

### **VOLUME-17 ISSUE-3**

### MAY-JUNE-2023



# **ABOUT US**

GMR Institute of Technology was established in the year 1997 by GMR Varalakshmi Foundation - the corporate social responsibility arm of GMR Group - GMRIT offers aspiring engineers high quality technical education. Located in Rajam, Vizianagaram district of Andhra Pradesh, GMRIT provides its learning community state-of-theart facilities, infrastructure and a competent faculty. The Institute encourages collaborative learning between industry and academia as a means of reinforcing its curriculum with practical and real world experiences. It is this emphasis on a well-rounded education that makes GMRIT a preferred institute among engineering colleges in India. It offers nine undergraduate and six Postgraduate programs . All the UG Programs are accredited by NBA under Tier-1(Phase 4) and the institution is accredited by the NAAC with A Grade(3rd Cycle). GMRIT is ranked among top 5 colleges in state of AP and among top 50 in the country level. In placements 95% of the students gets placed every year with a medium salary around 5 LPA and maximum salary of 34 LPA.

# **PROGRAMS OFFERED**

#### **B.TECH PROGRAMS**

- Chemical Engineering
- Civil Engineering
- Computer Science and EngineeringCSE-Artificial Intelligence and
- Data Science
- CSE-Artificial Intelligence and Machine Learning

#### **M.TECH PROGRAMS**

- CSE-Cyber Security
- Environmental Engineering
- Power and Industrial Drives
- Thermal Engineering
- Transportation Engineering
- VLSI and Embedded Systems Design

Engineering
Electrical and Electronics Engineering
Information Technology

Electronics and

Communication

Mechanical Engineering



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**GMR INSTITUTE OF TECHNOLOGY** An Autonomous Institute affiliated to JNTUGV VIZIANAGARAM (DIST),532127 ANDHRA PRADESH

### **Achievements:**

 GMRIT rated as AAAA+ by careers360 and 2<sup>nd</sup> in South Zone, May 2023.



- Ranked 3rd in AP and 25th among the Private Engineering colleges in the country, by Data Quest (DQ - CMR), March 2023.
- Ranked1001+ out of 1591 Universities/Institutions Ranked Worldwide by THE Impact Rankings 2023, May 2023.
- Ranked 5th in AP in Private Engg. Colleges, by One Magazine, May 2023.
- GMRIT first time positioned in the Global Impact Rankings 2023.



GMRIT received Indian Red Cross Society Award 2022-23 from IRCS Srikakulam District branch, A.P, on the occasion of Annual General Body Meeting and World Blood Donor Day celebrations.



NSS Unit of GMRIT secured 2nd place at University Level Competitions in connection with World Environment Day at JNTUGV on 5th June, 2023.

Secured 2nd Place at University Level Competitions in connection with World Environment Day at JNTUGV on 05.06.2023



NSS UNIT, GMR INSTITUTE OF TECHNOLOGY, RAJAM

### **Institute Related:**

GMRIT Celebrated International Yoga Day on 21st June 2023.



GMR INSTITUTE OF TECHNOLOGY, RAJAM

Graduation Day Ceremony for the year 2023 was held on 11th June 2023. Dr. S. Chandrasekhar, Secretary, DST, New Delhi is the Chief Guest and Dr. K. Venkatasubbaiah, VC, JNTU-GV, is the Guest of Honour.



- In memory of GC member Late Dr. G. Padmanabham on World Environment Da
- y conducted seminar on "ETA for Environment & Sustainability" on 5th June 2023.

NSS unit conducted awareness program on Beat Plastic Pollution in connection with "World Environment Day", on 5<sup>th</sup> June 2023.



NSS UNIT, GMR INSTITUTE OF TECHNOLOGY, RAJAM

- Two faculty from CSE attended a training program on "Digital Education for Teaching & Learning for Teachers" organized by Govt. of AP on 26<sup>th</sup> May 2023 at Vijayawada.
- Volunteering campaign undertaken by staff and students of GMRIT on 12-06-23.

#### Volunteering Activity by Staff and Students of GMRIT



GMR INSTITUTE OF TECHNOLOGY, RAJAM - 12.06.2023

#### GMRIT NEWSLETTER | Vol : 17: | Issue-3(May-June 2023)

D.Yogesh Misra, Professor, from ECE department presented his book titled "Programming and Interfacing with Arduino" to Shri Kalraj Mishra, Hon'ble Governor of Rajasthan on 4<sup>th</sup> May, 2023.



Dr. Yogesh Misra, Professor, GMR Institute of Technology, Rajam, Andhra Pradesh presenting his b titled "Programming and Interfacing with Arduino" to Shri Kalraj Mishra, Hon'ble Governor of Rajas on 4th May, 2023 at Rajbhawan, Jaipur

- Dr Y Aditya, from BS&H is awarded with NBHM project Grant worth of Rs. 16,61,900/- . for the project "Anisotropic Holographic Dark Energy Models in Rastall Theories of Gravitation: Theoretical Features and Observational Constraints"
- GMRIT conducted a Five-day Faculty Development Program on "Outcome Based Curriculum Design Delivery & Assessment" from 1<sup>st</sup> to 5<sup>th</sup> May 2023.



GMRIT conducted workshop on "writing Proposals for Research Grants" on 11<sup>th</sup> & 12<sup>th</sup> May 2023, Resource Person Dr. Rajiv K Tayal, Formerly: Advisor - DST(Ministry of Science & Technology).



