentioned eight engineering branches. Details of Offering courses in Undergraduate, Post Graduate and Ph.D. &M.S.

4.2.1 UNDERGRADUATE PROGRAMMES

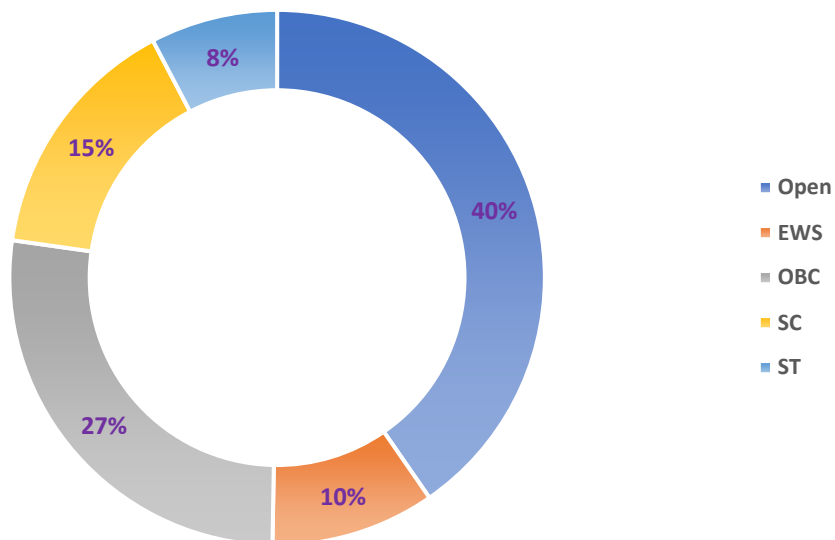
NIT Andhra Pradesh has been sanctioned with a total of 750 seats for the academic year 2022-23. Out of the these, 375 seats will be filled by the candidates from the state of Andhra Pradesh under Home State (HS) quota and the remaining 375 seats will be filled

by the candidates from all other states under Other State (OS) quota. All the seats will be filled based on the All-India Rank (AIR) obtained in the JEE (Mains). In each branch, 50% seats will be filled under HS quota and 50% seats will be filled under OS quota. The seat occupancy matrix of B. Tech in the eight engineering branches at NIT Andhra Pradesh for the academic year 2022-23 is provided in Table 1. A total of 716 students have been enrolled against the 750 allocated seats. A total of 361 students have enrolled under HS quota and a total of 355 students have enrolled under OS quota. The Figures 1, 2 and 3 present students' enrolment state-wise, category-wise, and gender-wise respectively. Please note that the total enrolments in HS quota is 50.42% and OS quota is 49.58.%. This variation is due to the number of vacant seats under the respective quota. There are a total of 14 vacant seats across all branches under the HS quota, whereas there are 20 vacant seats across all branches under the OS quota. We also present the year-wise enrolment in Table 2.

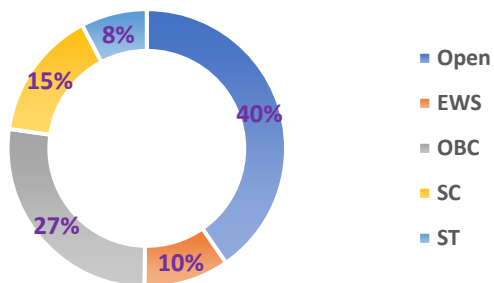


B.Tech. A.Y. 2022-23													
S. No	Department	Intake Capacity 2022-23	Actual Enrolment 2022-23					TOTAL	Home State Quota	Other State Quota	Male	Female	PwD
			Open	EWS	OBC	SC	ST						
1	Bio Technology	35	13	3	9	4	1	30	16	14	21	9	1
2	Chemical Engineering	35	15	3	8	5	2	33	17	16	23	10	1
3	Civil Engineering	100	39	7	24	15	7	92	46	46	70	22	0
4	Computer Science and Engineering	150	58	16	41	22	12	149	74	75	117	32	9
5	Electrical and Electronics Engineering	125	48	12	34	17	9	120	60	60	96	24	5
6	Electronics and Communication Engineering	150	58	16	40	22	12	148	74	74	118	30	6
7	Mechanical Engineering	120	45	12	30	18	10	115	59	56	92	23	2
8	Metallurgical and Materials Engineering	35	13	2	7	5	2	29	15	14	25	4	0
	Total	750	289	71	193	108	55	716	361	355	562	154	24

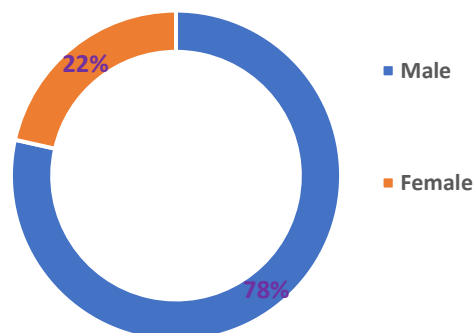
**Category wise enrolment in UG
A.Y.-2022-23**

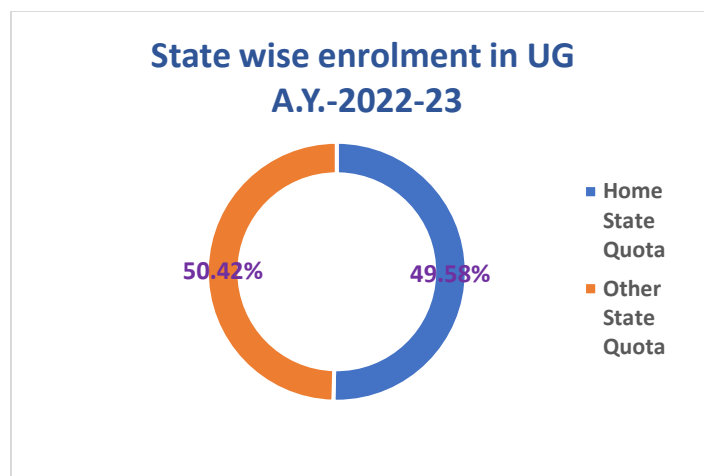


**Category wise enrolment in
UG
A.Y.-2022-23**



**Gender wise enrolment in UG
A.Y.-2022-23**





4.2.2 Study in India (SII) and DASA Programme

4.2.2.1 DASA Programme

Admission to Foreign Nationals/Persons of Indian Origin/ Non-Resident Indians/Overseas Citizen of India to undergraduate programmes in various Institutes in India. NIT Andhra Pradesh is participating in DASA programme and offering a total of 24 seats in five disciplines of B. Tech Programme.

S. No	Discipline	Sanctioned Intake	A.Y.2022-23 Admitted students
1	Civil Engineering	2	0
2	Computer Science & Engineering	7	2
3	Electrical & Electronics Engineering	5	0
4	Electronics & Communication Engineering	7	1
5	Mechanical Engineering	3	0
Total		24	3

4.2.2.2 Study in India (SII) Programme

Under SII programme, foreign nationals can be admitted to undergraduate programmes in various Institutes in India. NIT Andhra Pradesh is participating in SII program and offering a total of 20 seats in five disciplines of B. Tech Programme.

S. No	Discipline	Sanctioned Intake	A.Y.-2022-23 Admitted students
1	Civil Engineering	2	0
2	Computer Science & Engineering	6	1
3	Electrical & Electronics Engineering	4	0
4	Electronics & Communication Engineering	6	0
5	Mechanical Engineering	2	0
Total		20	1

S. No	Country	No. of Students
1	Bangladesh	1

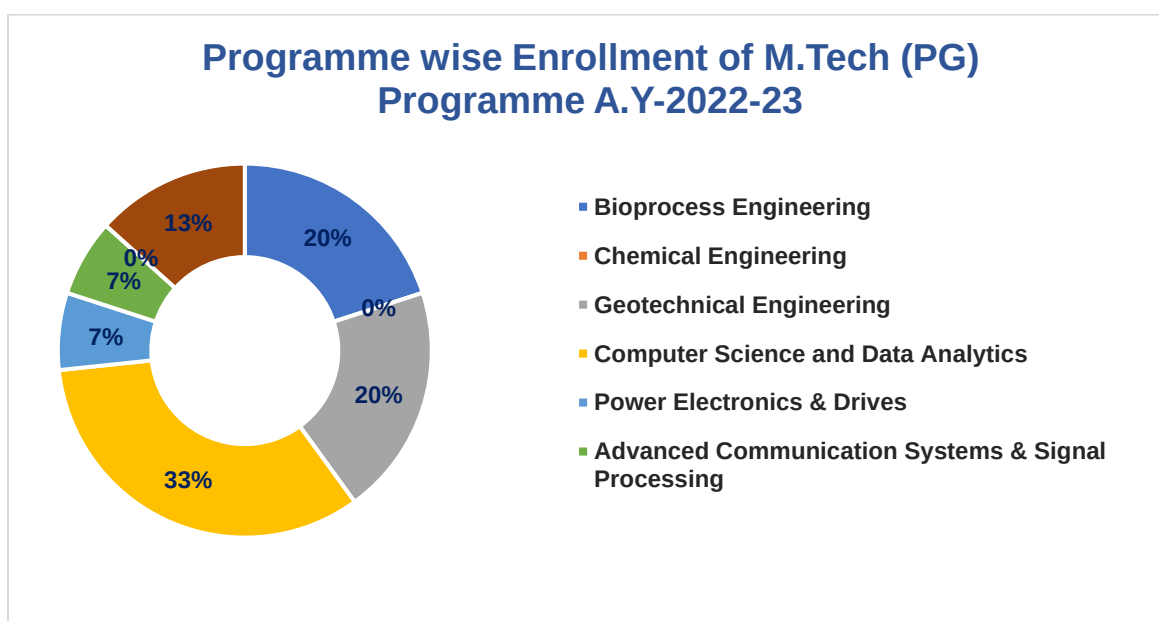
4.2.3 POSTGRADUATE PROGRAMMES

4.2.3.1 M.TECH PROGRAMME

NIT Andhra Pradesh offers M. Tech programme in Eight specializations from Seven departments. A total of 15 students have enrolled for M. Tech. programme across the seven departments. We present the admission details of M. Tech. programme for the academic year 2022-23 in table below.

M. Tech. A.Y. 2022-23												
S. No	Programme Name	Branch	Intake Capacity 2019-20	Actual Enrolment 2022-23					TOTAL	Male	Female	PwD
				Open	EW S	OB C	S C	S T				
1	Bioprocess Engineering	Biotechnology	10	1	0	1	1	0	3	1	2	0

2	Chemical Engineerin g	Chemical Engineeri ng	10	0	0	0	0	0	0	0	0	0
3	Geotechnic al Engineerin g	Civil Engineeri ng	10	0	0	2	1	0	3	1	2	0
4	Computer Science and Data Analytics	Computer Engineeri ng	15	2	1	1	1	0	5	3	2	0
5	Power Electronics & Drives	Electrical Engineeri ng	10	0	0	1	0	0	1	1	0	0
6	Advanced Communic ation Systems & Signal Processing	Electronic s Engineeri ng	10	0	0	0	0	1	1	1	0	0
7	Thermal Engineerin g	Mechanic al Engineeri ng	10	0	0	0	0	0	0	0	0	0
8	Manufactur ing Engineerin g		10	1	0	1	0	0	2	2	0	0
Total			85	4	1	6	3	1	15	9	6	0



M. Tech. (PG) Programme Admitted students					
S. No	Programme Name	Branch (Engineering)	No. of Admitted Students A.Y. 2020-21	No. of Admitted Students A.Y. 2021-22	No. of Admitted Students A.Y. 2022 - 23
1	Bioprocess Engineering	Biotechnology	-	4	3
2	Chemical Engineering	Chemical	-	3	0
3	Geotechnical Engineering	Civil	8	10	3
4	Computer Science and Data Analytics	Computer Science	11	10	5
5	Power Electronics & Drives	Electrical & Electronics	9	10	1
6	Advanced Communication Systems & Signal Processing	Electronics & Communication	8	7	1
7	Thermal Engineering	Mechanical	7	7	2
8	Manufacturing Engineering		6	4	0
	Total		49	55	15

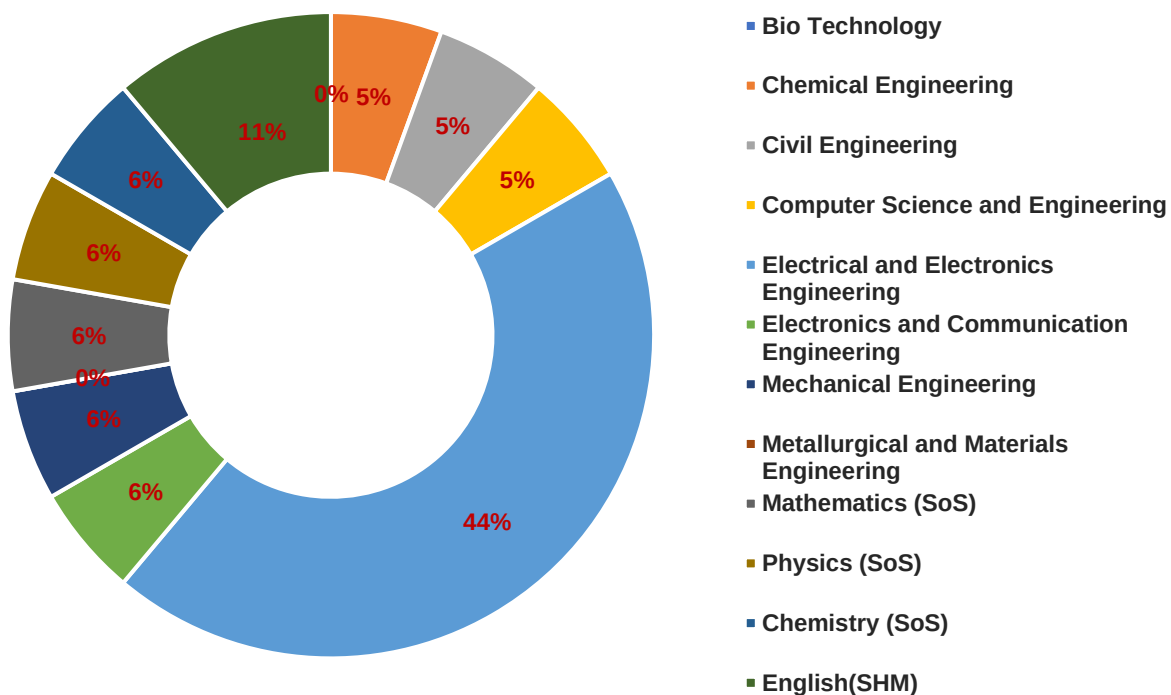
4.2.3.2 Ph.D./M.S. (By Research) Programme

NIT Andhra Pradesh has started Master of Science (by Research) and Doctor of Philosophy (PhD) programmes from the academic year 2019-2020. The institute is offering PhD programmes in full-time and part-time modes. The full-time PhD students of the institute will receive institute fellowship/stipend as per the guidelines of the Ministry of HRD. Admission to MS and PhD programmes is conducted in two sessions in the academic year, one in the beginning of each semester. The department-wise distribution of admissions is presented in the table below

Ph.D./M.S. (By Research) Programme A.Y. 2022-23														
S. No	Department	Actual Enrolment Ph.D. (Full-Time) Programme 2022-23					TOTAL	Ph. D. (Full-Time)	Ph. D. (Part-Time)	Ph.D. (under Project category)	MS (by Research)	Male	Female	P w D
		Open	EWS	OBC	SC	ST								
1	Bio Technology	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Chemical Engineering	1	0	0	0	0	1	1	0	0	0	1	0	0
3	Civil Engineering	1	0	0	0	0	1	1	0	0	0	1	0	0
4	Computer Science and Engineering	0	0	1	0	0	1	1	0	1	1	2	1	0
5	Electrical and Electronics Engineering	3	0	5	0	0	8	8	1	0	0	9	0	0
6	Electronics and Communication Engineering	0	1	0	0	0	1	1	0	0	0	1	0	0
7	Mechanical Engineering	1	0	0	0	0	1	1	0	0	0	1	0	0
8	Metallurgical and Materials Engineering	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Mathematics (SoS)	0	0	1	0	0	1	1	0	0	0	1	0	0
10	Physics (SoS)	1	0	0	0	0	1	1	0	1	0	2	0	0

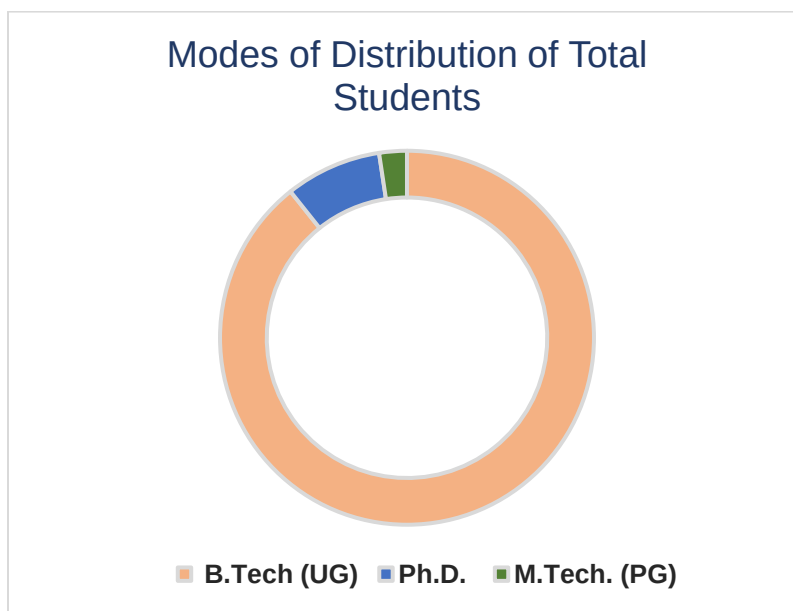
11	Chemistry (SoS)	1	0	0	0	0	1	1	0	0	0	1	0	0
12	English (SHM)	2	0	0	0	0	2	2	0	0	0	0	2	0
Total		10	1	7	0	0	18	18	1	2	1	19	3	0

Department wise Enrollment of Ph.D. Programme (Full-time) A.Y-2022-23



MS (by Research) Programme Admitted Scholars branch-wise (AY 2019-20 To AY 2022-23)											
S. No.	Branch (Engineering)	AY 2019-20 (Full-Time) / Under Project	AY 2019-20 (Part-Time)	AY 2020-21 (Full-Time) / Under Project	AY 2020-21 (Part-Time)	A.Y.- 2020-21 M. S. (by Research)	AY 2021-22 (Full-Time) / Under Project	AY 2021-22 (Part-Time)	AY 2022-23 (Full-Time) / Under Project	AY 2022-23 (Part-Time)	M.S. (by Research)
1	Biotechnology Engineering	0	0	3	3	0	0	2	0	0	0
2	Chemical Engineering	2	1	1	2	0	0	2	1	0	0
3	Civil Engineering	3	6	3	8	0	4	0	1	0	0
4	Computer Science and Engineering	7	13	2	10	3	1	1	2	0	1
5	Electrical and Electronics Engineering	6	7	8	13	0	8	4	8	1	0
6	Electronics and Communication Engineering	5	11	8	11	0	4	3	1	0	0
7	Mechanical Engineering	6	17	4	17	0	3	12	1	0	0
8	Metallurgical and Materials Engineering	3	5	2	1	0	1	0	0	0	0
9	Mathematics (SoS)	1	1	3	2	0	3	2	1	0	0
10	Physics (SoS)	2	1	3	2	0	7	0	2	0	0
11	Chemistry (SoS)	0	0	2	0	0	1	0	1	0	0
12	English (SHM)	1	1	0	0	0	1	0	2	0	0
13	Management (SHM)	-	3	-	4	0	0	3	0	0	0
	Total	36	66	39	73	3	33	29	20	1	1

Cumulative Students' Strength A.Y. 2022-23				
S. No	Branch	B.Tech. (UG)	Ph.D.	M. Tech. (PG)
1	Bio Technology	97	6	7
2	Chemical Engineering	120	6	3
3	Civil Engineering	305	15	12
4	Computer Science and Engineering	504	20	14
5	Electrical and Electronics Engineering	443	46	11
6	Electronics and Communication Engineering	497	35	6
7	Mechanical Engineering	360	46	12
8	Metallurgical and Materials Engineering	101	10	0
9	School of Sciences	0	30	0
10	School of Management	0	12	0
Total		2427	226	65



Examination results for the B.Tech batch 2019-2023 (5th Convocation)							
S.No	Branch	No.of Students appeared	First Class with Distinction	First Class	Second Class	Total	Percentage of pass
1	Biotechnology	16	3	10	3	16	100
2	Chemical Engineering	24	7	14	3	24	100
3	Civil Engineering	56	8	40	6	54	96.43
4	Computer Science & Engineering	95	24	61	4	89	93.68
5	Electrical & Electronics Engineering	96	23	62	7	92	95.83
6	Electronics & Communication Engineering	92	26	61	5	92	100
7	Mechanical Engineering	67	13	48	6	67	100
8	Metallurgical and Materials Engineering	24	6	16	2	24	100

Degree awarded in 2019-2023(B. Tech)		
S.No	Branch	Total
1	Biotechnology	16
2	Chemical Engineering	24
3	Civil Engineering	54
4	Computer Science & Engineering	89
5	Electrical & Electronics Engineering	92
6	Electronics & Communication Engineering	92
7	Mechanical Engineering	67
8	Metallurgical and Materials Engineering	24

Examination results for the M.Tech batch 2021-2023							
S.No	Branch	No.of Students appeared	First Class with Distinction	First Class	Second Class	Total	Percentage of pass
1	BTE (Bioprocess Engineering)	4	1	3	0	4	100
2	CHEM (Chemical Engineering)	3	2	1	0	3	100
3	CIVIL (Geotechnical Engineering)	9	3	6	0	9	100
4	CSE (Computer Science and Data Analytics)	9	3	5	0	8	88.89
5	EE (Power Electronics & Drives)	10	5	5	0	10	100
6	ECE (Advanced Communication System and Signal Processing)	6	1	5	0	6	100
7	MECH (Manufacturing Engineering)	4	3	1	0	4	100
8	MECH (Thermal Engineering)	6	5	1	0	6	100

Degree awarded in 2021-2023 (M.Tech)		
S.No	Branch	Total
1	BTE (Bioprocess Engineering)	4
2	CHEM (Chemical Engineering)	3
3	CIVIL (Geotechnical Engineering)	9
4	CSE (Computer Science and Data Analytics)	8
5	EE (Power Electronics & Drives)	10
6	ECE (Advanced Communication System and Signal Processing)	6
7	MECH (Manufacturing Engineering)	4
8	MECH (Thermal Engineering)	6

4.3 Training and Placement

There are a total of 464 students in the fourth year of B.Tech. Out of these, 65.77% of students have been placed. But, out of 464 students, 336 students have opted for

placements and several others have opted for higher education. The statistics of the placements department-wise are presented in the table below.

Department-wise UG Placement details

S. No	Department	Total Strength	undergraduate Students opted For Job	No. of Students Placed	placement %	Average package (Lacs/Annum)	Highest package (Lacs/Annum)
1	Biotechnology	15	8	7	87.5	5.45	6
2	Chemical	24	14	4	28.57	6.8	7.6
3	Civil	57	35	21	60.00	6.25	12.88
4	CSE	94	79	51	64.56	10.63	44
5	ECE	91	68	59	86.76	10.93	32.3
6	EEE	93	69	47	68.12	9.02	19
7	Mechanical	66	46	28	60.87	6.67	10
8	MME	24	17	4	23.53	6.25	9
	Total	464	336	221	65.77	7.75	

The placement statistics for the M.Tech students is presented below.

Department-wise Placement details for the M. Tech Students

Department	Total Strength	Postgraduate Students Opted for job	No. of Students Placed	Placement %	Average package	Highest package
Civil	9	9	0	0	0	0
CSE	9	8	6	75	9.5	14
ECE	6	4	1	25	18	18
EEE	10	6	2	33.33	7.28	9.25
MECH	10	8	3	37.5	10.57	13
Total	44	35	12	34.16	9.07	

5 Departments

5.1 BIO-TECHNOLOGY ENGINEERING

The Department of Biotechnology at the National Institute of Technology Andhra Pradesh was established in the year 2015. Currently, we are offering undergraduate B. Tech, M. Tech, M.S (by Research) (Part-time) and Ph.D. (Part-time and Full time) programs. The department is committed to impart quality education and offer an excellent research environment to its ongoing programs to motivate budding engineers, scientists and entrepreneurs to enhance their problem-solving skills for societal benefits. The department has faculty members from diverse specializations from reputed national and international institutes. Our laboratories are well equipped with modern infrastructure to meet the requirements of academic programs. The research area of our faculty members include: Microbial Biotechnology, Bioprocess Engineering, Downstream processing, Modelling and Simulation of Bioprocesses, Prebiotics, Probiotics, Bioinformatics, Plant Biotechnology, Drug Delivery, Phytopharmacology, Environmental Biotechnology, and Nano-biotechnology. The departmental activities are supported by non-teaching staff. The aim of the department is to inculcate the knowledge of Biotechnology to the young minds who can contribute towards the development of the society.

VISION:

To nurture competent biotechnologists who will disseminate their knowledge for the development of sustainable technologies with their innovative approaches.

MISSION:

1. Maintaining high academic standards by adopting effective pedagogy, and continuously upgrading the program curriculum to meet the current needs.
2. Providing a flexible environment for faculty and students to flourish in teaching, research and entrepreneurship.
3. Creating Institute-Industry interface by inculcating skills and knowledge through training programs to address the socio-economic issues.

LABS/WORKSTATIONS:

1. Microbiology
2. Biochemistry,
3. Cell and Molecular Biology
4. Transport Phenomenon in Bioprocess systems
5. Bioprocess Engineering
6. Genetic Engineering
7. Downstream processing
8. Bioinformatics.

FACULTY:



**Dr. TINGIRIKARI JAGAN
MOHAN RAO**
Assistant Professor
(Head of the Department)

AREAS OF INTEREST:

- Synthesis of Biopolymers,
- Functional health drinks,
- Development of Probiotics,
- Prebiotics,
- Bio flocculants, and
- In vitro Gut Model Studies



Dr. A. SEENIVASAN
Assistant Professor

AREAS OF INTEREST:

- Applied Microbiology and Biotechnology; Biochemical Engineering;
- System Biology;
- Nanobiotechnology;
- Depolymerization of copolymers



**Dr. RAJESWARA REDDY
ERVA**
Assistant Professor

AREAS OF INTEREST

- Microbial Biotechnology, Bioinformatics,
- Modelling,
- Simulation and Optimization of Bioprocesses



**Dr. V. SUDARSHANA
DEEPA**
Assistant Professor

AREAS OF INTEREST:

- Plant Biotechnology;
- Environmental Biotechnology;
- Drug Delivery;
- Nanotechnology;
- Phytopharmacology

RESEARCH SCHOLARS:

DR. V. SUDARSHANA DEEPA	Mayank Roy Chowdary (Full time)	Computational approach to discover natural products-based drugs for treating Alzheimer's disease using traditional plants as lead
	E. Balaji (Part- time)	Simultaneous phycoremediation of food industry waste water and enhance the production of beta carotene from macro algae

DR. A. SEENIVASAN	Digvijay (Full time)	Bioprocess Development for the production of chitinases
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DR. E. RAJESWARA REDDY	Dherendra Kumar Suman (Full time)	Development, Characterization and Application of Oleogel, Emulgel and Bigel in Neutraceutical Industry"
	Kakara Divya (Part time)	Bioprocess Optimization and enhanced production of L-Lysine from <i>Corynebacterium glutamicum</i>

DR. T. JAGAN MOHAN RAO	Abhishek Kumar (Part time)	Investigate the molecular mechanisms of Nitrilase-mediated reactions and its potential applications in bioremediation
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5.2 CHEMICAL ENGINEERING

The Department of Chemical Engineering at NIT Andhra Pradesh was established in 2015-16, with a mission to impart high-quality engineering education and mould the students to meet the ever-growing demand for technical human resources in Chemical Engineering. The Department currently offers B. Tech, M.Tech and Ph.D. programmes in Chemical Engineering. We have revised our academic curriculum to be in tune with the current developments in the field while retaining the core concepts from the discipline. In addition, faculty introduced new electives related to their research, and these are pretty well subscribed. Our students are highly encouraged to participate in national and international conferences, seminars, workshops, and symposia. The last few years have seen a dramatic increase in industrial associations, research projects, publications, and faculty awards.

VISION:

To offer academic and research programs that prepare students to address a global society's challenges and needs by solving complex problems associated with Chemical and Allied Engineering.

MISSION:

To deliver high-quality technical education that enables the students to lead productive careers in the chemical and allied industries.

1. To develop a state-of-the-art infrastructure that promotes internationally recognized research, creativity, and entrepreneurial culture.
2. To offer credible solutions to problems prevalent in the Chemical and allied industries by building a robust interface.
3. To make students contribute to the nation's sustainable development through leadership in professionalism, education, research, and public services.

LABS/WORKSTATIONS:

1. Research Lab-I
2. Mass Transfer Lab
3. Process Control Lab
4. Chemical Reaction Engineering Lab
5. Heat Transfer Lab
6. Fluid Mechanics Lab
7. Computational Design And Simulation Lab
8. Research Lab-II

FACULTY:



**Dr. VINOTH KUMAR
RAJA**
Assistant Professor
(Head of the Department)

AREAS OF INTEREST:

- Membrane Processes;
- Wastewater Treatment;
- Micropollutants Removal;
- Biofuels;
- Polymer Nanocomposites



**Dr. PUCHALAPALLI
DINESHSANKAR REDDY**
Associate Professor

AREAS OF INTEREST:

- Interfacial Science,
- Thin Films,
- Nanotechnology,
- Fluid Mechanics,
- Environmental Engineering.

RESEARCH SCHOLARS

Dr. VINOTH KUMAR RAJA (Supervisor)	Kokkirapati V V Satyanarayana	Low-cost ceramic membranes, Fruit Juice Clarification
	Suthapalli Lakshmi Sandhya Rani	Synthesis of ceramic membranes using inexpensive raw materials for waste water treatment applications

	Maddala Srikanth	Ceramic Membranes
	A Sasikala	Waste water treatment. Removal of heavy metals by green liquid emulsion membrane

Dr. PUCHALAPALLI DINESH SANKAR REDDY (Supervisor)	SATHIEESH S	Studies on esterase enzyme
	AJMEERA RAMESH	Biodiesel production from waste vegetable edible oil by using eucalyptus green synthesis nanocatalyst

5.3 CIVIL ENGINEERING

The Civil Engineering Department offers B.Tech., M.Tech. (Geotechnical Engineering), M.S. (by Research) and Ph.D. Programmes. The department was incepted in the year 2015 with a sanctioned intake of 60 students for the B.Tech. (Civil) programme, M.Tech., (2021) and Ph.D. Programmes (2019). The Department is actively involved in basic and applied research in the field of Structural Engineering, Geotechnical Engineering, Water Resources Engineering and Environmental Engineering. A broad area of the current research focus of the Department includes Earthquake Engineering, Environmental Geo-technology, Structural Health Monitoring, Wastewater Treatment, GIS-based Hydrological Modelling, and Integrated Watershed Management.

VISION:

To lead the global community by producing outstanding Civil Engineers through quality technical education, and research and build a legacy of entrepreneurship who can serve industry and society through their innovative thinking.

MISSION:

1. To design a curriculum which caters for the present and future challenges and establish a Centre of Excellency in Civil Engineering.

2. To carry out novel research, on problems prevalent in society and provide sustainable solutions in various disciplines of Civil Engineering.
3. To have industry connect for combating the multi-dimensional problems through collaborations.
4. To promote innovative ideas among the students to excel as future entrepreneurs.

LABS/WORKSTATIONS:

1. Concrete Technology Laboratory
2. Hydraulic Engineering Laboratory
3. Geotechnical Engineering Laboratory
4. Environmental Engineering Laboratory
5. Engineering Geology Laboratory
6. Surveying Laboratory
7. Fluid Mechanics Laboratory
8. Highway Engineering Laboratory

FACULTY:



Dr. S. BARANIDHARAN
Assistant Professor
(Head of the Department)

AREAS OF INTEREST:

- Water & Wastewater Treatment Process
- Fate and Transport of Emerging
- Contaminants & Monitoring Emerging
- Contaminants & Toxicity Studies Risk
- Life Cycle Assessment Bio-char for Contaminant Removal



Dr. TALARI RESHMA
Assistant professor

AREAS OF INTEREST:

- GIS-based hydrological modelling,
- Soft Computing Techniques,
- Watershed Modelling,
- Remote Sensing and GIS



Dr. JAYANTHI N. V. PRATHYUSHA
Assistant Professor

AREAS OF INTEREST:

- Geotechnical Engineering;
- Environmental Geotechnology;
- Advanced Geomaterial Characterization;
- Sustainable geomaterials;
- Climate change and its impact on Geomaterials



Dr. SUBBARAO PICHUKA
Assistant Professor

AREAS OF INTEREST:

- Hydrological Extremes,
- Impact of Climate change on Hydroclimatic variables,
- Integrated Watershed Management,
- River Engineering



Dr. SHAIK MAHABU SUBHANI
Assistant Professor

AREAS OF INTEREST:

- Smart materials and composites;
- Constitutive modelling;
- Concrete technology;
- Structural Health Monitoring

RESEARCH SCHOLARS

DR. SHAIK MAHABU SUBHANI	Gedela Santhosh Kumar (Full time)	Performance Evaluation of POFA and SCBA in producing alkali activated binder and blended concrete systems
	Asim Rifaur Rahman (Full time)	Performance Evaluation of POFA and Marble dust in producing alkali activated binder and blended concrete systems
	Shaik Subhani (Full time)	Study agricultural waste as a sustainable construction material
	Mehar Sai (Part Time)	Performance Evaluation of Recycled fine aggregates and POFA in producing blended concrete systems
	Venugopal Swamy (Part Time)	Performance Evaluation of Slag sand and SCBA in producing blended concrete systems

	Naga Sruthi (Part Time)	Performance of Agro Waste Ashes in Concrete Technology
DR. SHAIK MAHABU SUBHANI & DR.BARANIDHARAN S	Kunchala Ashok (Part Time)	Performance Evaluation of Recycled fine aggregates and SCBA in producing blended concrete systems.
DR. BARANIDHARAN S	Shilpa Mishra (Part Time)	CaTiO ₃ Nanoparticle for Landfill Leachate Treatment.
DR. JNV PRATHYUSHA	Dinesh Srirama (Full time)	Stabilization of expansive soil using eggshell lime
	Venkata Charan V(Part Time)	Modeling of soil strength parameters
DR. T RESHMA	Chirasmayee S(Project mode)	Monitoring and Analysis of non-point source pollutants for an agricultural watershed
	Shiva Chandra V(Part time)	Improving Runoff Predictions in Urbanized Catchments with Pixel based Estimates of Impervious Surface Cover.

5.4 COMPUTER SCIENCE AND ENGINEERING

The Department of Computer Science and Engineering at NIT Andhra Pradesh, offers a B.Tech. Undergraduate programme in Computer Science and Engineering, M.Tech. in Computer Science and Data Analytics, M.S. (by research) and Ph.D. programmes. The department was incepted in the year 2015, the current sanctioned intake is 150 students for the B.Tech. (CSE) programme.

The B.Tech. curriculum offered by the department comprises of core courses that provide a sound theoretical foundation which is supplemented through industry relevant elective courses and a project component. The department hosts an M.Tech. programme in Computer Science and Data Analytics with an intake of 15

students, from the Academic Year 2020-21 onwards. The M.Tech. curriculum is designed in such way to provide a sound theoretical and practical foundation for conducting high-quality research in the thrust sub-domains of Data Analytics.

