

**Prasad V. Potluri**  
**SIDDHARTHA INSTITUTE OF TECHNOLOGY, KANURU, VIJAYAWADA**  
NBA & NAAC Accredited, ISO: 9001-2015 Certified Institution, AICTE Approved &  
Permanent Affiliation to JNTUK, Kakinada  
**(Sponsored by Siddhartha Academy of General & Technical Education, Vijayawada)**  
**DEPARTMENT OF FRESHMAN ENGINEERING**  
**MONTHLY REPORT July, 2025**

**FACULTY ACTIVITIES**

**a) Publications in refereed Journals:**

**SCIE Indexed:**

Sireesha R, **Y.Pavani**, B Divya Mullavarapu, subbarao M published a paper on “Unveiling the anticancer mechanism of 1,2,3-triazole-incorporated thiazole-pyrimidine-isoxazoles: insights from docking and molecular dynamics simulations” in Journal of Biomolecular Structure and Dynamics, ISSN: 07391102, Volume:42, Issue:24, Pages:13803-13815, June 2025.

**Scopus Indexed:**

1. Hari Kumar, **Rehena Sk.**, Nidhi Mishra, Rama Devi. A., Enas Kamal Zayed, Ali Lamouchi, Naheed Saba, Afsha Jamal published an article entitled “Adopting Technology-Driven Cognitive Strategies to Enhance English Proficiency in Rural Background Undergraduate Students” in Theory and Practice in Language Studies, ISSN 1799-2591, VOL. 15 NO. 7 (2025). <https://doi.org/10.17507/tpls.1507.23>.
2. **Siva Naga Malleswari V**, Amarendra Babu V, Bhagya Lakshmi K published a paper “Basic Statistical Concepts On Neutrosophic Soft sets” in Neutrosophic sets and systems, Volume 85, July 2025, pp:67-76, ISSN:2331-608X, DOI: [10.5281/zenodo.15270700](https://doi.org/10.5281/zenodo.15270700).
3. Govindarao Yedlapalli\*, Nagineni Sudarshan Rao, **Pavani Peddi**, Venkata Swamy Tangeti, and Phani R.S.CH, “Development of a Green Stability Indicating HPLC Method for Quantification of Genotoxic Impurities of Bexagliflozin and LC-MS/MS Profiling of its Degradation Products”, Research Journal of Chemistry and Environment, Vol. 29 (8), August 2025, pp. 11–20. <https://doi.org/10.25303/298rjce011020>.
4. **Y.Pavani** published a paper “Solvent dependent structural, electronic, and optical properties of ureidopeptidomimetics: A DFT and TD-DFT study on the effects of donor and acceptor functional groups”, in Oxford Open Materials Science, ISSN: 26336979, Volume: 5, Issue: 1, June 2025, EID: 2-s2.0-105000320666, DOI: 10.1093/oxfmat/itaf001.

**Scopus - Conference Proceedings: Nil**

**Conference Proceedings (Others):**

1. B. Venkata Swamy; Lakkakula Hari Prasad; **M. Shyam Sundar**; Harika Pothini; Aarthi R; Shrikant Upadhyay published a paper, "Experimental Evaluation Vitamin Deficiency Detection using Digital Image Processing based on Convolutional Deep Learning Strategy" in IEEE 2025 7th International Conference on Intelligent Sustainable Systems (ICISS). DOI: 10.1109/ICISS63372.2025.11076205
2. Sreela B, Hema R, Purnachandra Rao Alapati, Nashwan Adnan Othman, Sathishkumar P and Vuda Sreenivasa Rao, "Enhancing Automated English-Speaking Tests: The Integration of Natural Language Processing and Machine Learning" *2025 Global Conference in Emerging Technology*, 09-11 May, 2025, (*GINOTECH*), Pune, India, 2025, pp. 1-5, ISBN: 979-8-3315-0775-6. (IEEE Xplore on 19 July, 2025)

**b) Patents:**

1. Dr. Sk.Rehena published a patent application No. 202541057896 entitled "ENHANCEMENT OF UNDERGRADUATE STUDENTS LANGUAGE COMPETENCE THROUGH PRAGMATIC PRACTICES" on 04-07-2025.
2. Dr.P.Lakshmi Lavanya published a patent application No.202541058094 entitled "Transforming ELT through ICT: Contemporary Practices and Future Directions" on 04-7-2025.
3. Mr. T. Pullarao and Dr. G. Sreedevi published a patent application No. 202541063838 entitled "MXENE- BASED ZRO2 CATALYTIC NANOHYBRID STRUCTURES FOR ENHANCED GREEN HYDROGEN PRODUCTION" on 11/07/2025.

