

VALLURUPALLI NAGESWARA RAO VIGNANA JYOTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

An Autonomous, ISO 9001:2015 & QS I-Gauge Diamond Rated Institute, Accredited by NAAC with 'A++' Grade NBA Accreditation for B.Tech. CE,EEE,ME,ECE,CSE,EIE,IT,AME, M.Tech. STRE, PE, AMS, SWE Programmes Approved by AICTE, New Delhi, Affiliated to JNTUH, NIRF (2022) 113th Rank in Engineering Category College with Potential for Excellence by UGC,JNTUH-Recognized Research Centres:CE,EEE,ME,ECE,CSE Vignana Jyothi Nagar, Pragathi Nagar, Nizampet (S.O.), Hyderabad – 500 090, TS, India. Telephone No: 040-2304 2758/59/60, Fax: 040-23042761 E-mail: postbox@vnrvjiet.ac.in, Website: www.vnrvjiet.ac.in

DEPARTMENT OF HUMANITIES & SCIENCES Summary of Patents & Copyrights of the faculty

| SI. No. | Academic Year | No. of Patent publications | No. of Copyrights |
|---------|------------------|----------------------------------|----------------------|
| 1 | 2023-24 | 6 | 3 |
| 2 | 2022-23 | 8 | - |
| 3 | 2021-22 | 5 | - |
| 4 | 2020-21 | 1 | - |
| 5 | 2019-20 | 0 | 1 |
| | Total | 20 | 4 |



VALLURUPALLI NAGESWARA RAO VIGNANA JYOTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

An Autonomous, ISO 9001:2015 & QS I-Gauge Diamond Rated Institute, Accredited by NAAC with 'A++' Grade NBA Accreditation for B.Tech. CE,EEE,ME,ECE,CSE,EIE,IT,AME, M.Tech. STRE, PE, AMS, SWE Programmes Approved by AICTE, New Delhi, Affiliated to JNTUH, NIRF (2022) 113th Rank in Engineering Category College with Potential for Excellence by UGC,JNTUH-Recognized Research Centres:CE,EEE,ME,ECE,CSE Vignana Jyothi Nagar, Pragathi Nagar, Nizampet (S.O.), Hyderabad – 500 090, TS, India. Telephone No: 040-2304 2758/59/60, Fax: 040-23042761 E-mail: postbox@vnrvjiet.ac.in, Website: www.vnrvjiet.ac.in

DEPARTMENT OF HUMANITIES & SCIENCES PATENTS & COPYRIGHTS OF THE FACULTY

| Sl. No. | Date of publication | Patent/ Copyright | Name of the faculty | Title | India/ International | Status & Application Number |
|------------|---------------------|----------------------|---|--|-------------------------|---|
| 1 | 22-03-2024 | Patent | Dr. E. Ramesh | Transformative dynamics: Unveiling a comprehensive framework for customer experience, relationship management, and value co-creation | India | 202441016959 A |
| 2 | 20-01-2024 | Copyright | Dr. Ujjwala Kakarla | A Darkened Diary | India | Published; ISBN: 978-93- 609-4246-5 |
| 3 | 13-12-2023 | Copyright | Dr. K. Neelaveni | Dialogue-based dataset for AI & ML virtual reality based chatbot for engaging learners in interactions for English language learning. | India | Published: L- 138255/2023 |
| 4 | 07-12-2023 | Copyright | Dr. Ujjwala Kakarla, Leena Pundir Agarwal, Tanu Gupta | Functional English for Communication | India | Published; ISBN:978-81-269- 4002-8 |
| 5 | 24-11-2023 | Patent | Dr. K. Ramaiah | Unlocking the secrets of micro plastic emissions from sewage plants with methodological analysis | India | Published; 202341067363 A |

July 2023 – Till the Date

| 6 | 06-10-2023 | Patent | Dr. K. Ramaiah | A technique for edge identification in individual Silicon crystal semiconductors using adaptive inpainting | India | Published; 202341061391 A |
|---|------------|--------|-----------------------------------|---|-------|------------------------------|
| 7 | 01-09-2023 | Patent | Mr. D. Swarnakar | Implementation and analysis of fractional derivative based weighted skip connections for satellite image road segmentation | India | Published 202341035282 A |
| 8 | 25-08-2023 | Patent | Dr. Kotha Anil Kumar | Artificial Intelligence (AI) based public policy model for smart governance | India | Published; 202311050950 A |
| 9 | 28-07-2023 | Patent | Dr. Ch. V. L. L. Kusuma Kumari | A systematic statistical measurement of the effect of stocktaking on business performance in small and medium enterprises. | India | Published; 202311033210 A |