VISION:

To strive for excellence in academics, research and technological service to the society, with an intent to nurture the stakeholders and produce Computer Scientists, technologists and Engineers who are globally competent and nationally relevant.

MISSION:

1. To adopt a teaching-learning process that imparts technical skills and state-of-the-art knowledge with a well-blended and balanced mix of theory and practice.
2. To create functional centres of excellence that promote research and consultancy in the thrust sub-domains of theoretical computer science, systems and technology.
3. To collaborate with industry and higher learning institutes of national/international repute and solve socially relevant problems.

LABS/WORKSHOPS:

S. No	Name of the Lab	Details of the Equipment Available (Quantity and Brief Specification)	Details of the Software Available
1	HiPC Lab	The cluster of 5 Rack Servers (HPE ProLiant ML350 GEN10)	TensorFlow, Hadoop, Message Passing Interface (MPI), Apache Spark Cluster Computing Framework.
2	AI Lab	No. of Workstations: 80 Spec: Intel(R) Core (TM) i7-8TH GEN ,16 GB RAM, Hard disk 1TB, Operating system - Linux, Cores: 6	IDEs for C/C++/Java/Python, AI Frameworks like TensorFlow and Theano

3	Enterprise App Development Lab	No. of Workstations: 36 Spec: Intel(R) Core (TM) i7-8TH GEN ,16 GB RAM, Hard disk 1TB, Operating system -Linux, CORES 6 No. of Workstations: 44 Spec: Intel i7 9th gen, 8 GB RAM, Linux, hard disk 2 TB, cores 8	My SQL, Umbrello, AutoCAD, IDE for Java and Python
4	Data Analytics Lab	No. of Workstations: 40 Spec: Intel(R) Core (TM) i7-8TH GEN ,16 GB RAM, Hard disk 1TB, Operating system -Linux, CORES 6 No. of Workstations: 40 Spec: Intel i7 9th gen, 8 GB RAM, Linux, hard disk 2 TB, cores 8	Open-Source Frameworks for Data Analytics, Tensor Flow.
5	Systems Programming Lab	No. of Workstations: 80 Spec: Intel i7 9th gen, 8 GB RAM, Linux, hard disk 2 TB, cores 8	IDEs required for Systems Programming and Analysis.
6	Network Lab	No. of Workstations: 39 Spec: Intel(R) Core (TM) i7-8TH GEN ,16 GB RAM, Hard disk 1TB, Operating system -Linux, CORES 6 No. of Workstations: 30 Spec: Intel i7 9th gen, 8 GB RAM, Linux, hard disk 2 TB, cores 8	Visual Studio, Net Beans, IntelliJ Idea, Eclipse, Jupyter Notebook, Pycharm

FACULTY:



**Dr. HIMABINDU
KOMMANTI**
Assistant Professor
(Head of the Department)

AREAS OF INTEREST:

- Web Mining,
- Machine Learning,
- Big data,
- Educational Data Mining



Dr. KARTHICK. S
Assistant Professor

AREAS OF INTEREST:

- Algorithms (Randomized, Approximation, Parallel),
- Machine Learning,
- Data Analytics,
- Web/Text Mining, Performance Modelling



**Dr. NAGESH
BHATTU SRISTY**
Assistant Professor

AREAS OF INTEREST:

- Machine Learning,
- Database Systems,
- Distributed Computing



**Dr. SRILATHA
CHEBROLU**
Assistant Professor

AREAS OF INTEREST:

- Attribute reduction using Rough Sets,
- Boolean Reasoning and
- Evolutionary Algorithms

RESEARCH SCHOLARS:

DR. HIMA BINDU K	Nelaturi Kiran Babu (Full time)	Offensive Language Detection)
	Venkata Ramana Battula (Part time)	Machine Reading Comprehension

	Krishna Kumar Singh (Part time)	Few-shot Learning
	Srichandana Abbineni (Part time)	Entity Linking for EHR
	Samineni Bhavani (Part time)	Stance Detection

DR. NAGESH BHATTU S	B S S Mounica (Part time)	Privacy and Fairness in Social Network Analytics
	Nishita T (Part time)	Rate Control Algorithms
	Ms. Ila Chandana Kumari P (Part time)	Machine Learning

Dr. Nagesh Bhattu S (Main Supervisor) Dr. Sri Phani Krishna (Co-supervisor)	Y Gireesh (Full time)	Weakly Supervised Video Classification
Dr. Nagesh Bhattu S (Main Supervisor) Dr. Sri Phani Krishna (Co-supervisor)	Shashanka B N (Full time)	Hand Written Text Recognition
	Mandala Sookshma (Full time)	Sparsity Representation Learning
Dr. Karthick Seshadri (Main Supervisor) Dr. Nagesh Bhattu S (Co-supervisor)	Samriddhee Ghosh (Full time)	Characterization and resource provisioning models for Elastic Cloud Computing
	Sindhu Korrapati (Full time)	Characterization and resource provisioning models for Elastic Cloud Computing
	Sastry Y VRPS (UGC-NET) (Full time)	Causality-aware sentiment analysis

Dr. Karthick Seshadri	Upendar Rao Rayala (Part time)	Knowledge graphs and Sentiment analysis of code-mixed scripts
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	Kumar Anurupam(Part time)	Probabilistic graphical modeling for attack inference
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Dr. Srilatha Ch.	Hanuman Turaga (Full time)	Parallel and distributed attribute reduction of large data sets based on rough set theory and evolutionary algorithms
	M A Praveen (Full time)	Deep Learning models on Brain Tumor classification and segmentation
	Siva Rama Sastry Gumma(Part time)	Telugu historic documents (Palm Leafs)

Graduated:

S. No	Name	Topic	Supervisor
1.	Dr. Raveendra Babu P (Full-Time)	Design and analysis of authentication protocols for dynamic charging system of electric vehicles	Dr. Goutham Reddy A

5.5 ELECTRONICS AND COMMUNICATION ENGINEERING

The Electronics and Communication Engineering (ECE) Department was established in the year 2015. The department offers Undergraduate (UG), Post Graduate (PG), M.S. (By Research) and Ph.D. degree programs that provide students with the knowledge and tools they need to succeed in the Electronics and Communication Engineering. Research in the department focuses on high-impact various disciplines such as: Communication systems, Wireless networks, Internet of Things, Signal and Image Processing, Biomedical Signal Processing, RF MEMS, Microwave antennas, Optical communication and Photonics, and future prospective of VLSI technologies.

Currently the department offers four-year B. Tech course with student intake of 120 and MTech course with intake of 10 students. The department of ECE is one of the established

and largest departments in NIT-Andhra Pradesh. Our faculty brings state-of-the-art research, development, and design experience into the classroom, ensuring that our students and alumni are able to apply for registration as professional engineers in all part of global engineering and the scientific community. In all courses the Department has built an excellent reputation for its graduates in terms of placements.

The department has mission to educate the students with the state of art technologies to meet the growing challenges of the industry, to carry out research through constant interaction with research organizations and industry, and to equip the students with strong foundations to enable them for continuing education. So, the vision is to excel in education and research in Electronics and Communication Engineering.

VISION:

To be recognized as a center of academic and research excellence in the field of Electronics and Communication Engineering that endeavors to create globally competent, innovative Engineers with entrepreneurial skills, capable of addressing the industry and societal demands.

MISSION:

1. To provide conducive environment for the students to become technically competent in the upfront technologies of Electronics and Communications.
2. To inspire students and teachers towards innovative and collaborative research leading to the establishment of centers of excellence.
3. To stimulate the stakeholders of the department towards the entrepreneurial activity.
4. Inculcate human values and professional ethics to students and faculty members and make them philosophical towards the societal issues.

LABS/WORKSHOPS:

1. Communication Systems Laboratory
2. Electronic Devices and Circuits Laboratory
3. Microcontrollers Laboratory

FACULTY:



**Dr. KIRAN KUMAR
GURRALA**
Assistant Professor
(Head of the Department)

AREAS OF INTEREST:

- Cooperative Communication in Wireless Networks;
- Physical Layer Security



**Dr. PULI KISHORE
KUMAR**
Assistant Professor

AREAS OF INTEREST:

- signal processing;
- communication;
- radars



Dr. S. YUVARAJ
Assistant Professor

AREAS OF INTEREST:

- RF and Microwave Engineering
- Microwave Sources and allied components (Especially Vacuum Electron Devices),
- Microwave Passive devices



**Dr. KRISHNA
CHAITANYA A**
Assistant Professor

AREAS OF INTEREST:

- Resource allocation in Wireless Networks;
- Information Theory;
- Coding Theory



**Dr. NARASIMHA RAO
BANAVATHU**
Assistant Professor

AREAS OF INTEREST:

- Cooperative Communications;
- Spectrum Sensing;
- Cognitive Radio;
- Optimization;
- Internet of Things (IoT);
- Unmanned Aerial Vehicles (UAVs);
- Signal Processing for Communications;
- Distributed Sensor Networks and
- Decision/Data Fusion.

DR. PULI KISHORE KUMAR	L.Nagaraju (Full-Time)	Antenna Array Processing
	Pamu Harika(Full-Time)	VLSI
	Lokesh Dharmatheja Ch(Full-Time)	Antenna Array Processing
	Lanka Sree Lakshmi Sowjanya(Full-Time)	UWB SAR Imaging
	Alladi Praveen Kumar (Part-Time)	Embedded System
	V H Prasad(Part-Time)	Signal Processing
	G Krishnaveni(Part-Time)	VLSI
	Sumathi Jyothi(Part-Time)	VLSI
	G Ramya(Part-Time)	WIRELESS COMMUNICATION
	Parri Srinivasulu(Part-Time)	VLSI signal Processing

DR. YUAVRAJ S	M Venkateswara rao(Full-Time)	Antennas
	RVNR Suneel Krishna(Full-Time)	Microwave Filters
	Syed Imran Basha(Full-Time)	Microwave Sensors
	Grandhi Challa Ram(Part-Time)	Microwave Filters
	Makkapati Himaja(Part-Time)	Antennas
	Qurratul Ayn(Part-Time)	Antennas
	S V Ravi Kumar(Part-Time)	Microwave absorbers

DR. NARASIMHA RAO B	K. Beulah Sujana (Full-Time)	Wireless Communications
	K. Sarath Babu(Full-Time)	Wireless Communications
	P Naveen Kumar Reddy(Full-Time)	Wireless Communications
	S Sreelekha(Full-Time)	Wireless Communications
	S Ramajaneya (Full-Time)	Wireless Communications
	S Rambabu(Part-Time)	Wireless Communications
	N Lalitha(Part-Time)	Wireless Communications

DR. KRISHNA CHAITANYA A	Mr. Ananda Kumar Karem	Power allocation and subcarrier allocation for NOMA-IBFD systems
	Pagadala Usha	Automatic Speech Recognition
	M Venkata Srinu	Resource allocation for IBFD systems

- Mr. Narasimha Nayak (PF061901) under the guidance of Dr. Kiran Kumar Gurralla has awarded degree on 20th March 2023.

DR. KIRAN KUMAR GURRALLA	Uma Maheswara Rao Ukyam(Full-Time)	RIS aided next generation wireless network
	Purna Chandra Reddy V(Part-Time)	Joint DR-DME classification using deep learning-
	Sri Indrani Kotamaraju(Part-Time)	UWB body area wireless cooperative networks
	Pramodkumar Aylapogu(Part-Time)	Index modulation for next generation networks
	Rallapati Aditya(Part-Time)	VLSI for cooperative communication
	S V M G Phani Kumar C(Part-Time)	Wireless Communication

5.6 ELECTRICAL AND ELECTRONICS ENGINEERING

The Department of Electrical Engineering at National Institute of Technology (NIT), Andhra Pradesh offers B. Tech, M. Tech and Ph. D programs which keenly emphasize global learning. The main theme of the department is to create a platform for knowledge assimilation, dissemination and generation. It is committed to work in emerging areas and develop sustainable technologies & innovations in the electrical engineering field. The

students and faculty are encouraged to work in interdisciplinary projects with a stimulating and wonderful learning experience.

Currently, the faculty are engaged actively in following research areas: Power Electronics, Electric Drives, Design of Electric Machines, Renewable Energy and Microgrids, Hybrid and Electric Vehicles, Electric Vehicle Charging Infrastructure, Smart Grid Technologies and Integration, AI & ML Applications in Power and Energy Systems, DSP / FPGA based Real –Time Embedded Systems and Assistive Technologies. The department encourages continuous learning process through internship programs, IEEE activities and industry interaction sessions.

VISION:

Aiming to nurture globally competent electrical engineers in research and innovation through quality education and develop cutting edge technologies for the betterment of society.

MISSION:

1. Effective Technology adoption into teaching and learning Strategies by faculty that result in observable student's achievement.
2. Create an open platform for innovative research work in sustainable electrical power systems.
3. Nurture creative thinking with understanding engineering principles and develop real-time solutions for global problems with industry collaboration.
4. Deploy energy efficient and green energy technologies to address social, environmental, and economical effects.

LABORATORIES:

The laboratories and research facilities in the Department are well maintained and regularly updated with latest technology.

UG Laboratories

1. Analog and Digital Electronic Circuits Lab
2. Measurements and Instrumentation Laboratory
3. Control Systems Laboratory
4. Numerical Methods and Programming Analytical Lab
5. Power Electronics Lab
6. Electrical Machines – I Lab
7. Electrical Machines – II Lab
8. Power Systems & Renewable Energy Laboratory

PG Laboratories

1. Power Electronics & DC Drives Laboratory
2. AC Drives Laboratory

Research Laboratories

1. Kalam Open Innovation Laboratory

FACULTY:



Dr. V. SANDEEP
Assistant Professor
(Head of the Department)

AREAS OF INTEREST:

- Microgrids, Smart Grids,
- Electric Vehicles,
- Power Electronics and Drives,
- Computer -Aided Design of Electric Machines,
- Energy Conversion,
- Energy Management
- Machine Learning (ML) and Artificial Intelligence (AI) in Power & Energy Systems



Dr. SANKAR PEDDAPATI
Assistant Professor

AREAS OF INTEREST:

- Reliability Aspects of Power Electronics Converters,
- Optimization Techniques, Assistive Technology



Dr. JAYARAM NAKKA
Assistant Professor

AREAS OF INTEREST:

- Power Electronics and Drives - High Power Factor Converters,
- Multilevel Converters/ Inverters (MLI/Cs),
- MLI/Cs applications in Renewable Energy Systems,
- Grid connected Renewable Energy Conversion Systems,
- AC/DC converters,
- Power Quality using STATCOM Technologies



Dr. TEJAVATHU RAMESH
Assistant Professor

AREAS OF INTEREST:

- Power Electronics and Drives,
- Electrical machines,
- Special Machines,
- Sensor less Drives,
- Multi-level Inverters,
- Hybrid Renewable Energy Systems,
- Electric Vehicles,
- Artificial Intelligence Application in Power Electronics and Drives.



Dr. KIRAN TEEPARTHI
Assistant Professor

AREAS OF INTEREST:

- Power System Security and Stability;
- Power System Operation and Control;
- Renewable Energy integration issues;
- Power System Optimization;
- Artificial Intelligence (AI) applications to Power Systems



Dr. SRI PHANI KRISHNA KARRI
Assistant Professor

AREAS OF INTEREST:

- Digital signal processing;
- Embedded systems;
- Machine learning;
- Electrical Machines

RESEARCH SCHOLARS

DR. V. SANDEEP	B.Amruth Raju(Full-Time)	Energy Management in Micro Grid
	P. Krishna Mohan Reddy (Full-Time)	Energy management in a Microgrid
	G. Babu (Full-Time)	Optimal Energy Management in DC Microgrid
	K.Narendra Babu(Full-Time)	Hybrid Micro Grid
	Satyavani Yadlapalli (Part Time)	Design and Development of Wireless Power Transfer Charging for UAVs
	Ropesh Rayalu Onteru(Part-Time)	Effective energy management strategies in commercial & Residential microgrids using machine learning techniques
	Pagidipala Sravanthi (Part-Time)	Optimal Techno-Economic Operation of Power Systems with Renewable Energy Sources and Electric Vehicles

DR. NAKKA JAYARAM	P.S.V. Kishore (Full-Time)	Design of switched capacitor based single phase multilevel inverters for Renewable energy conversion system
	Gaurav (Full-Time)	Design and Analysis of Non-isolated DC-to-DC converter for renewable energy application
	A. Vamshi (Full-Time)	Electric vehicles
	Arandhakar Sairaj (Full-Time)	Emerging Intelligent Bidirectional Charging Strategy Based on Recurrent Neural Network Accosting EMI and Temperature Effects for Electric Vehicle
	D Aasha Vardhini (part-Time)	Energy Management in Microgrid.
	Vanapalli Naga Venkata Vamsi Kumar(part-Time)	Design and development of novel multilevel inverters with switched capacitors technique
	Katta Suresh(part-Time)	Fault Tolerant Multi –Level Inverters
	M Sri Suresh(part-Time)	Modelling and coordination of interconnected hybrid micro grids

DR. TEJAVATHU RAMESH	P. Rama krishna(Full-Time)	Investigations on Multi-Level Inverter fed Sensorless Permanent Magnet Synchronous Motor Drive using Direct Torque and Flux Control based Space Vector Modulation Technique
	P.Dharmendra kumar(Full-Time)	Development of modified Predictive torque control for multilevel inverter fed sensorless PMS Motor drive
	A.Chandra Sekhar(Full-Time)	Design and development of Solar PV Configuration under partial shaded conditions and its applications to water pumping
	A. Mastanaiah(Full- Time)	ML based Electric Drives
	Tangirala Isradani(Full-Time)	Model free control of Multi level inverter fed Permanent magnet synchronous motor drive
	Malla Mohan(Full- Time)	Design and development of Direct torque control SVM on five phase PMSM
	Davu Srinivasa Rao(part-Time)	Renewable Energy
	K. Rajani(part-Time)	Maximum power enhancement of PV array configurations under partial

DR. SANKAR PEDDAPATI	SVK Naresh(Full- Time)	Investigation on design and analysis of Non isolated quadratic DC-DC Converters with reliability Assesment for micro grid applications
	A. Rajamallaiah(Full- Time)	Optimal control of Power converters using Deep Reinforcement Learning controller
	Balaram Kumar (Full-Time)	Fault tolerant Multilevel Inverter
	R.Vikash Kumar Full-Time)	Grid Integration
	Kallelapu Rambabu Full-Time)	Bidirectional DC-DC Converters

	K.V.S. Prasada Rao(part-Time)	design and development of fault tolerant MLI Topologies with reduced device count
	V. Sree Vidhya(part-Time)	Design of multi-output wide-input Reconfigurable series Loaded Resonant Converters
	Mahendra Chand Bade(part-Time)	Design and development of current source multilevel Transformer-less photovoltaic inverter systems

DR. T. KIRAN	B.Sreenath(Full-Time)	power system security
	Y. Raghuvamsi(Full-Time)	Distribution system state estimation
	K. Amarendra (Full-Time)	Load frequency control in a interconnected Microgrid
	V V N Prasad Thota (Full-Time)	Peer-to-Peer Energy Trading
	Bala Saibabu Bommididi(part-Time)	Data Driven Models for Wind Speed Forecasting
	S M K Patnaik(part-Time)	Optimal location of EV charging stations in distribution network
	Parri Srihari(part-Time)	Artificial Intelligence based frameworks for wind speed forecasting
	Chittemma Yerra(part-Time)	Application of Demand Side Management in Smart Grid

DR. S.P.K. KARRI	L N Sastry Varanasi(Full-Time)	Non- Intrusive Load Monitoring using Machine Learning Algorithms
	S.Raja Sekhar(Full-Time)	Deep Learning in Image Processing
	Jeweliddin shaik(part-Time)	Based Energy management Strategy for Hybrid Electric Vehicles
	Santhosh Karra(part-Time)	Deep Learning based Image Analysis
	Gunda Narasimharao(part-Time)	Real time energy management of a micro grid using Deep Reinforcement learning

	Shravani Kanaka Kumari Palla(part- Time)	Deep Reinforcement Learning Applications to Electric Vehicles
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No of Students Awarded Ph.D Degree : 1

S.N o.	Name of the Scholar	Name of the Supervisor	Research Area
1	Mr.Jami Rajesh	Dr. Nakka Jayaram	Design of switched capacitor based single phase multilevel inverters for Renewable energy conversion system

5.7 MECHANICAL ENGINEERING

The Department of Mechanical Engineering at NIT Andhra Pradesh, offers a B.Tech. Undergraduate programme in Mechanical Engineering, Two M. Tech programmes Manufacturing Engineering and Thermal Engineering and Mechanical Engineering also, M.S. (by research) and Ph.D. programmes (Full time and Part-time). The department was incepted in the year 2015 with a sanctioned intake of 60 students currently the enhanced intake is 120 students for the B.Tech. (ME) programme. The B.Tech. curriculum offered by the department includes of core courses that provide a comprehensive theoretical foundation which is supplemented through industry relevant elective courses and a project component. The department offers two M.Tech. programmes in programmes Manufacturing Engineering and Thermal Engineering with an intake of 15 students, from the Academic Year 2020-21 onwards. The M.Tech. curriculum is designed in such way to provide a theoretical and practical foundation for conducting high-quality research. Regular faculty in the department are experienced and possess degree from Institutes of national importance. Faculty members in the department work on research domains such as Design, Manufacturing, Therman and Materials Sciences to name a few.

VISION:

The Mechanical Engineering Department endeavours to be recognized globally for outstanding education and research leading to well qualified engineers, who are innovative, entrepreneurial and successful in advanced fields of mechanical engineering to cater the ever-changing industrial demands.

MISSION:

1. To impart mechanical engineering education with latest teaching learning processes.
2. To equip the students with the advanced tools to make them suitable for global employment and societal requirements.
3. To train the students to solve engineering problems in multi-disciplinary areas.
4. To inculcate professional ethics and human values.

LABS/WORKSHOPS:

1. Mechatronics lab,
2. Manufacturing lab with CNC Turning and Milling Centres,
3. Advanced Welding Laboratory
4. Foundry Technology Laboratory
5. CAD/CAM/CAE Laboratory
6. Machine Shop,
7. Workshops and Drawing Halls

FACULTY:



**Dr. THELLA BABU
RAO**
Assistant Professor
(Head of the
Department)

AREAS OF INTEREST:

- Metal Matrix Composites,
- Manufacturing Engineering,
- Modeling and Optimization of Manufacturing Processes,
- Bulk metal removal from hard-to-cut materials



**Dr. VEERESH KUMAR
G. B**
Assistant Professor

AREAS OF INTEREST:

- Material Science and Metallurgy,
- Composite Materials,
- Manufacturing Technology,
- Artificial Neural Networks



**Dr. G. RAVI KIRAN
SASTRY**
Professor

AREAS OF INTEREST:

- IC engine combustion,
- Biodiesel and other biofuels,
- Regulated and unregulated emissions



**Dr. SANTHOSH
KUMAR GUGULOTHU**
Assistant Professor

AREAS OF INTEREST:

- Cavitation,
- Heat Transfer in Space Applications,
- IC engines,
- Energy Efficient Thermal Systems,
- Computational Fluid Dynamics,
- Micro-scale flows and biological application of Ultrasound.



**Dr. T. KARTHIKEYA
SHARMA**
Assistant Professor

AREAS OF INTEREST:

- IC engines,
- Refrigeration and Air Conditioning,
- Energy Efficient Thermal Systems,



**Dr. HYMAVATHI
MADIVADA**
Assistant Professor

AREAS OF INTEREST

- Optimization of Scheduling and Inventory Problems,
- Soft Computing Techniques,
- Manufacturing Processes

RESEARCH SCHOLARS

1. Number of full-time: 08
2. Number of part-time: 36
3. Number of students graduated: 03
4. Thesis submitted: 02

5.8 METALLURGY AND MATERIALS ENGINEERING

The Department of Metallurgical and Materials Engineering is progressing at a rapid pace with development in both infrastructure and academic programmes. The department has highly qualified faculty members with research interests in the following areas: Extractive Metallurgy; Metallurgical Waste Utilization; Welding Metallurgy; High Temperature Corrosion; Additive Manufacturing; Powder Metallurgy; Materials Characterization; Energy-, Bio- and Nano Materials. The department offers B.Tech., M.S. (by Research) and Ph.D. Programmes (Full Time/Part Time).

VISION:

The vision of the Department is to be a recognized center of knowledge, experience, ingenuity, research, education, and leadership that is unique in scope and unsurpassed in dedication to its students and the nation.

MISSION:

1. To provide high-quality education and training in Metallurgy and Materials Science & technology and to prepare graduates for productive careers in engineering and allied fields.
2. To motivate the graduates to discover and disseminate new knowledge through creative activity in research.
3. To engage in collaborative research with academia, R&D and industry partners and extend our expertise as and when needed for testing, consultancy and dealing the solution oriented industrial problems.
4. To provide service to the state, nation, and world by advancing the frontiers of science and engineering of materials, and, through these efforts, to enhance the human conditi

LABS/WORKSHOPS:

1. Physical Metallurgy
2. Extractive Metallurgy
3. Powder Metallurgy
4. Materials Testing
5. Materials Forming
6. Foundry and Casting
7. Corrosion Engineering
8. Heat Treatment

FACULTY:



Dr. R. SUNIL KUMAR
Assistant Professor
(Head of the Department)

AREAS OF INTEREST:

- Powder Metallurgy,
- High Temperature Materials,
- ODS Steels,
- Powder Processing,
- Additive Manufacturing



Dr. RAFFI MOHAMMED
Assistant Professor

AREAS OF INTEREST:

- Welding Metallurgy,
- Corrosion of Welds,
- High Temperature Corrosion

RESEARCH SCHOLARS

DR. R. SUNIL KUMAR	S.Subhramanyam (FullTime)	Investigation of Mechanical and Corrosion Properties of Low Temperature Salt Bath Nitrided Ferritic Stainless Steels.
	R. Parthasaradi(FullTime)	Effect of Active Element Addition in High Temperature Oxidation Behavior of High Entropy Alloys
	B. Venkateswarlu (part Time)	Developing MgZnRE-Hydroxyapatite Composites for Biomedical Applications: Evaluating Microstructure, Mechanical Properties and Corrosion Behavior
	V. Mahesh Babu (part Time)	Surface Modifications of Ni based Super Alloys

Dr. Raffi Mohammed	Sheik Surjan (FullTime)	Structure-Property Correlation of Ni based and Ni free Austenitic Stainless Steels
	T Atmaramudu(FullTime)	Studies on Arc Welding of Low Ni/ Ni free Austenitic Stainless Steels
	GArun Kumar(FullTime)	Studies on Friction Stir Welding of Ni Free Austenitic Stainless Steels
	P Raghuram(part Time)	Studies on Heat Treatment and Surface Hardening Aspects on Leaf Spring Steels for Automotive Applications

	K.Ramasamy(part Time)	Studies on Bimetallic (Ti/CS) and Trimetallic (Zr/Ti/SS) Explosive Clads
	V Shashikanth(part Time)	Studies on CRA Weld-Overlays on Steel Substrate for Wear and Corrosion Resistance

5.9 SCHOOL OF SCIENCES

The School of Sciences, National Institute of Technology Andhra Pradesh, was initiated in the same year of establishment of the institute. The School of Sciences encompasses the basic departments in Sciences – Mathematics, Physics and Chemistry. Presently, the School offers all the basic science courses to the Under-graduate engineering students of the institute. Since, science courses form the basis for all the engineering disciplines, syllabus pertaining to Mathematics, Physics and Chemistry are meticulously planned to provide updated information to the students. The courses being taught are not restricted to first year alone, since the school offers elective courses for the higher semesters as well.

The Department is equipped with good number of faculty who have obtained Ph.D. degrees from internationally reputed institutes. The Department is strengthened with the services of faculty members having rich expertise in the areas of Differential equations, Linear Algebra, Functional Analysis, Mathematical Physics, magnetic materials, photonic materials, shape memory alloys, nano materials, energy materials, synthetic methods for biologically active molecules, peptide chemistry, molecular self-assembly, glyconanoparticles, click chemistry, corannulene chemistry and antibacterial materials. The faculty of the department are highly motivated with a strong commitment to teaching and research. Faculty members involve in the execution of sponsored research projects funded by SERB, UGC, UGC DAE CSR, and etc. Also, faculty have been taking active part in the development of the institute.

Department has already established physics and chemistry laboratories for the Under-graduate students. These labs are equipped with latest experiments and are periodically upgraded. The faculty members are committed to establish the research laboratory with the aim of performing cutting-edge research in the areas of physical and chemical science

through collaboration with leading institutions. Efforts are being undertaken to initiate Centres of Excellence in Materials Development and build a state-of-the art characterization facility to cater to the needs of researchers working in the areas of Materials research.

Text books and reference materials suggested by the faculty members to the students are of international standards. The Laboratory course materials are substantiated with video demonstrations and efforts to develop Virtual laboratories have commenced recently. This facilitates the teaching-learning process, and helps the students to be well-prepared and face the real-time laboratory sessions with confidence.

Memorandum of Understanding (MoU) with leading international and national research institutes and organizations are in the pipeline. It is proposed to undertake post-graduate students for research internships during summer and winter sessions every year.

Programs such as Faculty Development Programs, Conferences, quizzes and Webinars, are being organized in a phased manner. This helps the members of faculty to stay abreast with the latest developments in their areas of expertise and build strong collaborations with leading scientists and researchers.

The number of research scholars pursuing their Ph.D. degree in the school shows a constant progress. Faculty members also publish research articles in highly reputed international journals. Filing patents is also encouraged by the institute.

Overall, the academic, and research activities of the school is aimed to provide a vibrant, all-inclusive and progressive environment for all the individual faculty members and the students involved and the team together.

VISION:

To offer quality education in the significant domains of basic and applied sciences by developing vibrant academic and research eco-system capable of nurturing and producing competent engineers and scientists.

MISSION:

1. Expose students to the key areas of basic sciences by developing a conducive and progressive **teaching-learning** ambience augmented with research insights.
2. To inculcate and nurture **innovative capabilities** in students by offering project-based learning and internship practices.
3. To undertake active multi-disciplinary research projects with industry through **consultancy and collaborative** initiatives in the areas of expertise.
4. Encourage students to enhance scientific potential for catering to **societal needs**.

LABS/WORKSTATIONS:

1. Functional materials laboratory
2. Organic synthesis laboratory

FACULTY:



Dr. ARUN KUMAR. R
Assistant Professor
 (Head of the Department)

AREAS OF INTEREST:

- Experimental Solid-State Physics;
- Optical materials (Bulk and Nano-scale);
- Single crystals; Luminescent glasses;
- Dosimeter materials; Nano materials



**Dr. KURMAYYA
TAMMINANA**
Associate Professor
(maths)

AREAS OF INTEREST:

- Linear Algebra,
- Functional Analysis



Dr. SUDARSHAN DHUA
Assistant Professor

AREAS OF INTEREST:

- Theoretical Seismology,
- Electrodynamics,
- Solid Mechanics,
- Crack Propagation



Dr. SHARAD DWIVEDI
Associate Professor

AREAS OF INTEREST:

- Differential Equations and
- Mathematical Physics
(Magnetization dynamics,
Spintronics).



**Dr. RAMUDU
MACHAVARAPU**
Assistant Professor

AREAS OF INTEREST:

- Spintronic Materials,
- Thermal / Ferromagnetic shape
memory alloys and thin films,
- Magnetic Sensors,
- Magnetocaloric Materials,
- Rare-earth and rare-earth free
based permanent magnetic
materials.



Dr. TAPAS PARAMANIK
Assistant Professor

AREAS OF INTEREST:

- Experimental Condensed Matter
Physics & Material Science



Dr. J. KRISHNAMURTHY
Assistant Professor

AREAS OF INTEREST:

- Multiferroics,
- strongly correlated systems,
- Magnetism at the nanoscale,
- Multifunctional properties of magnetic oxides,
- Low temperature physics,
- Growth and characterization of semiconductor hetero-structures



Dr. AMARENDAR REDDY. M
Assistant Professor

AREAS OF INTEREST:

- Peptide and polysaccharide based nanostructured materials,
- Synthesis of novel antimicrobial agents



Dr. SURENDRA H. MAHADEVEGOWDA
Assistant Professor

AREAS OF INTEREST:

- synthetic Organic Chemistry;
- Materials Chemistry;
- Corannulene Chemistry;
- Molecular Self-Assembly;
- Biomaterials

RESEARCH SCHOLARS

Sl. No.	Scholar Name (Ms. /Mr.)	Supervisor Name	Research Topic
1	CH.M. Verriyya	Dr. T. Kurmayya	Generalized Inverses
2	K. Chandra Mouli	Dr. T. Kurmayya & Dr. Nagesh Bhattu	Applied Linear Algebra
3	Manish	Dr. T. Kurmayya	Linear Algebra
4	Rajashree Panda	Dr. R. Arun Kumar	Development of calcium aluminate-based phosphors for fabricating luminescent devices
5	Mitrabhanu Behera	Dr. R. Arun Kumar	Development of phosphor-in-glass materials for efficient white light generation

6	Sushree Bedamati	Dr. R. Arun Kumar	Light-conversion phosphors for enhanced light harvesting in solar cells
7	M. Siva Kumar	Dr. R. Arun Kumar	Up-conversion phosphor materials for enhancing device performance of solar cells
8	Mahesha K.Hegde	Dr. R. Arun Kumar	Fabrication of dosimeter single crystals
9	Rahul Awasthi	Dr. R. Arun Kumar	Development of Novel nanomaterials and Investigations on Their Response to C and Ag ions irradiation
10	Arindam Nath	Dr. Sudarshan Dhua	Elastodynamics
11	Arpita Maji	Dr. Sudarshan Dhua	Elastodynamics
12	Subrata Mondal	Dr. Sudarshan Dhua	Impact of Surface/interface theory and nonlocal theory on the wave propagation in smart composite structures
13	Anapagaddi Sudhir Kumar	Dr. Sudarshan Dhua	Fuzzy theory on Partial Differential Equation
14	Rakesh Kumar	Dr. Sudarshan Dhua	Neural network on Partial Differential Equation
15	Mr. Prabhakar Somavarapu	Dr. Tapas Paramanik	Studies of magnetocaloric properties in intermetallic compounds.
16	Mr. Shuvendu Ghosh	Dr. Tapas Paramanik	Studies of magnetic and magnetocaloric properties in Gd-based intermetallic compounds
17	Mr. Manikantha Panda	Dr. Tapas Paramanik	Studies of topological behavior in intermetallic and chalcogen-based compounds
18	Mr CH Prasanth	Dr J Krishnamurthy	Magnetic multiferroics
19	Mr Abhijit Nayak	Dr J Krishnamurthy	Exchange bias effect
20	Ms. Debasmita Bala	Dr J Krishnamurthy	Low-temperature magnetism
21	Ms. P Athira	Dr J Krishnamurthy	Solid-state refrigeration
22	Mr Karumuri Venkanna	Dr J Krishnamurthy	Physical properties of Heusler alloys

23	Mr. Vygith K V	Dr. M. Ramudu	Metamagnetic shape memory materials
24	Mr. Kuri Manjunatha	Dr. M. Ramudu	Development of materials for Photodiode applications
25	Ms. Punam Salaria	Dr. Amarendar Reddy M.	Phytochemicals evaluation by in silico methods for epilepsy
26	Mr. Sumit Maity	Dr. Sharad Dwivedi	Mathematical analysis of ferromagnetic nanostructures
27	Mr. Sarabindu Dolui	Dr. Sharad Dwivedi	Ultrafast magnetization dynamics in ferromagnetic nanostructures
28	Ms. Ambalika Halder	Dr. Sharad Dwivedi	Domain wall motion in multilayer ferromagnetic heterostructures
29	Mr. Sarabindu Dolui	Dr. Sharad Dwivedi	Ultrafast magnetization dynamics in ferromagnetic nanostructures
30	Raghvendra	Dr. Surendra H. M	Multicomponent reactions and development of Fluorescent chemosensors
31	G Durga Prasad	Dr. Surendra H. M	Synthesis of coumarin and pyrene based fluorescent sensors and heterocyclic compound derivatives.
32	Mr. Ramu Yarra	Dr. M. Ramudu	Multiferroic Materials

5.10 SCHOOL OF HUMANITIES AND MANAGEMENT

School of Humanities and Management came into existence in August 2018. School houses two departments, that is, Department of Humanities and Department of Management. The school offers core and elective courses for B.Tech degree program and an audit course for PhD program. The School has nine part-time and two full-time research scholars.