- CSE department conducted a five day online FDP on "Professional Skills and Intellectual Property Rights" in collaboration with SGT University, Gurugram, Haryana from 15<sup>th</sup> May to 19<sup>th</sup> May 2023.
- Dr. A. Sivasangari, Asso.Professor, ECE is nominated as member for JNTUGV Women Empowerment and Grievances Cell.
- Guest lecture conducted for 3<sup>rd</sup> year students on higher studies by Mr. Akhil. K, Software developer at AMAZON, Seattle, USA on 2<sup>nd</sup> March 2023.
- Dr. I. Sreedhar, Professor, BITS Plani -Hydearabad visited the campus and addressed the 3rd & 4th year students of Mechanical and chemical engg.
- Two faculty from CSE went to Vijayawada for "Digital Education for Teaching & Learning For Teachers" organized by Govt. of AP on 26<sup>th</sup> May 2023.
- ECE department conducted Guest lecture for B.Tech 4th semester students on "Electromagnetic waves for 5G Communications" by Mr. VSR Suresh, Sr. Engineer from Physitech Electronics Pvt Ltd., Hyderabad dated 29<sup>th</sup> May 2023.
- Dr R L Naidu, from BSH dept published a Patent on "A Numerical Method for Providing integral transforms", and "A system for evaluating statistical methods for time series analysis".

- Dr M P Srinivasarao, from BSH dept published a Patent on "Integrated Bio Battery and Hydrogen Generation System for Sustainable Energy Production".
- Dr.V.Jagan naveen from ECE dept published a Patent on "Device to learn braille board by blind people' at official journal of the patent office.
- Dr. K.Jayasri has got best paper award in the ICRISET 2023 organised by Vignan's Institute of Engineering for Women Vishakhapatnam.
- Dr.RamanaPilla from EEE dept published a textbook on Electronic Devices and Circuits (As per JNTUH, Hyderabad syllabus) by Schand Publications, New Delhi, India- June 2023.
- Dr G Chandra Sekhar from EEE dept. A textbook on Network Analysis and Synthesis by Deccan international Academic Publishers, June 2023
- Dr.M.Rambabu from Mech dept published a patent titled "Analysis and Management of Overload Protection of EV batteries for bringing fourth environment friendly" on 16-6-2023.
- Dr.M.Venkatesh from Mech dept published a patent titled "A system for providing security using a plurality of factors for IOT gadgets" on 30-6-2023
- Dr.R.Rama Krishna from Mech dept published a patent titled "A solar energy based step-up DC-DC converter system with isolated installations and method thereof" on 30-6-2023
- Dr K V S Prasad, published a patent on "Artificial intelligence based automatic stock price prediction system to predict high, low and closing price using cloud computing and machine learning algorithms".
- Dr K Ravi babu, published a patent on IOT sensors in environmental monitoring system using artificial intelligence".
- Dr. Ajit Kumar Rout has filed a patent on the title "an image processing system based on IOT for obstacle detection on roads".

### Academic Achievements:

### **Technical Paper Publication in Conferences**

 P. Someswari, et al. presented a paper on "Traffic sign detection using Deep learning techniques," 2023 Third International Conference on Advances in Electrical, Computing, Communication and Sustainable Technologies (ICAECT), Bhilai, India, 2023, pp. 1-6, doi: 10.1109/ICAECT57570.2023.10118165.

- G.Chandra Sekhar, presented a paper on "Hybrid MDA-ANFIS approach based control of grid connected solar system with nine level inverter wind energy conversion", International Review of Applied Sciences and Engineering, ISSN No:2063-4269DOI:10.1556/1848.2022.00474, Vol.14, Issue2 pp:183-200, May 2023.(SCOPUS) Q2,https://akjournals.com/view/journals/1848/14/2 /article-p183.xml
- S. Purbey, et al. presented a paper on "Evolution of Low - Power Blockchain Technology by using Iterative Sharding for IoT Environment," 2022 OPJU International Technology Conference on Emerging Technologies for Sustainable Development (OTCON), Raigarh, Chhattisgarh, India, 2023, pp. 1-6, doi: 10.1109/OTCON56053.2023.10113981.
- > Srihari, P., et al. presented a paper on "Game Automation System Based Computer on Vision"2nd International Conference on Sustainable Computing and Data Communication ICSCDS 2023 Proceedings Systems, \_ 10.1109/ICSCDS56580.2023.10105000.
- A. Vineela, et al. presented a paper on "Social Distance and Face Mask Detection using visionbased sensors and IP cameras," 2023 Third International Conference on Advances in Electrical, Computing, Communication and Sustainable Technologies (ICAECT), Bhilai, India.
- D. S. Krishna, et al. presented a paper on "Feature extraction based ensemble stacking for combating cyber threat in phishing URLs," 2023 Third International Conference on Advances in Electrical, Computing, Communication and Sustainable Technologies (ICAECT), Bhilai, India.
- T. Geetamma et al. presented a paper on "IEEE Sensors Letters-A New Approach of Transparent and Explainable Artificial Intelligence Technique for Patient-Specific ECG Beat Classification", on 01.05.2023, Volume No. 7, Issue No.5, Page No. Article Sequence Number: 5501604, Publisher :

IEEE, ISSN No. 2475-1472, Indexing : IEEE, Impact Factor: 3.04.