<u>July 2022 – June 2023</u>

| 1 | 09-06-2023 | Patent | Dr. Ch. V. L. L. Kusuma Kumari | Data science and machine learning based working employees stress forecast analytics by human resources | India | Published; 202311031393 A |
|---|------------|--------|---|--|-------|-------------------------------|
| 2 | 19-05-2023 | Patent | Dr. Ch. V. L. L. Kusuma Kumari | Design of a system to study the psychological signals of humans and predict the life stress using machine learning pipelines | India | Published; .202311026054 A |
| 3 | 17-03-2023 | Patent | Dr. P. Aparna, Dr. N. Pothanna, Dr. R. Srilatha, Mr. M. Raja Shekhar, Dr. M. Pavan Kumar Reddy | AI and Machine Learning techniques based on the role of linear algebra and its applications in monitoring of health care. | India | Published; 202341014207 A |

| 4 | 17-02-2023 | Patent | Dr. B. Srinivas | Method and system for providing machine learning (ML) models for rendering and executing physics simulations | India | Published; 202341004835 A |
|---|------------|--------|---|--|-------|------------------------------|
| 5 | 20-01-2023 | Patent | Dr. M. Sumithra | Ferroelectric bridge junction device with computational modelling and synaptic features | India | Published; 202341002313 A |
| 6 | 13-01-2023 | Patent | Dr. Ch Shashi Kumar | Heat transfer analysis on electro-osmotic MHD peristaltic pumping of Jeffrey fluid in asymmetric rotating microchannel | India | Published; 202241076199 A |
| 7 | 29-07-2022 | Patent | Dr. Ch. Shashi Kumar, Dr. G. Jithender Reddy | Fluid dynamic melted Aluminium refinement in a designed furnace through a mathematical model | India | Published; 202241041907 A |
| 8 | 22-07-2022 | Patent | Dr. N. Pothanna | Efficient image smoothing and parallel structure design using five directional partial derivatives | India | Published; 202241037470 A |

<u>July 2021 – June 2022</u>

| 1 | 10-06-2022 | Patent | Dr. R. Srilatha | An approach for solving differential equations and variational problems based on python Elvet NN system | India | Published; 202214031513A |
|---|------------|--------|----------------------------------|---|-------|------------------------------|
| 2 | 25-05-2022 | Patent | Dr. K. S. Rudramamba | A series capacitive compensation technique with design based iterative algorithm for mitigation of Ferranti effect in EHV and UHV power transmission systems | India | Published; 202241027437 A |
| 3 | 18-02-2022 | Patent | Dr. B. Ashok, Dr. B. Srinivas | Method for the synthesis of mixed metal nanoscale composites using low cost precursors | India | Published; 202221003745 A |

| 4 | 04-02-2022 | Patent | Dr. B. Srinivas | User friendly new trend material for solar cell applications with low cost | India | Published; 202241003792 A |
|---|------------|--------|---|---|-------|------------------------------|
| 5 | 10-12-2021 | Patent | Dr. I. Rajani (alias, Dr. T. Rajani) | Optical parameters of Gallium nitride doped ferrite Polypyrrole nanocomposites | India | Published; 202141055716 A |

<u>July 2020 – June 2021</u>

| 1 | 05-03-2021 | Patent | Dr. L. Srinivasa Rao | Development of Bismuth Borate glasses co- doped with small concentrations of Manganese oxide and Zirconium oxide nanoparticles suitable for luminescent materials | India | Published; 202141008364 A |
|---|------------|--------|----------------------|---|-------|------------------------------|
|---|------------|--------|----------------------|---|-------|------------------------------|

<u>July 2019 – June 2020</u>

| 1 | 20-11-2020 | Copyright | Dr. Ch. Jyosna & Dr. N. Aruna Kumari | Post-Lockdown restart manual: Framework for prevention & mitigation of Covid-19 | India | Published; L-96861/2020 |
|---|------------|-----------|---|--|-------|----------------------------|
| | | | | | | |

Filed for patent publication

| 1 | 19-08-2023 | Patent | Dr. Linganaboina Srinivasa Rao | Development of transparent bismuth- borate-zirconium-manganese oxide nano glass ceramics with high refractive index | India | Filed; 202341055624 |
|---|------------|--------|-----------------------------------|---|-------|------------------------|
| 2 | 17-05-2022 | Patent | Dr. E. Prasad | Mathematical modelling and Internet-of- Things based patient health monitoring system | India | Filed; 202241028401 |
| 3 | 10-05-2022 | Patent | Dr. E. Prasad | Two-temperature magneto-thermo- elasticity for heat conductivity | India | Filed; 202241026851 |