VISION:

To edify the young minds and enable them achieve intellectual excellence and personal refinement by fine-tuning their linguistic and managerial skills

MISSION:

To stimulate critical thinking and creativity in students through pedagogic innovations and cutting-edge research and thereby, develop School of Humanities and Management as a centre of academic excellence that meets global standards

FACULTY



Dr. SOUMYA JOSE
Assistant Professor (English)

AREAS OF INTEREST:

- African American Theatre,
- First Nations Theatre,
- Diaspora Studies and
- Gender Studies

➤ RESEARCH SCHOLARS

Scholar Name: KRISHNA JA T. S
Research topic: Nuns in the American Theatre, Post Vatican II
Supervisor: Dr. Soumya Jose

Scholar Name: SAMIKHYA DASH
Research topic: Rape Trauma Syndrome and Imperceptible Disability: A Study of Select Hindi Films, 2000-2023
Supervisor: Dr. Soumya Jose

Scholar Name: ARYA ANN JOHNS
Research topic: Indian Writing in English
Supervisor: Dr. Soumya Jose

Scholar Name: SRUTHI MADHU
Research topic: African American Women Theatre
Supervisor: Dr. Soumya Jose

6 RESEARCH AND DEVELOPMENT

6.1 International Journals

1. Singh RP, Niharikaa J, Kondepudi KK, Bishnoi M, **Jagan Mohan Rao Tingirikari** (2022). Recent understanding of human milk oligosaccharides in establishing infant gut microbiome and role in immune system. Food Research International. 151:110884.
2. Babu PJ, **Jagan Mohan Rao. Tingirikari.** (2022). A review on polymeric nanomaterials intervention in food industry. Polymer Bulletin.80:137-164.
3. Babu PJ, Tirkey A, Chanu NB, Lalchhandama K, Singh YD, **Jagan Mohan Rao. Tingirikari** (2022). Conventional and nanotechnology-based sensors for creatinine (A kidney biomarker) detection: A consolidated review. Analytical Biochemistry. 645: 114622 doi.org/10.1016/j.ab.2022.114622
4. Anjaneyulu Musini, **Jagan Mohan Rao. Tingirikari** (2022). Bioactive compounds from plants and their immune potentials on Coronavirus. Current Nutrition and Food Science.18:432-440.
5. Mallu, M. R., **Erva, R. R.**, Manne, A. A., Prasanth, D. S. N. B. K., Venkateswarlu, T. C., Chadalavada, S., Kurpati, A. K., Chava, N. (2022). "Improving Physiological Factors and Plasmid Stability of DE3 Host System". Asian Journal of Pharmaceutics (AJP), 16(4), 429-433.
6. Divya, K., Malothu, R., Dowlathabad, M. R., Suman, D. K., & **Erva, R. R.** (2022): "Recent Advances in engineering Corynebacterium glutamicum for production of Lysine". Research Journal of Biotechnology Vol, 17, 12.
7. Madhuri K, Kalpana Motha, Aparna D, **Sudarshana Deepa V** and Sunitha P. (2022). Performance of Sweet Flag (Acorus calamus L.) accession in Andhra Pradesh. Biological Forum-An International Journal .14(3)1-7.
8. Suryawanshi N, **Ayothiraman S**, Eswari JS. New Insights of Carbon Catabolite Repression and Kinetics Modeling for the Growth of Thermomyces lanuginosus. Chemical Engineering & Technology, 2022 (In Press). (IF: 2.215) DOI:10.1002/ceat.202100609
9. Sounderarajan S, Puchalapalli DSR, **Ayothiraman S**, Effect of synthetic fatty liquor and neats foot oil on the reduction of chromium using Fusarium oxysporum and its kinetic study, Environmental Science and Pollution Research, 2022, 29(57):86427-86438. (IF: 5.19)
10. Pradhan N, Kumar S, Selvasembian R, Rawat S, Gangwar A, R S, Kit Yuen Y, Luo L, **Ayothiraman S**, Dattatraya Saratale G, Mal J. Emerging trends in the pretreatment of microalgal biomass and recovery of value-added products: A review, Bioresource Technology, 2023, 369:128395. (IF: 11.88)
11. Dahiya D, Akhil P, Chirra PRR, Sreeramula V, Mogili NV, **Ayothiraman S**, Morphological and structural characterization of chitin as a substrate for the

- screening, production, and molecular characterization of chitinase by *Bacillus velezensis*, *Environmental Science and Pollution Research*, 29(57):86550-86561. (IF: 5.19)
12. K.V.V. Satyannarayana, S.L.S. Rani, S. Baranidharan, **R. Vinoth Kumar**, Indigenous bentonite-based tubular ceramic microfiltration membrane: Elaboration, characterization, and evaluation of environmental impacts using life cycle techniques, *Ceramics International*, 48(19) (2022) 28843-28855. (IF: 5.532) DOI: [10.1016/j.ceramint.2022.03.156](https://doi.org/10.1016/j.ceramint.2022.03.156)
 13. K.V.V. Satyannarayana, S.L.S. Rani, **R. Vinoth Kumar**, Clarification of citrus fruit juices using microfiltration technique equipped with indigenously developed novel ceramic membrane, *Journal of Food Science and Technology*, (2023): 1-11. (IF 3.117) DOI: 10.1007/s13197-023-05734-y
 14. K.V.V. Satyannarayana, **R. Vinoth Kumar**, Tangential microfiltration of lime and pineapple juices using inexpensive tubular ceramic membrane and analysis of fouling mechanism, *Applied Food Research*, 3 (1) (2023) 100284. DOI: 10.1016/j.afres.2023.100284
 15. K.V.V. Satyannarayana, **R. Vinoth Kumar**, C.B. Mathaji, R. Singh, Y.H Ahn, S.S. Chen, Ceramic membranes for citrus fruit juice clarification: A systematic review, *ChemBioEng Reviews* (2023), Manuscript ID: cben. 202200048.R1 (IF 6.2). (Accepted)
 16. S. Lakshmi Sandhya Rani, **R. Vinoth Kumar***, fabrication and characterization of ceramic membranes derived from inexpensive raw material fuller's earth clay, *Materials Science and Engineering: B*, 284 (2022):115877. DOI: <https://doi.org/10.1016/j.mseb.2022.115877> [IF: 3.407, SCI & Scopus Indexed]
 17. S. Lakshmi Sandhya Rani, K. V. V. Satyannaryana, **R. Vinoth Kumar***, "Evaluation Study of Fuller's Earth Clay Ceramic Membrane in Treating Raw Rubber Processing Wastewater", *Journal of Rubber Research*, (2023) [IF: 1.208, SCI indexed] [Accepted, Manuscript No: JRUR-D-22-00100R2].
 18. Yadiki Mohammad Nizamuddin, Venkata Satyanarayana Suggala and **Puchalapalli Dinesh Sankar Reddy** (2022). Plant chemical analysis and antioxidant commotion of lactobacillus contrived hydroethanolic extracts of *Opuntia dillenii* Haw. *Annals of Phytomedicine: An International Journal*, 11(2): 500-506, 2022 (DOI: <http://dx.doi.org/10.54085/ap.2022.11.2.61>, Web of Science)
 19. Yadiki Mohammad Nizamuddin, Venkata Satyanarayana Suggala, **Puchalapalli Dinesh Shankar Reddy**, Comparing the content of hydro ethanolic *Opuntia ficus indica* cladode extracts following lactobacillus treatment using quantitative phytochemical screening, *NeuroQuantology*, 20(19), 989-997, 2022, (DOI: 10.48047/nq.2022.20.19. NQ99090).
 20. R. Renu, Kavitha Waghray, **P.Dinesh Sankar Reddy**, Optimization and Modelling of the Shelf Life of Mango (*Mangifera Indica*) in Hydro-Cooling Coated with

- Antimicrobial Extract, IJFANS International Journal of Food and Nutritional Sciences, 11(Sp.Issue 2), 947-956, 2022 (UGC CARE Listed (Group -I)).
21. Mohammad Nizamuddin Yadiki, Venkata Satyanarayana Suggala, **Dinesh Shankar Reddy Puchalapalli**, Hindustan Abdul Ahad, Temperature and Exposure Time Impact on the Extraction of *Opuntia ficus-indica* and *Opuntia dillenii* Cladodes on % Yield as a Response: Screening using Design Expert Software, Global Journal of Medical, Pharmaceutical, and Biomedical Update, 17(17), 1-5, 2022, (http://dx.doi.org/10.25259/GJMPBU_55_2022).
 22. Purohitam Narasimha Siva Teja, Santhosh Kumar Gugulothu, **Puchalapalli Dinesh Sankar Reddy**, and Balakrishnan Deepanraj, Numerical investigation of nanoparticles dispersion on forced/ mixed convective flows and heat transfer in a lid-driven stepped cavity configurations, Proc IMechE Part E: J Process Mechanical Engineering, Special Issue: ICTAES21, 1-14, 2022, (<https://doi.org/10.1177/09544089221127617>). (scopus)
 23. P. Narasimha Siva Teja, S. K. Gugulothu, **P. Dinesh Sankar Reddy**, Midhun Das, and B.Deepanraj, Mixed convective heat transmission of laminar flow field in a mono/ dual moving lid type square figured cavity packed with diverse aqueous based nanofluids, Applied Nanoscience, 2022, (<https://doi.org/10.1007/s13204-022-02621-4>). (scopus)
 24. R. Chinthayya Naidu, **P. Dinesh Sankar Reddy**, Comparative Studies on the effect of pyrolyzed custard apple (*Annona squamosa*) leaves as an adsorbent in the removal of fluoride from waste water, Asian Journal of Chemistry, 34(10), 2597-2603, 2022, (<https://doi.org/10.14233/ajchem.2022.23836>). (scopus)
 25. P. Narasimha Siva Teja, S. K. Gugulothu, **P. Dinesh Sankar Reddy**, Abdul Ashraf, B.Deepanraj, and P. Thillai Arasu, Numerical Study on the Thermal Enhancement of Phase Change Material with the Addition of Nanoparticles and Changing the Orientation of the Enclosure, Journal of Nanomaterials, Volume 2022, Article ID 6428469, 15 pages, 2022, (<https://doi.org/10.1155/2022/6428469>). (scopus)
 26. Mahadeva Raju G. K., Chaitra Srikanth, G.M. Madhu, **P. Dinesh Sankar Reddy**, Karthik K. V., Fly Ash Epoxy Composites with Superior Fire-Retardant Properties, Advanced Materials Research, 1172, 83-94 (<https://doi.org/10.4028/p-hfbu93>), 2022. (Scopus)
 27. Shiva Chandra Vaddiraju, **Reshma T (2022)**. Urban flood susceptibility analysis of Saroor Nagar Watershed using Geomatics based multi-criteria analysis framework. Environmental Science and Pollution Research Journal. <https://doi.org/10.1007/s11356-022-24672-4> (SCIE-Springer).
 28. Savitha, Chirasmayee, and **Reshma Talari**. "Mapping cropland extent using sentinel-2 datasets and machine learning algorithms for an agriculture watershed." Smart Agricultural Technology 4, (2023): 100193. Accessed May 3, 2023. <https://doi.org/10.1016/j.atech.2023.100193>.
 29. Shiva Chandra Vaddiraju, **Reshma T (2023)**. Assessment of groundwater potential zones in Saroor Nagar Watershed, Telangana, India using Geospatial Techniques

- and Analytical Hierarchy Process. Environmental Science and Pollution Research Journal. [\(SCIE-Springer\)](https://doi.org/10.1007/s11356-023-26185-0)
30. Shiva Chandra Vaddiraju, **T. Reshma**, & Savitha, C. (2022) Determination of impervious area of Saroor Nagar Watershed of Telangana using spectral indices, MLC, and machine learning (SVM) techniques. Environmental Monitoring Assessment 194, 258. doi.org/10.1007/s10661-022-09901-0 (SCIE-Springer).
 31. Shiva Chandra Vaddiraju, **Reshma T**, (2022) Urbanization implications on hydro-meteorological parameters of Saroor Nagar Watershed of Telangana, Environmental Challenges, pp 1-15, Volume 8, 2022, ISSN 2667-0100, doi.org/10.1016/j.envc.2022.100562. (Scopus-Elsevier).
 32. Satyanarayana, K. V. V., Sandhya Rani, S. L., **Baranidharan S**, and Kumar, R. V. (2022) "Indigenous bentonite-based tubular ceramic microfiltration membrane: Elaboration, characterization, and evaluation of environmental impacts using life cycle techniques." Ceramics International, Vol. 48, Issue 19, Part B, pages 28843 - 28855 (<https://doi.org/10.1016/j.ceramint.2022.03.156>) ISSN: 0272-8842.
 33. Shilpa Mishra and **Baranidharan S** (2022), "Efficacy of Nanoparticles as Photocatalyst in Leachate Treatment" Nanotechnology for Environmental Engineering, 7, 173–192 (2022) (<https://doi.org/10.1007/s41204-021-00209-x>) ISSN (print): 2365-6379.
 34. Nagireddi Jagadeesh, Santhosh Kumar G, Shaik Mahabu Subhani, and **Baranidharan S** (2022) "Environmental Performance of Prefabricated Structural Elements for Cleaner Construction Solutions – A LCA Approach" ACSE Journal of Hazardous, Toxic, and Radioactive Waste, Volume 26, Issue 2, ([https://doi.org/10.1061/\(ASCE\)HZ.2153-5515.0000667](https://doi.org/10.1061/(ASCE)HZ.2153-5515.0000667)) ISSN (print): 2153-5493.
 35. Santhosh, Kumar Gedela, **Sk M. Subhani**, and A. Bahurudeen. "Sustainable reuse of palm oil fuel ash in concrete, alkali-activated binders, soil stabilisation, bricks and adsorbent: A waste to wealth approach." Industrial Crops and Products 183 (2022): 114954.
 36. Santhosh, Kumar Gedela, **Sk M. Subhani**, and A. Bahurudeen. "Recycling of palm oil fuel ash and rice husk ash in the cleaner production of concrete-A review." Journal of Cleaner Production (2022): 131736.
 37. Santhosh, Kumar Gedela, **Sk M. Subhani**, and A. Bahurudeen. "An investigation on the effectiveness of quarry dust and sugarcane bagasse ash in Na-based alkali-activated binder." Materials Today: Proceedings (2023).
 38. Ramakrishnan, Jegan and Liu, Tingting and Yu, Rongrong and **Seshadri, Karthick** and Gou, Zhonghua, towards greener airports: Development of an assessment framework by leveraging sustainability reports and rating tools, Environmental Impact Assessment Review, Vol. 93, 2022, Elsevier, IF: 6.122.
 39. Sindhu, Korrapati and **Seshadri, Karthick** and Kollengode, Chidambaran, Workload characterization and synthesis for cloud using generative stochastic processes, The

Journal of Supercomputing, vol. 78, no. 17, pp. 18825—18855, 2022, Springer, US. IF: 2.557

40. Y, VRPS Sastry and **Seshadri, Karthick**, Explainable sentiment analysis for product reviews using causal graph embeddings, *Sadhana*, vol. 47, no. 4, 2022, Springer. IF: 1.214.
41. Ramakrishnan, Jegan and Liu, Tingting and Zhang, Fan and **Seshadri, Karthick** and Yu, Rongrong and Gou, Zhonghua, A decision tree-based modeling approach for evaluating the green performance of airport buildings, *Environmental Impact Assessment Review*, vol. 100, 2023, Elsevier. IF: 6.122.
42. KiranBabu Nelatoori, **K. Hima Bindu**, "Attention-based Bi-LSTM Network for Abusive Language Detection", *IETE Journal of Research*, Vol. 68, pp.1-9, 2022, DOI:10.1080/03772063.2022.2034534.
43. KiranBabu Nelatoori, **Hima Bindu Kommanti**, "Multi-task learning for toxic comment classification and rationale extraction", *Journal of Intelligent Information Systems*, Springer, Vol.60, pp. 495–519, 2023, <https://doi.org/10.1007/s10844-022-00726-4>.
44. GssMILP for anomaly classification in surveillance videos” by N Satya Krishna, **S Nagesh Bhattu**, DVLN Somayajulu, NV Narendra Kumar, K Jaya Shankar Reddy, *Expert Systems with Applications*, Volume: 203, 2022.
45. Enhanced-Sweep: Communication Cost Efficient Top-K Best Region Search” by Avinash Potluri, **S Nagesh Bhattu**, NV Narendra Kumar, RBV Subramanyam *Arabian Journal for Science and Engineering*, Volume 48, Pages: 2121-2132
46. Purna Chandra Reddy, **Kiran Kumar Gurralla**, OHGCNet: Optimal feature selection-based hybrid graph convolutional network model for joint DR-DME classification, *Biomedical Signal Processing and Control*, Volume 78, 2022,103952, ISSN 1746-8094, <https://doi.org/10.1016/j.bspc.2022.103952>.
47. Purna Chandra Reddy, **Kiran Kumar Gurralla**,Joint DR-DME classification using deep learning-CNN based modified grey-wolf optimizer with variable weights,Biomedical Signal Processing and Control, Volume 73,2022,103439,ISSN 1746-8094,<https://doi.org/10.1016/j.bspc.2021.103439>.
48. Pramod Kumar Aylapogu, **Kiran Kumar Gurralla** “A mm wave circularly polarized tri-band saucer shaped antenna for underwater monitoring” *Micro Systems Technologies*, Springer Journal March 2022.Vol28, Issue3, pp11739-175012(SpringerpublicationImpactfactor:2.276) <https://link.springer.com/article/10.1007/s00542-022-05290-z>.
49. Narasimha Nayak, **Dr. Kiran Kumar Gurralla**, “Enhancing Secrecy in SWIPT-Enabled NOMA Cooperative Network with Control-Jamming and Power Optimization” *IEEE Transactions on Vehicular Technology (IEEE)*, March 2022. (Under Review).

50. Nagaraju L and **Puli Kishore Kumar**, "Improved 1-D and 2-D DOA Estimation Method Using a Single Snapshot with Particle Swarm Optimization," *IETA Traitement du Signal* (Accepted volume 40, No.3).
51. M. V. Rao, Y. B. Modugu, D. Mondal, **S. Yuvaraj**, and M. V. Kartikeyan "Generation of Dual Band OAM Beam using Compact Uniform Circular Array for Vehicular Communications," *Microwave and Optical Technology Letters*, Wiley Black well, Accepted, 2023, pp. 1-6 doi: 10.1002/mop.33717. Electronic ISSN:1098-2760 (IF: 1.392).
52. D. Mondal, **S. Yuvaraj**, S. Singh, M. Rawat, and M. V. Karthikeyan, "Insert Misalignment studies of a coaxial cavity gyrotron-Full wave Approach," *IEEE Trans. Electron Devices*, IEEE, vol. 70, no. 5, May 2023, pp. 2556-2562, doi: 10.1109/TED.2023.3262222. Print ISSN: 0018-9383 Electronic ISSN: 1557-9646 (IF: 2.917).
53. S. Adya, **S. Yuvaraj**, M. Rawat, and M. V. Karthikeyan, "I/O System of V-Band Second Harmonic Gyrotron for 100/200 kW Operation, " *Fusion Engg. & Design*, Elsevier, vol. 193, 113613, Aug. 2023, pp. 113613(1-9), doi: 10.1016/j.fusengdes.2023.113613, ISSN: 0920-3796, (IF: 1.905).
54. G. Challa Ram, P. Sambaiah, **S. Yuvaraj**, and M. V. Kartikeyan "Graphene based tunable bandpass filter for terahertz spectroscopy of polymers," *Optik*, Elsevier, vol. 268, Oct. 2022, pp. 169792(1-10), doi: 10.1016/j.ijleo.2022.169792 (IF: 2.84).
55. Pagidipala, Sravanthi and **Vuddanti Sandeep**. "Solving realistic reactive power market clearing problem of wind-thermal power system with system security" *International Journal of Emerging ElectricPowerSystems*, vol.23, no.2, April 2022, pp. 125-144. <https://doi.org/10.1515/ijeeps-2021-0060>
56. V. B Murali Krishna, **V. Sandeep**, SS Murthy and Y. S Kishore Babu "Experimental Investigations on Performance Comparison of Self Excited Induction Generator and Permanent Magnet Synchronous Generator for Small scale Renewable Applications", *Renewable Energy*, Elsevier Publications, Vol. 195, pp. 431-441, June 2022 (Scopus & SCI).
57. **V Sandeep**, P. Sudheer, and Vinuta Bolashetty "A Case Study in the Identification of Best Combination of Energy Resources for Hybrid Power Generation in Rural Communities through Techno-Economic Assessment" *Journal of Ambient Energy*, Taylor and Francis Group, July 2022. DOI: 10.1080/01430750.2022.2103183
58. Bala Murali Krishna, V and **Vuddanti Sandeep**. "Identification of the best topology of delta configured three phase induction generators for distributed generation through experimental investigations" *International Journal of Emerging Electric Power Systems*, vol. 23, no. 3, 2022, pp. 329-341. (Scopus & ESCI). DOI: <https://doi.org/10.1515/ijeeps-2021-0064>
59. SSSR Sarathbabu Duvvuri, **V. Sandeep**, Kishore Yadlapati and V. B Murali Krishna, "Research on Induction Generators for Isolated Rural Applications: State of Art and Experimental Demonstration", *Measurement: Sensors*, Vol. 24, 100541, December 2022. DOI: <https://doi.org/10.1016/j.measen.2022.100541>

60. Peddeeti, Sudheer and **Vuddanti Sandeep**, "A comparative analysis of the performance of centralized inverter and parallel inverter-based hybrid microgrid system for distributed generation" *International Journal of Emerging Electric Power Systems*, vol. 23, no. 3, pp. 305-316, 2022. (Scopus & ESCI) DOI: <https://doi.org/10.1515/ijeeps-2021-0089>
61. Peddeeti, Sudheer, **Vuddanti Sandeep** and B. Chitti Babu, "Effective power balancing and power quality enhancement in single-phase microgrid for remote areas with water pumping, battery storage and electronic load controller", *Electrical Engineering*, 104, pp. 83–96, 2022. (SCI, IF= 1.63). DOI: <https://doi.org/10.1007/s00202-021-01377-4>
62. Pulavarthi Satya Venkata Kishore, Jami Rajesh, **Nakka Jayaram** & Sukanta Halder (2022) A Survey of Machine Learning Applications in Renewable Energy Sources, *IETE Journal of Research*, DOI: 10.1080/03772063.2022.2143439.
63. Gaurav, **N. Jayaram**, S. Halder, K. P. Panda and S. V. K. Pulavarthi, "A Novel Design with Condensed Component of Multi-Input High Gain Nonisolated DC–DC Converter for Performance Enhancement in Carbon Neutral Energy Application," in *IEEE Journal of Emerging and Selected Topics in Industrial Electronics*, vol. 4, no. 1, pp. 37-49, Jan. 2023, doi: 10.1109/JESTIE.2022.3211779.
64. S. Arandhakar, **N. Jayaram**, Y. R. Shankar, Gaurav, P. S. V. Kishore and S. Halder, "Emerging Intelligent Bidirectional Charging Strategy Based on Recurrent Neural Network Accosting EMI and Temperature Effects for Electric Vehicle," in *IEEE Access*, vol. 10, pp. 121741-121761, 2022, doi: 10.1109/ACCESS.2022.3223443.
65. Jami Rajesh, **N Jayaram**, Satya Venkata Kishore Pulavarthi, "Grid Integration of Three Phase Solar Powered Fault Tolerant Cascade H-Bridge Inverter", *International Journal of Circuit Theory and Applications*, March 2022, DOI: <https://doi.org/10.1002/cta.3272>
66. Bogineni Jaya Chandra, **N Jayaram**, "A novel reduced switch single-phase five-level inverter", *International Journal of Circuit Theory and Applications*, April 2022, DOI: <https://doi.org/10.1002/cta.3283>
67. Swamy Jakkula, **N. Jayaram**, S. V. K. Pulavarthi, Y. R. Shankar and J. Rajesh, "A Generalized High Gain Multilevel Inverter for Small Scale Solar Photovoltaic Applications," in *IEEE Access*, vol. 10, pp. 25175-25189, 2022, doi: 10.1109/ACCESS.2022.3152771.
68. P S V Kishore, **Jayaram Nakka** and Jami Rajesh "Power enhancement of transformer less single-phase grid connected solar-wind energy conversion system for various environmental conditions" *International Journal of Emerging Electric Power Systems*, vol., no., 2022. <https://doi.org/10.1515/ijeeps-2021-0333>
69. Jami Rajesh, **Jayaram Nakka**, Pulavarthi Satya Venkata Kishore and Swamy Jakkula. "Performance analysis of grid interactive single-phase solar powered fault tolerant cascaded inverter" *International Journal of Emerging Electric Power Systems*, vol., no., 2022. <https://doi.org/10.1515/ijeeps-2021-0416>
70. Jami Rajesh, Satya Venkata Kishore Pulavarthi, **N Jayaram**, Sukanta Halder, "An Advanced HBNP Multi-level Inverter for the Performance Enhancement with

Reduced components”, International Journal of Electronics, April 2022, DOI: <https://doi.org/10.1080/00207217.2022.2066190>

71. Srimannarayana. K, **Nakka Jayaram**, Satya Venkata Kishore Pulavarthi, Yannam Ravi Shankar, Jami Rajesh, V Gouri Prashant. (2023). Quadruple Boost Switched Capacitor-based Inverter for Standalone Applications. IEEE Access.
72. Controlling the Significance of BLDC Motor Internal Faults Using Dual Examine Algorithm in Electric Vehicle applications (accepted) International Journal of Power Electronics and Drive Systems (IJPEDS).**Dr.N.Jayaram**
73. Rajani, K. and **Dr. Tejavathu Ramesh**. “Impact of wiring resistance on PV array configurations in harvesting the maximum power under static and dynamic shading conditions” IETE Journal of Research, 1-29, 2022.
74. Pothuraju, R. **Dr. Tejavathu Ramesh**, & Poondla, D. K. “Stator resistance and speed estimation for five level inverters fed DTFC-SVM of speed sensorless PMSM drive”. Electrical Engineering, Springer, 1-18, 2022.
75. Davu, S. R., **Dr. Tejavathu Ramesh** & Tummala, S. K. “EDAX analysis of poly crystalline solar cell with silicon nitride coating” International Journal on Interactive Design and Manufacturing (IJIDeM), 1-8, 2022.
76. Rajani, K. and **Dr. Tejavathu Ramesh**. “Reconfiguration of PV arrays (TCT, BL, HC) considering wiring resistance” CSEE Journal of Power and Energy Systems 8 (5), 1408-1416, 2022.
77. Dharmendra Kumar, P., **Dr. Tejavathu Ramesh**. “Investigation of Torque Ripple Behaviour for Five-Level Inverter-Fed Modified Model Predictive Torque Control-Based PMSM Drive”. IETE Technical Review, 1-16., 2022
78. Pothuraju, Ramakrishna, **Tejavathu Ramesh**, and Dharmendra Kumar Poondla. "Stator resistance and speed estimation for five level inverters fed DTFC-SVM of speed sensorless PMSM drive." Electrical Engineering 104.6 (2022): 4415-4432, Web of Science
79. Rajani, Kandipati, and **Tejavathu Ramesh**. "Impact of wiring resistance on PV array configurations in harvesting the maximum power under static and dynamic shading conditions." IETE Journal of Research (2022): 1-29.
80. Rajani, K., & **Tejavathu Ramesh** (2022). Reconfiguration of PV arrays (TCT, BL, HC) by considering wiring resistance. CSEE Journal of Power and Energy Systems, Web of Science
81. Davu, Srinivasa Rao, **Tejavathu Ramesh**, and Suresh Kumar Tummala. "EDAX analysis of poly crystalline solar cell with silicon nitride coating." International Journal on Interactive Design and Manufacturing (IJIDeM) (2022): 1-8.
82. Dharmendra Kumar, P., **Tejavathu Ramesh**, (2022). Investigation of Torque ripple behavior for Five-Level Inverter fed Modified Model Predictive Torque Control based PMSM Drive. IETE Technical Review, DOI: 10.1080/02564602.2022.2086931, Web of Science.
83. Pothuraju, R., **Tejavathu Ramesh**, & Panda, A. K. (2022). Multilevel Inverter fed Direct Torque and Flux Control-Space Vector Modulation of Speed Sensorless

Permanent Magnet Synchronous Motor drive with Improved Steady State and Dynamic Characteristics. International Journal of Circuit Theory and Applications, 50(4), 1279-1296, Web of Science.

84. Rajani, K. and **Dr. Tejavathu Ramesh**. "An Automatic Column Wiring Resistance Algorithm for Static Reconfiguration of PV Arrays and Analysis of Reconfigured T-C-T and T-T-C-L Under Dynamic Shading Conditions". Journal of Control, Automation and Electrical Systems, 1-21, 2023.
85. A Chandra Sekhar and **Dr. Tejavathu Ramesh**. "Novel Double Tied Cross Link with Reduced Cross Cables for Maximum Power Extraction under Uniform and Non-Uniform Shading Conditions" IETE Technical Review, 1-16, 2023
86. Chandra Sekhar & **Tejavathu Ramesh** (2023) Hybridization of Solar PV Configurations for Maximum Power Extraction Under Partial Shading Conditions, IETE Journal of Research, DOI: 10.1080/03772063.2023.2221664.
87. **S. Peddapati** and V. S. Prasadaraao K, "A New Fault-Tolerant Multilevel Inverter Structure with Reduced Device Count and Low Total Standing Voltage," in IEEE Transactions on Power Electronics, vol. 37, no. 7, pp. 8333-8344, July 2022.
88. S. Naresh, **S. Peddapati** and M. L. Alghaythi, "A Novel High Quadratic Gain Boost Converter for Fuel Cell Electric Vehicle Applications," in IEEE Journal of Emerging and Selected Topics in Industrial Electronics, vol. 4, no. 2, pp. 637-647, April 2023.
89. S. V. K. Naresh, **S. Peddapati** and M. L. Alghaythi, "A non-isolated high quadratic step-up converter for fuel cell electric vehicle applications," in International Journal of Circuit Theory and Applications, vol. 51, no. 9, pp. 1-24, April 2023.
90. S. V. K. Naresh and **S. Peddapati**, "Mission Profile Based Reliability Analysis of Power Converters in Grid Integrated PV-Battery System," in Electric Power Components and Systems, vol. 51, no. 5, pp. 480-495, February 2023.
91. Vishalteja Kosana, **Kiran Teeparthi**, Santhosh Madasthu, "Hybrid wind speed prediction framework using data pre-processing strategy based autoencoder network", Electric Power Systems Research, Elsevier, Volume 206, 2022. (DOI: <https://doi.org/10.1016/j.epsr.2022.107821>) (SCIE, Q1-Impact factor: 3.818)
92. Kosana V., **Kiran Teeparthi**, & Madasthu S, "Hybrid convolutional Bi-LSTM autoencoder framework for short-term wind speed prediction", Neural Computing and Applications, Springer, 2022. (DOI: <https://doi.org/10.1007/s00521-022-07125-4>) (SCIE, Q2-Impact factor: 5.102)
93. Vishalteja Kosana, Santhosh Madasthu, **Kiran Teeparthi**, Santosh Kumar, "A novel dynamic selection approach using on-policy SARSA algorithm for accurate wind speed prediction," Electric Power Systems Research, Elsevier, Vol. 212, 2022. (DOI: <https://doi.org/10.1016/j.epsr.2022.108174>). (SCIE, Q1-Impact factor: 3.818)
94. Sreenadh Batchu and **Kiran Teeparthi**, "Transient Stability Enhancement Through Individual Machine Equal Area Criterion Framework Using an Optimal Power Flow" in IEEE Access, vol. 10, pp. 149433 - 49444, 2022. (DOI: 10.1109/ACCESS.2022.3173422) (SCIE, Q1-Impact factor: 3.367)
95. Sreenadh Batchu and **Kiran Teeparthi**, "A new method for operating point free power system transient stability situational awareness based on single machine

- equivalent approach" Engineering Reports, Wiley, 2022. (DOI: <https://doi.org/10.1002/eng2.12519>) (ESCI)
96. Vishalteja Kosana, **Kiran Teeparthi**, and Santhosh Madasthu, "A novel and hybrid framework based on generative adversarial network and temporal convolutional approach for wind speed prediction", Sustainable Energy Technologies and Assessments, Elsevier, Volume 53, 2022. (DOI: <https://doi.org/10.1016/j.seta.2022.102467>). (SCIE, Q1-Impact factor: 7.632)
 97. Y.Raghuvamsi, **Kiran Teeparthi**, and Vishalteja Kosana, "A novel deep learning architecture for distribution system topology identification with missing PMU measurements", Results in Engineering, Elsevier, Vol. 15 ,2022. (DOI: <https://doi.org/10.1016/j.rineng.2022.100543>). (ESCI, Q1)
 98. Bala Saibabu Bommidi, V Kosana, **Kiran Teeparthi**, and S Madasthu, "Hybrid attention-based temporal convolutional bidirectional LSTM approach for wind speed interval prediction", Environmental Science and Pollution Research, Springer, 2023. (DOI: <https://doi.org/10.1007/s11356-022-24641-x>). (SCIE, Q2-Impact factor: 5.190)
 99. Bala Saibabu Bommidi, **Kiran Teeparthi**, and Vishalteja Kosana, "Hybrid wind speed forecasting using ICEEMDAN and transformer model with novel loss function", Energy, Elsevier, Vol. 265, 2023. (DOI: <https://doi.org/10.1016/j.energy.2022.126383>). (SCIE, Q1-Impact factor: 8.875)
 100. Y Raghuvamsi and **Kiran Teeparthi**, "Detection and reconstruction of measurements against false data injection and DoS attacks in distribution system state estimation: A deep learning approach", Measurement, Elsevier, Vol. 210, 2023. (DOI: <https://doi.org/10.1016/j.measurement.2023.112565>). (SCIE, Q1-Impact factor: 5.131)
 101. **Sastry, G. R.**, Gugulothu, S. K., Bharath Raju, L. B., Panda, J. K., Bhurat, S. S., Burra, B. 2022. "Influence of Exhaust Gas Recirculation on Performance, Combustion, and Emission Characteristics of a Common Rail Direct Injection Diesel Engine Fueled by Diesel/Higher Alcohol Blends." ASME. J. Thermal Sci. Eng. Appl. October 2022; 14(10): 101001.
 102. Ramachander, J., **Gugulothu, S.K. and Sastry, G.R.K.**, 2022. Performance and Emission Reduction Characteristics of Metal Based Sio2 Nanoparticle Additives Blended with Ternary Fuel (Diesel-MME-Pentanol) on CRDI Diesel Engine. Silicon, 14(5), pp.2249-2263.
 103. Kireeti, S.K., **Sastry, G.R. and Gugulothu, S.K.**, 2022. Numerical investigation on implication of innovative hydrogen strut in comparison with multi strut injector on performance and combustion characteristics in a scramjet combustor. International Journal of Hydrogen Energy.
 104. Seelam, N., **Gugulothu, S.K.**, Bhasker, B., Mulugundum, S. and **Sastry, G.R.**, 2022. Investigating the role of fuel injection pressure and piston bowl geometries to enhance performance and emission characteristics of hydrogen-enriched diesel/1-

- pentanol fueled in CRDI diesel engine. Environmental Science and Pollution Research, pp.1-15.
105. S.K. Kireeti, **Gadepalli Ravikiran Sastry, S.K. Gugulothu**, B. Deepanraj, Pau Loke Show, Ao Xia, M. Arthi, 2022 Numerical investigations on the implication of hydrogen fuel jet injection pressure on the performance characteristics in a multi-strut in a double-dual cavity-based scramjet combustor. Fuel Volume 324, Part B, 2022,124528, ISSN 0016-2361
 106. S.K. Kireeti, **G. Ravi Kiran Sastry, S.K. Gugulothu**, B. Deepanraj, L. Syam Sundar, M. Arthi, Comparison of combustion characteristics of four strut injectors with that of three strut injectors by numerically investigating doubly-dual cavity-based scramjet combustor, Sustainable Energy Technologies and Assessments, Volume 53, Part D, 2022, 102759, ISSN 2213-1388.
 107. Buddaraju, K.M., **Sastry, G.R.K.** & Kosaraju, S. 2022 Grey-Taguchi optimization of machining of Inconel 600 using AlTiN coated carbide inserts under dry environmental conditions. Int J Interactive Design and Manufacturing
 108. Raju, L.B., **Sastry, G.R., Gugulothu, S.K.** et al. 2022 Computational analysis on solar air heater with combination of alternate dimple protrusions and intrusions on absorber plate with one rounded corner triangular duct. Environ Sci Pollut Res.
 109. Debnath, R., **Sastry, G.R.K.**, Dash, A., Singh, R., Rai, R.N. 2022 An Experimental-Based Comparative Analysis of Undi Biodiesel Blends with Diesel in a DI Engine Operating with AHP Method. In: Edwin Geo, V., Aloui, F. (eds) Energy and Exergy for Sustainable and Clean Environment, Volume 1. Green Energy and Technology. Springer, Singapore
 110. Vidya Ch., **Sastry, G.R.K.**, Prasanthi, P.P., Lakshmi Kanth, C. 2022. Thermodynamic Analysis of Cross-Flow Heat Exchanger with Organic Blends as Substitute to Ionic Coolants. In: Srinivas, S., Satyanarayana, B., Prakash, J. (eds) Recent Advances in Applied Mathematics and Applications to the Dynamics of Fluid Flows. Lecture Notes in Mechanical Engineering. Springer, Singapore
 111. L.B. Bharath Raju, **G.R.K. Sastry, S.K. Gugulothu**, K. Kesava Reddy, B. Deepanraj, 2023 Numerical investigation on fully-developed heat transfer augmentation and friction factor with dimple shaped intrusion and different radius of curvatures on triangular ducts, Applied Thermal Engineering, Volume 221, 119661, ISSN 1359-4311.
 112. Vidya Chaparala, **G. Ravi Kiran Sastry**, P. Phani Prasanthi, 2023 Thermal degradation study of cotton waste pulp-based cellulose nanocrystals, Materials Today: Proceedings.
 113. Murali Mohan, U N Kempaiah, **G. B. Veeresh Kumar**, "Characterization of Born Carbide and Rice Husk Ash Reinforced Aluminum Alloy Composites" ACCEPTED for Publication in the Journal of Testing and Evaluation.