- Dr. D. Suresh presented a paper entitled "A web based smart billing system using Node MCU, in International Conference on Recent Innovations in Science, Engineering and Technology (ICRISET)-2023, at VIGNAN'S INSTITUTE OF ENGINEERING FOR WOMEN, Kapujaggarajupeta, Visakhapatnam-530 049, on 20.05.2023.
- Mr. BMS Sreenivasa Rao presented a paper entitled "Alcohol detection and anti-sleep alarm with engine locking system" in International Conference on Recent Innovations in Science, Engineering and Technology (ICRISET)-2023, at VIGNAN'S INSTITUTE OF ENGINEERING FOR WOMEN, Kapujaggarajupeta, Visakhapatnam, on 20.05.2023.
- Dr. A. Sudhakar presented a paper entitled "Design of Slot Antenna with Circular Stub for Dual Band Applications" in ICRICET 2023, at Vignan Institute of Technology, Visakhapatnam on 20.05.2023.
- Dr.V.Jagan Naveen presented a paper entitled "Performance analysis of UFMC-OFDM over fading channel " in ICECSS 2023, at Vasavi college of engineering, Hyderabad on 23<sup>rd</sup> to 24<sup>th</sup> June 2023
- $\geq$ S. Purbey, et al. presented a paper on "Evolution of Low - Power Blockchain Technology by using Iterative Sharding for IoT Environment," 2022 OPJU International Technology Conference on Technologies Emerging for Sustainable Development (OTCON), Raigarh, Chhattisgarh, India. 2023. pp. 1-6. doi: 10.1109/OTCON56053.2023.10113981.
- S. Sahu, et al. presented a paper on "Empirical Study on Real Time People Counting using Deep Learning," 2023 10th International Conference on Computing for Sustainable Global Development (INDIACom), New Delhi, India, 2023, pp. 1-4.
- S. K. Dasari, et al. presented a paper on "Enhancing Environmental Sounds Classification through Deep Learning Techniques," 2023 International Conference on Sustainable

Computing and Data Communication Systems (ICSCDS), Erode, India, 2023, pp. 265-270, doi: 10.1109/ICSCDS56580.2023.10104722.

- L. R. Kalabarige, et al. presented a paper on "Facial Landmark-based Cursor Control and Speechto-Text System for Paralyzed Individuals," 2023 International Conference on Sustainable Computing and Data Communication Systems (ICSCDS), Erode, India, 2023, pp. 849-856, doi: 10.1109/ICSCDS56580.2023.10104936.
- Cristin, R, et al. presented a paper on "Design and Development of a Digital Preservation Voice Enabled Application for Cultural Heritage towards Fishing in Vernacular Language" Pervasive Computing and Social Networking. Lecture Notes in Networks and Systems, vol 475. Springer, Singapore, 2023. <u>https://doi.org/10.1007/978-981-19-2840-6\_23</u>
- Sahu, S., et al. presented a paper on "Analysis of Road Accidents Prediction and Interpretation Using KNN Classification Model", Emerging Technologies in Data Mining and Information Security. Lecture Notes in Networks and Systems, vol 490. Springer, Singapore,2023. https://doi.org/10.1007/978-981-19-4052-1\_18
- Srinadh, V et al. presented a paper on "Dual Image-Based High Quality Digital Image Watermarking". In: Dash, R.N., Rathore, A.K., Khadkikar, V., Patel, R., Debnath, M. (eds) Smart Technologies for Power and Green Energy. Lecture Notes in Networks and Systems, vol 443. Springer, Singapore,2023. https://doi.org/10.1007/978-981-19-2764-5\_14
- RK Patnaik, et al. presented a paper on "ASCAsqueeze net: Aquila sine cosine algorithm enabled hybrid deep learning networks for digital image forgery detection", Computers and Security, Vol.128,2023 [Indexed in: SCIE, IF: 5.101, Q1 Link:https://www.sciencedirect.com/science/article /pii/S0167404823000652]
- S. Sahu, et al. presented a paper on "A Study on Weather based Crop Prediction System using Big Data Analytics and Machine Learning," 2023 5th

International Conference on Smart Systems andInventive Technology (ICSSIT), Tirunelveli, India,2023, pp. 794-800, doi:10.1109/ICSSIT55814.2023.10060865.

## **Journal Publications:**

- Lakshmanan R., et al. published a paper on "ASCA-squeeze net: Aquila sine cosine algorithm enabled hybrid deep learning networks for digital image forgery detection", Computers and Security, Vol.128,2023 [Indexed in: SCIE, IF: 5.101, Q1 Link : https://www.sciencedirect.com/science/article/pii/ S0167404823000652].
- Perla S., et al. published a paper on "A hybrid neural network and optimization algorithm for forecasting and trend detection of Forex market indices", Decision Analytics Journal, Volume 6, March 2023, 100193 [Indexed in: SCOPUS, Q2, Link:<u>https://www.sciencedirect.com/science/articl</u> e/pii/S2772662223000334]
- S. Akila Agnes, et al. published a paper on "Abusive Comment Detection in Social Media with Bidirectional LSTM Model, 2023 5th International Conference on Smart Systems and Inventive Technology (ICSSIT), Tirunelveli, India, IEEE Xplore, 2023, pp. 1368-1373, doi: 10.1109/ICSSIT55814.2023.10060887. (Scopus Indexed).
- A. Arun Solomon et al. published a paper on "Land-cover classification with hyper spectral remote sensing image using CNN and spectral band selection, Remote Sensing Applications: Society and Environment, Remote Sensing Applications: Society and Environment, Volume 31, August 2023, 100986, doi: https://doi.org/10.1016/j.rsase.2023.100986. (Elsevier, ESCI, SJR: Q1, Scopus Indexed).
- Ganesh Prabhu Ganapathy, et al. published a paper on "Effects of fly ash and silica fume on alkalinity, strength and planting characteristics of vegetation porous concrete",2023, Journal of

