

**DEPARTMENT OF MECHANICAL ENGINEERING
SIDDHARTHA ACADEMY OF HIGHER EDUCATION
(DEEMED TO BE UNIVERSITY)
FACULTY PUBLICATIONS
ACADEMIC YEAR 2025-26**

	SCI Indexed Journals	SCOPUS Indexed			Others	International Conferences
		Journals	Conference Proceedings	Lecture Notes		
No. of Publications	7	9	16	1		5

Books

1. **Dr. R. V. Kiran Kumar Ravi, Dr. C. V. Lakshmi Narayana, Amit Joshi, Mrs. Chethana T. V., “ Python Programming”, RK publications, ISBN : 978-93-49701-92-2, 26th August 2025.**
2. **Dr. R. V. Kiran Kumar Ravi, Andiappan Ananth, Dr. Punit Kumar Chaubey, “ AI and Deep Learning”, BR Publications, ISBN : 978-81-990858-1-7, 1st September 2025**

Lecture Notes

1. **Srinivas, K., Singhi, D., Dandu, K.M., Jai Tarun Sai, P., Shyam Sundar, A., Subrahmanyam, K. (2026). The Automated Rope Line: A Revolution in Industrial Automation. Recent Trends in Manufacturing Engineering. ICMech 2024. Lecture Notes in Mechanical Engineering. Online ISBN978-981-96-7576-0, Springer, Singapore. https://doi.org/10.1007/978-981-96-7576-0_47, SCOPUS.**

International Journals:

1. **Syam Prasad Ammineni Lingaraju Dumpala Nagaraju Cherukuri, “Thermo - Vibrational analysis of Temperature dependent damping characteristics of Viscoelastic materials”, Journal of Vibration and Control,1-10, 6 October 2025, <https://doi.org/10.3390/ma17235832>, SCIE, IF 2.7, Q1**
2. **Phani prasanthi, Haritha Akkineni, U.Koteswara Rao, V.V.Venu Madhav, Kuldeep K Saxena, Rakesh C, Lakshita Sehgal and Mushtaq Ahmad Ansari “Predictive analysis of natural fiber-reinforced composite printed circuit boards using experimental, finite element, and machine learning approaches”, Journal of Mechanical Science and Technology, 2025 Volume 39, pages 4535–4545, (2025), Published: 26 July 2025 , <https://doi.org/10.1007/s12206-025-0727-y>, SCIE, IF 1.7, Q2**

3. Sudhakar Uppada, **G.Jamuna Rani**, YarrapragadaKss Rao, Ravikiran Balaga , “Impact of discrete heating on thermal performance of Ag, Cu, and MWCNnanofluids in square enclosure: A CFD analysis”, Vacuum, ISSN: 0042-207X, Volume 241, November 2025, 114690 <https://doi.org/10.1016/j.vacuum.2025.114690>, **SCI, IF 3.9, Q1**
4. Venkatesh Goveraiahgari, **Prakash Babu Kanakavalli**, Meenakshi Reddy Reddygari, Mallikarjuna Rao Pabbisetty and Satish Kumar Vutukur, “Computational study on heat transfer augmentation with pencil pin fins and ribbed surfaces in wedge channels”, International journal of turbo and jet engines, ISSN 0334-0082, October 2025, <https://doi.org/10.1515/tjj-2025-0094> , **SCIE, Q3. .0.98**
5. Goveraiahgari, Venkatesh, **Kanakavalli, Prakash Babu**, Shimpi, Rajendra, Reddygari, Meenakshi Reddy and Ganapathi, Deenadayalan. "Effect of Reynolds number variation on thermal performance and flow characteristics of heart pin fins in trailing edge" International Journal of Turbo & Jet-Engines. ISSN 0334-0082, <https://doi.org/10.1515/tjj-2025-0115>, December 2025, **SCIE, Q3.0.98**
6. **K. Ramanaiah, Srinivas Prasad Sanaka**, P. Hari Sankar, A.V. Ratna Prasad, K. Hemachandra Reddy, “Sustainable bio composites for thermal management of electronic devices”, Vacuum, ISSN: 0042-207X, Volu 246, Pp-1-6, December 2025, <https://doi.org/10.1016/j.vacuum.2025.115045>, **SCI, IF 3.9, Q1**
7. **M Sumalatha**, K Pranay Rahul, **M Bala Chennaiah**, B Bhanu Teja, G Ravi Teja, “Fabrication and Comprehensile Characterization of Biochar-Enhanced PLA Composite 3D Filament”, Journal of Materials Engineering and Performance, ISSN : 1059-9495, <https://doi.org/10.1007/s11665-026-13306-2>, February 2026, **SCIE, Q2. IF:2**
8. Tummala Srinag , Chennupati Lakshmi Srinivas , C. H. Sandeep , Parvathaneni Phani Prasanthi , **Vallabhaneni Venkata Venu Madhav** , AshishKumar , Rakesh Chandrashekar , Din Bandhu , Sudhir Kumar Singh and Akkireddy, Anitha Lakshmi, “Mechanical characterization of walnut shell powder-reinforced neem shell liquid composite, “ Journal of the Mechanical Behavior of Materials ISSN: 0334-8938, , vol. 34, no. 1, 2025, pp. 20250078. <https://doi.org/10.1515/jmbm-2025-0078>, August 28, 2025, **SCOPUS, ESCI, IF : 1.7, Q2**
9. **M. Bala Chennaiah, G. Dilli Babu**, K. Dilip Kumar, Reddy Sreenivasulu, Tarunika Sharma, A. Somaiah, R. Meenakshi Reddy, Nishant Kumar “Effect of wear and frictional force on Al6063-T6 with magnesium and zinc oxide nanoparticles”