114. Aravind Sankeerth, Pagidi Madhukar, Gurabvaiah Punugupati, **G. B. Veeresh Kumar**, C. S. P. Rao, Murthy Chavali, Mahmoud Helal⁴, Rokkaya Sami, Sultan J. Alsufyani, N. I. Aljuraide, Abdallah M. A. Dawood, and Suzan Harara, "Optimization of Process Parameters for Surface Temperature in Laser-Assisted Machining of Nb C103 using Taguchi Method", *Materials Express*. 2023, 13, pp.1–6, doi:10.1166/mex.2023.2355.
115. Emani Varshith Shankar, **G. B. Veeresh Kumar**. "Investigation of Microstructure and Mechanical Properties of Friction Stir Extruded Joints of Dissimilar Materials", Volume 51, Issue 5, *Journal of Testing and Evaluation*
116. Ch. Polayya, **G B Veeresh Kumar**, C S P Rao, Ravi Jeja Surakasi. "Synthesis and Mechanical Properties of Graphene Nano Particles Reinforced with Aluminum Alloy Matrix Composites". Published: 18 January 2023 *Nanotechnology for Environmental Engineering*. Jan 2023.
117. K. Chinna Maddaiah, **G.B. Veeresh Kumar**, "Mechanical Characterization of AA357 MMC with Reinforcement of Si₃N₄", Volume 51, Issue 5, *Journal of Testing and Evaluation* - <https://doi.org/10.1520/JTE20220519>.
118. K. Chinna Maddaiah, K. Naresh, **G.B. Veeresh Kumar**, Thella Babu Rao, R Pramod. "Influence of Equal Channel Angular Pressing on Mechanical Properties and Associated Microstructural Changes of Aluminum, Copper, Titanium and Magnesium Alloys and their Metal Matrix Composites – A Review". *Journal of Testing and Evaluation*. vol.51, no.2, Sep 2022, DOI: 10.1520/JTE20210591
119. Gantasala Sreenivasulu, C B Mohan, **Veeresh Kumar G B**, M.G Ananthaprasad. "Evaluation of Mechanical and Tribological behavior of Aluminum Alloy LM13 Reinforced with Titanium Dioxide Metal Matrix Composites". *Iranian Journal of Materials Science and Engineering*. vol.19, no.4, pp.1-15, Dec 2022., DOI: 10.22068/ijmse.2688
120. **Sastry, G. R., Gugulothu, S. K.**, Bharath Raju, L. B., Panda, J. K., Bhurat, S. S., Burra, B. 2022. "Influence of Exhaust Gas Recirculation on Performance, Combustion, and Emission Characteristics of a Common Rail Direct Injection Diesel Engine Fueled by Diesel/Higher Alcohol Blends." *ASME. J. Thermal Sci. Eng. Appl.* October 2022; 14(10): 101001.
121. Ramachander, J., **Gugulothu, S.K. and Sastry, G.R.K.**, 2022. Performance and Emission Reduction Characteristics of Metal Based SiO₂ Nanoparticle Additives Blended with Ternary Fuel (Diesel-MME-Pentanol) on CRDI Diesel Engine. *Silicon*, 14(5), pp.2249-2263.
122. Kireeti, S.K., **Sastry, G.R. and Gugulothu, S.K.**, 2022. Numerical investigation on implication of innovative hydrogen strut in comparison with multi strut injector on performance and combustion characteristics in a scramjet combustor. *International Journal of Hydrogen Energy*.

123. Seelam, N., **Gugulothu, S.K.**, Bhasker, B., Mulugundum, S. and Sastry, G.R., 2022. Investigating the role of fuel injection pressure and piston bowl geometries to enhance performance and emission characteristics of hydrogen-enriched diesel/1-pentanol fueled in CRDI diesel engine. Environmental Science and Pollution Research, pp.1-15.
124. S.K. Kireeti, **Gadepalli Ravikiran Sastry, S.K. Gugulothu**, B. Deepanraj, Pau Loke Show, Ao Xia, M. Arthi, 2022 Numerical investigations on the implication of hydrogen fuel jet injection pressure on the performance characteristics in a multi-strut in a double-dual cavity-based scramjet combustor. Fuel Volume 324, Part B, 2022,124528, ISSN 0016-2361.
125. S.K. Kireeti, **G. Ravi Kiran Sastry, S.K. Gugulothu**, B. Deepanraj, L. Syam Sundar, M. Arthi, Comparison of combustion characteristics of four strut injectors with that of three strut injectors by numerically investigating doubly-dual cavity-based scramjet combustor, Sustainable Energy Technologies and Assessments, Volume 53, Part D, 2022, 102759, ISSN 2213-1388
126. Raju, L.B., **Sastry, G.R., Gugulothu, S.K.** et al. 2022 Computational analysis on solar air heater with combination of alternate dimple protrusions and intrusions on absorber plate with one rounded corner triangular duct. Environ Sci Pollut Res.
127. L.B. Bharath Raju, **G.R.K. Sastry, S.K. Gugulothu**, K. Kesava Reddy, B. Deepanraj, 2023 Numerical investigation on fully-developed heat transfer augmentation and friction factor with dimple shaped intrusion and different radius of curvatures on triangular ducts, Applied Thermal Engineering, Volume 221, 119661, ISSN 1359-4311.
128. Sarat Babu Mulpur, **Thella Babu Rao**, Development of an In-Process Cutting Tool Life Prediction System Using Bidirectional Long Short-Term Memory Network, Journal Failure Analysis and Prevention (2023). <https://doi.org/10.1007/s11668-023-01625-8>
129. **Thella Babu Rao**, Real-time cutting tool condition assessment and stochastic tool life predictive models for tool reliability estimation by in-process cutting tool vibration monitoring, International Journal on Interactive Design and Manufacturing (2022). <https://doi.org/10.1007/s12008-022-01109-3>
130. **Thella Babu Rao**, Prediction of EDMed micro-hole quality characteristics using hybrid bio-inspired machine learning-based predictive approaches, International Journal on Interactive Design and Manufacturing (2022).<https://doi.org/10.1007/s12008-022-01117-3>
131. Sarat Babu Mulpur, **Thella Babu Rao**, A PCA-Integrated OGM (1, N) Predictive Model for In-Process Tool Wear Prediction Based on Continuous Monitoring of Multi-Sensorial Information, Journal Failure Analysis and Prevention (2022). <https://doi.org/10.1007/s11668-022-01499-2>

132. Joijode Kiran Kumar, **Thella Babu Rao**, Konjeti Rama Krishna, The microstructural properties and tribological performance of Al₂O₃ and TiN nanoparticles reinforced Ti-6Al-4V composite coating on AISI304 steel by TIG cladding, J. Tribol. ASME (2022), 145(1): 011401. IF: 1.891<https://doi.org/10.1115/1.405548>
133. Jalli Kantha Rao, Reddypogula Madhusudhan, **Thella Babu Rao**, Recent Progress in Stir Cast Aluminum Matrix Hybrid Composites: Overview on Processing, Mechanical and Tribological Characteristics, and Strengthening Mechanisms, Journal of Bio- and Tribo-Corrosion, 8, 74 (2022). Cite Score: 3.4 <https://doi.org/10.1007/s40735-022-00670-4>
134. Mulpur Sarat Babu, **Thella Babu Rao**, Multi-sensor heterogeneous data-based online tool health monitoring in milling of IN718 superalloy using OGM (1, N) model and SVM, Journal of the International Measurement Confederation, Volume 199, August (2022), 111501. IF: 5.131<https://doi.org/10.1016/j.measurement.2022.111501>
135. Bheemavarapu Subba Rao, **Thella Babu Rao**, Effect of Process Parameters on Powder Bed Fusion Maraging Steel 300: A Review, Lasers in Manufacturing and Materials Processing volume 9, pages338–375 (2022). Cite Score: 3.4 <https://doi.org/10.1007/s40516-022-00182-6>
136. Bheemavarapu Subba Rao, **Thella Babu Rao**, Mechanical and Tribological Properties of 3D printed Al-Si alloys and composites: a Review, Silicon, volume 14, pages5751–5782 (2022). IF: 2.941, <https://doi.org/10.1007/s12633-021-01340-9>
137. Ramesh KN, **Sharma TK**. Thermal analysis of PCM-based hybrid micro-channel heat sinks: A numerical study. Journal of Thermal Engineering. 2021;9(4):1015-25.
138. B. Venkateswarlu, B. Ratna Sunil, **R. Sunil Kumar**; “Magnesium based alloys and composites: Revolutionized biodegradable temporary implants and strategies to enhance their performance”, Materialia 27 (2023).
139. Surjan Sheik, **Raffi Mohammed**, Atmaramudu Tirumalla, Arun Kumar Gurralla, Correlative Analysis of Morphology–Mechanical–Corrosion Behavior of Conventional Nickel-Based and Nitrogen-Alloyed Nickel-Free Austenitic Stainless Steels, Journal of Materials Engineering and Performance (Springer), volume 32, pages1196–1212 (2023). Conference Proceedings
140. Archana Bhat, **T. Kurmayya**, “A characterization of cone nonnegativity of Moore Penrose inverses of unbounded Gram operators”, Positivity, Vol.26, Article No. 67, 2022, <https://doi.org/10.1007/s11117-022-00908-y>.
141. Archana Bhat, **T. Kurmayya** and R.S. Selvaraj, “A characterization of Drazin monotonicity of operators over ordered Banach space”, The Journal of Analysis, 2023, <https://doi.org/10.1007/s41478-023-00567-6>.
142. Nath, A., & **Dhua, S.** (2022). Influence of initial stress on shear wave scattering in a functionally graded magneto-visco-elastic orthotropic multi-layered structure. Waves in Random and Complex Media, 1-25.

143. Nath, A., & **Dhua, S.** (2023). Dispersion and Attenuation Characteristics of Shear Wave Due to an Impulsive Source in a Piezo-electro-magnetic Composite with Viscoelastic Coating. *Journal of Vibration Engineering & Technologies*, 1-15.
144. Maji, A., & **Dhua, S.** (2023). Propagation of magnetoelastic shear wave in an initially stressed inhomogeneous composite layered structure with an imperfect interface, *International Journal of Geomechanics*. (Accepted)
145. Rahaman, **T. Paramanik**, B. Pal, R. Pal, P. Maji, K. Bera, S. Mallik, D. K. Goswami, A. N. Pal, and D. Choudhury, "Surface-phase superconductivity in a Mg-deficient V-doped MgTi₂O₄ spinel", *Phys. Rev. B*, pp.- 245124, vol. no.- 107, 2023.
146. S. Ghosh, **T. Paramanik**, I. Das, "Observation of conventional and inverse magnetocaloric effects in (Dy_{0.6}Gd_{0.4})₅Pd₂," *Indian J. Phys.*, pp.- 1781-1786 vol. no.- 97, 2023.
147. CH Prashanth, TW Yen, Ajay Tiwari, P Athira, SM Huang, Bommareddy Poojitha, DP Gulo, HL Liu, CW Wang, YK Lin, YC Chuang, YC Lai, **Krishnamurthy Jyothinagaram**, HD Yang, D Chandrasekhar Kakarla, Interplay of magnetic and electric coupling across the spin density wave to conical magnetic ordering in a BaHoFeO₄ spin-cluster chain compound, *Journal of Alloys and Compounds* 942, 169017 (2023).
148. CH Prashanth, Indukuru Ramesh Reddy, Kartick Tarafder, D Chandrasekhar Kakarla, HD Yang, Venimadhav Adyam, **Krishnamurthy Jyothinagaram**, Magnetic complexity, magnetodielectric effect and DFT calculations on correlation driven Gd₂CoMnO₆ insulator, *Journal of Magnetism and Magnetic Materials* 563, 169880 (2022).
149. Loyola Poul Raj, S. Valanarasu, R.S. Rimal Isaac, **M. Ramudu**, Yugandhar Bitla, V. Ganesh, I.S. Yahia, The role of silver doping in tuning the optical absorption, energy gap, photoluminescence properties of NiO thin films for UV photosensor applications, *Optik - International Journal for Light and Electron Optics*, 254 (2022) 168634.
150. C. K. Shahu, **S. Dwivedi**, and S. Dubey, Dynamics of curved domain walls in hard ferromagnets with nonlinear dissipative and inertial effects, *Physica D: Nonlinear Phenomena*, 133737, (2023).
151. S. Maity, S. Dolui, **S. Dwivedi**, and G. Consolo, Domain wall dynamics in cubic magnetostrictive materials subject to Rashba effect and nonlinear dissipation, *Z. Angew. Math. Phys.* 74, 23 (2023).
152. C. K. Shahu, S. Dubey, and **S. Dwivedi**, Domain wall motion in multiferroic nanostructures under the influence of spin-orbit torque and nonlinear dissipative effect, *Mechanics of Advanced Materials and Structures*, (2022).
153. P. Dhivya, Mitrabhanu Behera, **R. Arun Kumar**, Investigations on L-valine doped imidazolinium L-tartrate (IMLT) single crystals, *Journal of Materials Science: Materials in Electronics*, 34 (2022) 35.

154. A Suresh Kumar, **R. Arun Kumar**, R. Vijayakumar, Synthesis and luminescence properties of Na⁺, Li⁺ compensated Er³⁺ doped CaAl₄O₇ phosphors, Journal of Materials Science: Materials in Electronics, 33 (2022) 21297–21310.
155. Krishnaja T. S. & **Soumya Jose**. “Traversing Familial Interlocks: Debunking Gendered Space in Thappad and The Great Indian Kitchen.” Quarterly Review of Film and Video, 2022. DOI: 10.1080/10509208.2022.2131342

6.2 National conferences

1. K.V.V. Satyannarayana, S.L.S. Rani, **R. Vinoth Kumar**, Clarification of citrus fruit juices using tubular ceramic membranes, National Symposium on Ideation, Innovation, Development, and Technology Transfer of Industrially Scalable Processes, NIT Andhra Pradesh, 2023.
2. Sheha Shaji*, Vinil Kumar Gade, and **Baranidharan S** (2023) "An Effective, Environmentally Benign Way for Soil Stabilization using Xanthan Gum: A Review" Ninth Indian Young Geotechnical Engineers Conference (9IYGEC-2023), 21st – 22nd March 2023, Marathwada Institute of Technology, Chhatrapati Sambhajinagar, Aurangabad, India.
3. Veera Swamy Kolli, Vinil Kumar Gade, **Jayanthi N V Pratyusha** (2023) "Influence of Sew water on Expansive Soil Stabilization using GGBS", 9IYGEC-2023, 21st-22nd March 2023, Marathwada Institute of Technology, Aurangabad, India.
4. D. Mondal, **S. Yuvaraj**, M Rawat and M.V. Kartikeyan, “Parametric Studies of a Quasi-Optical Launcher for a DEMO-Class Gyrotron,”in National Symposium on Vacuum Electronic Devices & Applications (VEDA-2022) , Bengaluru, Jan. 19-21, 2023.
5. Nimushakavi Syam Manohar, **Kiran Teeparthi**, Sreenadh Batchu, "Improved Grasshopper Optimization Framework for Optimal Power flow Considering Multi Objective Functions", IEEE 3rd Global Conference for Advancement in Technology (GCAT), 2022.
6. Y.Raghuvamsi, Sreenadh Batchu, **Kiran Teeparthi**, “Physics-guided Deep Learning for Branch Current Distribution System State Estimation”, IEEE 22nd National Power System Conference (NPSC-2022), IIT Delhi, 17-19 Dec-2022, pp.1-6.
7. Sreenadh Batchu, Y.Raghuvamsi, **Kiran Teeparthi**, “A Comparative Study on Equal Area Criterion Based Methods for Transient Stability Assessment in Power Systems”, IEEE 22nd National Power System Conference (NPSC-2022), IIT Delhi, 17-19 Dec-2022, pp.1-6.
8. Bala Saibabu Bommidi, V Kosana, **Kiran Teeparthi**, Santhosh Madasthu, “A hybrid approach to ultra short-term wind speed prediction using CEEMDAN and Informer”, IEEE 22nd National Power System Conference (NPSC-2022), IIT Delhi, 17-19 Dec-2022, pp.1-6.

9. Srihari Parri, V Kosana, Kiran Teeparthi, "A hybrid GAN based autoencoder approach with attention mechanism for wind speed prediction", IEEE 22nd National Power System Conference (NPSC- 2022), IIT Delhi, 17-19 Dec-2022, pp.1-6.
10. Atmaramudu Tirumalla, Narasimha Reddy S and **Raffi Mohammed**, Electrochemical studies on corrosion behavior of low nickel-based austenitic stainless-steel weldments in chloride-containing seawater environment, 3rd International Conference on Chemical, Bio & Environmental Engineering (CHEMBIOEN 2022), Jointly Organized by Department of Chemical Engineering, NIT Jalandar and B.V. Raju Institute of Technology. during Nov 04th - 05th 2022.
11. **Raffi Mohammed**, Influence of N₂ shielding on weld morphology, localized and intergranular corrosion susceptibility of A-TIG welded 2205 duplex stainless steels, 76th Annual Technical Meeting (IIM-ATM 2022), 13th to 16th, November 2022, organized by Hyderabad and Vizag chapters of The Indian Institute of Metals in association with DMRL.

6.3 International Conferences

1. **Dr E. Rajeswara Reddy** Presented a paper at 8th International Conference on Innovations in Big Data, Cyber Security, Bioinformatics & Biotechnology (IBCB-2022) entitled "Characterization and improvement of a wild type strain of *Corynebacterium glutamicum* for L-Lysine production" at the Jawaharlal Nehru Technological University Kakinada (JNTUK), Kakinada, Andhra Pradesh, India, on 27th December 2022.
2. **Dr E. Rajeswara Reddy** Presented a paper at an International Conference on Recent Advances in Biotechnology (iCRAB 2022) entitled " Review on Oleogel based formulations in food manufacturing Industries " at Dr. B.R. Ambedkar National Institute of Technology Jalandhar (NITJ), Jalandhar, India, during 2nd to 4th December 2022. (Online).
3. K.V.V. Satyannarayana, S.L.S. Rani, **R. Vinoth Kumar**, Clarification of mandarin and sweet orange fruit juices with bentonite tubular ceramic membrane: A study on membrane's performance and fouling, International Congress on Separation and Purification Technology, P.149 (2022), Elsevier.
4. K.V.V. Satyannarayana, S.L.S. Rani, **R. Vinoth Kumar**, Tangential microfiltration of citrus fruit juices using inexpensive tubular ceramic membrane and analysis of fouling mechanism, International Congress on Separation and Purification Technology, P.OB7.08 (2022), Elsevier.
5. S. Lakshmi Sandhya Rani, K.V.V. Satyannarayana, **R. Vinoth Kumar***, Performance Evaluation of Fuller's Earth Clay Membrane for the Treatment of Food Processing Industries Wastewater, International Congress on Separation and Purification Technology (ISPT 2022), P-519 (2022) (organised by Elsevier & Beijing Membrane Society).
6. S. Lakshmi Sandhya Rani, K.V.V. Satyannarayana, **R. Vinoth Kumar***, Fabrication of Fuller's earth clay ceramic membrane for the treatment of dairy and edible oil

processing industries wastewater, International Congress on Separation and Purification Technology (ISPT 2022), P-519 (2022) (organised by Elsevier & Beijing Membrane Society).

7. S. Lakshmi Sandhya Rani, K.V.V. Satyannarayana, **R. Vinoth Kumar***, Treatment of food processing industries effluents using a new clay-based inorganic Membrane: performance evaluation and fouling analysis, 3rd International Conference on Chemical, Bio & Environmental Engineering (CHEMBIOEN-2022), 22CHEMBIOEN_1073 (2022), (Organized by B V Raju Institute of Technology, Narsapur & NIT Jalandhar).
8. Sathieesh Sounderarajan, Kanakalakshmi K, Aafreen Periyar V, **Dinesh Sankar Reddy P**, Seenivasan Ayothiraman*, Screening and Optimization of Media Components for the production of Esterase using *Trichoderma harzianum*, South Asia Catalysis conference (SACE) 2023 (Organized by Singapore catalysis society at National University of Singapore)
9. Rajashree Panda, R. Arun Kumar, **P. Dinesh Sankar Reddy**, A Comparative Study on Phosphors Prepared by Microwave-Assisted Combustion Technique, International Conference on "Chemistry – Frontiers and Challenges" (ICCFC - 2022), at PSGR Krishnammal College for Women, 5-7 January, 2022
10. Nizamuddin Mohammad Yadiki, Suggula Sathyanarayana, **Puchalapalli Dinesh Shankar Reddy**, Comparative antioxidant evaluation of lactobacillus treated ethanolic extracts of *Opuntia ficus indica* and *Opuntia dillenii* cladodes. "International Conference on international property rights and patent drafting" held on 22nd & 23rd April 2022.
11. Vijaykumar Sekar* and **Baranidharan S** (2023) "Solid waste management: Impact of Microplastics in Soil from the Geoenvironmental Perspective" 7th International Conference on Recent Advancements in Chemical, Environmental & Energy Engineering (RACEEE - 2023), 16 - 17th February 2023, Sri Sivasubramaniya Nadar College of Engineering, Chennai, India.
12. Shilpa Mishra* and **Baranidharan S** (2022) "CaTiO₃ Perovskite Nanoparticle-Synthesis, Characterisation, and Photocatalytic Application "3rd International Conference on International Conference on Chemical, Bio & Environmental Engineering (CHEMBIOEN-2022), 04 – 05th November 2022, B V Raju Institute of Technology, Medak, Telangana, India.
13. Kumar Gedela Santhosh, **Sk M. Subhani**, A. Bahurudeen "Experimental study on compressive strength of alkali activated binders containing stone dust as a replacement of fine aggregate", the International Virtual Conference on "Smart and Sustainable Development of Urban Green Infrastructure in India and Canada" organized by National Institute of Technology Tiruchirappalli from 25th to 26th March 2022.

14. Kumar Gedela Santhosh, **Sk M. Subhani**, A. Bahurudeen “An investigation on the effectiveness of quarry dust and sugarcane bagasse ash in Na-based alkali-activated binder” in the Second International Conference on Construction Materials and Structures (ICCMS-2022) during 13-19 December, 2022.
15. Charupalli, Charan and **Seshadri, Karthick**, Fine-tuning the Robust Temporal Feature Magnitude model for enhancing the accuracy of anomaly detection, 2022 IEEE 5th International Conference on Multimedia Information Processing and Retrieval (MIPR), pp. 419—424, IEEE, 2022.
16. Pachava, Manasa and **Seshadri, Karthick** and Kollengode, Chidambaran, Assessment of Deep Sequence Models for Characterization and Prediction of Cloud Workloads, 2022 IEEE 3rd Global Conference for Advancement in Technology (GCAT), pp. 1-6, 2022, IEEE.
17. Iyer, VK and **Seshadri, K** and Mohan, R, Leveraging Conventional CS Problems for Blended Learning In Algorithms Lab: An Option For Experimental Learning, INTED2023 Proceedings, pp. 181-189, 2023, IATED, Valencia, Spain.
18. Kammakomati, M., Chowdary, S.D., Varthya, S.N., **Seshadri, K.** (2023). Anomaly Detection in ATM Vestibules Using Three-Stream Deep Learning Approach. In: Gupta, D., Bhurchandi, K., Murala, S., Raman, B., Kumar, S. (eds) Computer Vision and Image Processing. CVIP 2022. Communications in Computer and Information Science, vol 1776. Springer, Cham. https://doi.org/10.1007/978-3-031-31407-0_1.
19. V. Nadapana and **H. B. Kommanti**, “Investigating the role of Named Entity Recognition in Question Answering Models,” 2022 IEEE 3rd Global Conference for Advancement in Technology (GCAT), Bangalore, India, 2022, pp. 1-7, doi: 10.1109/GCAT55367.2022.9972157.
20. Kiran Babu, N., **Hima Bindu, K.** Evaluation of Word Embeddings for Toxic Span Prediction. In: Kumar, A., Ghinea, G., Merugu, S., Hashimoto, T. (eds) Proceedings of the International Conference on Cognitive and Intelligent Computing. Cognitive Science and Technology. Springer, Singapore. pp 177–190, 2022, https://doi.org/10.1007/978-981-19-2350-0_17.
21. Raghavendra Rao Masabathula V S, Surya Puligundla, Nikhil Sai Ekkala and **Srilatha Chebrolu**, “Image Classification of Ischemic Stroke Blood Clot Origin using Stacked EfficientNet-B0, VGG19 and ResNet-152” (Accepted) ICSCCC 2023, NIT Jalandhar.
22. Improvising the CNN Feature maps Through Integration of Channel Attention for Handwritten Text Recognition by Shashank B, **S. Nagesh Bhattu**, K Sri Phani Krishna, Accepted in CVIP 2022.
23. N. L and **P. K. Kumar**, "Performance Analysis of Sparse Array Using Compressive Sensing in A Closed Multi-Path Environment," 2022 IEEE Microwaves, Antennas, and Propagation Conference (MAPCON), Bangalore, India, 12-16 December 2022, pp. 1413-1417, doi: 10.1109/MAPCON56011.2022.10046420.

24. L. S. L. Sowjanya and **P. K. Kumar**, "Performance comparison of DAS and BP algorithms for Synthetic Aperture Radar Imaging," 2022 IEEE Microwaves, Antennas, and Propagation Conference (MAPCON), Bangalore, India, 12-16 December 2022, pp. 1726-1731, doi: 10.1109/MAPCON56011.2022.10047698.
25. L. Dharma Theja Ch, L. Nagaraju and **K. Kumar Puli**, "Classification based DOA estimation using ANN and CNN Models," 2022 IEEE Microwaves, Antennas, and Propagation Conference (MAPCON), Bangalore, India, 12-16 December 2022, pp. 1470-1473, doi: 10.1109/MAPCON56011.2022.10047297.
26. Lokesh Dharma Theja Ch, **Kishore Kumar Puli** "Investigations on the Performance Comparison of Co-Prime Array with and without interpolation for DOA Estimation", March 2023, Volume 1, Issue 1, Pages 1-16, IRO Journal on Sustainable Wireless Systems (ISSN: 2582-3167)
27. L S. L. Sowjanya and **P.K. Kumar**, "Analyzing Mangrove Loss in Sundarbans Using Copernicus Sentinel-1 SAR Images" – IEEE International Conference on Range Technology (ICORT), DRDO Chandipur, India, 23-25 February 2023
28. L S. L. Sowjanya, L Nagaraju, and **P.K. Kumar**, "Compressive Sensing Framework for Synthetic Aperture Radar Imaging using OMP Algorithm," – IEEE international conference on Wireless Communications, Signal Processing and Networking (WiSPNET), Chennai, India, 29-31 March 2023.
29. L Nagaraju and **P.K. Kumar**, "Sparsity-unaware High Probability DOA Estimation using Compressive Sensing based Extended OMP," – IEEE international conference on Wireless Communications, Signal Processing and Networking (WiSPNET), Chennai, India, 29-31 March 2023.
30. Harika P and **P.K. Kumar**, "Realization of Electronically Controllable, Wide bandwidth Instrumentation Amplifier using single DVCCTA," – IEEE international conference on Wireless Communications, Signal Processing and Networking (WiSPNET), Chennai, India, 29-31 March 2023
31. Aylapogu Pramod Kumar, **Dr Gurralla Kiran Kumar** "Modified Koch Curve with Beeline Fractal Antenna for 5G Communication System" 2022 IEEE 19th India Council International Conference (INDICON-2022), Kerala IEEE Section-2022. <https://ieeexplore.ieee.org/document/10040089>
32. **Dr. Kiran Kumar Gurralla**, Mahitha Deepthi, U Uma Maheswara Rao, "Sum Secrecy Rate Maximization for Control Jamming assisted STAR-RIS Wireless Network" 2nd International Conference on Microwave, Optical and Communication Engineering (ICMOCE-2023), IIT Bhubaneswar, India (Accepted).
33. **Dr. Kiran Kumar Gurralla**, Panchadi Sireesha, Pailla Durga Pavan Kumar, Addala P V N R Manikanta Ashish, U Uma Maheswara Rao, "Enhance physical layer security for RIS aided wireless network with control jammer and power allocation scheme" second International Conference on the Paradigm shifts in Communication,

Embedded Systems, Machine Learning and Signal Processing (PCEMS 2023), VNIT Nagpur, India (Accepted)

34. Madasu Venkateswara Rao, **S. Yuvaraj** and M.V.Kartikeyan "A Uniform Circular Array Antenna for Orbital Angular Momentum (OAM) Beam Generation with Azimuthal Symmetry , "in 2023 IETE International Conference India (IICI 2023) , Bengaluru, India, May 03-05, 2023, pp. 1-8 (Presented).
35. Veeravalli Sudheep, Maddu Srinivas, **Gurralla Kranthi Kumar**, Madasu Venkateswara Rao, S. Yuvaraj and M.V.Kartikeyan "A Low-Profile UCA Antenna to Generate Conical beam based on OAM Technique for Vehicular Application , "in 2023 3rd International Conference on Artificial intelligence and Signal Processing (AISP 2023) , VIT Andhra Pradesh, India, March 18-20, 2023, pp. 1-4 (Presented).
36. RVNR Suneel Krishna, P. Sambaiah, **S. Yuvaraj**, and M. V. Kartikeyan "Design of the Multiband Substrate Integrated Waveguide Filter Using Coupling Matrix Based on Frequency Transformation," in 2022 IEEE Microwave, Antennas, and Propagation Conference (MAPCON), Bangalore, India December 12-15, 2022, pp. 78-83, doi: 10.1109/MAPCON56011.2022.10047760
37. **Krishna Chaitanya A**, Ananda Kumar K, Satya Kumar V, Seungil Yoon, "Joint Subcarrier and Power allocation for Multi-Carrier NOMA-IBFD Wireless Communication System", IEEE PIMRC, 2022.
38. M. C. Bade, **S. Peddapati** and V. Sonti, "A Single Phase Transformerless CSI Inverter Topology for Minimization of Leakage Current in Grid Integrated PV Systems," 2022 IEEE 2nd International Conference on Sustainable Energy and Future Electric Transportation (SeFeT), Hyderabad, India, pp. 1-5, 2022.
39. Krishna Mohan Reddy Pothireddy, **Sandeep Vuddanti**, "Optimal re-distribution of incentives to the demand responsive loads during overlap," 2023 9th International Conference on Electrical Energy Systems (ICEES), Chennai, India, 2023, pp. 240-243, doi: 10.1109/ICEES57979.2023.10110068.
40. Krishna Mohan Reddy Pothireddy, A. R. Battula, **Sandeep Vuddanti**, "Demand response: What is the optimal curtailment for economic benefit?" 2023 9th International Conference on Electrical Energy Systems (ICEES), Chennai, India, 2023, pp. 235-239, doi: 10.1109/ICEES57979.2023.10110210.
41. Krishna Mohan Reddy Pothireddy, **Sandeep Vuddanti**, "Optimal re-distribution of demand responsive loads in Microgrids," 2023 3rd International conference on Artificial Intelligence and Signal Processing (AISP), Vijayawada, India, 2023, pp. 1-5, doi: 10.1109/AISP57993.2023.10134867
42. B. A. Raju, Krishna Mohan Reddy Pothireddy, **Sandeep Vuddanti**, "A Day Ahead Demand Aggregation in Islanded Microgrid considering Uncertainty," 2023 3rd International conference on Artificial Intelligence and Signal Processing (AISP), Vijayawada, India, 2023, pp. 1-5, doi: 10.1109/AISP57993.2023.10134788.