Materials Research and Technology, Vol.24, pp. 5347-5360, (Indexed in SCI and Scopus, Q1) .(Impact Factor: 6.26) (ISSN: 2238-7854 )( https://doi.org/10.1016/j.jmrt.2023.04.029 )

- Ganesh Prabhu Ganapathy, et al. published a paper on "Engineering properties of SBS and crumb-rubber modified bitumen – a design of experiment approach",2023, Journal of Engineering, Design and Technology, (Indexed in ESCI, Q2) .(Impact Factor: 0.371) (ISSN: 1726-0531)( https://doi.org/10.1108/JEDT-01-2022-0037)
- B.P.R.V.S. Priyatham, et al. published a paper on "Review on performance and sustainability of foam concrete",2023, (Published online)(Scopus,IF:1.46) (https://doi.org/10.1016/j.matpr.2023.04.080)
- B.A.V. Ram Kumar, et al. published a paper on "Performance evaluation of red mud as a construction material – A review",2023, (Published online)(Scopus,IF:1.46) (https://doi.org/10.1016/j.matpr.2023.04.043)
- Sridhar Jayaprakash, et al. published a paper on" Influence of Prosopis juliflora ash in mechanical properties of concrete", Materials Today Proceedings,vol.80,pp.11681172(Scopus,IF:1.46) (https://doi.org/10.1016/j.matpr.2022.12.127)
- Viswanadham, B., Tejeswararao, D., Putrakumar, B.,"N-BOC protection of amines over mesoporous SBA-15 catalyst at room temperature", Journal of Porous Materials Vol. 30, Page No. 713-721 (2023), (Scopus Indexed) https://doi.org/10.1007/s10934-022-01374-3
- D. Datta, et al. published a paper on "Isolation of Nanocellulosic Fibrils from Allium cepa L. Skin Biowaste Food Residues: Extraction and Characterization", Journal of The Institution of Engineers (India): Series E, 104 (1), 2023, 141-151 (Scopus Indexed) https://doi.org/10.1007/s40034-022-00259-z
- Palla R., et al. published a paper on "Miniaturized Wearable Antenna with Reduced Specific Absorption Rate and Enhanced Bandwidth", SN Computer Science, vol. 4, no. 4, May, 2023 (Indexed by Scopus, IF : 1.07, Q2, ISSN: 2661-

#### 8907,

https://link.springer.com/article/10.1007/s42979-023-01679-3)

- S. Krishnan, et al. published a paper on "Identification of Dry Bean Varieties Based on Multiple Attributes Using CatBoost Machine Learning Algorithm", Scientific Programming, vol. 2023, Article ID 2556066, 21 pages, 2023. https://doi.org/10.1155/2023/2556066 (Scopus Indexed, Q3).
- Srividya, K., et al. published a paper on "Histo-Quartic Graph and Stack Entropy-Based Deep Neural Network Method for Brain and Tumor Segmentation", Neural Processing Letters May 2023. [Indexed by SCI and Scopus, Q2, IF 2.565 Link: https://doi.org/10.1007/s11063-023-11276-3]
- Satish Muppidi, et al. published a paper on "Autism spectrum disorder classification using Adam war strategy optimization enabled deep belief network", Biomedical Signal Processing and Control, Volume 86, Part A, May2023, [Indexed by SCI and Scopus, Q1, IF 5.076, ISSN 1746-8094,Link:

https://www.sciencedirect.com/science/article/pii/ S1746809423003476].

- ▶ Vavilada Satya Swamy Venkatesh, et al. published a paper on "Influence of microwave sintering temperatures on mechanical and microstructural Behavior of Al/SiC/snail shell hybrid composite synthesized through powder metallurgy technique", Proceedings of the institution of mechanical engineers part c-journal of mechanical engineering science, pp.1-12, 0954-4062, **ISSN:** SCIE, Q2, https://doi.org/10.1177/09544062231169120, https://journals.sagepub.com/doi/abs/10.1177/095 44062231169120.
- $\geq$ T. R. Vijaybabu, et al. published a paper on "High Thermal Conductivity Polymer Composites Fabrication through Conventional and 3D Printing Processes: State-of-the-Art and Future Trends", Macromolecular Materials and Engineering, ISSN: 1439-2054, SCIE. 01. https://doi.org/10.1002/mame.202300001, https://onlinelibrary.wiley.com/doi/full/10.1002/ mame.202300001.
- T. Daniya, et al. published a paper on "Rider Water Wave-enabled deep learning for disease

detection in rice plant, Advances in Engineering Software, Volume 182, 2023, 103472, ISSN 0965-9978,

https://doi.org/10.1016/j.advengsoft.2023.103472.