**c) Projects: Nil**

**d) Books:Nil**

**Others:Nil**

**e)Participation in FDP/ Training/ Workshops/ Conferences/ Seminars/ Webinar Etc.**

**Paper presented in conferences: Nil**

**Faculty Development Programs:**

1. Dr.S.Lakshmitulasi , Dr P.Pavani ,Dr.N.Usharani participated in the Six Day Faculty Development Program On "Smart And Sustainable Materials: Advances In Material Chemistry For Global Challenges - 2025" organized by the Department of Chemistry, SRM Institute of Science and Technology, Ramapuram, Chennai in association with Society for Advancement in Chemical Sciences and Education (SACSE), IGCAR, Kalpakkam from 21st July, 2025 to 26th July, 2025.(NIRF rank 21)

**Resource person:**

1. Dr. D. Ravi Shankaran Professor, National Centre for Nanosciences and Nanotechnology University of Madras Guindy Campus, Chennai

2. Dr. A. S. Suneesh Scientific Officer Indira Gandhi Centre for Atomic Research, Kalpakkam
3. Dr. S. Anandan Professor, Nanomaterials & Solar Energy Conversion Lab Department of Chemistry National Institute of Technology, Trichy

**Others:**

1. Dr. G. Raghavendra Ganesh, Dr. M. Prameela, Dr. V. Sitha Mahalakshmi, A. Chandra Sekhara Babu have participated in a Five-day Online Faculty Development program on “Contemporary Topics in Mathematics and its applications” held from 28-07-2025 to 01-08-2025 organized by Division of mathematics, Freshman Engineering Department, Lakireddy Balireddy College of Engineering.

Resource persons:

1. Dr. D. Krishna Kiran Vamsi, CEMB, SSSIHL, A.P
2. Prof. V. Lakshmana Gomathi Nayagam, NIT Trichy
3. Prof. Santanu Koley, BITS Hyderabad
4. Dr. Ghosh Bapan, IIT Indore
5. Dr. Avishek Adhikari, Presidency University, Kolkata.

2. Dr. M. Prameela attended a Six day Faculty Development Program on “Prompt Engineering and ChatGPT Utilization” Organized by the Department of Information Technology, KKR & KSR Institute of Technology and Sciences held from 14th July to 19th July, 2025.

Resource Persons:

1. Mr. C. Naveen, AI/ML ops Engineer - OZONETEL;
  2. Mr. Bhanu Prakash, Web developer, APP Developer, Data Science & ML engineer - TFI;
  3. Mr. Lakshmi Narayana Malineni, AI Engineer - VALGENESIS;
  4. Ms. Akhila Matathammal is a Doctorial Researcher at IIIT Hyderabad;
  5. Mr. Biswajit, Senior AI Engineer, Speech & Language Tech Specialist.
2. A. Chandra Sekhara Babu attended a One-Week Faculty Development Program on “Mathematics and Its Applications in New Technologies” Organized by Faculty of Mathematics, Department of Basic Sciences & Humanities Dr. Lankapalli Bullayya College of Engineering, Visakhapatnam from 23rd to 27th June 2025 .

Resource Persons:

1. Prof. V. Ravindranath, IIT, Registrar, JNTUK
2. Prof. K.S. Rao, IIT, New Delhi
3. Dr. V. Ramakrishna, NSTL Scientist
4. Prof. K. Venkateswarlu AU College of Engineering
5. Dr. Y. L. P. Thorani, GITAM UNIVERSITY

**Training programs attended: Nil**

**Workshops Attended:**

1. Dr. G. Raghavendra Ganesh attended NPTEL Online Workshop on ‘Mastering Fluent Meshing: Fluent meshing for CFD Applications’ by Mr. Vignesh SM, Application Engineer, CADFEM India on 19-07-2025.
  2. Dr. A. Purnachandra Rao attended a National Workshop on ‘Role of National Education Policy 2020 in Swarna Andhra and Viksit Bharat@2047’ by Jawaharlal Nehru Technological University Kakinada on 17<sup>th</sup> and 18<sup>th</sup> July, 2025.
- Resource Persons:

1. Professor Anil Sahasrabudhe, Chairman – NBA & NAAC;
2. Professor KK Aggarwal, President – South Asian University, New Delhi;
3. Professor Ved Prakash; Professor Santishree Dhulipudi Pandit, VC, JNU;
4. Professor D. Janaki Ram IIT Madras, Chennai;
5. Sri Ananth Sankar Joint Secretary, Planning Department Government of Andhra Pradesh

Pradesh

**Papers presented in conferences /seminars: Nil**

**Webinars Attended: Nil**

**Guest lectures attended: Nil**

**f) Organized FDP/ Career Development/ Training/ Workshops/ Conferences/ Seminars/ Webinar etc.**

**Seminars Organized: Nil**

**Guest Lectures organized: Nil**

**Workshop Organized: Nil**

**g) Certification programs (NPTEL / Coursera / edX etc.):**

Pavani Peddi has successfully completed the 8-week online certification course “Introduction to Sustainability”, authorized by the University of Illinois Urbana-Champaign and offered through Coursera, with a grade of 89.15%, on 6th June 2025.

**Student activities:**

**Outside the institution: Nil**

**Other information: Nil**

Dr. M. Srilakshmi

(HOD - FED)