43. **Dr.N.Jayaram** Design and Analysis of a Simplified Non-isolated Bidirectional DC–DC Converter for Energy Storage Systems (ICICCSP 2022). .
44. P. S. V. Kishore, **J.Nakka**, S. Jakkula, S. Halder and J. Rajesh, "A Novel Extended T-type Nine-Level Boost Inverter," 2022 IEEE International Conference on Power Electronics, Drives and Energy Systems (PEDES), Jaipur, India, 2022, pp. 1-5, doi: 10.1109/PEDES56012.2022.10080335.
45. S. Katta, **N. Jayaram**, J. Rajesh and S. Halder, "An Improved Cascaded H-Bridge Based High Power Factor Converter with Enhanced Power Quality," 2022 IEEE International Conference on Power Electronics, Drives and Energy Systems (PEDES), Jaipur, India, 2022, pp. 1-5, doi: 10.1109/PEDES56012.2022.10080865.
46. J. Rajesh, **N. Jayaram**, P. S. V. Kishore, S. Halder and K. Suresh, "A Quadruple Gain Fault-Tolerant Nine Level Cascaded Inverter," 2022 IEEE Global Conference on Computing, Power and Communication Technologies (GlobConPT), New Delhi, India, 2022, pp. 1-5, doi: 10.1109/GlobConPT57482.2022.9938240.
47. Swamy Jakkula, **N Jayaram**, Satya Venkata Kishore Pulavarthi, Jami Rajesh, "A New Nine Level Switched Capacitor based Inverter with Quadruple Boosting ability", IEEE TEECCON 2022, May 2022
48. P. S. V. Kishore, **N. Jayaram** and J. Rajesh, Sukanta Halder, "Performance Enhancement of Buck Converter Using Reinforcement Learning Control," 2022 IEEE Delhi Section Conference (DELCON), 2022, pp. 1-5, doi: 10.1109/DELCON54057.2022.9752938.
49. S. Jakkula, **N. Jayaram**, P. S. V. Kishore and J. Rajesh, "A New Quadruple Boost Nine Level Inverter with Self-Voltage Balancing of Capacitors," 2022 IEEE Delhi Section Conference (DELCON), 2022, pp. 1-7, doi: 10.1109/DELCON54057.2022.9753269.
50. J. Rajesh, **N. Jayaram**, S. V. K. Pulavarthi and S. Halder, "Grid Integration of Solar PV System with Active Boost Switched Capacitor Based Inverter," 2022 IEEE Delhi Section Conference (DELCON), 2022, pp. 1-9, doi: 10.1109/DELCON54057.2022.9752968.
51. B. Jayachandra and **N. Jayaram**, "Battery and Supercapacitor Performance Analysis during Regenerative Braking in Electric Vehicle", IEEE International Conference on Computing, Communication and Power Technology (IC3P 2022), Jan 2022
52. B. Kumar, **S. Peddapati** and V. S. P. K, "A Fault Tolerant-MLI with Modified PWM Technique for Symmetrical and Asymmetrical Voltage Levels," 2022 IEEE International Conference on Power Electronics, Drives and Energy Systems (PEDES), Jaipur, India, pp. 1-6, 2022
53. Tangirala, Isradani and **Tejavathu Ramesh**. "Sensorless control of Five level inverter fed Fuzzy Logic based DTFC SVM Controlled PMSM drive using Luenberger Observer." 2022 IEEE IAS Global Conference on Emerging Technologies (GlobConET). IEEE, 2022.

54. Kumar, Poondla Dharmendra, and **Tejavathu Ramesh**. "Model Predictive Current Control based Multi-Level Inverter fed Permanent Magnet Synchronous Motor Drive." 2022 IEEE IAS Global Conference on Emerging Technologies (GlobConET). IEEE, 2022.
55. L N Sastry Varanasi; **S P K Karri** an Edge Device for Monitor and Control of Electrical Appliances using Smart Power Line Communication Published in: 2022 IEEE 2nd International Conference on Sustainable Energy and Future Electric Transportation (SeFeT)
56. B. N. Shashank, **S. Nagesh Bhattu & K. Sri Phani Krishna** Improvising the CNN Feature Maps Through Integration of Channel Attention for Handwritten Text Recognition
57. MJV Sai Ratna Kumar, **Kiran Teeparthi**, Sreenadh Batchu, "A Search Space Reduction Algorithm Applied for Transient Stability Constrained Optimal Power Flow", IEEE 9th Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON), 2022.
58. S Maddineni, S Janapati, V Kosana, **K Teeparthi** 2022 International Conference on A hybrid deep transformer model for epileptic seizure prediction International Conference on Advances in Energy Research
59. BS Bommidu, V Kosana, **K Teeparthi**, S Madasthu Advancements in Smart, Secure and Intelligent Computing (ASSIC) A Novel Wind Speed Forecasting Framework Using Data Preprocessing Based Adversarial Approach
60. Chinthala Adarsh and **V. Sandeep** "Performance Analysis of Induction Motor and PMSM for Electrical Vehicle Traction Application", IEEE International Conference on Distributed Computing and Electrical Circuits and Electronics (ICDCECE-2022), Ballari, Karnataka, 23rd & 24th April 2022.
61. V. B Murali Krishna and **V. Sandeep** "A Short Report on Influencing Factors of Excitation Phenomena in Self Excited Induction Generator", The 14th International Green Energy Conference (IGEC-XIV) virtually on July 4-8, 2022, Organizing by University of Waterloo.
62. Racharla Saikiran, Sanagapalli Srinivas, Kaibalya Prasad Panda and **V. Sandeep** "Compact Switched-Capacitor Boost Active-Neutral-Point-Clamped Multilevel Inverter" IEEE International Conference on Intelligent Controller and Computing for Smart Power (ICICCSP) 2022, 21 -23 July, 2022
63. Chintapalli Venu, Srinivasa Shyam Praneeth Mamillapalli, Kaibalya Prasad Panda and **V. Sandeep** "Compact Quadruple Boost Switched Capacitor Multilevel Inverter" IEEE International Conference on Intelligent Controller and Computing for Smart Power (ICICCSP) 2022, 21 -23 July, 2022.
64. Geetha Sravya Varaganti, Narendra Babu Kampa and **Sandeep Vuddanti** "Design and Modelling of Small-Scale Wind Turbine for Domestic Power Generation", IEEE

International Conference on Sustainable Energy and Future Electric Transportation – SEFET 2022, 4-6 August 2022, Hyderabad.

65. Venkata Kishore Podamekala and **V Sandeep** “An Isolation Circuit based Charging and Discharging Model of On-Board Charger in Electric Vehicle” IEEE International Conference on Sustainable Energy and Future Electric Transportation –SEFET 2022, 4-6 August 2022, Hyderabad.
66. T. Jahnavi, J. Gnapika, T. Sree Chakradhar, Ch. Devi Prasad, **Veeresh Kumar G B**, “Fabrication and Testing of Al6061-Copper Oxide Metal Matrix Composites”, No: 6480, Accepted for International Conference on Innovative Product Design and Intelligent Manufacturing Systems (IPDIMS 2022).
67. Salina Sai Sandeep, Sali Renuka, Vavilala Sai Pavan, Nerella Hari, **Veeresh Kumar G B**, “Welding of Stainless Steel 316 Joined by using Multipass SAW, MIG, and Hybrid (SAW and MIG) Welding”, No: 9117, Accepted for International Conference on Innovative Product Design and Intelligent Manufacturing Systems (IPDIMS 2022).
68. Anjali Yadav, Bhukya Poorna Prakash, Karanam Sai Dileep, Sureddi Arjuna Rao, **Veeresh Kumar G B**, “An Experimental Examination on Surface Finish of FDM 3D Printed Parts”, No: 5884, Accepted for from International Conference on Innovative Product Design and Intelligent Manufacturing Systems (IPDIMS 2022).
69. A Navanth, Prakash H M, **T. Karthikeya Sharma***, G. Amba Prasad Rao, “Effect of Equivalence Ratio on the Performance and emission characteristics of a dual fuel HCCI Engine with Swirl” 21st ISME International Conference on Advances in Mechanical Engineering (ISME-2023), PES University, Bengaluru, 13– 15 July 2023
70. Krishnaja TS and **Soumya Jose**, Deconstructing Nunhood: Celebration of Female Spirituality and Autonomy in Rebel Hearts, International Conference on Religion and Theology, Vrije University, Amsterdam.
71. B. Venkateswarlu, B. Ratna Sunil, R. Sunil Kumar; “Microstructure, mechanical properties and corrosion behavior of Rare Earths (RE) containing Mg-Zn alloy for biomedical applications”, Materials Today: Proceedings, In Press
72. B. Venkateswarlu, B. Ratna Sunil, R. Sunil Kumar; “Developing Mg Based Composites for Degradable Orthopedic Implant Applications: A Review” Advances in Science and Technology, 120 (2022) 61-67, (Trans Tech Publications Ltd, Switzerland),
73. Subrahmanyam S and Sunil Kumar R, “Investigation of microstructure and mechanical properties of liquid nitrided AISI 420 and AISI 430 stainless steels. AIP Conference Proceedings (Accepted for Publication)
74. Subrahmanyam S, Pardhasaradhi R and Sunil kumar R,” Assessment of Process parameters for Mechanical alloyed Fe(84-X)- 16% Cr-MOX Alloys. Transactions of PMAI-23 (Accepted for Publication)
75. Pardhasaradhi DVT, Subrahmanyam. S, RVS Pranav and Sunil Kumar R,” Mechanical alloying of Equiatomic CoCrFeMnNi high entropy alloy” Transactions of PMAI-23 (Accepted for Publication)

76. Raghuram Peddinti and Raffi Mohammed, Correlation of tempering treatments on microstructure and corrosion behaviour of SUP9 and SUP11A leaf spring steels, 2nd International Conference on Advanced Materials and Manufacturing Processes (ICAMMP-2023) during 3rd and 4th March 2023 organized by the department of Metallurgical Engineering, College of Engineering Vizianagaram, Jawaharlal Nehru Technological University Gurajada Vizianagaram, (JNTUGV), Andhra Pradesh, India.

6.4 Book

1. Rajesh K. Kesharwani, **Jagan Mohan Rao. Tingirikari**, Raj K Kesarwani. (2022). Prebiotics and Probiotics in Disease Regulation and Management. Wiley Publication. ISBN No: 978-1- 394-16627-5.
2. K.V.V. Satyannarayana, S.L.S. Rani, C.B. Mathaji, **R. Vinoth Kumar**, Fouling Mechanisms in Nanofiltration Membranes, Springer Nature, (2022), DOI: 10.1007/978-981-19-5315-6_11.

6.5 Book-chapter

1. Prabhu Y.A., Muthu V.S., **Jagan Mohan Rao. Tingirikari**, (2022). Immuno-modulatory role for the treatment and management of Tuberculosis. In Immuno-modulators and Human Health. Springer Publication 1, 267-301.
2. Muthu V.S., Prabhu Y.A., Pavitra S., Prabha S.J., **Jagan Mohan Rao. Tingirikari**, (2022). Immune response of fructo and galacto oligosaccharides. In Prebiotics and Probiotics in Disease Regulation and Management. Wiley Publication 1, 27-44.
3. Nazeer Abdul Azeez, Sapna Pahil, **Surendra H. Mahadevegowda and Sudarshana Deepa Vijaykumar (2022)**. Metal organic frame works (MOF) for the antimicrobial applications. Recent Trends and Future of Antimicrobial Agents. Bentham Science, 280-292.
4. Sivapriya Veeraiyan, Abdul Azeez Nazeer, Saravanan Dhandapani, **Sudarshana Deepa Vijaykumar (2022)**. Surface chemistry for intelligent food packaging. Biomaterials in Food Packaging, Jenny Stanford. 83-118.
5. Nitish Venkateswarlu Mogili, Sapna Pahil, Abdul Azeez Nazeer, and **Sudarshana Deepa Vijaykumar**. (2023). Nanozymes in medicine. Biological Applications of Nanozyme Springer. 187-212.
6. Nur Izyan Wan Azelee, Aishah Rosli, **Seenivasan Ayothiraman**, Shilpa Mishra, Baranidharan S, Rangabhashiyam Selvasembian, "Nanoparticles for the adsorptive removal of heavy metals from wastewater" Adsorption through Advanced Nanoscale Materials: Applications in Environmental Remediation (Elsevier) (Submitted)
7. Digvijay D., **Seenivasan Ayothiraman**, Chitinases: structure, function, and valorization of marine shell waste (Ch: 7), In: Enzymes in Valorization of Waste (Vol 1): Enzymatic Pre-treatment of Waste for Development of Enzyme based Biorefinery, CRC Press, 2023, 157-186. ISBN: 9781003187714.

8. Nithya Murugesan, **Seenivasan Ayothiraman**, Design and Kinetics of homogenous biochemical reactors, Bioprocess Engineering and Technology: Upstream Process, CRC Press, 2023 (In press).
9. Nitish Venkateswarlu Mogili, Nithya Murugesan, **Seenivasan Ayothiraman**, et al., Biohydrogen Production from Wastewater and Organic Solid Wastes, In: Waste-to-Energy Approaches Towards Zero Waste, Elsevier, 2022, 165-195.
10. Nitish Venkateswarlu Mogili, Sapna Pahil, Abdul Azeez Nazeer, and **Sudarshana Deepa Vijaykumar**. "Biological Applications of Nanozymes." In Nanozymes in Medicine. Cham: Springer Nature Switzerland, 2023, 187-212.
11. S. Lakshmi Sandhya Rani, **R. Vinoth Kumar***, Eco-Friendly Ceramic Membranes from Inexpensive Raw Materials and Their Applications, Book: Environmental Science and Engineering: Advances in Chemical, Bio and Environmental Engineering, Springer Publishers (2022), DOI: 10.1007/978-3-030-96554-9_56
12. S. Lakshmi Sandhya Rani, **R. Vinoth Kumar***, Performance of Ceramic Nanofiltration Membranes in Water Purification, Book: Nanofiltration Membrane for Water Purification, Springer Publishers (2022), DOI: 10.1007/978-981-19-5315-6_10.
13. Nagireddi Jagadeesh and **Baranidharan S** (2023) "Review of Microfibres from Various Industries and Its Life Cycle Burden on Environment" In: Muthu, S.S. (eds) Progress on Life Cycle Assessment in Textiles and Clothing. Textile Science and Clothing Technology. Springer, Singapore pp 261–281 (https://doi.org/10.1007/978-981-19-9634-4_10) Online ISBN: 978-981-19-9634-4.
14. Yamini Lakshmi, Muthukumar S, and **Baranidharan S** (2023) "Microplastics in wastewater: A review of the current knowledge on Detection, Occurrence and Removal " Emerging Technologies in Wastewater Treatment, CRC Press, eISBN 9781003164982 (<https://doi.org/10.1201/9781003164982>).
15. Nagireddi Jagadeesh and **Baranidharan S** (2023) " Emerging Pollutants removal using Biochar in Wastewater: A Critical Review " Emerging Technologies in Wastewater Treatment, CRC Press, eISBN 9781003164982 (<https://doi.org/10.1201/9781003164982>).
16. Shilpa Mishra, Muthukumar S and **Baranidharan S** (2022) " Advanced Oxidation Process for Leachate Treatment: A Critical Review" An Innovative Approach of Advanced Oxidation Processes for Wastewater Treatment, Maulin P Shah, Sweta Parimita Bera, Günay Yildiz Tore, ISBN 9780367762117, CRC Press (In Press) <https://doi.org/10.1201/9781003165958>.
17. Sindhu, Korrapati and **Seshadri, Karthick**, Text Summarization: A Technical Overview and Research Perspectives, Handbook of Intelligent Computing and Optimization for Sustainable Development, pp. 261-286, John Wiley, USA, 2022.
18. **Seshadri, Karthick** and Pavana, C and Sindhu, Korrapati and Kollengode, Chidambaran, Unsupervised Modeling of Workloads as an Enabler for Supervised Ensemble-based Prediction of Resource Demands on a Cloud, Advances in Data

- Computing, Communication and Security: Proceedings of I3CS2021, pp. 109-120, 2022, Springer Nature Singapore.
19. Viswanathan Iyer, K and **Seshadri, Karthick** and Ghosh, Samriddhee, Some Observations on Huffman Trees, Proceedings of the International Conference on Cognitive and Intelligent Computing: ICCIC, Vol. 2, pp. 345-355, 2023, Springer Singapore.
 20. V H Prasad, **G K Kumar**, and **P K Kumar**, "Hardware Architecture for Denoising of EOG signal using Differential Evolution Algorithm", Recent Advances and Applications, CRC Press, Taylor and Francis – ACCEPTED.
 21. Pagidipala Sravanthi, **Vuddanti Sandeep**, "Modelling of Energy Sources and Loads for Distributed Power Generation", Distributed Energy Systems, 1st Edition, CRC Press, pp. 75-87, December 2022. ISBN: 9781003229124
 22. Krishna Mohan Reddy Pothireddy, **Sandeep Vuddanti**, Surender Reddy Salkuti "An introduction to demand response in microgrid" Power Quality in Microgrids: Issues, Challenges and Mitigation Techniques, Springer. June 2023 DOI: 10.1007/978-981-99-2066-2_21.
 23. S. V. K. Naresh and **S. Peddapati**, "Nonisolated Quadratic Bidirectional DC-DC Converters for Future Renewable Energy Systems," in CRC Press Taylor & Francis, vol. 1, pp. 105-127, 2023.
 24. Davu, Srinivasa Rao, **Tejavathu Ramesh**, and Suresh Kumar Tummala. "Electrical Characterization of Silicon Nitrate-Coated Polycrystalline Solar Cell." Recent Advances in Materials Processing and Characterization. Springer, Singapore, 2023. 371-381.
 25. **G.B. Veeresh Kumar**, H.S. Balasubramanya, R. Pramod, S.M. Aradhya, "Tribological Behaviour of Co-Cr-Mo Alloy on Ultra High Molecular Polyethylene with and without Third Body Particles Used in Hip Implant Application", Recent Trends in Product Design and Intelligent Manufacturing Systems, Part of the Lecture Notes in Mechanical Engineering book series (LNME), pp 83–93, DOI: 10.1007/978-981-19-4606-6_10. SCOPUS indexed Springer Lecture Notes.
 26. R. Mrudhula, **Dr. P. Dinesh Sankar Reddy, Veeresh Kumar G B**, "Preparation of Cellulose Nano Fibers (CNFs) from Cajanus Cajan (Pigeon pea) and Acacia arabica (babul plant)", Recent Trends in Product Design and Intelligent Manufacturing Systems, Part of the Lecture Notes in Mechanical Engineering book series (LNME), pp 429–438, DOI: 10.1007/978-981-19-4606-6_40. SCOPUS indexed Springer Lecture Notes.
 27. K. Chinna Maddaiah, **G B Veeresh Kumar**, "Investigation and Assessment of Mechanical Properties of Al-Fly Ash MMCs", Recent Trends in Product Design and Intelligent Manufacturing Systems, Part of the Lecture Notes in Mechanical Engineering book series (LNME), pp 439–451, DOI: 10.1007/978-981-19-4606-6_41. SCOPUS indexed Springer Lecture Notes.
 28. Ramesh KN, Sai MM, Goud KV, Raghavendra K, Amruth S, Sharma TK. Numerical Analysis of Heat Transfer Enhancement of Heat Sink using Different Phase Changing

Materials for Electronic Cooling Application. In: Lecture notes in Mechanical Engineering. Springer, Singapore, 2023

29. **Dhua, S.**, Maji A., & Nath A. Analysis of Lamb wave propagation in a generalized thermoelastic functionally graded plate. Functionally Graded Structures: Modelling and computation of static and dynamical problems, IOP Publishing.
30. **Dhua, S.**, Nath A., & Maji A. Lamb type wave in functionally graded orthotropic piezoelectric plate. Functionally Graded Structures: Modelling and computation of static and dynamical problems, IOP Publishing
31. Samikhya Das and **Soumya Jose**. Paper titled “Advertisement and Social Media: An Open Ground for Body Shaming” has been published in the Book titled Media Language and Literature: Current Indo-German Approaches with ISBN 978-81-954161-5-8.

6.6 PATENTS FILED

S. No.	Faculty Name	Titled of the Patent	Patent Applied To	Date of filed
1.	Dr. Karthick Seshadri, Dr. Mercy Shalinie, Dr. Vijayalakshmi M.	System and methods for on-the-fly intelligent knowledge acquisition and context aware scribing using IoT	Number: 201841023572 in Indian Patent Office	June-2022
2.	Dr. Karthick Seshadri	An utility model entitled "A parallel web directory constructor for automatically curating web directories".	20 2022 100 124 Germany	April -2022
3.	Dr. S. Yuvaraj (ECE Department)	A Radio Frequency Window for a Multifrequency Gyrotron and a Method for Designing Thereof.	India	Mar-2023
4.		Planar Orbital Angular Momentum (OAM) Antenna with Azimuthally Symmetrical Conical Beam for Vehicular Communication.	India	Dce-2022

6.7 Sponsored Research & Industrial Consultancies

S. No	Project Instructor	Department	Title and Scope of Project	Sponsoring Agency	Estimated value
1.	Vinoth Kumar Raja	Chemical Engineering	Indigenous Elaboration of Low-	DST-SERB (Science and	Rs. 28 Lakhs

			Cost Tubular Ceramic Membrane Forthe Clarification of Citrus	Engineering Research Board, Govt. of India)	
2.	Dr. Baranidharan S	Civil Engineering	Understanding the Interaction between Microplastics and Heavy Metals in Wastewater – Distribution, Adsorption, and Risk Assessment.	DST-SERB	Rs.24,31,120
3.	Dr. Talari Reshma		Monitoring and Analysis of non-point source pollutants in an agricultural watershed	DST-SERB	Rs. 31.88 Lakhs
4.	Dr. Karthick Seshadri	Computer science engineering	Leveraging Quantum Computing for efficient learning and inference in probabilistic graphical models	Ministry of Electronics and IT	Rs. 14.70 Lakhs
5.			A Scalable Resource Requirement Prediction and Provisioning Framework for Elastic Cloud	LinkedIn	Rs. 30.00 Lakhs
6.			Design and Evaluation of a Deep Neural Network Framework for Inferring and Ranking Causes for Sentiments in Product Reviews	AI and Robotics Research Park, IISc Bangalore	Rs. 3.60 Lakhs
7.	Dr. Narasimha Rao Banavathu	Electronics and Communication Engineering	Efficient Deployment of Unmanned Aerial Vehicles for Wireless Networks	Science and Engineering Research Board, Govt. of India. (SERB-DST)	Rs. 20.14 Lakhs
8.	Dr. Puli Kishore Kumar		Development of Compressive Sensing Based High Resolution Two-Dimensional Direction of Arrival	Science and Engineering Research Board, Govt. of India. (SERB-DST)	Rs.25.29 Lakhs

			Estimation Algorithms		
9.	Dr. Tejavathu Ramesh	Electrical Engineering	Project titled "Design and Development of Multi-level Inverter Fed Multi-Phase Sensorless Permanent Magnet Synchronous Motor Drive for Hybrid Electric Vehicle Applications with Reduced Torque and Flux Ripples".	Science and Engineering Research Board (SERB), New Delhi	Rs.55.00 Lakhs
10.	Dr. Sri Phani Krishna Karri		Edge Device Deployable Deep Learning Model For Screening Of Diabetic Retinopathy And Glaucoma In Rural India With High F-score	Science and Engineering Research Board, Govt. of India. (SERB-DST)	Rs. 30.01 Lakhs
11.	Dr. V. Sandeep and Dr. P. Sankar (Project Managers)		Common Research and Technology Development Hub (CRTDH) in the Renewable Energy sector	Department of Scientific and Industrial Research (DSIR), Ministry of Science & Technology, GoI	Rs. 715 Lakhs
12.	Dr.Thella Babu Rao	Mechanical Engineering		Science and Engineering Research Board, Govt. of India. (SERB-DST)	Rs.11.232 Lakhs
13	Dr. T. Karthikeya Sharma		Numerical Analysis of High Area Ratio Liquid Bi Propellant Thruster at Higher Altitudes	ASL, DRDL, Hyderabad	Rs 9.65 Lakhs
14	Dr. Taps Paramanik	School of Sciences	Studies on the magnetic and electronic properties in ternary pnictides RTX ₂ (R= Rare-earth, T= Transition metals, X= Pnictogens)	SERB, India under Core Research Grant (CRG) scheme	Rs.31.40 Lakhs

15	Dr. Taps Paramanik		To study structural, electronic and magnetic properties of half-metallic spintronics materials: Fe-based quaternary Heusler alloys	Collaborative Research Scheme (CRS) Project of UGC-DAE CSR	Rs. 6.84 Lakhs
16	Dr. J. Krishna Murthy		Unveil the multifunctional Properties of Multiferroic DYVO3 and HOVO3 epitaxial Structures and Explore the Possible RVO3 (R-rare -earth) Spintronic devices	Science and Engineering Research Board, Govt. of India. (SERB-DST-CRG)	Rs.27.4 Lakhs
17	Dr. J. Krishna Murthy		Multiferroic Materials for Future Electromagnetic based Solid-State Refrigeration Technology	INDIA-TAIWAN, sponsored by GITA, DST	Rs. 42.22 Lakhs
18	Dr. R. Arun Kumar		Development of Novel Thermoluminescent and Photoluminescent nanomaterials and Investigations on Their Response to C and Ag ions irradiation	Inter-University Accelerator Centre, New Delhi	Rs.10.11 Lakhs
19	Dr. R. Arun Kumar		Development of phosphor-in-glass materials for efficient white light generation	SERB, India under Core Research Grant (CRG) scheme	Rs. 30.43 Lakhs
20	Dr. Sharad Dwivedi		Investigation of ultrafast magnetization dynamics in a network of ferromagnetic nanostructures	Science and Engineering Research Board, Govt. of India. (SERB-DST)	Rs.20.01 Lakhs

6.8 MoUs

S.No.	Firm Name	Date Of Mou and Period	Field
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1	Sri Vasavi Engineering College (Autonomous) Tadepalligudem	09-02-2023 to 08-02-2026 Three Years	Academia & Collaborative Research
2	Sasi Institute Of Technology & Engineering (Autonomous) Tadepalligudem	09-02-2023 to 08-02-2026 Three Years	Academia & Collaborative Research
3	Sagi Rama krishnam Raju Engineering College (Autonomous) Bhimavaram	09-02-2023 to 08-02-2026 Three Years	Academia & Collaborative Research

6.9 Innovation, Incubation & Startups

Centre for Research Innovation Incubation & Consultancy (CRIIC) of NIT Andhra Pradesh with the verticals Research & Consultancy and Innovation Incubation & Entrepreneurship aims to strengthen the research profile of the institute and acts as interface for all the research projects and consultancy works. Further, the centre targets to strengthen Institute Innovation-entrepreneurship eco-system. The following events are organized by CIIC in the year 2022-23.

S. No	Name Of the Event	Dates
1.	Engineers Day Celebrations Engineer's day celebrations were conducted with technical sessions on career entrepreneurship, technical sessions like quiz competitions, word extraction and treasure hunts were conducted.	15-09-2022
2.	5G Launching Program Pradhan Manthri Shri Narendra Modi Launched 5G Network Launching program	01.10.2022
3.	India Start up Day Innovation and Entrepreneurship-Issues and Challenges	01.10.2022
4.	Idea contest (Innovation Day & Abdul Kalam Birthday) The idea competition was evaluated by the IIC members of NIT Andhra Pradesh totally 201 entries from all over India among them eight teams were shortlisted. The presentation's final round was conducted on 15-10-2022 @10.00 am in the administrative vista director conference hall	15-10-2022

5.	Atal Mega Tinkering on Childrens day Atal Tinkering Lab (ATL) is a central government of India initiative to create an environment of scientific temperament, innovation, creativity amongst Indian students. It is a step towards a new India that will embrace and encourage novel and innovative ideas and inventions	14.11.2022
6.	National Education Day Students presented on new Innovations and new Ideas	26.11.2022
7.	National Energy Conservation Day (India) Organised by Department of Chemical Engineering in Association with Institution's Innovation Council (IIC), and Indian Institute of Chemical Engineers - Amaravati Regional Centre (IICHe-ARC) NATIONAL INSTITUTE OF TECHNOLOGY ANDHRA PRADESH	27.01.2023
8.	National Science Day The National Institute of Technology of Andhra Pradesh celebrated "National Science Day to commemorate invention of "Raman effect" by an Dean (Research & Consultancy) office & IIC Patron of NIT Andhra Pradesh	28.02.2023

IIC 5.0 Calendar Activities for Academic Year 2022-23

Quarter I (1st September - 30th November)

S. No	Name of the Event	Dates
1.	Workshop on " Entrepreneurship and Innovation " as Career Opportunity Speaker: Dr. Roshan Srivastav Project Director, Navavishkar I-Hub Foundation (IITTNiF) IIT Tirupati	10.11.2022
2.	My Story – Motivational Session by Successful Entrepreneur/Start-up founder Speaker: Dr. Kishore Indukuri Founder& CEO, Sid's Farm	18-11-2022
3.	Session on Problem-Solving and Ideation Workshop Speaker: Dr. Sambath Parthasarthy Founder & Director, Dataever Consulting Pvt. Ltd.	24.11.2022
4.	My Story – Motivational Session by Successful Innovators Speaker: P.Ponram Founder & Director Tejas Translational Technologies Pvt. Ltd	30.11.2022

Quarter II (1st December- 28th February)

S. No	Name of the Event	Dates
1.	Innovation and Entrepreneurship-outreach program Speaker: Prof. G. Ravi Kiran Sastry Dean (Research & consultancy)	15.12.2022
2.	Entrepreneurship skill, attitude and behavior development Speaker: Shanker Viswanath (Chartered Accountant)	12-01-2023
3.	Symposium on “ Ideation, Innovation, Development, and technology transfer of industrially scalable process ” Speaker: 1.Prof. Thamida Sunil Kumar IIT Tirupati 2.Mr. S. Chiranjeevulu MRPL, Mangalore 3. Prof. G. Arthanareeswaran NIT Tiruchirappalli 4. Prof. M. Venkateswara Rao IITChE, Amaravati	27.01.2023
4.	Workshop on “ Design Thinking, Critical thinking and Innovation Design ” (Virtual) Speaker: Dr. T. Sucharita M. D Founder-CEO, Kairos Kinetic, Chennai	10.02.2023

Quarter III (1st March - 31st May)

S. No	Name of the Event	Dates
1.	Field Visit JNTUK Kakinada Speaker: Dr. Gopala Krishna, Director, Innovation Research Center	03.03.2023
2.	Workshop on Intellectual Property Rights (IPRs) and IP management for start up Speaker: Dr. Prasanna Belur. D Associate Professor NIT Surathkal	24.03.2023
3.	Start-up Expo Exhibition Start-up Expo Exhibition in NIT Andhra Pradesh	05.04.2023

7 Events conducted at NIT Andhra Pradesh

7.1 Events conducted by students

NIT Andhra Pradesh has several clubs and associations to enable students for hands on learning. The details of activities organized as part of various clubs and associations is presented below.

1. E-Yantra club

The e-yantra club organized a seminar on Robotics with a demonstration of robotic arm. It also organized workshops such as Arduino expo and on Drones. As part of

Vulcanzy, a cultural and technical fest at NIT Andhra Pradesh, the e-yantra club organized events such as robo war.

2. Nature and Value Education club

This club organized several events such as Lock and Key, Solve Me, Capture to Correct, and Phrases to Make. It also organized 2K marathon to enhance core values among students.

3. Prayatnam

This club visited several government schools nearby and donated stationery such as books and pencils for the needy students.

4. E & I Cell

The E&I cell has organized events such as Guess master, and online webinars jointly with institute's IIC cell. As part of vulcanzy, the E&I cell organized a startup expo to showcase innovative ideas of the students and create awareness about startups among the students.

5. Brindavanam club

This club provide awareness among students about horticulture, and gardening. As part of this, students visited Dr. YSR Horticulture University, Tadepalligudem. This club organized events such as hydroponics to create working models to grow leafy vegetables.

6. PNP club

During the academic year, the PNP club organized several events and activities that were both fun and educational for the students. Some of the significant events organized by the club include panel painting, hand painting, pot painting, and etc.

All the engineering departments have formed an association for the benefit of students. Each association has conducted several interactive sessions on placements, importance of IEEE, women in technology, innovator challenge, etc. All engineering associations have conducted several technical events to improve learning and create hands on experience. Few of such events are listed below:

- Seismic survivor
- Model making : created models of dam, bridge, etc

- Ideathon
- CSS battle
- One-day workshop on microprocessors and microcontrollers
- Material exhibit
- Industrial visit to APGENCO
- Mechanical Gala
- Project expo to demonstrate solutions to practical problems identified in day to day life.

In addition to these activities, the EEE association and ECE association publish monthly magazines named Eclectic and ECE Herald respectively.

Apart from the above mentioned clubs, NIT Andhra Pradesh organized several technical and cultural events through various engineering associations that are part of Vulcanzy. The following list name few of such events:

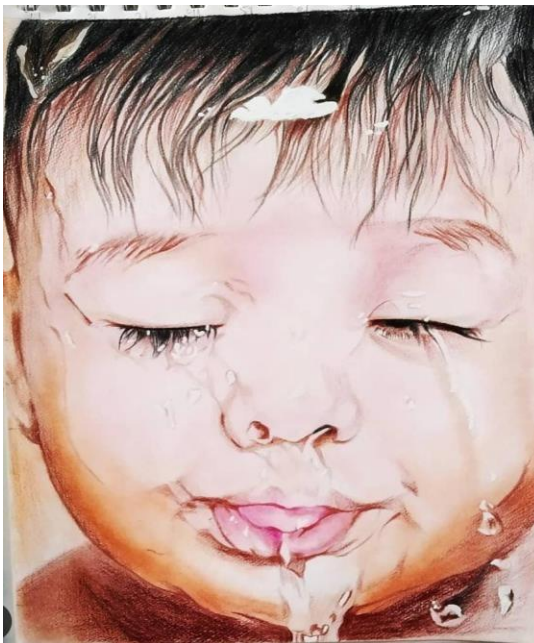
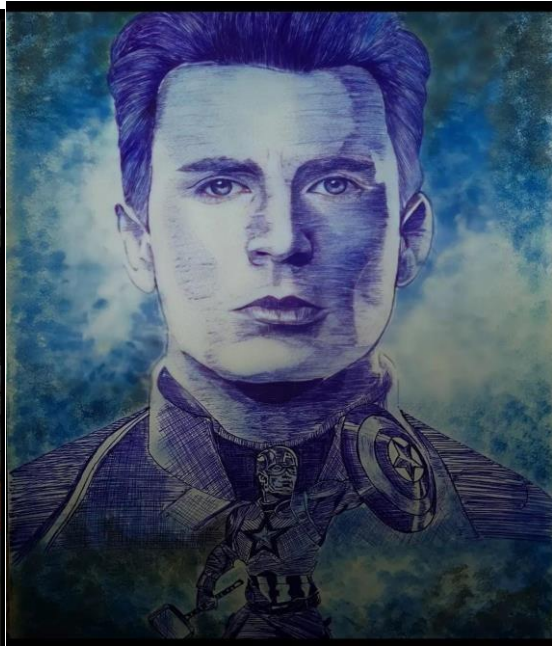
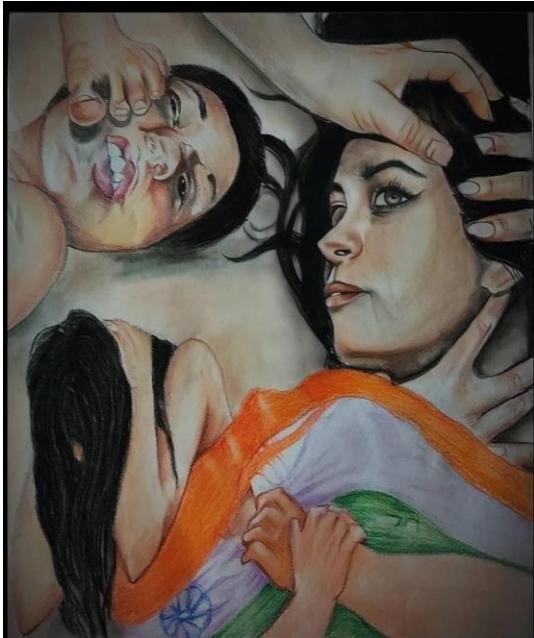
- Tech expo
- Prison break and Kaboon
- Race, Chase, and Ace
- Scary house
- Tower crane building challenge.