- Pendela Kanchanamala, et al. published a paper on "Optimization-enabled hybrid deep learning for brain tumor detection and classification from MRI, Biomedical Signal Processing and Control, Volume 84, 2023, 104955, ISSN 1746-8094, https://doi.org/10.1016/j.bspc.2023.104955.
- PendelaKanchanamala, et al. published a paper on "AACO: Aquila Anti-Coronavirus Optimization-Based Deep LSTM Network for Road Accident and Severity Detection International Journal of Pattern Recognition and Artificial IntelligenceVol. 37, No. 05, 2252030 (2023) https://doi.org/10.1142/S0218001422520309.
- Prabhakar, T., et al. published a paper on "A., "Deep Learning Network for Vision-Based UAV Recognition", Proceedings of the International Conference on Intelligent and Innovative Technologies in Computing, Electrical and Electronics, ICIITCEE 2023, pp. 1162-1167. (Indexed by Scopus), https://ieeexplore.ieee.org/document/10091022
- Suresh G., et al. published a paper on "Multiple Feature-Based Tomato Plant Leaf Disease Classification Using SVM Classifier", Lecture Notes in Electrical Engineering, vol. 946, pp. 443-455.(Indexed by Scopus), https://link.springer.com/chapter/10.1007/978-981-19-5868-7\_33
- Dr. D. Suresh published a patent on "IOT based emergency handling communication for traffic control in smart cities" Patent No. 202341027848, Date of Publication 05.05.2023, and Agency: Official journal of the patent office.
- Dr.V.Jagan naveen published a patent on "Chronic care model based on IOT to monitor and care for patients with type-2 diabetes Patent No. 202341025396, Date of Publication 05.05.2023, and Agency: official journal of the patent office.
- Mr. B.M.S.Sreenivasa Rao published a patent on "IOT based secure and emergency communication between electric vehicle and rescue team", Patent No. 202321027527, Date of Publication 12.05.2023, and Agency: arinnapatent1@gmail.com.

- Dr. D Srinivasa Rao published a patent on "Machine learning and wireless sensor networks based approaches for analysis environment pollution on smart cities", Patent No. 202311016337, Date of Publication 12.05.2023, and Agency: arinnapatent1@gmail.com.
- > Vavilada Satya Swamy Venkatesh, et al. published a paper on "Influence of microwave sintering temperatures on mechanical and microstructural Behavior of Al/SiC/snail shell hybrid composite synthesized through powder metallurgy technique", Proceedings of the institution of mechanical engineers part c-journal of mechanical engineering science, pp.1-12, 0954-4062. ISSN: SCIE, O2. https://doi.org/10.1177/09544062231169120, https://journals.sagepub.com/doi/abs/10.1177/095 44062231169120
- T. R. Vijaybabu, et al. published a paper on "High Thermal Conductivity Polymer Composites Fabrication through Conventional and 3D Printing Processes: State-of-the-Art and Future Trends", Macromolecular Materials and Engineering, ISSN: 1439-2054, SCIE, Q1, https://doi.org/10.1002/mame.202300001, https://onlinelibrary.wiley.com/doi/full/10.1002/ mame.202300001
- S. Krishnan, et al. published a paper on "Identification of Dry Bean Varieties Based on Multiple Attributes Using CatBoost Machine Learning Algorithm", Scientific Programming, vol. 2023, Article ID 2556066, 21 pages, 2023. https://doi.org/10.1155/2023/2556066. (Scopus Indexed, Q3)
- G Thirumala Rao, et al. published a paper on "Recent Progress in the Use of SnO2 Quantum Dots: From Synthesis to Photocatalytic Applications", Catalysts 2023, 13, 765. https://doi.org/10.3390/catal13040765, https://www.mdpi.com/journal/catalysts

https://www.mdpi.com/journal/catalysts, April-May 2023.

G Thirumala Rao, et al. published a paper on "Review of Recent Developments in the Fabrication of ZnO/CdS Heterostructure Photocatalysts for Degradation of Organic Pollutants and Hydrogen Production" April-May 2023, Molecules, 2023, 28, 4277. https://doi.org/ 10.3390/molecules28114277.

- G Thirumala Rao, et al. published a paper on "Novel In Situ Fabrication of Fe-Doped Zinc Oxide/Tin Sulfide Heterostructures for Visible-Light-Driven Photocatalytic Degradation of Methylene Blue, Hindawi Journal of Chemistry, Volume 2023, Article ID 1407395, 13 pages, https://doi.org/10.1155/2023/1407395, Published 23 May 2023.
- M Eswara Rao, et al. published a paper on Relations Formed on Campus as Exposed in the Select Indian Campus Novels, ISSN NO: 1006-8341, Volume 23, Issue 5, 2023.
- B.P. Das, et al. published a paper on "Isolation of Nanocellulosic Fibrils from Allium cepa L. Skin Biowaste Food Residues: Extraction and Characterization", Journal of The Institution of Engineers (India): Series E, 104 (1), 2023, 141-151 (Scopus Indexed) https://doi.org/10.1007/s40034-022-00259-z
- N. Sinivasa Rao et al. published a paper on "numerical results of bingham non newtonian method fluid flow in the entrance part of concentric annuli along with outer wall rotation" European Chemical Bulletin, vol.12, Special Issue 4, Page:1080-1100 April 2023, ISSN: 2063-5346, Scopus
- > Y.Aditya, et al. published a paper on "Kaluzaholographic Klein FRW Tsallis dark energy model scalar-tensor theory in of gravitation, Bulgarian Astronomical Journal, Bulgarian Academy of Sciences, Vol. 39, (2023) (ISSN (Online): 1314-5592). ESCI & SCOPUS Journal. Impact Factor: 0.14
- Hanumanthu Joga Rao, et al. published a paper on "Comparative adsorptive removal of Reactive Red 120 using RSM and ANFIS models in batch and packed bed column", Biomass Conversion and Biorefinery,ISSN: 2190-6823 13, 5843–5859 (2023). Q3, SCIE https://doi.org/10.1007/s13399-021-01444-7,
- Gokulan Ravindiran, et al. published a paper on "Removal of azo dyes from synthetic wastewater using biochar derived from sewage sludge to prevent groundwater contamination", Urban Climate,2023,101502,IF:6.63, SCI,IF:,Q1)(ISSN 2212-0955