innovation and emerging technologies, Vol. 12, 2440016 (2025), 1, August 2025, <https://doi.org/10.1142/S2737599424400164>, **SCOPUS and ESCI, Q3**,

10. **Srinivas Prasad Sanaka, K. Ramanaiah**”Performance analysis of Pem Electrolyser for green hydrogen production Sustainable Chemistry for Climate Action Issn :2772-8269, Volume 7, 1-7,13 November 2025, <https://doi.org/10.1016/j.scca.2025.100162> **ESCI, SCOPUS, Q1**
11. **Srinivas Prasad Sanaka, K. Ramanaiah**, Naga Sai Pranay GUNDA , Design and parametric evaluation of proton exchange membrane fuel cell for enhanced performance, Journal of Thermal Engineering, ISSN :2148-7847, Volume 11 Issue 6, pp. 1705–1716, November 2025, DOI: 10.14744/thermal.0001028 , **SCOPUS, Q2**
12. **Balaji M** , Kumar, K. Dilip Kumar , A KiranDongre ,”Polymer-Gel Composite Phase Change Materials: A Functional Polymer Composite Approach for Solar-Thermal Energy Storage in Building Facades”, JOURNAL OF POLYMER & COMPOSITES, ISSN / eISSN: 2321-8525 / 2321-2810, Volume13, Issue6, Page36-51, Nov 2025, DOI:10.37591/JOPC, **ESCI and SCOPUS, Q2**
13. **K.Ramanaiah**, Hari Sankar Palla and Kunapuli Siva Satya Mohan, “Influence of Environment Aging on the Thermal Insulation of Sustainable Ecofriendly Composites”. Journal of Composites and Biodegradable Polymers, ISSN : 2311-8717 vol. 13, Dec. 2025, pp. 135-9, doi:10.12974/2311-8717.2025.13.1, **SCOPUS Q4**.
14. Alla Venkata Ranga Surya Prasad, Leela Santi Parige, **Prakash Babu Kanakavalli**, Vinjamuri Venkata Kamesh, Vigneshwar Pesaru and Nageswara Rao Medikonda, “Path Planning of Autonomous Mobile Robot in Mixed Reality Environments through Exploring Augmented Realities”, International Journal of Vehicle Structures & Systems, ISSN: 0975-3060, Vol17, 620-626 ,25 doi: 10.4273/ijvss.17.4.12, November 2025, **SCOPUS, Q4**
15. M. Keerthi, M. Gnana Kiran, **Prakash Babu Kanakavalli**, Vinjamuri Venkata Kamesh, R. L. Krupakaran, P. S. V. Nandini, N. Krishna Jyothi, M. C. Rao, D. Madhavi Latha, SK. Mahamuda, “Effect of Temperature on Ionic Conductivity and Optical Bandgap Features of TSP-NaI-Based Biopolymer Electrolytes”. Iranian Journal of Materials Science and Engineering. ISSN:17350808, Vol. 22,119-131, 10.22068/ijmse.4086 , December 2025, **SCOPUS, Web of Science (ESCI), Q2**
16. G.Sulochana, **Ch.Venkata Prasad**, S. Aparna Mr. A. Chandramouli, CH. Jyothirmai, “Fabrication and Performance Analysis of Multi-Phase Hybrid Composites with Glass

Conference Proceedings:

1. **Ramanaia, K., Palla, H., Sanaka Srinivas Prasad., Ratna Prasad, A.V., Konireddy, H. (2025).** Development of 3D Printed Biodegradable Composite Materials for Acoustic and Thermal Insulation Applications. In: Patra, A., Rajendrachari, S. (eds) Proceedings of the 6th International Conference on Processing and Characterization of Materials. ICPCM 2024. Springer Proceedings in Physics, vol 317. Springer, Singapore. https://doi.org/10.1007/978-981-96-7340-7_10, Online ISBN978-981-96-7340-7, 2nd July 2025, **SCOPUS. Q4**
2. **Ramanaiah, K., Sanaka Srinivas Prasad., Ratna Prasad, A.V., Pravallika, M., Konireddy, H. (2025).** Development of Jute Based Composite Materials for Thermal Insulation. In: Patra, A., Rajendrachari, S. (eds) Proceedings of the 6th International Conference on Processing and Characterization of Materials. ICPCM 2024. Springer Proceedings in Physics, vol 317. Springer, Singapore. https://doi.org/10.1007/978-981-96-7340-7_11 , Online ISBN978-981-96-7340-7, 2nd July 2025, **SCOPUS. Q4**
3. **Sanaka Srinivas Prasad, Ramanaiah, K., Garikapati, N.V.S.S., Prasad, T.S.V. (2025).** Realization of Complex Shape Composite Component Using Composite Tooling. In: Patra, A., Rajendrachari, S. (eds) Proceedings of the 6th International Conference on Processing and Characterization of Materials. ICPCM 2024. Springer Proceedings in Physics, vol 317. Springer, Singapore. https://doi.org/10.1007/978-981-96-7340-7_9, Online ISBN978-981-96-7340-7, 2nd July 2025, **SCOPUS. Q4**
4. **Sanaka, S.P., Durga Prasad, Y., Manoj Kumar, P., Alum, S.H. (2025).** Experimental Analysis of a Sustainable Water Purifier Using Bamboo Charcoal as an Adsorbent Material. In: Patra, A., Rajendrachari, S. (eds) Proceedings of the 6th International Conference on Processing and Characterization of Materials. ICPCM 2024. Springer Proceedings in Physics, vol 317. pp 109-114, 2nd July 2025, ISBN 978-981-96-7340-7 Springer, Singapore. https://doi.org/10.1007/978-981-96-7340-7_12, **SCOPUS,Q4**
5. **Milindkumar Namdeorao Dandale, Vangipurapu Bapi Raju, Asheesh Kumar, Ghanasham C. Sarode, Savanam Chandra Sekhar, Prasanna Kumar Lakineni** “Efficient Method for Creep Behavior of Recycled Aggregate Concrete using CEMDN-CNN and LSTM”, 16th-17th May, 2025 3rd International Conference on Data Science and Information System (ICDSIS), Hassan, India, pp. 1-6, doi: 10.1109/ICDSIS65355.2025.11070760. IEEE xplore, ISBN : 979-8-3315-4265-8 , 10th July 2025, **SCOPUS**