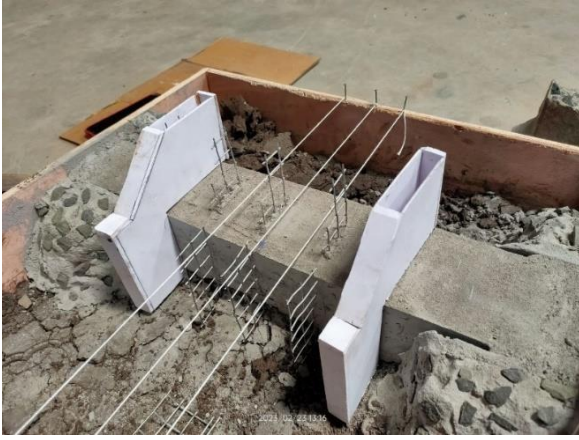




VISIT OF ORPHANAGE CHILDREN TO TECHNICAL FEST ON VULCANZY







7.2 Events and Celebrations at the Institute Level :

The events and celebrations at the institute level are organized by Center for Physical Education and Sports (CPES) and Dean (Student welfare). The main aim of physical education and sports is to develop students' competence and confidence to take part in a range of physical activities that become a central part of their lives, both in and out of college. It helps the students to develop holistic health, fitness, motor skills, social skills, and confidence needed to begin and maintain a healthy physically active lifestyle for the rest of their life. It is said that "Intelligence and skill can only function at the peak of their capacity when the body is healthy and strong". In order to develop physical health and thereby overall development and well-being of the students, the CPES provides various opportunities in the form of yoga and various recreational activities such as sports and games.

1. Coaching camps in Basketball, Volleyball, Badminton, Handball, Kabaddi and Cricket

The CPES has organized different sports and games coaching camps for I B. Tech students (Boys & Girls).

- The Basketball, Volleyball, and Badminton coaching camps have been organized from 01.06.2022 to 14.06.2022 (Two weeks).
- The kabaddi and Handball coaching camps have been organized from 14.06.2022 to 28.06.2022.
- Cricket training sessions cum selection trails have been conducted from 20.06.2022 to 30.06.2022 for I/IV B. Tech Boys students.



2. 8th International Day of Yoga Celebrations

In view of the 8th International Day of Yoga on 21st June 2022, CPES has organized the following activities by the guidelines of the Ministry of Aayush, India.

S.No	Activities	Dates	Brief write -up about the activity
1	Common Yoga Protocol (CYP) -15 Days Training	During 15 th -27 th April 2022	All the first-year students participate in 15 days of training every day in the Morning 6:00 am – 7:00 am
2	Display Yoga Charts and Standees within the Institution and create awareness	From 15 th April to 21 st June 2022	Intuition students demonstrated Common Yoga Protocol postures and Making charts and standees and display the main places on the NIT AP campus.
3	Lifestyle Diseases Curb with Yoga -15 days of Training	From 1 st May to 15 th May 2022	Special training is provided for students, Teaching, and Non-Teaching staff. This Programme mainly focused on Lifestyle diseases and selected yoga asanas practicing for every day in the evening 4:30 pm-5:30 pm
4	Encourage the Online competitions through MyGov Portal	Follows MyGov Portal	Followed MyGov Portal/created by the NIT AP

5	Invited yoga-related articles from Students and Faculty for publishing NIT AP yoga book.	From 16 th May to 11 th June 2022	Collected best yoga-related articles from Students and Faculty then scrutinize the best and most effective articles and published in the NIT AP Yoga book. This one released on International Day of Yoga and placed in the NIT AP Library.
6	Celebration of International day of yoga	21 st June 2022	An offline Programme conducted where Common Yoga Protocol is followed.



3. National Javelin Throw Day

On 7th August, as it is celebrated as National Javelin Throw Day on the victory of Neeraj Chopra in World Athletics Championship, we have conducted javelin throw competitions among all the students, staff and faculty members. The winners were rewarded with medals on 15th August on the occasion of Independence Day.



4. 75th Independence Day celebrations

The 75th independence day is celebrated at NIT Andhra Pradesh on 15-August-2022. The chief guest for the event is Prof. G R K Sastry. On this occasion, the institute commemorated several freedom fighters. Also, the achievements of the Nation in past seventy five years has been presented. On this occasion, National flag hoisted by the chief guest. The fraternity of NIT Andhra Pradesh has paid tribute to the freedom of fighters and the national leaders.



5. National sport Day Celebrations

The CPES has celebrated National Sports Day Celebrations on the account of Dhyanchand birth anniversary on 29th August 2022.



6. Visvesvaraya Jayanthi celebrations on Sep 15th, 2022

On this day, the fraternity of NIT Andhra Pradesh commemorated the achievements of M Visvesvaraya.



7. Har Ghar Tiranga Programme

In view of the HAR GHAR TIRANGA PROGRAMME under Azadi Ka Amrit Mahatsov (AKAM), the CPES has conducted the following activities by the guidelines of the Government of India.



S. No	Tentative Dates	Proposed Activity
1	01.08.2022	To create awareness of unsung heroes of India by displaying boards and standees within the campus
2	02.08.2022	To create the importance of Independence Day by Motor Cycle rally with all faculty members, non-teaching staff, and student members.
3	03.08.2022	To create the awareness of Har Ghar Tiranga program and distribution of the National Flags to Kondrupolu Village to hoist the National Flag of India in their homes.
4	04.08.2022	To create the awareness of Har Ghar Tiranga program and distribution of the National Flags to L Agraharam Village to hoist the National Flag of India in their homes.
5	05.08.2022	Javelin throw Competitions for all faculty members, non-teaching staff, and student members.
6	06.08.2022	Conduction of offline/online competitions like drawing, singing, essay writing, etc. for all students.
7	07.08.2022	Book release on the remembrance of 75 Unsung Heroes of India.



8. Gandhi Jayanthi Celebrations

On 02-Oct-2022, NIT Andhra Pradesh celebrated Gandhi Jayanthi at the statue of Mahatma Gandhi at the East gate of the Institute. On this occasion, several faculty, staff and students participated and recalled his work and ideology towards the growth of the nation.



9. Unity Run

In order to commemorate the birth anniversary of Dr. Sardar Vallabhai Patel the Center for Physical Education and Sports has conducted unity run (both 2k and 3K) programme on 31st October.





10. Swachatha pakhwada program

In this program, students, staff, and faculty actively participated and cleaned the campus.



11. Participation in All India Inter NIT Sports and Games

NIT Andhra Pradesh actively participated in the inter NIT sports at MNIT Jaipur held between 16-19 November for athletics and basket ball competition. A team of 35 members (16 for athletics and 20 for basketball) participated in the competition.



Also, NIT Andhra Pradesh participated in the following inter NIT competitions held at various places:

- Badminton, Chess, and Table Tennis at NIT SILCHAR held between 17-19 November. In this 18 people participated (9 for Badminton, 5 for CHESS, 4 for Table Tennis)
- Cricket competition at VNIT NAGPUR between 4-7 December, 16 members have participated and our people have reached the quarter-finals.
- Hand Ball competition at NIT Calicut held between 6-8 January, 12 members have participated.
- Kabaddi and Volley Ball competition at NIT SURATHKAL held between 18-20 January. 30 members have participated (21 for Kabaddi and 9 for Volley Ball). Our people have reached the quarter-finals.
- Foot Ball competition held at NIT ROURKELA between 10-12 February. 14 members have participated.



12. Intramural competitions for the 1st B. Tech year students

The Centre for Physical Education and Sports (CPES) has conducted various sports events for the 1st B.Tech year students in connection with the 74th Republic Day. The competitions have held from 17th January 2023 to 20th January 2023. These competitions have been conducted section wise.

13. 74th Republic Day Celebrations



NIT Andhra Pradesh celebrated the republic day on 26-Jan-2023 by hoisting the

National flag. On this day, prizes were distributed to the winners of the sports events conducted by the CPES.



14. Matrubhasha Diwas





15. Intramural competitions on the occasion of the Annual Sports Day

From March 6th, the intramural competitions have started. We have conducted about 14 games along with Athletics for all the B. Tech students against their branches. We have seen massive participation of around 1200 members. We have also conducted games for the staff and faculty members from March 15 to March 27.



S. No.	Name of the Event	Max. members per each team	Tentative Dates	Timings
1	Volleyball (M&W)	Men: 10; Women: 8	M A R C H 1st W E E K O N W A R D S	5:30 PM-9:00 PM
2	Basketball (M&W)	Men: 10; Women: 8		5:30 PM-9:00 PM
3	Football (M)	Men: 15		5:30 PM-9:00 PM
4	Badminton (Singles & Doubles)	Men: 5; Women: 4		6:00 AM-8:00 AM 4:30 PM-9:00 PM
5	Chess (M&W)	Men: 4; Women: 4		6:00 AM-8:00 AM 5:30 PM-8:00 PM
6	Yoga (M&W)	Men: 1; Women: 1		6:00 AM-8:00 AM
7	Squash (M&W)	Men: 1; Women: 1		5:30 PM -8:00 PM
8	Table Tennis (M&W)	Men: 5; Women: 4		6:00 AM-8:00 AM 4:30 PM-7:00 PM
9	Kabaddi (M&W)	Men: 10; Women: 10		6:00 AM-8:00 AM
10	Throw ball (W)	Women: 10		6:00 AM-8:00 AM
11	Kho-Kho (M&W)	Men: 1; Women: 11		6:00 AM-8:00 AM
12	Handball (M&W)	Men: 10; Women: 10		6:00 AM-8:00 AM
13	Athletics	NA		6:00 AM-8:00 AM
14	Cricket	Men: 15		6:00 AM-8:00 AM 4:30 PM-7:00 PM



16. Annual Sports Day Celebrations

The Center for Physical Education and Sports celebrated the annual sports day on 6th April 2023 amidst great enthusiasm and camaraderie. The chief guest invited to the event was Dr. Robin F. Simon, Lecturer in Physical Education Department, VNIT Nagpur. NIT Andhra Pradesh felicitated the chief guest and several prizes were distributed for the winners.



8 Fourth Convocation

NIT Andhra Pradesh has organized degree awarding ceremony, convocation, on 10-09-2022. Shri M S Unnikrishnan, CEO, IITB-Monash Research Academy is the chief guest for the convocation. Ms. Pulivendula Prasuna, department of CSE, is the Institute topper and received gold medal.





Annual Accounts 2022-23

NATIONAL INSTITUTE OF TECHNOLOGY
ANDHRA PRADESH

BALANCE SHEET AS AT 31-03-2023

(Amount in Rupees)

SOURCES OF FUNDS	SCHEDULE	Current Year	Previous Year
Corpus / Capital Fund	<u>1</u>	5,24,41,07,541	5,14,43,02,530
Designated / Earmarked / Endowment Funds	<u>2</u>	15,72,947	1,66,05,269
Current Liabilities & Provisions	<u>3</u>	37,95,29,537	36,92,34,128
TOTAL		5,62,52,10,024	5,53,01,41,926
APPLICATION OF FUNDS			
Fixed Assets			
-- Tangible Assets	<u>4</u>	4,26,09,57,998	21,39,57,530
-- Intangible Assets		29,89,724	37,632
-- Capital Work in progress		0	4,10,92,36,000
Investments			
-- Long Term		0	0
-- Short Term	<u>5</u>	0	0
Investments - Others	<u>6</u>	0	0
Current Assets	<u>7</u>	1,27,40,10,345	1,14,19,75,755
Loans, Advanes & Deposits	<u>8</u>	8,72,51,957	6,49,35,009
TOTAL		5,62,52,10,024	5,53,01,41,926

Significant Accounting Policies **23**

Contingent Liabilities and Notes to Accounts **24**

NATIONAL INSTITUTE OF TECHNOLOGY
ANDHRA PRADESH

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2023

(Amount in Rupees)

SOURCES OF FUNDS	SCHEDULE	Current Year	Capital Fund	Total	Previous Year
Academic Receipts	9	15,48,20,719	0	15,48,20,719	15,18,54,306
Garnts / Subsidies	10	46,41,82,541	0	46,41,82,541	62,10,60,320
Income from Investments	11	4,24,77,105	0	4,24,77,105	4,39,39,898
Interest Earned	12	9,414	0	9,414	2,79,492
Other Income	13	1,04,44,573	0	1,04,44,573	1,27,51,012
Prior Period Income	14	62,97,997	0	62,97,997	1,04,71,340
TOTAL (A)		67,82,32,349	0	67,82,32,349	84,03,56,368
EXPENDITURE					
Staff Payments & Benefits (Establishment Expenses)	15	20,00,08,989	0	20,00,08,989	25,59,51,176
Academic Expenses	16	6,16,13,869	0	6,16,13,869	7,43,92,924
Administrative and General Exp	17	15,09,86,435	0	15,09,86,435	5,01,31,425
Transportation expenses	18	63,77,397	0	63,77,397	70,70,821
Reparis & Maintenance	19	4,37,08,976	0	4,37,08,976	2,59,66,586
Finance Cost	20	0	0	0	13,42,53,225
Depreciation	4	12,28,30,043	0	12,28,30,043	3,47,17,954
Other Expenses	21	0	0	0	0
Prior Period Expenses	22	31,80,342	0	31,80,342	0
TOTAL (B)		58,87,06,051	0	58,87,06,051	58,24,84,111
Balance being excess of Income over Expenditure (A-B)		8,95,26,299	0	8,95,26,299	25,78,72,257
Transfer to / from Designated Fund		0	0	0	0
Building Fund		0	0	0	0
Others if Any		0	0	0	0
Balance being surplus (Deficit) carried to General Fund		8,95,26,299	0	8,95,26,299	25,78,72,257
Significant Accounting Policies	23				

Annual accounts for the year 2022-23

SCHEDULE 1- CORPUS FUND / CAPITAL FUND

PARTICULARS	CURRENT YEAR	PREVIOUS YEAR
Balance as at the beginning of the year	5,14,27,73,729	2,49,17,88,564
Add: Contributions towards Corpus / Capital Fund	0	0
Add: Grants from UGC, GOI and State Government to the extent utilized for capital expenditure	0	2,39,31,12,908
Add: Assets purchased out of Earmarked Funds	0	0
Add: Assets purchased out of Sponsored Projects where ownership vests in the institution	0	0
Add: Assets Donated / Gifts Received - Land received from State Govt	0	0
Add: Other Addition	1,18,07,513	0
Add: Excess of Income over expenditure transferred from Income & Expenditure Account	8,95,26,299	25,78,72,257
	5,24,41,07,541	5,14,27,73,729
Ded: Deficit of Income over Expenditure transferred from Income & Expenditure Account	0	0
Balance at the year end	5,24,41,07,541	5,14,27,73,729

SCHEDULE - 2: DESIGNATED / EARMARKED / ENDOWMENT FUND

Particulars	FUND WISE BREAK UP							TOTAL	
	SC Sub Plan - Non Recurring	ST Sub Plan - Non Recurring	SC Sub Plan - Recurring	ST Sub Plan - Recurring	Grant for HEFA loan	TOTAL DESIGNATED / EARMARKED FUNDS	ENDOWMENT FUND	CURRENT YEAR	PREVIOUS YEAR
a) Opg. Balance of the Funds	-	-	1,57,86,464	8,18,805	-	1,66,05,269	-	1,66,05,269	9,07,88,846
b) Additions during the year	-	-	3,13,00,000	1,47,00,000	-	4,60,00,000	-	4,60,00,000	2,06,58,10,985
c) Income from investments made of the funds	-	-	-	-	-	-	-	-	-
d) Accrued Interest on Investments / Advances	-	-	-	-	-	-	-	-	-
e) Interest on Savings Bank A/c	-	-	-	-	-	-	-	-	-
f) Other additions (Specify nature)	-	-	-	-	-	-	-	-	-
TOTAL (A)	-	-	4,70,86,464	1,55,18,805	-	6,26,05,269	-	6,26,05,269	2,15,65,99,831
Refunded to Ministry	-	-	14,00,000	15,00,000	-	29,00,000	-	29,00,000	-
B) Utilization / Exp towards objectives of funds									
i) Capital Expenditure	-	-	-	-	-	-	-	-	1,90,47,85,181
i) Revenue Expenditure	-	-	4,49,32,322	1,32,00,000	-	5,81,32,322	-	5,81,32,322	23,52,09,381
TOTAL (B)	-	-	4,63,32,322	1,47,00,000	-	6,10,32,322	-	6,10,32,322	2,13,99,94,562
Closing Balance at the year end (A-B)	-	-	7,54,142	8,18,805	-	15,72,947	-	15,72,947	1,66,05,269

Represented by									
Cash and Bank Balances	-	-	7,54,142	8,18,805	-	15,72,947	0	15,72,947	1,66,05,269
Investments	-	-	-	-	-	-	0	-	-
Interest accrued but not due	-	-	-	-	-	-	0	-	-
Total:	-	-	7,54,142	8,18,805	-	15,72,947	0	15,72,947	1,66,05,269

SCHEDULE 2A

ENDOWMENT FUNDS

Sr No	Name of the Endowment	Opg Balance		Additions during the year		Total		Expenditure on the object during the yr	Closing balances		
		Endowment	Accumulated Interest	Endowment	Interest	Endowment	Accumulated Interest		Endowment	Accumulated Interest	Total
1	2	3	4	5	6	7=(3+5)	8=(4+6)	9	10	11	12=(10+11)
	Total	0	0	0	0	0	0	0	0	0	0

- 1 The total of Colmns 3 & 4 will appear as the opening Balances in the Column "Endowment Funds" in Schedule 2, of Earmarked Funds forming part of the B.S.
- 2 The total of Col.9 should normally be less than the total of Col.8, as only the interest is to be used for the expenditure on the object of the endowments
- 3 There should not normally be a debit balance in the schedule, if in a rare case, there is debit balance against any of the Endowment funds the debit balance should appear on the Assets side of the Balance Sheet as "Receivable", in Schedule-8 Loans, Advances & Deposits.

SCHEDULE 3 - CURRENT LIABILITIES & PROVISIONS

PARTICULARS	CURRENT YEAR	PREVIOUS YEAR
A. CURRENT LIABILITIES		
1. Deposits from staff		
--- Security Deposit for Staff Quarters	0	0
2. Deposits from students		
--- Lab and Library Deposit	1,96,15,519	1,84,05,147
--- Hostel Caution Deposit	1,84,25,209	1,63,68,000
3. Sundry Creditors		
a) For Goods & Services	0	0
b) Others	0	0
4. Deposits - others (including EMD, Security deposit)		
--- Tender Deposit	6,95,990	3,44,302
--- Other Deposit	0	0
5. Statutory Liabilities(GPF, TDS, WC TAX, CPF, GIS, NPS):		
a) Overdue	0	0
b) Others		
--- Profession Tax	42,760	36,960
--- GPF	0	0
--- GSLI	0	0
--- VPF	0	0
--- GST	8,61,924	5,81,387
--- NPS	0	31,81,734
--- Income Tax (TDS)	26,22,277	13,00,070
6. Other Current Liabilities:		
a) Salaries - Outstanding salaries to Adhoc faculties	0	63,800
b) Receipts against sponsored projects	0	0
c) Receipts against sponsored fellowships & scholarships	99,61,272	3,18,89,431
d) Unutilised Grants		
--- Plan Grants	0	0
--- Non-Plan Grants	-24,76,323	2,14,29,856
--- Earmarked Funds(Capital Work In Progress)	0	0
e) Grants in advance (grants received in advance for next year)	0	0
f) Other funds	0	0
g) Other liabilities		
--- SBI CR Reddy Branch	0	0
--- HEFA Loan	0	0

--- NIT, Warangal	10,00,00,000	10,00,00,000
--- Fee Payable	5,00,51,194	2,62,18,838
--- Hostel & Mess Charges Paid & Payable	0	32,567
--- Advance fee recived	1,42,107	0
--- Alumni Association Fee	92,10,000	77,08,000
--- Cess	1,13,770	1,00,884
--- CPDA unutilised balance	0	0
--- FDP	0	0
--- Games Fee	71,34,035	56,08,535
--- Institution Development fee	4,60,49,000	3,85,40,000
--- Internet & ICT Charges	1,60,77,600	1,27,98,000
--- Medical Fee	1,25,17,673	97,84,673
--- Magazine Fee	17,61,400	13,60,900
--- Other Deductions on Salaries	1,28,147	1,28,147
--- Seinarage	14,312	5,925
--- Students Club Fee	66,99,000	53,32,500
--- Student Library Fee	2,01,70,337	1,59,13,997
--- Student Welfare Fund	42,30,200	33,46,700
--- Technical Association Fee	29,91,800	23,49,800
--- Fest Fee Collected	44,72,059	38,02,248
--- Fest Sponserhip	2,907	8,10,000
--- Student Scholarship	3,84,290	3,16,794
--- Un Identified Credit	45,501	45,501
--- Security Deposit: Withheld Amount	59,26,864	65,87,092
--- M.Tech Stipend Hold	0	24,800
--- P.hd Stipend Hold	5,34,387	5,66,746
--- Outstanding Liabilities	39,40,652	0
TOTAL (A)	34,23,45,863	33,49,83,334
B. PROVISIONS		
1. For Taxation	0	0
2. Gratuity	1,74,76,431	1,19,40,615
3. Superannuation/ Pension	0	0
4. Accumulated Leave Encashment	1,76,41,565	1,20,31,466
5. Trade Warranties/ Claims	0	0
6. Others (Specify)- Electricity March Bill	20,65,678	0
TOTAL (B)	3,71,83,674	2,39,72,081
TOTAL (A+B)	37,95,29,537	35,89,55,415

Note: Unutilised grants 6(d) will include grants received in advance for next year

ENCOSURE TO BALANCE SHEET

ENCLOSURE TO CURRENT LIABILITIES AND PROVISIONS (Schedule - 3)

HEAD OF ACCOUNT	OPG. BALANCE	RECEIPTS	PAYMENTS	CLG BALANCE
<u>Other Deposits</u>				
Tender Deposit	3,44,302	6,24,788	2,73,100	6,95,990
Advance fee recived	0	1,42,107	0	1,42,107
Alumni Association Fee	77,08,000	15,20,000	18,000	92,10,000
Cess	1,00,884	12,886	0	1,13,770
CPDA unutilised balance	0	0	0	0
Games Fee	56,08,535	15,33,000	7,500	71,34,035
Institution Development fee	3,85,40,000	76,00,000	91,000	4,60,49,000
Internet & ICT Charges	1,27,98,000	32,91,600	12,000	1,60,77,600
Medical Fee	97,84,673	27,43,000	10,000	1,25,17,673
Magazine Fee	13,60,900	4,03,500	3,000	17,61,400
Other Deduction on Salaries	1,28,147	0	0	1,28,147
Seinrage	5,925	8,387	0	14,312
Students Club Fee	53,32,500	13,71,500	5,000	66,99,000
Student Library Fee	1,59,13,997	42,72,840	16,500	2,01,70,337
Student Welfare Fund	33,46,700	8,87,500	4,000	42,30,200
Student Scholarship	3,16,794	16,23,032	15,55,536	3,84,290
Technical Association Fee	23,49,800	6,45,500	3,500	29,91,800
Fest Fee Collected	38,02,248	14,03,800	7,33,989	44,72,059
Fest Sponserhip	8,10,000	11,98,000	20,05,093	2,907
FDP	0	7,34,056	7,34,056	0
Un Identified Credit	45,501	0	0	45,501
Security Deposit: Withheld Amount	65,87,092	13,88,553	20,48,781	59,26,864
M.Tech Stipend Hold	24,800	0	24,800	0
P.hd Stipend Hold	6,67,186	4,82,480	6,15,279	5,34,387
Sub Total (a)	11,55,75,984	3,18,86,529	81,61,134	13,93,01,379
<u>Student Deposits</u>				
Hostel Caution Deposit	1,63,68,000	1,16,64,000	88,85,360	1,91,46,640
Lab and Library Deposit	1,84,05,147	46,24,372	34,14,000	1,96,15,519
Sub Total (b)	3,47,73,147	1,62,88,372	1,22,99,360	3,87,62,159
Grand Total (a+b)	15,03,49,131	4,81,74,901	2,04,60,494	17,80,63,538

HEAD OF ACCOUNT - STATRY LIABILITIES	OPG. BALANCE	RECEIPTS	PAYMENTS	CLG BALANCE
Profession Tax	36,960	4,65,500	4,59,700	42,760
GPF	0	0	0	0
GSLI	0	0	0	0
VPF	0	0	0	0
TDS	13,00,070	1,63,65,831	1,50,43,624	26,22,277
GST	5,81,387	56,78,036	53,97,499	8,61,924
NPS	24,21,743	2,47,15,965	2,71,37,708	0
GRAND TOTAL	43,40,160	4,72,25,332	4,80,38,531	35,26,961

Unutilized Non-Plan Grants	CURRENT YEAR	PREVIOUS YEAR
A. Non-Plan Grants: Government of India		
Balance B/f	2,14,29,856	52,99,22,843
Add: Receipts during the year	42,31,50,000	33,70,00,000
Total(a)	44,45,79,856	86,69,22,843
Less: Refunds	4,10,05,960	9,59,60,608
Less: Utilized for Revenue Expenses	40,60,50,219	39,61,29,652
Less: Utilized for Capital Expenses	0	35,34,02,727
total(b)	44,70,56,179	84,54,92,987
Unutilized carried forward (a-b)	-24,76,323	2,14,29,856

SCHEDULE - 3(a) - SPONSORED PROJECTS

Sr No	Name of the Project	Opening Balance		Receipts / Recoveries	Total	Expenditure during the year	Closing Balance	
		Credit	Debit				Credit	Debit
1	2	3	4	5	6	7	8	9
					-	-	-	0
	Total	-	-	-	-	-	-	-

- 1 The Projects may be listed agency-wise, with sub-totals for each agency
- 2 The total of Col.8 (Credit) will appear under the above head on the liabilities side of the Balance Sheet (Schdule-3)
- 3 The total of Col.9(debit) will appear as Receivables in Schedule 8, Loans, Advances and Deposits on the Assets of the Balance Sheet

SCHEDULE 3(b) SPONSORED FELLOWSHIPS AND SCHOLARSHIPS

SI No	Name of the Sponsor	Opening Balance as on 01.04.2017		Transactions during the year		Closing Balance as on 31.03.2018	
		Cr	Dr	Cr	Dr	Cr	Dr
1	University Grant Commission	0	0	0	0	0	0
2	Ministry.....	0	0	0	0	0	0
	DST-SERB - Scanning near Field Optical Microscopy Investigation of Optical Field Strength in Metal Dielectric Nanostructures and Spectroscopy - Dr Mahamad Ahamad Mohiddon	5,68,316	-	-	-	5,68,316	-
	Dr Thella Babu Rao	12,500	-	5,49,200	5,42,093	19,607	-
	Dr J Krishna Murthy	46,465	-	-	35,190	11,275	-
	Dr Vinoth Kumar Raja	1,92,941	-	3,40,418	5,33,354	5	-
	Dr T Ramesh	52,773	-	27,231	70,000	10,004	-
	Dr Puli Kishore Kumar	3,80,764	-	5,50,000	67,922	8,62,842	-
	Dr Ch Srilatha	1,82,560	-	4,50,000	4,91,961	1,40,599	-
	Dr T Reshma	1,55,026	-	4,81,613	5,66,512	70,127	-
	Dr B Giridhar Rajesh	1,05,571	-	-	1,05,571	-	-
	Dr N Jayaram	22,653	-	-	-	22,653	-
	Dr Sharad Dwivedi	1,87,275	-	4,66,960	4,01,760	2,52,475	-
	Dr Narasimha Rao Banavathu	2,58,750	-	3,50,000	1,93,135	4,15,615	-
	Dr Subba Rao Pichuka	1,14,600	-	4,17,220	4,21,047	1,10,773	-
	Dr Karthick Seshadri	11,61,050	-	-	2,48,000	9,13,050	-

Dr R Arun Kumar	1,88,256	-	5,00,000	5,07,101	1,81,155	-
Dr Narayana Thota	20,44,864	-	48,418	20,93,282	-	-
Dr Phani Krishna Karri	22,76,495	-	-	21,40,211	1,36,284	-
Dr J Krishna Murthy	14,78,433	-	-	7,67,201	7,11,232	-
CRTDH	1,75,00,000	-	22,88,992	1,97,88,992	-	-
Dr J Krishna Murthy	20,15,500	-	-	18,24,506	1,90,994	-
Dr Tapas Parmanick	2,28,120	-	2,28,120	1,57,482	2,98,758	-
Dr S Yuvraj	-	-	6,77,874	6,77,874	-	-
Dr Baranidharan	-	-	8,79,000	1,21,068	7,57,932	-
Dr R Arun Kumar	-	-	1,45,000	1,34,272	10,728	-
Dr T Ramesh	-	-	39,00,000	-	39,00,000	-
Total	2,91,72,912.00	-	1,23,00,046.00	3,18,88,534.00	95,84,424.00	-

- 1 The total of Column 7 (Credit) will appear under the above head, on the liabilities side of the Balance Sheet (Sch-3)
- 2 The total of Column 8 (Debit) will appear as Receivables on the Assets side of the Balance Sheet (Sch-8)

SCHEDULE 3 (c)- UNUTILISED GRANTS FROM UGC, GOVERNMENT OF INDIA AND STATE GOVERNMENTS

	CURRENT YEAR	PREVIOUS YEAR
A. Plan Grants: Government of India		
Balance B/f	0	0
Add: Receipts during the year	0	13,49,25,000
Total(a)	0	13,49,25,000
Less: Refunds	3,11,00,000	0
Less: Utilized for Revenue Expenses	0	0
Less: Utilized for Capital Expenses	0	13,49,25,000
total(b)	3,11,00,000	13,49,25,000
Unutilized carried forward (a-b)	-3,11,00,000	0
B. UGC Grants: Plan		
Balance B/f	0	0
Receipts during the year	0	0
Total(c)	0	0
Less: Refunds	0	0
Less: Utilized for Revenue Expenses	0	0
Less: Utilized for Capital Expenses	0	0
total(d)	0	0
Unutilized carried forward (c-d)	0	0
C. UGC Grants Non Plan		
Balance B/f	0	0
Receipts during the year	0	0
Total(e)	0	0
Less: Refunds	0	0
Less: Utilized for Revenue Expenses	0	0
Less: Utilized for Capital Expenses	0	0
total(f)	0	0
Unutilized carried forward (e-f)	0	0

D. Grants from State Govt.		
Balance B/f	0	0
Receipts during the year - Cost of Land	0	0
Total(g)	0	0
Less: Refunds	0	0
Less: Utilized for Revenue Expenses	0	0
Less: Utilized for Capital Expenses - Cost of Land	0	0
total(h)	0	0
Unutilized carried forward (g-h)	0	0
Grand Total (A+B+C+D)	-3,11,00,000	0

- Unutilized grants includes advances on Capital Account
- Unutilized grants include grants received in advance for the next year
- Unutilized grants are represented on the Assets side by Bank Balances, Short term Deposits with Banks and Advances on Capital Account

FIXED ASSET SCHDULE

SCHEDULE - 4 - FIXED ASSETS

(Amount in Rupees)

S.No	DESCRIPTIONS	GROSS BLOCK				DEPRECIATION				NET BLOCK	
		Opg Balance 01.04.2022	Additions	Deductions	CI Balance	Dep Opening Balance	Depreciation for the year	Deduction / Adjustments	Total Depreciation	31.03.2023	31.03.2022
1	Land	1	0	0	1	0	0	0	0	1	1
2	Site Development	0	0	0	0	0	0	0	0	0	0
3	Buildings	65,82,385	4,11,63,98,217	0	4,12,29,80,602	65,82,385	8,24,15,185	0	8,89,97,570	4,03,39,83,032	0
4	Roads & Bridges	0	0	0	0	0	0	0	0	0	0
5	Tubewells & Water Supply	0	0	0	0	0	0	0	0	0	0
6	Sewerage & Drainage	0	0	0	0	0	0	0	0	0	0
7	Electrical Installation and Equipment	1,75,31,820	19,78,209	0	1,95,10,029	37,48,516	9,75,507	0	47,24,023	1,47,86,006	1,37,83,304
8	Plant & Machinery	0	0	0	0	0	0	0	0	0	0
9	Scientific & Laboratory Equipment	11,12,72,768	2,04,16,753	0	13,16,89,521	2,58,78,483	1,05,35,163	0	3,64,13,646	9,52,75,875	8,53,94,285
10	Office Equipment	64,71,585	1,28,023	0	65,99,608	11,60,753	7,31,233	0	18,91,986	47,07,622	53,10,832
11	Audio Visual Equipment	1,23,93,890	1,19,27,653	0	2,43,21,543	41,22,154	18,24,118	0	59,46,272	1,83,75,271	82,71,736
12	Computers & Peripherals	9,24,29,799	6,49,426	0	9,30,79,225	5,66,97,314	1,59,58,644	0	7,26,55,958	2,04,23,267	3,57,32,485
13	Furniture, Fixtures & Fittings	7,55,53,480	1,57,18,771	0	9,12,72,251	1,74,53,453	70,22,795	0	2,44,76,248	6,67,96,003	5,81,00,027
14	Vehicles	0	0	0	0	0	0	0	0	0	0
15	Lib Books & Scientific Journals	1,32,72,131	6,72,738	0	1,39,44,869	58,72,055	13,94,493	0	72,66,548	66,78,321	74,00,076
16	Small Value of assets	0	0	0	0	0	0	0	0	0	0
	Tota (A)	33,55,07,859	4,16,78,89,790	0	4,50,33,97,649	12,15,15,113	12,08,57,138	0	24,23,72,251	4,26,10,25,398	21,39,92,746
17	Capital Work in progress (B)	0	0	0	0	0	0	0	0	0	0

S.No	Intangible Assets	Opg Balance 01.04.2022	Additions	Deductions	CI Balance	Dep / Amortization Opening Balance	Depreciation / Amortization for the year	Deduction / Adjustments	Total Depreciation / Amortization	31.03.2023	31.03.2022
18	Computer Software	8,03,267	48,92,813	0	56,96,080	7,55,926	19,72,905	0	27,06,356	29,89,724	47,341
19	E-Journals	0	0	0	0	0	0	0	0	0	0
20	Patents	0	0	0	0	0	0	0	0	0	0
	Total (C)	8,03,267	48,92,813	0	56,96,080	7,55,926	19,72,905	0	27,06,356	29,89,724	47,341
	Grand Total(A+B+C)	33,63,11,126	4,17,27,82,603	0	4,50,90,93,729	12,22,71,039	12,28,30,043	0	24,50,78,607	4,26,39,47,722	21,40,40,087

FIXED ASSET SCHDULE

SCHEDULE - 4A - PLAN

(Amount in Rupees)