- Mahendran S., et al. published a paper on " MTBE adsorption on surface modified adsorbent kaolin-KOH – A study on kinetic equilibrium and surface morphology",2023, Global NEST Journal, 25(4), 86-94 (Indexed in SCI and Scopus, Q3) .(Impact Factor: 1.04) (ISSN: 1108-4006, 1790-7632)( https://doi.org/10.30955/gnj.003058 )
- Rajeshkumar V., Chandrakanthamma L., Senthil Kumar M., and Gokulan R., "Enhancement of adsorption efficiency by surface modified Avocado seed for xylene removal", Global NEST Journal, 25(3), 130-138.( (Indexed in SCI and Scopus, Q3) .(Impact Factor: 1.04) (ISSN: 1108-4006, 1790-7632)
- Kanta Naga Rajesh, et al. published a paper on "A review on alternatives to sand replacement and its effect on concrete properties" Materials Today: Proceedings, 2023,(Scopus)(ISSN 2214-7853)
- S. Mahendran, et al. published a paper on "Production of Ulva prolifera derived biochar and evaluation of adsorptive removal of Reactive Red 120: batch, isotherm, kinetic, thermodynamic and regeneration studies", Biomass Conversion and Biorefinery, April 2023. (Indexed in SCIE, IF: 4.88, Q2) (ISSN No: 190-6815) (https://doi.org/10.1007/s13399-021-01483-0)
- BPRVS Priyatham, et al. published a paper on "Seismic analysis and design of steel beamcolumn connections in Indian standard code framework", Materials Today: Proceedings, 2023, https://doi.org/10.1016/j.matpr.2023.03.365 (Scopus Indexed)
- Saravanan Praveen, et al. published a paper on "Evaluation of the adsorptive removal of cationic dyes by greening biochar derived from agricultural bio-waste of rice husk", Biomass Conversion and Biorefinery, (ISSN No: 190-6815 (SCI,Q2) (Impact Factor: 2.68) (https://doi.org/10.1007/s13399-021-01415-y)
- A.Arun Solomon, et al. published a paper on Turning Low-Density Polyethylene plastic waste into plastics bricks for sustainable development, Materials Today: Proceedings, 2023,https://doi.org/10.1016/j.matpr.2023.03.482( Scopus Indexed).
- A.Arun Solomon, et al. published a paper on Influence of Supplementary Cementitious

Materials on Stress-Strain behaviour and Toughness Characteristics of Concrete Subjected to Higher Temperature Exposure, Materials Today: Proceedings, 2023, https://doi.org/10.1016/j.matpr.2023.03.13 9. (Scopus Indexed)

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- Someswari Perla, et al. published a paper on "A hybrid neural network and optimization algorithm for forecasting and trend detection of Forex market indices", Decision Analytics Journal, Volume 6, 2023,100193, ISSN 2772-6622, ,[Indexed by SCOPUS, https://www.sciencedirect.com/science/article/pii/ S2772662223000334]
- Purbey, S., et al. published a paper on "Design of a blockchain-based secure and efficient ontology generation model for multiple data genres using augmented stratification in the healthcare industry", Signal Video and Image Processing(2023). ,[Indexed by SCIE, IF:1.583

Q2, Link: <u>https://doi.org/10.1007/s11760-023-02576-1</u>]

- Majji, R., G., O.P.P., Rajeswari, R.Cristin, 'Smart IoT in Breast Cancer Detection Using Optimal Deep Learning" Journal of Digit Imaging (2023).[Indexed by SCIE, IF:4.903,Q1, Link: <u>https://doi.org/10.1007/s10278-023-00834-</u>
- Kanchanamala, P., Lakshmanan, R., Muthu Kumar, B., Maram, B.AACO: "Aquila Anti-Coronavirus Optimization-Based Deep LSTM Network for Road Accident and Severity Detection " International Journal of Pattern Recognition and Artificial Intelligence Volume 37, Issue 5, 1 April 2023, Article number 2252030
- Purbey, S., et al. published a paper on "Design of a blockchain-based secure and efficient ontology generation model for multiple data genres using augmented stratification in the healthcare industry", Signal Video and Image Processing(2023). ,[Indexed by SCIE, IF:1.583 Q2, Link: <u>https://doi.org/10.1007/s11760-023-02576-1</u>]
- V.S.S. Venkatesh, et al. published a paper on "Processing and evaluation of nano SiC reinforced aluminium composite synthesized through ultrasonically assisted stir casting process", Journal of Materials Research and Technology, ISSN: 2238-7854, SCIE, Q1, https://doi.org/10.1016/j.jmrt.2023.05.030, https://www.sciencedirect.com/science/article/pii/ S223878542300995X
- V. S. S. Venkatesh, et al. published a paper on "Effect of SiC and TiC Reinforcements on the Mechanical Properties of ZrB2-SiC- TiC Hybrid Composite Fabricated Through Spark Plasma Sintering", Silicon, Q1, pp. 1-13, ISSN: 1876-9918, Dec. 2022, (SCIE ans Scopus) https://doi.org/10.1007/s12633-022-02263-9
- Prashant Kumar Choudhary, et al. published a paper on "Optimal design of composite cylindrical shells subject to compression buckling strength", Multidiscipline Modeling in Materials

and Structures, ISSN: 1573-6105, 5 June 2023, SCIE and scopus, Q3, https://doi.org/10.1108/MMMS-11-2022-0269, https://www.emerald.com/insight/content/doi/10. 1108/MMMS-11-2022-0269/full/html