6. **V. Sudheer Kumar**, G. N. Mori, S. K. K. R, P. J. Josephson, N. Kumar and R. Nithya, "Detecting Jamming and Spoofing Attacks on Unmanned Aerial Vehicles with Advanced Neural Network Models," *2025 Global Conference in Emerging Technology (GINOTECH)*, PUNE, India, 2025, pp. 1-6, doi: 10.1109/GINOTECH63460.2025.11076803, IEEE *Xplore*: 17 July 2025, **SCOPUS**.
7. **Venkata Kiran Kumar Ravi**, N. Patil, **V. Sudheer Kumar**, K. Srinivasan, P. Kotliar and R. J. Kumar, "Smart Waste Management and Classification System for Smart Cities using Hybrid Random Forest and ANN Models," *2025 8th International Conference on Computing Methodologies and Communication (ICCMC)*, Erode, India, 2025, pp. 1476-1481, doi: 10.1109/ICCMC65190.2025.11140731, IEEE *Xplore*: 04 September 2025, **SCOPUS**.
8. **M. Bala Chennaiah**, **V. Sudheer Kumar**, M. S. Devimani, V. Repalle, R. K. Deb and S. S. Padaiyatchi, "GA-SA Hybrid Model for EV Penetration Forecasting and Charging Infrastructure Optimization," *2025 2nd International Conference on Intelligent Algorithms for Computational Intelligence Systems (IACIS)*, Hassan, India, 2025, pp. 1-6, doi: 10.1109/IACIS65746.2025.11211468. IEEE *Xplore*: 05 November 2025, **SCOPUS**.
9. **Veernapu Sudheer Kumar**, **M. Bala Chennaiah**, Rashmi shekar, ajay kumar, Tulasimani, soumitra mondal, "Hybrid Collaborative Recommendation Method via Dual-Autoencoder Framework for Analyzing Social Media Addiction and Student Behavior in Higher Education", *2025 2nd International Conference on Intelligent Algorithms for Computational Intelligence Systems (IACIS)*, Hassan, India, 2025, pp. 1-6, doi: 10.1109/IACIS65746.2025.11211286. IEEE *Xplore* 5th November 2025. **ISBN:979-8-3315-3678-7. SCOPUS**
10. **Venkata Kiran Kumar Ravi**, S. Gangwar, D. S. Reddy, L. Kumar, K. Lenka and R. Venkatesh, "Real-Time Natural Disaster Prediction and Early Warning Using IoT and Graph Neural Networks," *2025 International Conference on Intelligent Communication Networks and Computational Techniques (ICICNCT)*, Bidar, India, 2025, pp. 1-5, doi: 10.1109/ICICNCT66124.2025.11232970. IEEE *Xplore* , ISBN:979-8-3315-8623-2, 18th November 2025, **SCOPUS**
11. **Venkata Kiran Kumar Ravi**, S. Chatterjee, P. Nagapillai, S. Devi, K. N. Sharma and K. Singh, "Kidney Stone Identification Using a Two-Stage ResNet and SVM-Based Ultrasound Image Analysis System," *2025 2nd Asia Pacific Conference on Innovation in Technology (APCIT)*, MYSORE, India, 2025, pp. 1-6, doi: 10.1109/APCIT65661.2025.11410821. IEEE *Xplore* , ISBN:979-8-3315-2306-0 , 4th March 2026, **SCOPUS**.
12. R. K. Gupta, P. Vustelamuri, R. S. A. Shiny, **Venkata Kiran Kumar Ravi**, P. Kumar and S. Kumar, "Antibacterial Efficiency Prediction of BiFeO₃-based Photocatalytic Materials using Support Vector Machines and Random Forest," *2025 10th International Conference on Communication and Electronics Systems (ICCES)*, Coimbatore, India, 2025, pp. 704-709, doi: 10.1109/ICCES67310.2025.11336926. . IEEE *Xplore*, ISBN:979-8-3315-9756-6 , 21st January 2026, **SCOPUS**
13. **Venkata Kiran Kumar Ravi**, U. Rajender, S. Mineesha, M. BhagyaLaxmi, N. Gandhewar and M. Habeeb, "Ai-Driven Healthcare: Enhancing Diagnosis and

Treatment Via Fuzzy Convolutional Neural Networks," 2025 *International Conference on Intelligent Communication Networks and Computational Techniques (ICICNCT)*, Bidar, India, 2025, pp. 1-6, doi: 10.1109/ICICNCT66124.2025.11232735. IEEE *Xplore*, ISBN:979-8-3315-8623-2, 18th November 2025, **SCOPUS**.

14. P. Keshwani, **Venkata Kiran Kumar Ravi**, M. Kanmani, V. Karimli Maharram, S. Kumari and M. Shunmugasundaram, "Hybrid Deep CNN-ELM Based Auto-Grading System for Reducing Educator Workload and Enhancing Student Performance in Higher Education," 2025 *3rd World Conference on Communication & Computing (WCONF)*, Raipur, India, 2025, pp. 1-6, doi: 10.1109/WCONF64849.2025.11233444. IEEE *Xplore*, ISBN:979-8-3315-3045-7, 17th November 2025. **SCOPUS**.
15. P. A. Awate, **Venkata Kiran Kumar Ravi**, S. Bhardwaj, M. M. Hoque, B. Nepal and G. Kalra, "Hybrid CNN-LSTM Model for Accurate Detection and Classification of Brain Tumors Using MRI Scans," 2025 *3rd World Conference on Communication & Computing (WCONF)*, Raipur, India, 2025, pp. 1-6, doi: 10.1109/WCONF64849.2025.11233441. IEEE *Xplore*, ISBN:979-8-3315-3045-7, 17th November 2025. **SCOPUS**
16. K. U. K. Reddy, T. Chandrasekhar, **Venkata Kiran Kumar Ravi**, V. N. Ganesh, D. P and A. K. Lamba, "IoT-Enabled Graph Neural Networks and Deep Learning for Accurate Road Accident Detection and Analysis," 2025 *3rd World Conference on Communication & Computing (WCONF)*, Raipur, India, 2025, pp. 1-6, doi: 10.1109/WCONF64849.2025.11233480. IEEE *Xplore*, ISBN:979-8-3315-3045-7, 17th November 2025. **SCOPUS**