S.No	DESCRIPTIONS	GROSS BLOCK				DEPRECIATION				NET BLOCK	
		Opg Balance 01.04.2022	Additions	Deductions	CI Balance	Dep Opening Balance	Depreciation for the year	Deduction / Adjustments	Total Depreciation	31.03.2023	31.03.2022
1	Land	1	0	0	1	0	0	0	0	1	1
2	Site Development	0		0	0	0	0	0	0	0	0
3	Buildings	65,82,385	4,11,20,37,145	0	4,11,86,19,530	65,82,385	8,22,40,743	0	8,22,40,743	4,03,63,78,787	0
4	Roads & Bridges	0	0	0	0	0	0	0	0	0	0
5	Tubewells & Water Supply	0	0	0	0	0	0	0	0	0	0
6	Sewarage & Drainage	0	0	0	0	0	0	0	0	0	0
7	Electrical Installation and Equipment	1,23,11,334	0	0	1,23,11,334	37,05,133	8,33,214	0	45,38,347	77,72,987	90,02,481
8	Plant & Machinery	0	0	0	0	0	0	0	0	0	0
9	Scientific & Laboratory Equipment	10,37,42,574	0	0	10,37,42,574	2,52,76,067	82,99,405	0	3,35,75,472	7,01,67,102	4,36,35,596
10	Office Equipment	11,54,421	0	0	11,54,421	9,99,438	5,60,316	0	15,59,754	-4,05,333	7,56,692
11	Audit Visual Equipment	1,16,25,190	0	0	1,16,25,190	40,49,898	8,71,891	0	49,21,789	67,03,401	71,57,602
12	Computers & Peripherals	8,25,95,264	0	0	8,25,95,264	5,52,23,991	1,43,55,435	0	6,95,79,426	1,30,15,838	2,63,19,204
13	Furniture, Fixtures & Fittings	5,88,70,176	0	0	5,88,70,176	1,63,79,955	47,70,387	0	2,11,50,342	3,77,19,834	1,80,48,819
14	Vehicles	0	0	0	0	0	0	0	0	0	0
15	Lib Books & Scientific Journals	1,23,90,698	0	0	1,23,90,698	57,83,912	12,39,077	0	70,22,989	53,67,709	71,03,944
16	Small Value of assets	0	0	0	0	0	0	0	0	0	0
	Tota (A)	28,92,72,043	4,11,20,37,145	0	4,40,13,09,188	11,80,00,779	11,31,70,468	0	22,45,88,862	4,17,67,20,326	11,20,24,339
17	Capital Work in progress (B)	0	0	0	0	0	0	0	0	0	0

S.No	Intangible Assets	Opg Balance 01.04.2022	Additions	Deductions	CI Balance	Dep / Amortization Opening Balance	Depreciation / Amortization for the year	Deduction / Adjustments	Total Depreciation / Amortization	31.03.2023	31.03.2022
18	Computer Software			0	0		0	0	0	0	0
19	E-Journals	0	0	0	0	0	0	0	0	0	0
20	Patents	0	0	0	0	0	0	0	0	0	0
	Total (C)	0	0	0	0	0	0	0	0	0	0

	Grand Total(A+B+C)	28,92,72,043	4,11,20,37,145	0	4,40,13,09,188	11,80,00,779	11,31,70,468	0	22,45,88,862	4,17,67,20,326	11,20,24,339
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FIXED ASSET SCHEDULE

SCHEDULE - 4B - NON PLAN

(Amount in Rupees)

S.No	DESCRIPTIONS	GROSS BLOCK				DEPRECIATION				NET BLOCK	
		Opg Balance 01.04.2022	Additions	Deductions	CI Balance	Dep Opening Balance	Depreciation for the year	Deduction / Adjustments	Total Depreciation	31.03.2023	31.03.2022
1	Land	0	0	0	0						
2	Site Development	0	0	0	0	0	0	0	0	0	0
3	Buildings	0	0	0	0	0	0	0	0	0	0
4	Roads & Bridges	0	0	0	0	0					
5	Tubewells & Water Supply	0	0	0	0	0	0	0	0	0	0
6	Sewarage & Drainage	0	0	0	0	0	0	0	0	0	0
7	Electrical Installation and Equipment	0	0	0	0	0	0	0	0	0	0
8	Plant & Machinery	0	0	0	0	0	0	0	0	0	0
9	Scientific & Laboratory Equipment	0	0	0	0	0	0	0	0	0	0
10	Office Equipment	0	0	0	0	0	0	0	0	0	0
11	Audit Visual Equipment	0	0	0	0	0	0	0	0	0	0
12	Computers & Peripherals	0	0	0	0	0	0	0	0	0	0
13	Furniture, Fixtures & Fittings	0	0	0	0	0	0	0	0	0	0
14	Vehicles	0	0	0	0	0	0	0	0	0	0
15	Lib Books & Scientific Journals	0	0	0	0	0	0	0	0	0	0
16	Small Value of assets	0	0	0	0	0	0	0	0	0	0
	Tota (A)	0	0	0	0	0	0	0	0	0	0
17	Capital Work in progress (B)	0	0	0	0	0	0	0	0	0	0

S.No	Intangible Assets	Opg Balance 01.04.2022	Additions	Deductions	CI Balance	Dep / Amortization Opening Balance	Depreciation / Amortization for the year	Deduction / Adjustments	Total Depreciation / Amortization	31.03.2023	31.03.2022
18	Computer Software	0	0	0	0	0	0	0	0	0	0
19	E-Journals	0	0	0	0	0	0	0	0	0	0
20	Patents	0	0	0	0	0	0	0	0	0	0
	Total (C)	0	0	0	0	0	0	0	0	0	0

	Grand Total(A+B+C)	0	0	0	0	0	0	0	0	0	0
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FIXED ASSET SCHEDULE

SCHEDULE 4C - INTANGIBLE ASSETS

S.No	DESCRIPTIONS	GROSS BLOCK				DEPRECIATION				NET BLOCK	
		Opg Balance	Additions	Deductions	CI Balance	Dep / Amortization Opening Balance	Depreciation / Amortization for the year	Deduction / Adjustments	Total Depreciation / Amortization	31.03.2023	31.03.2022
		01.04.2022									
1	Patents & Copyrights	0	0	0	0	0	0	0	0	0	0
2	Computer Software	8,03,267	48,92,813	0	56,96,080	7,55,926	19,72,905	0	27,06,356	29,89,724	4,10,920
3	E-Journals	0	0	0	0	0	0	0	0	0	0
	Total	8,03,267	48,92,813	0	56,96,080	7,55,926	19,72,905	0	27,06,356	29,89,724	4,10,920

SCHEDULE - 4D - OTHERS

(Amount in Rupees)

S.No	DESCRIPTIONS	GROSS BLOCK				DEPRECIATION				NET BLOCK	
		Opg Balance	Additions	Deductions	CI Balance	Dep Opening Balance	Depreciation for the year	Deduction / Adjustments	Total Depreciation	31.03.2023	31.03.2022
		01.04.2022									
1	Land	0	0	0	0	0	0	0	0	0	0
2	Site Development	0	0	0	0	0	0	0	0	0	0
3	Buildings	0	43,61,072	0	43,61,072	0	1,74,442	0	1,74,442	41,86,630	0
4	Roads & Bridges	0	0	0	0	0	0	0	0	0	0
5	Tubewells & Water Supply	0	0	0	0	0	0	0	0	0	0
6	Sewerage & Drainage	0	0	0	0	0	0	0	0	0	0
7	Electrical Installation and Equipment	52,20,486	19,78,209	0	71,98,695	43,383	1,42,293	0	1,85,676	70,13,019	51,77,103
8	Plant & Machinery	0	0	0	0	0	0	0	0	0	0
9	Scientific & Laboratory Equipment	75,30,194	2,04,16,753	0	2,79,46,947	6,02,416	22,35,758	0	28,38,174	2,51,08,773	69,27,778
10	Office Equipment	53,17,164	1,28,023	0	54,45,187	1,61,315	1,70,917	0	3,32,232	51,12,955	51,55,849
11	Audio Visual Equipment	7,68,700	1,19,27,653	0	1,26,96,353	72,256	9,52,227	0	10,24,483	1,16,71,870	6,96,444
12	Computers & Peripherals	98,34,535	6,49,426	0	1,04,83,961	14,73,323	16,03,209	0	30,76,532	74,07,429	83,61,212
13	Furniture, Fixtures & Fittings	1,66,83,304	1,57,18,771	0	3,24,02,075	10,73,498	22,52,408	0	33,25,906	2,90,76,169	1,56,09,806
14	Vehicles	0	0	0	0	0	0	0	0	0	0
15	Lib Books & Scientific Journals	8,81,433	6,72,738	0	15,54,171	88,143	1,55,416	0	2,43,559	13,10,612	7,93,290
16	Small Value of assets	0	0	0	0	0	0	0	0	0	0
	Tota	4,62,35,816	5,58,52,645	0	10,20,88,461	35,14,334	76,86,670	0	1,12,01,004	9,08,87,457	4,27,21,482
17	Capital Work in progress	0	0	0	0	0	0	0	0	0	0
	Grand Total	4,62,35,816	5,58,52,645	0	10,20,88,461	35,14,334	76,86,670	0	1,12,01,004	9,08,87,457	4,27,21,482

SCHEDULE 4(C) (i) PATENTS AND COPYRIGHTS

PARTICULARS	Op Balance	Addition	Gross	Amortization	Net Block 31.03.2022	Net Block 31.03.2021
A. Patents Granted						
1. Balance as on 31.03.20 of Patents obtained in 2008-09 (Original Value - Rs...../-)	0	0	0	0	0	0
2. Balance as on 31.03.20 of Patents obtained in 2010-11 (Original Value - Rs...../-)	0	0	0	0	0	0
3. Balance as on 31.03.20 of Patents obtained in 2012-13 (Original Value - Rs...../-)	0	0	0	0	0	0
4. Patents granted during the current year	0	0	0	0	0	0
Total	0	0	0	0	0	0

PARTICULARS	Op Balance	Addition	Gross	Amortization	Net Block 31.03.2022	Net Block 31.03.2021
B. Patents pending in respect of Patents applied for						
1. Expenditure incurred during 2009-10 to 2011-12	0	0	0	0	0	0
2. Expenditure incurred during 2012-13	0	0	0	0	0	0
3. Expenditure incurred during 2013-14	0	0	0	0	0	0
Total	0	0	0	0	0	0

C. Grand Total (A+B)	0	0	0	0	0	0
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The Addition in Part A (patents granted) will be figure of patents granted during the year, transferred from Part B (Column- Patents granted/rejected). The amount against grants rejected during the year is written off in the income and expenditure account.

SCHEDULE 5 - INVESTMENTS FROM EARMARKED / ENDOWMENT FUNDS

S.No.	PARTICULARS	CURRENT YEAR	PREVIOUS YEAR
1	In Central Government Securities	0	0
2	In State Government Securities	0	0
3	Other Approved Securities	0	0
4	Shares	0	0
5	Debentures and Bonds	0	0
6	Term Deposits with Banks	0	0
7	Others (to be specified)	0	0
	TOTAL	0	0

SCHEDULE 5(A): INVESTMENTS FROM EARMARKED / ENDOWMENT FUNDS (FUND WISE)

SI No	FUNDS	CURRENT YEAR	PREVIOUS YEAR
		0	0
		0	0
	Total	0	0

The total in this sub schedule will agree with the total in Schedule 5

SCHEDULE 6 - INVESTMENTS - OTHERS

PARTICULARS	CURRENT YEAR	PREVIOUS YEAR
1. In Central Government Securities	0	0
2. In State Government Securities	0	0
3. Other Approved Securities	0	0
4. Shares	0	0
5. Debentures and Bonds	0	0
6. Others (to be specified)	0	0
TOTAL	0	0

SCHEDULE 7 - CURRENT ASSETS

PARTICULARS	CURRENT YEAR	PREVIOUS YEAR
1. Stock:		
a) Stores and Spares		
--- Stores and Spares	0	0
--- Loose Tools	0	0
--- Publications	0	0
--- Laboratory chemicals, consumables and glassware	0	0
--- Building Material	0	0
--- Electrical Material	0	0
--- Stationery	0	0
--- Water supply material	0	0
2. Sundry Debtors:		
a) Debts outstanding for a period exceeding six months	2,00,448	2,00,448
b) Others		
--- Fee Receivable	23,77,216	4,76,100
--- Consultancy Fee Receivable	30,95,033	93,960
3. Cash and Bank Balances		
a) Cash Balance in hand(incl cheques / drafts and imprest)		
- Main Cash Balance	0	0
- Petty Cash Balance	0	0
- Imprest with department/sections/others	2,70,000	4,80,000
b) With Scheduled Banks:		
- In Current Accounts	11,72,43,413	36,39,17,265
- In Term Deposit Accounts - STDR	1,13,61,66,338	74,37,75,564
- In Savings Accounts	1,46,57,897	3,30,32,418
c) With Non-Scheduled banks:		
- In Current Accounts	0	0
- In Term Deposit Accounts	0	0
- In Savings Accounts	0	0
4. Post Office- Savings Accounts	0	0
TOTAL	1,27,40,10,345	1,14,19,75,755

ENCLOSURE TO BALANCE SHEET

ENCLOSURE TO SCHEDULE - 7 - BANK DEPOSITS (Item No 3(b))

HEAD OF ACCOUNT	OPG. BALANCE	DEPOSITED	MATURED	CLG BALANCE
Short Term Deposit Account	74,37,75,564	39,23,90,774	0	1,13,61,66,338
GRAND TOTAL	74,37,75,564	39,23,90,774	0	1,13,61,66,338

ENCLOSURE TO LOANS & ADVANCES AND OTHER ASSETS

HEAD OF ACCOUNT	OPG. BALANCE	ADVANCED	COLLECTION	CLG BALANCE
--- Advances to Co-ordinator	0			0
--- Advances to DOC	0	0	0	0
GRAND TOTAL	0	0	0	0

ANNEXURE A

		Amount In Rupees
I.	Current Account	
	1 Main Account - 34999496394	3,41,13,797
	2 EMD - 35579546371	50,79,158
	3 Fee - 35068108633	3,94,94,919
	4 Fest - 36693749770	2,77,479
	5 Gratuity - 40107272647	0
	6 Hostel - 39408132197	3,28,93,123
	7 Leave Encashment - 40107273061	0
	8 Projects - 35410591939	67,780
	9 Recruitment - 37722875550	22,34,335
	10 Scholarship - 35246973163	3,58,436
	11 SC - Recurring - 40107176534	0
	12 ST - Recurring - 40107272002	0
	13 Deduction - 35210003605	27,14,308
	14 FDP - 40107272308	10,076
	15 SC - Non-Recurring - 40107273425	0
	16 ST - Non - Recurring - 40107273800	0
	17 HEFA - Prinicpal - 2785201000162	0
	18 HEFA - Interest - 2785201000163	2
	19 TSA - 10682601001	0
		11,72,43,413
	Savings Account	
	1 GIAN - 40726016939	1,43,215
	2 PROJECTS - 40377943211	1,34,96,873
	3 ALUMNI - 40728915572	0
	4 GUEST HOUSE - 11012641680	10,17,810
	5 CRDTH - 110081230682	0
	6 PROJECTS - 464702010028215	0
		1,46,57,897
II.	Term Deposits With Schedule Bank	
	1 State Bank of India	1,14,16,09,538
	2 Canara Bank	
	Total	1,27,35,10,849

SCHEDULE 8 - LOANS, ADVANCES & DEPOSITS

PARTICULARS	CURRENT YEAR	PREVIOUS YEAR
1. Advances to employees (Non-interest bearing):		
a) Salary	0	0
b) Festival	0	0
c) LTC	0	0
d) Others (to be specified)	0	0
2. Long Term Advances to employees (Interest bearing)		
a) Vehicle loan	0	0
b) Home Loan	0	0
c) Others (to be specified)	0	0
3. Advances and other amounts recoverable in cash or in kind or for value to be received:		
a) On Capital Account	0	1,85,64,000
b) To Suppliers	0	0
c) Others	31,53,273	42,95,000
4. Prepaid Expenses		
a) Insurance	0	0
b) Other Expenses - Advance Rental to BSNL	7,28,650	7,28,650
5. Deposits		
a) Telephone	0	0
b) Lease Rent	0	0
c) Electricity	30,99,000	10,00,000
d) AICTE, if applicable	0	0
e) Others(to be specified)		
6. Income Accrued:		
a) On Investments from Earmarked/ Endowment Funds	0	0
b) On Investments- Others	7,96,22,114	3,84,93,971
c) On Loans and Advances	0	0
d) Others (includes income due unrealized)	6,315	0
7. Other Current Assets receivable from UGC / sponsored projects		
a) Debit balances in Sponsored Projects	0	0
b) Debit balances in Sponsored Fellowship & Scholarship	0	0
c) Grants Receivable	0	0
d) Other receivables from UGC	0	0
8. Claims Receivable		
a) TDS Receivable	6,32,845	3,14,828
b) GST Receivable	9,760	9,760
TOTAL	8,72,51,957	6,34,06,209

SCHEDULE 9- ACADEMIC RECEIPTS

FEE FROM STUDENTS	CURRENT YEAR	PREVIOUS YEAR
A. Academic		
1.Tution fee	7,08,21,451	9,53,23,466
2. Admission fee	18,77,500	20,90,000
3. Enrolment fee		
4. Library Admission fee		
5. Laboratory fee		
6. Art & Craft fee		
7. Registration fee		
8. Convocation fee	7,70,500	11,97,000
TOTAL (A)	7,34,69,451	9,86,10,466
B. Examinations		
1. Admission Test fee	0	0
2. Annual Examination fee	0	0
3. Marksheet, Certificate fee	0	0
4. Entrance Examination Fee - Study Mode / Summer Quarter Exam Fee	14,13,334	5,56,000
TOTAL (B)	14,13,334	5,56,000
C. Other fees		
1. Identity Card fee	1,50,200	1,67,200
2. Fine/ Miscellaneous fee		
3. Medical fee		
4. Transportation fee		
5. Hostel fee	6,90,55,275	3,68,68,427
6. Mess fee	1,07,32,459	1,56,52,213
TOTAL (C)	7,99,37,934	5,26,87,840
D. Sale of Publications		
1. Sale of Admission forms	0	0
2. Sale of Syllabus and Question paper, etc.	0	0
3. Sale of Prospectus including admission forms	0	0
TOTAL (D)	0	0
E.Other Academic Receipts		
1. Registration fee for workshops, programmes	0	0
2. Registration fees (Academic Staff College)	0	0
TOTAL (E)	0	0
GRAND TOTAL (A+B+C+D+E)	15,48,20,719	15,18,54,306

SCHEDULE 10 - GRANTS / SUBSIDIES (IRREVOCABLE GRANTS RECEIVED)

PARTICULARS	PLAN			TOTAL PLAN	NON PLAN /	CURRENT YEAR TOTAL	PREVIOUS YEAR
	GOVT OF INDIA	UGC					
		PLAN	SPC SCHEME				
Balance B/f	3,64,62,178	0	0	3,64,62,178	0	3,64,62,178	62,07,11,689
Add: Receipts during the year	46,91,50,000	-	-	46,91,50,000	-	46,91,50,000	2,53,77,35,985
Total	50,56,12,178	-	-	50,56,12,178	-	50,56,12,178	3,15,84,47,674
Less: Refunded to MoE	4,39,05,960	-	-	4,39,05,960	-	-	-
Balance	46,17,06,218	-	-	46,17,06,218	-	50,56,12,178	3,15,84,47,674
Less: Utilized for Capital Expenditure (A)	-	-	-	-	-	-	-
Balance	46,17,06,218	-	-	46,17,06,218	-	50,56,12,178	3,15,84,47,674
Less: Utilized for Revenue Expenditure (B)	46,41,82,541	-	-	46,41,82,541	-	46,41,82,541	62,10,60,320
Balance C/f (C)	(24,76,323)	-	-	(24,76,323)	-	4,14,29,637	2,53,73,87,354

Rs 3,11,00,000/- (Rupees Three Crores Eleven Lakhs only) has been returned to MoE towards settlement of excess grants released under OH - 35 vide Demand Draft No 983369 date

SCHEDULE 11- INCOME FROM INVESTMENTS

PARTICULARS	Earmarked / Endowment Funds		Other Investments	
	CURRENT YEAR	PREVIOUS YEAR	CURRENT YEAR	PREVIOUS YEAR
1. Interest				
a) On Govt. Securities	-	0	0	0
b) Other Bonds/ Debentures	-	0	0	0
2. Interest on Term Deposits	-	-	12,36,189	58,32,214
3. Income accrued but not due on Term Deposits / Interest bearing advances to employees	-		4,11,21,744	3,81,07,684
4. Interest on Savings Bank Accounts	1,12,921	0	-	0
5. Others (Interest Accrued but not due on SB Accounts)	6,251	0	-	0
TOTAL	1,19,172	-	4,23,57,933	4,39,39,898
TRANSFERRED TO EARMARKED/ ENDOWMENT FUNDS	-		-	-
Balance	1,19,172	-	4,23,57,933	4,39,39,898

SCHEDULE 12- INTEREST EARNED

Particulars	CURRENT YEAR	PREVIOUS YEAR
1. On Savings Accounts with Scheduled Banks	9,350	2,64,771
2. On Loans		
a) Employees / Staff	0	0
b) Others	0	0
3. On Debtors and Other Receivables	0	0
4. Others (Interest Accrued but not due on SB Accounts)	64	14,721
TOTAL	9,414	2,79,492

Note:

- 1) The amount against item 1, in respect of Bank Accounts of Earmarked/Endowment Funds is dealt with in Schedule 11 (First Part) and Schedule 2.
- 2) Item 2(a) is applicable only if Revolving funds have not been constituted for such advances

SCHEDULE 13- OTHER INCOME

A.Income from Land & Building	CURRENT YEAR	PREVIOUS YEAR
1. Hostel Room Rent	9,96,854	0
2. License fee	4,40,580	0
3. Hire Charges of Auditorium/Play ground/Convention Centre,etc.	0	0
4. Electricity Charges recovered	7,07,283	2,31,940
5. Water Charges recovered	2,39,144	63,373
Total (A)	23,83,861	2,95,313
B. Sale of Institute's Publications	0	0
C. Income from from holding events		
1.Gross Receipts from annual function/sports carnival	0	0
Less : Direct Expenditure incurred on the annual function/sports carnival	0	0
2. Gross Receipts from fetes	0	0
Less : Direct Expenditure incurred on the fetes	0	0
3. Gross Receipts for educational tours	0	0
Less : Direct Expenditure incurred on the tours	0	0
4. Others (to be specified and separately disclosed)	0	0
TOTAL(C)	0	0

SCHEDULE 13- OTHER INCOME

D. Others		
1. Income from Consultancy	18,60,600	26,32,931
2. RTI Fees	0	0
3. Income from Royalty	0	0
4. Sale of application form (recruitment)	0	38,46,771
5. Misc. receipts (Sale of tender form, waste paper, etc.)		
--- Miscellaneous Receipts	25,16,537	43,58,090
--- Tender Application Fee	46,011	1,30,000
--- Electricity Bill Recoverd from Employees	2,76,448	1,95,278
--- Rent Recoverd from Employees	22,81,545	10,96,718
--- Income from Guestes in Hostel	10,51,717	1,94,871
6. Profit on Sale/ Disposal of Assets:		
a) Owned Assets	0	0
b) Assets acquired out of grants, or received free of cost	0	0
7. Grants / Donations from Institutions, Welfare Bodies and International Organizations	0	0
8. Others (Specify)	27,854	1,040
TOTAL(D)	80,60,712	1,24,55,699
GRAND TOTAL (A+B+C+D)	1,04,44,573	1,27,51,012

SCHEDULE 14- PRIOR PERIOD INCOME

Particulars	CURRENT YEAR	PREVIOUS YEAR
1. Academic Receipts	0	0
2. Income from Investments	0	0
3. Interest Income	0	0
4. Other Income	62,97,997	1,04,71,340
TOTAL	62,97,997	1,04,71,340

SCHEDULE 15- STAFF PAYMENTS & BENEFITS

PARTICULARS	CURRENT YEAR			PREVIOUS YEAR		
	PLAN	NON PLAN	TOTAL	PLAN	NON PLAN	TOTAL
a) Salaries and Wages						
i) Teaching	0	7,69,94,828	7,69,94,828	0	7,56,40,831	7,56,40,831
ii) Non-Teaching	0	4,10,20,780	4,10,20,780	0	3,48,19,719	3,48,19,719
iii) Ad-Hoc	0	5,00,88,284	5,00,88,284	0	4,99,95,738	4,99,95,738
b) Allowances and Bonus - Bonus for Non Teaching Staff	0		0	0		0
c) Contribution to Provident Fund	0		0	0		0
d) Contribution to Other Fund (Specify)	0		0	0		0
e) Staff Welfare Expenses	0	14,68,848	14,68,848	0	79,999	79,999
f) Retirement and Terminal Benefits	0	2,55,62,766	2,55,62,766	0	3,85,06,122	3,85,06,122
g) LTC facility	0	28,92,826	28,92,826	0	0	0
h) Medical facility	0	6,31,451	6,31,451	0	38,858	38,858
i) Children Education Allowance	0		0	0	0	0
j) Honorarium	0		0	0		0
k) Others (CPDA)	0	13,49,206	13,49,206	0	1,36,939	1,36,939
--- Outsourcing Salaries / Security Services	0		0	0	5,67,32,970	5,67,32,970
TOTAL	0	20,00,08,989	20,00,08,989	0	25,59,51,176	25,59,51,176

SCHEDULE 15A - EMPLOYEES RETIREMENT AND TERMINAL BENEFITS

PARTICULARS	PENSION	GRATUITY	LEAVE ENCASHEMENT	TOTAL
Opening Balance as on 01.04.2021	0	0	0	0
Addition: Capitalized value of contributions received from organizations	0	0	0	0
Total (a)	0	0	0	0
Less: Actual Payment during the year (b)	0	0	0	0
Balance Available as on 31.03.2022 c(a-b)	0	0	0	0
Provision required on 31.03.2022 as per Actuarial Valuation (d)	0	5535816	5610099	11145915
A. Provision to be made in the Current Year (d-c)	0	5535816	5610099	11145915
B. Contribution to New Pension Scheme	14416851	0	0	14416851
C. Medical Reimbursement to Retired Employees	0	0	0	0
D. Travel to hometown on Retirement	0	0	0	0
E. Deposit Linked Insurance Payment	0	0	0	0
TOTAL (A+B+C+D+E)	14416851	5535816	5610099	25562766

Note:

SCHEDULE 16- ACADEMIC EXPENSES

PARTICULARS	CURRENT YEAR			PREVIOUS YEAR		
	PLAN	NON PLAN	TOTAL	PLAN	NON PLAN	TOTAL
a) Laboratory Expenses	0	26,94,713	26,94,713	0	1,07,96,445	1,07,96,445
b) Field work/ Participation in Conferences	0	88,001	88,001	0		0
c) Expenses on Seminars / Workshops	0	1,47,617	1,47,617	0	51,620	51,620
d) Payment to Visiting Faculty - Guest Lectures - Honorarium	0	68,68,791	68,68,791	0	16,31,128	16,31,128
e) Examination	0	1,43,925	1,43,925	0	20,92,574	20,92,574
f) Student Welfare expenses	0	15,63,914	15,63,914	0	6,71,586	6,71,586
g) Admission expenses	0	1,53,500	1,53,500	0		0
h) Convocation expenses	0	15,27,140	15,27,140	0	43,59,112	43,59,112
i) Publications	0		0	0		0
j) Stipend/ means-cum-merit scholarship	0	4,49,04,313	4,49,04,313	0	4,06,80,211	4,06,80,211
k) Subscription expenses	0	0	0	0		0
l) Others						
i) Seed Capital	0		0	0	13,53,778	13,53,778
ii) Seed Project Expenditure	0	34,33,096	34,33,096	0	4,84,001	4,84,001
iii) Hostel Expenditure	0		0	0	1,09,83,954	1,09,83,954
iv) Medals & Prizrs and Other Expenditure	0	88,859	88,859	0	12,88,515	12,88,515
TOTAL	0	6,16,13,869	6,16,13,869	0	7,43,92,924	7,43,92,924

SCHEDULE 17- ADMINISTRATIVE AND GENERAL EXPENSES

PARTICULARS	CURRENT YEAR			PREVIOUS YEAR		
	PLAN	NON PLAN	TOTAL	PLAN	NON PLAN	TOTAL
A. Infrastructure						
a) Electricity and Power	0	2,53,12,747	2,53,12,747	0	1,74,23,605	1,74,23,605
b) Water charges	0	0	0	0	19,000	19,000
c) Insurance	0	0	0	0	0	0
d) Rent, Rates and Taxes (including property tax)	0	0	0	0	25,00,000	25,00,000
B. Communication						
e) Postage and telegram	0	53,265	53,265	0	52,239	52,239
f) Telephone, Fax and Internet Charges	0	23,75,324	23,75,324	0	31,07,183	31,07,183
C. Others						
g) Printing and Stationary (Consumption)	0	12,38,445	12,38,445	0	24,14,081	24,14,081
h) Travelling and Conveyance Expenses(Officers Establishments)	0	21,66,685	21,66,685	0	2,96,724	2,96,724
i) Hospitality	0	7,00,000	7,00,000	0	6,88,714	6,88,714
j) Auditor's Remuneration	0		0	0	1,14,800	1,14,800
k) Professional Charges	0	4,26,000	4,26,000	0	24,304	24,304
l) Advertisement and Publicity	0	2,42,500	2,42,500	0	29,69,142	29,69,142
m) Magazines and Journals	0		0	0	43,22,129	43,22,129
n) Recruitment Expenses	0		0	0	33,56,631	33,56,631
o) Others (Specify)						
--- DOC - Contingent Expenses	0	58,39,840	58,39,840	0	16,14,243	16,14,243
--- Contingencies for Sp. Faculty & Allowances			0	0	85,000	85,000
--- Catering and maintenance of Guest House	0	3,43,521	3,43,521	0	47,51,653	47,51,653
--- Maintenance of VIP Bunglaw	0		0	0		0
--- Bank Charges	0	20,476	20,476	0	11,268	11,268
--- Medical Expenses	0	22,00,596	22,00,596	0	23,71,267	23,71,267
--- Inaguration Expenses	0		0	0	0	0
--- Sports	0	5,07,481	5,07,481	0	4,91,619	4,91,619
--- Identity Card expenses	0	35,560	35,560	0	0	0
--- Staff & Students Aminities	0		0	0		0
--- TDS Expenses	0	3,14,828	3,14,828	0	0	0
--- Outsourcing Salaries	0	10,42,72,677	10,42,72,677			
--- Other Miscellaneous Expenses	0	49,36,490	49,36,490	0	35,17,823	35,17,823
TOTAL	0	15,09,86,435	15,09,86,435	0	5,01,31,425	5,01,31,425

Final Annual Accounts 2022-23 (2)
SCHEDULE 18- TRANSPORTATION EXPENSES

PARTICULARS	CURRENT YEAR			PREVIOUS YEAR		
	PLAN	NON PLAN	TOTAL	PLAN	NON PLAN	TOTAL
1. Vehicles (owned by educational institution)						
a) Running Expenses	0	0	0	0	0	0
b) Repairs and Maintenance	0		0	0		0
c) Insurance Expenses	0	0	0	0	0	0
2. Vehicles taken on Rent/ Lease						
a)Rent/ Lease Expenses	0	63,77,397	63,77,397	0	70,70,821	70,70,821
3. Vehicle (Taxi) hiring expenses	0		0	0		0
TOTAL	0	63,77,397	63,77,397	0	70,70,821	70,70,821

SCHEDULE 19- REPAIRS AND MAINTENANCE

PARTICULARS	CURRENT YEAR			PREVIOUS YEAR		
	PLAN	NON PLAN	TOTAL	PLAN	NON PLAN	TOTAL
a) Building	0	16,66,296	16,66,296	0	89,12,015	89,12,015
b) Furnitures and Fixtures	0	50,15,431	50,15,431	0	24,61,086	24,61,086
c) Plant and Machinery	0	1,09,48,701	1,09,48,701	0	43,09,969	43,09,969
d) Office Equipment	0	79,920	79,920	0	75,837	75,837
e) Computers	0	3,58,576	3,58,576	0	1,74,909	1,74,909
f) Laboratory & scientific equipment	0	14,34,517	14,34,517	0	2,64,533	2,64,533
g) Audio Visual Equipment	0	27,435	27,435	0	0	0
h) Cleaning Material & Services	0	8,53,895	8,53,895	0	7,70,338	7,70,338
i) Book binding charges	0		0	0	49,241	49,241
j) Gardening	0	78,09,260	78,09,260	0	69,34,846	69,34,846
k) Estate Maintenance	0	46,19,517	46,19,517	0	4,20,850	4,20,850
l) Others						
i) Internet & Email	0	64,22,674	64,22,674	0	6,21,669	6,21,669
ii) Roads & Water Lines	0	37,39,914	37,39,914	0	8,48,740	8,48,740
iii) Sports Amenities	0	6,97,110	6,97,110	0	59,823	59,823
iv) Others	0	35,730	35,730	0	62,730	62,730
TOTAL	0	4,37,08,976	4,37,08,976	0	2,59,66,586	2,59,66,586

SCHEDULES FORMING PART OF INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR 2019-20

SCHEDULE 20- FINANCE COSTS	CURRENT YEAR			PREVIOUS YEAR		
	PLAN	NON PLAN	TOTAL	PLAN	NON PLAN	TOTAL
a) Bank Charges	0	0	0	0	0	0
b) HEFA Loan Interest	0	0	0	0	13,42,53,225	13,42,53,225
TOTAL	0	0	0	0	13,42,53,225	13,42,53,225

Note: If the amount is not material, the head Bank Charges could be omitted and these could be accounted as Admin Expn in Schedule 17

SCHEDULE 21- OTHER EXPENSES	CURRENT YEAR			PREVIOUS YEAR		
	PLAN	NON PLAN	TOTAL	PLAN	NON PLAN	TOTAL
a) Provision for Bad and Doubtful Debts/ Advances	0	0	0	0	0	0
b) Irrecoverable Balances Written-off	0	0	0	0	0	0
c) Grants / Subsidies to other Institutions /Organizations	0	0	0	0	0	0
c) Others (Specify)	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0

Note: Other expenses shall be classified as writes-off, provisions, miscellaneous expenses, loss on sale of investments, loss of fixed assets and loss on sale of fixed assets etc., and disclosed accordingly.