Venkatesh, V.S.S., Rao, et al. published a paper on "Effect of Spark Plasma Sintering Temperature on Phase Evaluation and Mechanical Behaviour of cu- 4 Wt% SiC Composite.", Silicon (May 2023), ISSN: 1876-9918, SCIE, Q2, https://doi.org/10.1007/s12633-023-02530-3, https://link.springer.com/article/10.1007/s12633-023-02530-3

#### Workshops/Conference Attended:

- Dr. B. Anil Babu attended a online FDP course titled "international workshop on microwave components", VIT AP, Amaravati, during 17.05.2023 to 23.05.2023 (5 days).
- Dr M P Srinivasa Rao attended One week FDP on "Computational modelling of materials" conducted by Department of Physics, Madanapalle Institute of Technology & Science, Madanapalle -517325, A.P., from 8<sup>th</sup> May 2023 to 12<sup>th</sup> May 2023.
- Dr. G. Nooka Raju attended online FDP course titled "Introduction to the Internet of Things and Embedded Systems" University of California, date of Completion 09.06.2023 (17 Weeks).
- Dr. G. Nooka Raju attended online FDP course titled "Programming for Everybody (Getting Started with Python)" University of Michigan, date of completion 07.06.2023 (31 Weeks).
- Sri. P. Kalyan Chakravarthi attended an online FDP Course titled "Software Defined Networking" the University of Chicago, date of Completion 30.05.2023 (8 Weeks).
- Dr. Bappa Mondal attend FDP on "Recent Advnces and challenges in Automotive Sector" organized by Department of Mechanical Engineering, Dream Institute of Technology, Kolkataon 25<sup>th</sup> May 2023 to 27<sup>th</sup> May 2023.
- Dr. Bappa Mondal attend FDP on "Operation Research and Optimization Techniques" organized by Department of Mechanical Engineering, Vellore Institute of Technology, Chennai 21<sup>st</sup> June 2023 to 25<sup>th</sup> June 2023.

- Dr. Pankaj Kumar attend FDP on "Operation Research and Optimization Techniques" organized by Department of Mechanical Engineering, Vellore Institute of Technology, Chennai 21<sup>st</sup> June 2023 to 25<sup>th</sup> June 2023.
- Dr KVS Prasad attended A Five Day National Level Virtual FDP on "Skills Eeengineering in Business Management" organized by Department of MBA, Andhra Loyola Institute of Engineering and Technology, Vijayawada from 23rd to 27th May 2023.

## **Co-Curricular Activities:**

Chaitanya from first year bagged bronze medal in National sub junior (under18) power lifting championship, held at Tamil nadu.



K. Sireesha, G. Vignesh, and U. Yaswanth  $\geq$ Kumar (III Year EEE) have won the Consolation Prize in the Technical Exhibition conducted Technology during the National Day Celebrations – 2023 (9th to 11th May, 2023) at Naval Science Technological the and Laboratory, Vizag.



- ➢ 41 students from II Year ECE attended NSTL (Vizag) Open House Exhibition on 9<sup>th</sup> May 2023.
- CSI Student Chapter has conducted "Speed Code Event" on 11-05-2023 at CA Lab.



- ISTE conducted events on "Speakathon"; "Squad Spirit"; "Eqiup-De(designing & labeling)", "Tech Talks"; "Hardware project design exhibition" & "Mind Spark".
- ISTE conducted events on "Summer Code Rush" & "CODE CLASH"; CSI conducted an event on "Speed Code"; ACM conducted an event on "Code Tale".
- Coding Club conducted an event on "Array Challenge" & "Front End Challenge-2".
- V.Vishnu vardhan (3rd IT) has emerged victorious by winning the "Business Capital (Tenders)" event at NIPUNA 2023 by SRKR Engineering College, Bhimavaram. His exceptional skills and knowledge in the field of business have helped him secure this win. He is expected to continue this success in his future endeavors, and his achievements will undoubtedly inspire others.
- Chaitanya from first year bagged bronze medal in National sub junior (under18) power lifting championship, held at Tamil nadu.
- Ist year student Mr. Chaitanya Kumar secured Bronze medal in National Sub-junior equipped powerlifting championship at Kalivanar Arangam Courtallam, Tenkasi District, Tamilnadu