SCHEDULE 22- PRIOR PERIOD EXPENSES	CURRENT YEAR			PREVIOUS YEAR		
	PLAN	NON PLAN	TOTAL	PLAN	NON PLAN	TOTAL
1. Establishment Expenses	0	0	0	0	0	0
2. Academic Expenses	0	0	0	0	0	0
3. Administrative Expenses	0	0	0	0	0	0
4. Transportation Expenses	0	0	0	0	0	0
5. Repairs & Maintenance	0	0	0	0	0	0
c) Other Expenses	0	31,80,342	31,80,342	0	0	0
TOTAL	0	31,80,342	31,80,342	0	0	0

NATIONAL INSTITUTE OF TECHNOLOGY
ANDHRA PRADESH

RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 31-03-2023

(Amount in Rupees)					
RECEIPTS	Current Year	Previous Year	PAYMENTS	Current Year	Previous Year
I. Opening Balances:			I. Expenses		
a) Cash in hand			a) Establishment Expenses	20,00,08,989	19,80,68,854
--- Main Cash Book	0	0	b) Academic Expenses	6,16,13,869	7,43,92,924
--- Imprest with Departments	4,80,000	0	c) Administrative Expenses	15,09,86,435	5,01,31,425
b) Bank Balances			d) Transportation Expenses	63,77,397	70,70,821
Main Account - 34999496394	2,45,15,620	41,78,21,681	e) Repairs & Maintenance	4,37,08,976	2,59,66,586
EMD - 35579546371	2,47,65,108	2,24,31,379	f) Prior Period Expenses	31,80,342	0
Fee - 35068108633	17,76,54,842	51,68,24,725	g) Finance Cost	0	13,42,53,225
Fest - 36693749770	13,51,486	7,20,962			
Gratuity - 40107272647	0	97,17,194	II. Payments made against Earmarked / Endowment Funds		
Hostel - 39408132197	6,13,93,685	0	--- Earmarked Fund	0	0
Leave Encashment - 40107273061	0	7,65,898	--- Endowment Fund	0	0
Projects - 35410591939	0	3,53,145			
Recruitment - 37722875550	22,34,984	98,78,972	III. Payments against Sponsored Projects / Schemes	0	0
Scholarship - 35246973163	3,48,181	33,78,566			
SC Recurring - 40107176534	4,23,86,075	4,23,86,692	IV. Payments against Sponsored Fellowships / Scholarships	2,95,99,542	0
ST Recurring - 40107272002	2,45,14,247	25,46,449			
Deduction - 35210003605	43,75,163	2,45,14,864	V. Investments and Deposits made		
FDP - 40107272308	2,29,497	0	a) Out of Earmarked / Endowments funds	0	0
SC Non Recurring - 40107273425	0	0	b) Out of Own funds	0	0
ST Non Recurring - 40107273800	0	0			
Project (Savings) - 40377943211	3,19,51,945	0	VI. Term Deposits with Scheduled Banks	39,11,44,617	1,13,06,33,914
GIAN - 40726016939	10,80,473	0			
Alumni - 40728915572	0	0	VII. Expenditure on Fixed Assets and Capital Works - in - Progress		
Guest House - 110012641680	1,48,376	0	a) Fixed Assets	6,35,46,603	3,38,90,271
HEFA Principal - 2785201000162	0	0	b) Capital Work - in - Progress	0	0
HEFA Interest - 2785201000163	0	0			
CRDTH - 110081230682	0	0	VIII. Other Payments incl statutory payments		
Projects - 464702010028215	0	0	--- Statutory Liabilities	4,80,38,531	3,78,69,044
TSA - 10682601001	0	0			
II. Grants Received			IX. Refunds and Grants	7,60,05,960	0
a) From Govt. of India			X. Deposits and Advances		
--- Towards General Fund	0	13,49,25,000	--- Other Deposits	70,36,198	69,80,701
--- Towards Revenue Exp	0	0	--- Advances to Co-ordinator / Dept	46,81,008	70,97,168
--- MHRD Grants Received	42,31,50,000	24,10,39,392	--- Advance Rent to BSNL	7,28,650	7,28,650
b) From State Government	0	0	--- Advance CPWD	0	18,13,00,000
c) From Other Sources	0	0			

NATIONAL INSTITUTE OF TECHNOLOGY
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RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 31-03-2023

(Amount in Rupees)					
RECEIPTS	Current Year	Previous Year	PAYMENTS	Current Year	Previous Year
III. Academic Receipts	18,59,20,719	15,18,54,306	XI. Other Payments - As per List enclosed	22,04,473	2,01,21,91,482
IV. Receipts against Earmarked / Endowment Fund			XII. Closing Balances		
--- Earmarked Fund	4,60,00,000	2,06,58,10,985	a) Cash in hand		
--- Endowment Fund	0	0	--- Main Cash Book	0	0
V. Receipts against Sponsored Projects / Schemes	0	0	--- Imprest with Others / Departments	2,70,000	4,80,000
VI. Receipts against Sponsored Fellowships and Scholarships	1,39,93,513	0	b) Bank Balances		
VII. Income on Investments from			Main Account - 34999496394	3,41,13,798	2,45,15,620
--- Earmarked / Endowment Funds	0	0	EMD - 35579546371	50,79,158	2,47,65,107
--- Other Investments	0	0	Fee - 35068108633	3,94,94,920	17,76,54,842
			Fest - 36693749770	2,77,479	13,51,486
			Gratuity - 40107272647	0	
			Hostel - 39408132197	3,28,93,123	6,13,93,685
			Leave Encachment - 40107273061	0	0
VIII. Interest received on			Projects - 35410591939	67,780	
--- Bank Deposits	12,36,189	4,39,54,619	Recruitment - 37722875550	22,34,335	22,34,984
--- Loans and Advances	0	0	Scholarship - 35246973163	3,58,436	3,48,181
--- Savings Bank Account	7,17,796	2,64,771	SC Recurring - 40107176534	0	4,23,86,275
IX. Investment encashed	0	0	ST Recurring - 40107272002	0	2,45,14,247
X. Term Deposits with Scheduled Banks encashed	0	52,76,72,427	Dedcution - 35210003605	27,14,308	43,75,163
			FDP - 40107272308	10,075	
XI. Other Income (including PPI)			SC Non Recurring - 40107273425	0	0
--- Misc Fund for Hostel	0	0	ST Non Recurring - 40107273800	0	0
--- Other Income	90,84,951	86,61,901	Project (Savings) - 40377943211	1,34,96,872	3,19,51,945
--- Misc Receipts for Institution	13,59,622	1,040	GIAN - 40726016939	1,43,215	10,80,473
--- Recruitment Application Fee	0	38,46,771	Alumni - 40728915572	0	0
XII. Deposits & Advances			Guest House - 110012641680	10,17,810	1,48,376
--- Other Deposits	3,00,24,789	4,69,19,026	HEFA Principal - 2785201000162	0	
--- Advances Accounts	45,77,735	39,17,168	HEFA Interest - 2785201000163	2	2
--- Advance CPWD	0	0	CRDTH - 110081230682	0	10,00,000
XIII. Misc Receipts incl Statutory Receipts			Projects - 464702010028215	0	0
--- Statutory Liabilities	4,72,46,605	4,22,52,264	TSA - 10682601001	0	0
XIV. Any Other Receipts - As per List Encl	6,02,91,298	7,03,38,690			

NATIONAL INSTITUTE OF TECHNOLOGY
ANDHRA PRADESH

RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 31-03-2023

(Amount in Rupees)

RECEIPTS	Current Year	Previous Year	PAYMENTS	Current Year	Previous Year
	1,22,10,32,900	4,39,27,98,887		1,22,10,32,900	4,29,87,75,451

ENCLOSURE TO RECEIPTS AND PAYMENTS ACCOUNT

(Amount in Rupees)

ADVANCES

	RECEIPTS	PAYMENTS
I. Advances		
--- Advances to Dean/Heads	45,77,735	45,77,735
--- Advances to LTC	0	1,03,273
--- Advance CPWD	-	0
Total	45,77,735	46,81,008

Statutory Liabilities	RECEIPTS	PAYMENTS
GPF	0	-
GSLI	0	-
VPF	0	-
Profession Tax	4,65,500	4,59,700
NPS	2,47,15,965	2,71,37,708
Cess	12,886	0
Seinarage	8,387	0
GST	56,78,036	53,97,499
Income Tax (TDS)	1,63,65,831	1,50,43,624
	4,72,46,605	4,80,38,531

CAPITAL EXPENSES INCURRED DURING THE YEAR

	RECEIPTS	PAYMENTS
Electrical Installation and Equipment	0	19,78,209
Plant & Machinery	0	0
Scientific & Laboratory Equipment	0	2,04,16,753
Office Equipment	0	1,28,023
Audio Visuals	0	1,19,27,653
Computers & Peripherals	0	6,49,426
Furnitures, Fixtures & Fittings	0	1,57,18,771
Lib. Books & scientific Journals	0	6,72,738
Land	0	0
Intangible Assets	0	48,92,813
Capital Work In Progress	0	0
Construction	0	71,62,217
GRAND TOTAL *****	0	6,35,46,603

ENCLOSURE TO RECEIPTS AND PAYMENTS ACCOUNT

(Amount in Rupees)

OTHER DEPOSIT ACCOUNTS

(Amount in Rupees)

	RECEIPTS	PAYMENTS
Hostel Caution Deposit	1,28,000	0
Lab and Library Deposit		
Hostel Charges Receive & Paid		
Mess Charges Received & Paid		
Alumni Association Fee	15,20,000	18,000
CPDA unutilised balance		
Games Fee	15,33,000	7,500
Institution Development fee	76,00,000	91,000
Internet & ICT Charges	32,91,600	12,000
Medical Fee	27,43,000	10,000
Magazine Fee	4,03,500	3,000
Students Club Fee	13,71,500	5,000
Student Library Fee	42,72,840	16,500
Student Welfare Fund	8,87,500	4,000
Technical Association Fee	6,45,500	3,500
Student Scholarship	16,23,032	15,55,536
Tender Deposit		
fest fee collected	14,03,800	7,33,989
Fest Sponsorship		
M.Tech Stipend Hold	0	24,800
P.hd Stipend Hold	4,82,480	6,15,279
Withheld Amount	13,88,553	20,48,781
Un Identified Crdit		
GIAN	0	9,37,408
F D P	7,30,484	9,49,905
	3,00,24,789	70,36,198

INVESTMENTS ACCOUNT

Short Term Deposit Account with SBI,	39,23,90,774	
Short Term Deposit Account with CANARABANK		
	39,23,90,774	0

ANY OTHER DEPOSITS

	RECEIPTS	PAYMENTS
Other dedution in salary	0	0
Salary Payable	14,30,970	14,30,970
Fee Payable	2,40,15,790	1,41,769
Fee Receivable	27,20,873	3,11,417
Advance Fee Recived	0	0
Fellowships	0	0

ENCLOSURE TO RECEIPTS AND PAYMENTS ACCOUNT

(Amount in Rupees)

HEFA Loan	0	0
Adv from SBI CR Reddy Branch	0	0
TDS Recivable	6,32,845	0
GRAND TOTAL *****	2,88,00,478	18,84,156

ENCLOSURE TO RECEIPTS AND PAYMENTS ACCOUNT

(Amount in Rupees)

EARMARKED/ENDOWMENT FUNDS		
	RECEIPTS	PAYMENTS
SC Sub Plan - Non Recurring	0	0
SC Sub Plan - Recurring	3,13,00,000	4,63,32,322
ST Sub Plan - Non Recurring	0	0
ST Sub Plan - Recurring	1,47,00,000	1,47,00,000
HEFA Loan Fund	0	0
SERB - Scanning FOMI - Dr Mohammed Ahmed Mohid	0	0
GRAND TOTAL *****	4,60,00,000	6,10,32,322

Other Income (including PPI)		
	RECEIPTS	PAYMENTS
Institution fund	6,57,329	2,000
Tender Application fee	46,011	
Paid Accomadation	1,82,000	
Gust House Receipts	8,69,717	
Consultancy Fee	18,85,300	0
GIAN		
staff quarters liscence fee	4,40,580	
Water Charges Recovery	2,39,144	
Ph.D Application Fee	2,56,000	
FDP Application fee	81,903	2,91,086
Processing fee	4,57,000	
Electricity Bill Recovered From Employees	2,76,448	
Electricity Bill Recovered From Vendors	7,07,283	
Income From Guestes in Hostel		
Rent Recovery	22,81,545	
Over head charges		27,231
Recruitment Application Fee		
Misc. Receipts for Institution	10,49,708	
GRAND TOTAL *****	94,29,968	3,20,317

Imprest				
	Opening	RECEIPTS	PAYMENTS	Closing
Others	4,80,000	34,51,596	32,41,596	2,70,000
GRAND TOTAL *****	4,80,000	34,51,596	32,41,596	2,70,000

NATIONAL INSTITUTE OF TECHNOLOGY
ANDHRA PRADESH
NPS TIER-I ACCOUNT
BALANCE SHEET FOR THE YEAR ENDED ON 31-03-2023

(Amount in Rupees)

(Amount in Rupees)

LIABILITIES:	Current Year	Previous Year	ASSETS:	Current Year	Previous Year
NPS Tier-I Account			NPS Tier-I Account		
Opening balance	31,81,734	7,59,991	Subscription and Contribution due for 3/2023	0	3181734
Less: Subscription for 3/2022	-31,81,734	-7,59,991	Investment	0	0
Add: Subscription for present year	2,47,15,802	2,11,27,699	Interest accrued but not due	0	0
Add: Interest Credited	0	0	Balance at Bank	0	0
Less: Transferred to NSDL	-2,47,15,802	-2,11,27,699			
Add: Subscription for 3/2023	0	31,81,734			
Excess of Income over expenditure					
Balance as on 01.04.2022	0	0			
Add: During the year	0	0			
TOTAL	0	31,81,734	TOTAL	0	31,81,734

NATIONAL INSTITUTE OF TECHNOLOGY

ANDHRA PRADESH

NPS TIER-I ACCOUNT**INCOME AND EXPENDITURE ACCOUNT FOR THE FINANCIAL YEAR 2022-23**

(Amount in Rupees)

(Amount in Rupees)

<u>EXPENDITURE</u>	Current Year	Previous Year	<u>INCOME</u>	Current Year	Previous Year
Interest Credited to Subscribers' Accounts	0	0	Interest Earned on Investment	0	0
Bank Charges	0	0	Less: Interest Accrued 31/03/2022	0	0
Excess of Income over Expenditure	0	0	Interest Accrued but not due	0	0
TOTAL	0	0	TOTAL	0	0

NATIONAL INSTITUTE OF TECHNOLOGY
ANDHRA PRADESH
NPS TIER-I ACCOUNT
RECEIPTS AND PAYMENTS ACCOUNT FOR THE FINANCIAL YEAR 2022-23
(Amount in Rupees)

<u>RECEIPTS</u>	Current Year	Previous Year	<u>PAYMENTS</u>	Current Year	Previous Year
Opening Balance as on 01/04/2022	31,81,734	7,59,991	Investment	0	0
NPS Tier-I Account			Withdrawal/Refund to NSDL	27897536	21127699
Own Subscription	1,02,98,236	98,27,729			
University Contribution	1,44,17,566	1,37,21,713	Closing Balance as on 31/03/2023	0	3181734
Interest Received on Investment	0	0			
Interest on saving bank a/c	0	0			
Investment Encashed	0	0			
TOTAL	2,78,97,536	2,43,09,433	TOTAL	2,78,97,536	2,43,09,433

SCHEDULE : 23

SIGNIFICANT ACCOUNTING POLICIES

1. BASIS FOR PREPARATION OF ACCOUNTS:

The Accounts are prepared under the Historical Cost Convention unless otherwise stated and generally on the accrual method of accounting.

2. REVENUE RECOGNITION

2.1 Fees from Students (except Tuition Fees), Sale of Admission Forms, Royalty and Interest on Savings Bank account are accounted on cash basis. Tuition Fees collected separately for each semester is accounted on accrual basis.

2.2 Interest on Investments are accounted on accrual basis.

2.3 The Institute has not given any advance to staff for House Building, Purchase of Vehicles and Computers. Hence no interest recognized.

3. FIXED ASSETS AND DEPRICIATION

3.1 Fixed assets are stated at cost of acquisition including inwards freight, duties and taxes and incidental and direct expenses related to acquisition, installation and commissioning.

3.2 No value is available for value of Land which was allotted by the State Government. Hence the value is shown as Rs.1.00.

3.3 Fixed assets are valued at cost less accumulated depreciation.

3.4 Depreciation on fixed assets is provided on straight line method, at the following rates

Tangible Assets:

1. Land	0%
2. Site Development	0%
3. Buildings	2%
4. Roads & Bridges	2%

5. Tube wells & Water Supply	2%
6. Sewerage & Drainage	2%
7. Electrical Installation & Equipment's	5%
8. Plant & Machinery	5%
9. Scientific & Laboratory Equipment	8%
10. Office Equipment	7.5%
11. Audio Visual equipment	7.5%
12. Computers & Peripherals	20%
13. Furniture, Fixture & Fittings	7.5%
14. Vehicles	10%
15. Lib Books & Scientific Journals	10%

Intangible Assets

1. E-Journals	40%
2. Computer Software	40%
3. Patents and Copyrights	9 Years

3.5 Depreciation is provided for the whole year on additions during the year

4. STOCKS: Expenditure on purchase of chemicals, glassware, publications and other stores is accounted as revenue expenditure, except that the value of closing stocks held on 31st March is set up as inventories by reducing the corresponding Revenue Expenditure on the basis of information obtained from Departments. The closing stock as at 31st March is **NIL**.

5. RETIREMENT BENEFITS

Retirement benefits of Rs. 1,44,16,851/-/- has been paid under employer share in NPS.

A provision for Gratuity of Rs. 55,35,816/- has been provided.

A provision for Leave Encashment of Rs. 56,10,099/- has been provided.

6. INVESTMENTS: - Nil -

7. Earmarked / Endowment Funds:

The details of funds received as Earmarked Funds for the year 2022-23 are furnished here under:

Sl No	Description	Grants Received	Grants Returned	Grants Utilized	Balance
1	SC Recurring Grants	31300000.00	1400000.00	29900000.00	0.00
2	ST Recurring Grants	14700000.00	1500000.00	13200000.00	0.00
3	SC Non - Recurring Grants	0.00	0.00	0.00	0.00
4	ST Non - Recurring Grants	0.00	0.00	0.00	0.00
TOTAL		46000000.00	2900000.00	43100000.00	0.00

8. CORPUS/CAPITAL FUND / OTHER FUNDS:

The fund was established in F.Y.2015-16. The Contributions from UGC, Central Government and State Government to the extent utilized for Capital nature are treated as additions to Capital Fund.

9. GOVERNMENT AND UGC GRANTS

9.1 Government Grants and UGC Grants are accounted on realization basis. However, where a sanction for release of grant pertaining to the financial year is received before 31st March and the grant is actually received in the next financial year, the grant is accounted on accrual basis and an equal amount is shown as recoverable from the Grantor.

9.2 To the extent utilized towards capital expenditure, (on accrual basis) government grants and grants from UGC are transferred to the Capital Fund.

9.3 Government and UGC grants for meeting Revenue Expenditure (on accrual basis) are treated, to the extent utilized, as income of the year in which they are realized.

9.4 Unutilized grants (including advances paid out of such grant) are carried forward and exhibited as a liability in the Balance sheet

10. INVESTMENTS OF EARMARKED FUNDS AND INTEREST INCOME ACCRUED ON SUCH INVESTMENTS:

----Nil---

11. SPONSORED PROJECTS: --- Nil ---

12. INCOME TAX

The income of the Institution is exempt from Income Tax under Section 10(23c) of the Income Tax Act 1961. No provision for tax is therefore made in the accounts.

- a) **PRIOR PERIOD ADJUSTMENTS:** Purchase of Fixed Assets of Rs.6297997/- which was adjusted during the year . (Credit to the “Income from Previous Years” and Debit to the Fixed Assets).

SCHEDULES 24: CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS:**ITEMS TO BE COVERED IN THIS SCHEDULE ARE LISTED BELOW****A. CONTINGENT LIABILITIES:**

1.	Claim against the Entity not acknowledged as debts	--- Nil ---
2.	Guarantees and Letters of credit outstanding	--- Nil ---
3.	Other items for which the entity is contingently liable	--- Nil ---

B. NOTES ON ACCOUNTS:

1.	Commitments on Capital Account not provided for	This would arise in terms of contracts / arrangements in terms of which amounts would have to be paid for acquisitions / constructions of assets as and when they take place. The amount, net of advances is required to be disclosed. Rs.0/-
2.	Educational institutions should host following information in public domain so as to enable all other stakeholders to have a bird's eye view of educational institutions' capacity and capability	
(i)	No of students	2718
(ii)	No of teachers	136
(iii)	Collection on account of building fund and expenditure thereof	Nil

(iv)	Collection for sports activities and expenditure thereof	Amount Collected : Rs.1533000/- Expenditure incurred : Rs.7500/-
(v)	Collection for co-curricular activities and expenditure thereof	Nil
(vi)	Collection on account of development charges and expenditure thereon	Amount Collected : Rs7600000/- Expenditure incurred : Rs*91000/-
(vii)	Collection for medical expenses and expenditure thereon	Amount Collected : Rs.2743000/- Expenditure incurred : Rs.*10000/-
(viii)	Compliance with statutory dues like EPF and ESI	Not Applicable
(ix)	Salary structure of teachers	7 th CPC

The above information can also be calculated on per student basis.

* This amount has been refunded to the students who as opted out for the college.

3. Related Party Disclosures: --- No transactions were taken place during the financial year with related party.

4. The Details of balances in Savings Bank Accounts, Current Accounts and Fixed Deposit Accounts with Banks are enclosed as Attachment to the Schedule of Current Assets.

5. Electricity Security Deposit of 30,99,000/- was made by making necessary adjustments against 38,99,000/- as initial Rs 8,00,000/- expenditure was not made by the Institute. Now Rs 30,99,000/- is shown under Schedule-8 "Loans – Advances and Deposits.

6. An amount of Rs 1,92,268/- was made to the HEFA Loan account as a part of Interest Portion in order to close the HEFA Loan in FY 2021-22.

7. Total land given to the Institute by State Government is 172.08 Acres and no additional land was either given by the State Government or any other donor and also the Institute has not purchased any land there upon till 31.03.2023

8. Rs. 3,11,00,000/- (Rupees Three crores Eleven Lakh Only) Have been returned to MoE against additional amount received over and above sanctioned amount under OH 35 vide Demand Draft no 983369 dated 13th September ,2022

9. The Expenditure made by to the Institute from Institute fund (IRG) In furnished has under

S.No	Financial Year	Particulars	Amount
1	2021-222	Towards creating capital Assets	4,43,61,611.00
2	2022-23	Towards creatin capital Assets	4,77,83,748.00
3	2022-23	Towards institute Share for CRDTH	16,93,467.00
Total			9,38,38,826.00

10. An Amount of Rs.1,57,62,855/- (Rupees One Crore fifty-seven lakhs sixty-two thousand Eight hundred and fifty-five Only) has been refunded to the Institute towards full and final settlement of civil contraction by CPWD in fy-2022-23 which have been utilized for creation of capital assets.

11. Previous Year figures have been regrouped wherever necessary

12. Schedules 1 to 24 are annexed to and form an integral part of the Balance Sheet at 31st March, 2022 and the Income & Expenditure account for the year ended on that date.

Separate Audit Report of The Comptroller & Auditor General of India on accounts of National Institute of Technology, Andhra Pradesh, Tadepalligudem, for the year ended 31 March 2023

We have audited the attached Balance Sheet of National Institute of Technology, Andhra Pradesh (NIT AP), Tadepalligudem as at 31 March 2023, the Income & Expenditure Account and Receipts & Payments Account for the year ended on that date under Section 19(2) of the Comptroller & Auditor General's (Duties, Powers & Conditions of Service) Act, 1971. These financial statements are the responsibility of the University's management. Our responsibility is to express an opinion on these financial statements based on our audit.

2. This Separate Audit Report contains the comments of the Comptroller & Auditor General of India (CAG) on the accounting treatment only with regard to classification, conformity with the best accounting practices, accounting standards and disclosure norms, etc. Audit observations on financial transactions with regard to compliance with the Law, Rules & Regulations (Propriety and Regularity) and efficiency-cum-performance aspects, etc., if any are reported through Inspection Reports/CAG's Audit Reports separately.

3. We have conducted our audit in accordance with auditing standards generally accepted in India. These standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatements. An audit includes examining, on a test basis, evidences supporting the amounts and disclosure in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of financial statements. We believe that our audit provides a reasonable basis for our opinion.

4. Based on our audit, we report that:

i. We have obtained all the information and explanations, which to the best of our knowledge and belief were necessary for the purpose of our audit;

ii. The Balance Sheet and Income & Expenditure Account / Receipts & Payments Account dealt with by this Report have been drawn in the Format of Accounts, prescribed by Government of India, Ministry of Education, for Central Educational Institutions.

iii. In our opinion, proper books of accounts and other relevant records have been maintained by the Institute, in so far as it appears from our examination of such books.

iv. We further report that:

A. Balance Sheet

A.1 Sources of Funds

A.1.1 Current Liabilities & Provisions - ₹ 37.95 crore

A.1.1.1 An amount of ₹24,76,323 being the expenditure incurred in excess of grants received was shown under Current Liabilities & Provisions-Schedule 3 as Minus figure. The expenditure incurred in excess of grants received is adjusted against future releases based on the Utilization Certificate and depicting the same as receivable is not in conformity with the Formats of Financial Statements for Central Higher Educational Institutions. The depiction of minus figure resulted in understatement of Current Liabilities and Provisions by ₹24.76 lakh.

A.2 Application of Funds

A.2.1 Fixed Assets - ₹ 426.39 crore

A.2.1.1 An amount of ₹19,11,979¹ incurred towards purchase/construction of various fixed assets whose worth was more than ₹5000, was incorrectly treated as revenue expenditure. This resulted in understatement of Fixed Assets and short account of Surplus with consequent understatement of Corpus / Capital Fund by ₹19.12 lakh.

A.2.2 Loans, Advances and Deposits - ₹ 8.73 crore

A.2.2.1 An amount of ₹8,00,000 being an additional deposit paid by the contractor to M/s Eastern Power Distribution Company, in the name of the Institute and included in the value of work was incorrectly capitalized. This resulted in overstatement of Fixed Assets and understatement of Loans, Advances and Deposits by ₹8 lakh.

¹ Construction of parking area near Staff Quarters: ₹8,93,379 ; Telescopic Scaffold Wheeled Ladders (2 Nos) : ₹9,94,600 and Metal Closed Beruva (2Nos) : ₹24,000

B Income and Expenditure Account

B.1 Sources of Funds - ₹67.82 crore

B.1.1 Interest Earned - ₹9,414

B.1.1.1 Interest amount of ₹11,617² received on savings bank account (110012641680 Canara bank) was not accounted for under Schedule 12- Interest Earned. This resulted in understatement of Income thereby understatement of Surplus by ₹11,617. Further, interest received on Savings Bank accounts, as per the Receipt and Payments account was ₹7,17,796. The same as per the bank statements was ₹7,44,134³. The difference of ₹26,338 needs to be reconciled.

C. General

C.1 Opening balance of Capital-work-in-progress of ₹4,10,92,36,000 and the adjustment made was not indicated in the Fixed Assets Schedule. This needs to be rectified.

C.2 Against assets purchased of ₹6,35,46,603 (as per Receipts and Payments account and Fixed Assets-Schedule-4), an amount of ₹1,18,07,513 was indicated as other additions in the Corpus Fund/Capital Fund (Schedule-1), after making prior period adjustments. The details of adjustments made was not suitably disclosed in the Notes to Accounts. Further, the depiction of net figure in the Annual Accounts needs to be rectified.

C.3 Against an amount of ₹31.53 lakh shown as advances given to employees an amount of ₹30.50 lakh is pending settlement since more than a year as detailed below. Action needs to be taken to either recover or adjust the outstanding advances.

Sl. No.	Name and designation of the Officer/Official	Vr. No. and Date of Advance taken	Amount of Advance Pending for adjustment in ₹	Purpose for which the advance is sanctioned
1.	Prof CSP Rao, Director	470/14.11.2019	1,00,000	Visited MHRD, New Delhi
2.	Prof CSP Rao, Director	21.10.2021	7,50,000	Advance for conducting NIRF Lectures, NEP 2020

² ₹1092+2041+3571+4913=₹11,617-Guest House

³ SBI-₹6235+1489+951+947=₹9,622 ; SBI-Projects-₹ 213629+212416+187773+109077= ₹7,22,895 ;

Canara Bank- ₹1092+2041+3571+4913=₹11,617

				and Phase IB Building Pooja
3.	Prof CSP Rao, Director	8.11.2021	12,00,000	Advance for second and third convocation celebrations
4.	Prof CSP Rao, Director	24.10.2021	5,00,000	Advance drawn for Non-teaching recruitment
5.	Y Deepika Kumari, PS to Director	5.10.2021	5,00,000	Release of advance for furnishing of Director's Bungalow and Directorate and also to meet urgent requirements

C.4 Action needs to be taken to adjust/clear the following amounts which are being carried forward as liabilities since two years without adjustment.

- a. NIT Warangal: ₹10 crore
- b. Other deduction on salaries: ₹1,28,147
- c. Unidentified credit: ₹45,501
- d. Seigniorage charges collected of ₹14,312 (including opening balance of ₹5,925)
- e. Cess collected of ₹1,13,770 (including opening balance of ₹1,00,884)

C.5 Credit balance under Schedule 3(b) Sponsored fellowships and scholarships, was shown as ₹95,84,424 whereas the receipts against Sponsored fellowships and scholarships under Schedule 3 – Current liabilities and Provisions was shown as ₹99,61,272. The difference of ₹3,76,848 was due to two unidentified sponsored projects (DST-P for ₹1,80,000 and another unidentified project without any name for ₹1,96,848). The details of these two projects need to be identified and properly accounted for under sponsored projects. Further, the sponsored projects should be depicted under Schedule 3 (a) and not 3 (b). This needs to be rectified.

C.6 The details of Assets created out of sponsored project funds worth ₹1.57 crore were not disclosed in the Notes on Accounts.

C.7 The difference of ₹5,74,11,397 between the Tuition fee receipts as per Income and Expenditure Account (₹7,08,21,451-Schedule 9) and as per amount (₹12,82,32,848) reported by Academics wing in response to Audit Enquiry and the difference of ₹1,23,016 between the fee receivable as per amount indicated in Current Assets Schedule -7 ₹23,77,216 and as per amount (₹ 22,54,200) reported by Academics wing needs to be reconciled.

C.8 In Receipts and Payments account, investments encashed was shown at zero whereas the same as per original FDs was ₹ 2,39,72,081⁴. Similarly, investments made during the year under Payment was shown at ₹ 39,11,44,617⁵ whereas the same as per original FDs was ₹41,63,62,855⁶. The differences need to be reconciled in Receipts and Payments account as well as in enclosure to Schedule 7 (Item No.3(b)).

D. Lack of Response

Draft SAR was issued to the Institute on 02.08.2023 with a request to furnish replies within 10 days and replies to comments included in DSAR are still awaited (13.09.2023).

E. Grants-in-aid

NITAP received an amount of ₹46.91⁷ crore towards Grants-in-aid during the year and utilised fully as on 31 March 2023.

v. Subject to our observations in the preceding paragraphs, we report that the Balance Sheet, Income & Expenditure Account and Receipts & Payments Account dealt with by this report are in agreement with the books of accounts.

vi. In our opinion and to the best of our Information and according to the explanations given to us, the said financial statements read together with the Accounting Policies and Notes on Accounts and subject to the significant matters stated above and other matters

⁴ ₹1,20,31,466 + ₹1,19,40,615

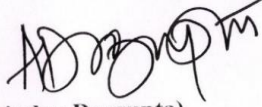
⁵ ₹55,35,167 + 56,09,450 + 12,00,00,000 + 24,00,00,000 + 2,00,00,000

⁶ ₹ 55,35,167 + 56,09,450 + 12,00,00,000 + 24,00,00,000 + 2,00,00,000 + 1,26,56,906 + 1,25,61,332

⁷ Recurring Grant ₹46.91 crore

mentioned in Annexure to this Audit Report, give a true and fair view in conformity with accounting principles generally accepted in India:

- a.** In so far as it relates to the Balance Sheet, of the state of affairs of the National Institute of Technology, Andhra Pradesh (NIT AP), Tadepalligudem, as at 31 March 2023; and
- b.** In so far as it relates to Income & Expenditure Account of the **Surplus** for the year ended on that date.



(Anindya Dasgupta)
Principal Director of Audit (Central), Hyderabad

Anindya Dasgupta, IA&AS
Principal Director of Audit (Central)

No.PDA(C)/CEA/NITAP/SAR.2022-23/ 2023-24/84

Date:13.09.2023

Dear Sir,

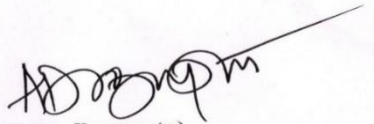
Audit of Annual Accounts of National Institute of Technology, Andhra Pradesh, for the year 2022-23 was conducted during June-July 2023. Significant comments on accounts are included in the Separate Audit Report issued separately to the Government of India, Ministry of Education, New Delhi and a copy marked to you. The observations which are not included in the Separate Audit Report, meriting the attention of the Management, are detailed in Annexure to enable your office to take necessary corrective action.

I would like to inform you that the issues included in the Part 'A' are persistent irregularities which have been included in the previous years' Separate Audit Reports but remained unattended to. Hence, remedial action may be arranged to be taken urgently in these issues.

Further other minor irregularities are in the Part 'B' which have been noticed during the current audit and which require the necessary corrective action to be taken by the Management.

Regards,

Yours sincerely,



(Anindya Dasgupta)
Principal Director of Audit (Central), Hyderabad

Prof. Pramod M. Padole,
Director (In-charge),
National Institute of Technology, Andhra Pradesh

Annexure to Management Letter

PART-A

NIL

PART-B

1. An amount of ₹ 1,19,172 being the interest earned and accrued on investment made out of Earmarked Fund was incorrectly accounted for as the income of the Institute. This resulted in excess account of Surplus with consequent overstatement of Corpus / Capital Fund and understatement of Designated/Earmarked /Endowment Fund by ₹1.19 lakh.
2. Expenditure incurred towards Staff Payments and Benefits (schedule 15) included an amount of ₹5,00,88,284 paid towards Salaries and wages of Ad-hoc staff (under Grants Head 36), which is in contravention of the principles of Grants. This needs to be reviewed and expenditure needs to be booked under relevant head of account.
3. An amount of ₹114,16,09,538 was shown incorrectly as Term Deposits with Schedule banks in Annexure A of Schedule 7 instead of ₹113,61,66,338. This typographical error needs to be corrected.
4. In the Receipts and Payments account, administrative expenses included electricity and power charges payable of ₹20,65,678 and other expenses payable of ₹58,060 aggregating to ₹21,23,738. Similarly, prior period expenses included consultancy charges payable of ₹18,48,648. These need to be re-checked and reconciled.
5. The following differences in Opening balances pertaining to NPS Balance Sheet need to be reconciled.

Particulars	As per annual accounts in ₹	As per ledger in ₹	Difference in ₹
OB	31,81,734	24,21,743	7,59,991
Subscriptions	2,47,15,802	2,47,15,965	163

6. The following differences in the opening balance of Fixed Assets need to be rectified and the adjustments, if any, made, need to be shown under additions/deletions and the details suitably disclosed in the Annual Accounts.

Nature of Asset	Closing Balance as on 31.03.2022 in ₹	Opening Balance as on 01.04.2022 in ₹	Difference in ₹
Scientific & Laboratory Equipment	11,12,74,468	11,12,72,768	1,700
Office Equipment	64,87,767	64,71,585	16,182
Electric Equipment	1,74,62,720	1,75,31,820	69,100

(Ch.V. Sai Prasad)

Director/ Central Expenditure Audit
O/o Principal Director of Audit (Central)

ANNEXURE

1. **Adequacy of Internal Audit System:** Internal Audit was not conducted for the year 2022-23.

2. **Adequacy of Internal Control System:** Internal Control System is inadequate due to the following reasons:

- There is no Internal Audit Wing.
- The institute does not have Account Manual, Internal Audit Manual.
- There is no Investment policy.
- Against Four Mandatory meetings, only one meeting was conducted in respect of Buildings and Works Committee and three meetings were conducted in respect of Finance Committee.

3. **System of Physical verification of fixed assets:** Physical verification of fixed assets was conducted for the year 2022-23.

4. **System of Physical verification of inventory:** Physical verification of Inventory was conducted for the year 2022-23

5. **Regularity in payment of statutory dues:** The Cess (OB as on 01.04.2022: ₹1,00,884) and Seigniorage charges (OB as on 01.04.2022: ₹5,925) collected were not paid and are in arrears since more than a year.



(Ch.V. Sai Prasad)

**Director/ Central Expenditure Audit
O/o Principal Director of Audit (Central)**