- Medals secured in AP 10<sup>th</sup> State Subjunior And Junior Classic (men &Women) Powerlifting at Tenali, Guntur Dist: 2 Gold medals, 2 Silver medals & 3 Bronze medals in Sub-Juniors Men Team; 1 Silver medal in Sub-Juniors Women Team; 1 Gold Medal & 3 Silver medals in Juniors Men Team; 4 Gold Medals & 1 Bronze Medal in Juniors Women Team
- Ms. T. Avyakta secured Bronze medal in Junior Nationals Ball Badminton Championship at Murtizpur, Akloa, and Maharashtra. & secured Bronze medal in Inter District (CM Cup) Ball Badminton Championship from 1<sup>st</sup> to 5<sup>th</sup> May 2023 at Tirupathi.
- Math Club conducted an event on "Puzzle Perfection: Put Your Problem-Solving Skills to the Test".
- Quiz Club conducted "Science Quiz".
- NSS conducted "World Red Cross Day", "Awareness Campaign in connection with World No-Tobacco Day" & "Organized Pledge on avoid single use plastic in the campus".
- P SREEVATSAV (3rd IT) has been declared the winner of the "Uniqus" event at NIPUNA 2023 by SRKR Engineering College, Bhimavaram. His hard work, perseverance, and dedication have finally paid off, and he has emerged victorious. He is advised to maintain his focus and dedication to achieving greater success in the future.
- P SREEVATSAV (3rd IT) has won the "Wordsphere" event at NIPUNA 2023 by SRKR Engineering College, Bhimavaram, showcasing his remarkable creativity and excellent communication skills. His win is a reflection of his hard work, perseverance, and exceptional abilities. He is wished all the best for his future pursuits, and his accomplishments are sure to inspire others.
- $\geq$ VV RAMARAJU (3rd IT) & KVL PRASANNA (2nd IT) have secured the runners-up position in the "Business Capital (Stocks)" event at NIPUNA 2023 by SRKR Engineering College, Bhimavaram. Their hard work, determination, and teamwork have been rewarded with this achievement. They are encouraged to continue their pursuit of success and make more significant contributions in the future.
- Prakash (2nd civ), Ch Surya (2nd it), Sowmya (2nd civ), KVL prasanna (2nd IT) have been

declared runners-up in the "Presencia - Civil" event at NIPUNA 2023 by SRKR Engineering College, Bhimavaram. Their dedication, commitment, and teamwork have earned them this accolade, and they are congratulated on their success.

- CSI Student Chapter has conducted "Speed Code Event" on 11-05-2023 at CA Lab from 2.30 PM to 4.30 PM with 67 Students.
- ISTE Student Chapter conducted "Summer Code Rush" on 13-05-2023 to 27-05-2023 with 152 participants.
- ACM Student Chapter conducted "Code Tale" on 04-05-2023 at CA Labs from with 78 participants.
- Ist year student Mr. Chaitanya Kumar secured Bronze medal in National Sub-junior equipped powerlifting championship at Kalivanar Arangam Courtallam, Tenkasi District, Tamilnadu
- Medals secured in AP 10<sup>th</sup> State Subjunior And Junior Classic (men &Women) Powerlifting at Tenali, Guntur Dist: 2 Gold medals, 2 Silver medals & 3 Bronze medals in Sub-Juniors Men Team; 1 Silver medal in Sub-Juniors Women Team; 1 Gold Medal & 3 Silver medals in Juniors Men Team; 4 Gold Medals & 1 Bronze Medal in Juniors Women Team
- Ms. T. Avyakta secured Bronze medal in Junior Nationals Ball Badminton Championship at Murtizpur, Akloa, and Maharashtra. & secured Bronze medal in Inter District (CM Cup) Ball Badminton Championship from 1<sup>st</sup> to 5<sup>th</sup> May 2023 at Tirupathi.
- Students U.Yaswanth Kumar (20341A02B4), G.Vignesh(21345A0210),KSireesha(21345A0211)
   )got Consolation Prize on Technical Exhibition conducted at NSTL,VSKP. Title of the Project: " Voice Control Wheel Chair" Date 08.05.2023
- Gollu Ajay, Gantla Kousalya, Allu Lokesh, Damirekula Deepak Teja, Daneti Sravanasandhya, T.Daniya, "Web DApp for Organ Donation Management System", International Conference on Applied Artificial Intelligence and Computing ICAAIC 2023.
- M.J.V.S.A.Satya Dev, T.Vivek Ratna, P.Sai Tharun, M. Sri Harsha, T. Daniya, "Plant Disease Detection and Crop Recommendation Using Deep Learning", International Conference on Applied

Artificial Intelligence and Computing ICAAIC 2023.

- B.Sudhir, D.Charan Teja, K.Sai, P.Sridhar and T.Daniya, "Plant disease severity detection and fertilizer recommendation using deep learning techniques", International Conference on Applied Artificial Intelligence and Computing ICAAIC 2023.
- CSI Student Chapter has conducted event Pair Programming Event on 08-06-2023 at CSE Project Lab from 2.30 PM to 4.30 PM with 30 Students.
- Total 45 students (4<sup>th</sup> Semester Civil Engg.) attended a virtual Guest Lecture on "Digital transformation: New-age tech skills" by Mr. T. Vamsi Naga Raju, Asst. Professor, SRKR, Engg. College, Bhimavaram, Andhra Pradesh on 13-05-23, 2:00-3:20PM, conducted by Dept. of Civil Engg., GMR Institute of Technology.

# **Training and Placement:**

- As on 30.06.2023, total 90 companies visited for 2022-23 outgoing batch: 609 students were placed with 806 offers with a maximum CTC of Rs. 11.00 Lakhs and an average CTC of Rs. 4.59 Lakhs
- Branch wise and Company wise Placements 2022-23 Batch for GMRIT as on 30.06.2023

Branch	Total Eligible	Offers	Placements
CE	104	73	65
CHE	27	24	23
CSE	192	237	144
ECE	186	171	127
EEE	105	85	75
IT	126	104	79
ME	168	112	95
M.Tech		1	1
Total	908	807	609

- Training program under CRT (Aptitude & Coding) by FACE Prep Team was conducted from 1<sup>st</sup> June to 3<sup>rd</sup> June,2023
- Guest session on The Future of Renewable Energy conducted by Mr. Harshitha S Kumar, EMEA Region Segment Head, Digital Solutions BU, PT&D IC, L&T Construction
- CRT (Aptitude & Coding) class conducted FACE prep team from 1<sup>st</sup> May to June 30<sup>th</sup>, 2023