EXCEL ENGINEERING COLLEGE

(Autonomous)

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai Accredited by NBA and NAAC with "A+" and Recognised by UGC (2f & 12B)

KOMARAPALAYAM - 637303

Research and Development Patent Publication 2023-24

| SI. No. | Department | Patent Application No. | Status of Patent (Published / Granted) | Inventor/s Name | Title of the Patent | Patent Filed Date (DD/MM/YY YY) | Patent Published Date / Granted Date (DD/MM/YY YY) |
|------------|----------------------------|---------------------------|---|--|--|--|--|
| | Agriculture | | | | Development and Evaluation of Solar | | |
| 1. | Engineering | 202341074624A | Published | Mr.S.Rameshkumar | powered sprayer for Agriculture | 31/10/2023 | 15/12/2023 |
| 2. | Agriculture Engineering | 202441022032A | Published | Mr.S.Rameshkumar | Advancement in Agriculture: A Solar Powered, Remote controlled vehicle for pesticide and fertilizer distribution | 21/03/2024 | 29/03/2024 |
| 3. | Agriculture Engineering | 202441028421A | Published | Mr.S.Rameshkumar | Investigating microbiomic signatures of cultural influences on Mushroom yield | 06-04-2024 | 12-06-2024 |
| 4. | Mech | 202341057373 A | Published | Mr. M. Nandha Kumar | Deep Learning Techniques to Analyse And Predict The Electric Vehicles Penetration In Automotive Market | 27-08-2023 | 08-09-2023 |
| 5. | Mech | 202441038316 A | Published | Mr. M. Nandha Kumar | Mindful Metrics: Utilizing MI to Mitigate Faculty Stress In Educational Institutions | 15/05/2024 | 31/05/2024 |
| 6. | Mech | 202441038318 A | Published | Mr. M. Nandha Kumar | A Study on the role Of tourism In The Reduction Of Poverty and Economic Growth | 15/05/2024 | 31/05/2024 |
| 7. | Mech | 401686-001 | Published and design registered | Mr.D.Alagesan, Mr.K.Arulkumar, Mr.M.Sanjay | Robot for crop monitoring | 08/12/2023 | 09/04/2024 |

| | ECE | 392429-001 | Published | | | | |
|-----|-------|----------------|---------------------------------------|-------------------|---|------------|------------|
| 8. | ECE | 392429-001 | and design registered | Dr.R.Dinesh | Solar powered mobile and laptop charging station | 10-8-2023 | 13/10/2023 |
| 9. | ECE | 202341039519 A | Publication | Dr.K.Tamilarasi | Multiple sensor data fusion based fuzzy logic system for distributed agricultural weather assessment | 09-06-2023 | 08-09-2023 |
| 10. | ECE | 397144001 | Published and design registered | Mr.V.Arun antony | Device to predict cardiovascular attack | 9-10-2023 | 08-12-2023 |
| 11. | ECE | 202441026998 | Published | Mr.Karthik Prabhu | Intelligent Inspection System for Industrial goods utilizing ML algorithm | 1-4-2024 | 12-4-2024 |
| 12. | ECE | 202441026998 | Published | Dr.K.Tamilarasi | .Transforming business dynamics AI and Advanced machine learning enterprise resource planning optimization | 21.5.2024 | 21.6.2024 |
| 13. | AI&DS | 202341066232 A | Published | Dr.P.Selvaraju | Integration of internet of things and machine learning techniques based approaches for plant disease detection and classification | 03-10-2023 | 20/10/2023 |
| 14. | AI&DS | 202441022121 | Published | S.L.Swarna | Enhancing Cloud Security with AI, Block chain and IOT for the next Generation | 22.03.2024 | 29.03.2024 |
| 15. | EEE | 202341072833A | Published | P.Maheswari | Oil based Transformer smart health monitoring system using AI | 26.10.2023 | 26.01.2024 |
| 16. | EEE | 202341067966 | Published | T.Nandhini Priya | An Automatic Transition of Transformers for an effective and Uninterrupted Power Sharing in Traction Substation | 10.10.2023 | 20.10.2023 |
| 17. | FT | 414404-001 | Published | Dr. M P Murugesan | Smart Air Purification System for Elevated Indoor Environmental Solutions | 26.05.2024 | 24.06.2024 |

| | | | | | | | 1 |
|-----|---------------------|----------------|-----------|---|---|------------|------------|
| 18. | Mathematics | 202341047827A | Published | Dr.S.Mohankumar, Ms.P.Sudha, Ms.P.Suseela, Ms.R.Deepa, Ms.M.Pavithra, Ms.V.Santhiya, Ms.R.Kasthuri, Ms.G.Nandhini, Ms.S.Mythili and Ms.P.Divya | The Theoretical Framework and Application of Labelled Strategies in Communication Network | 15/07/2023 | 1-9-2023 |
| 19. | Chemistry | 202311048921A | Published | R.Lavanya | Targeted Delivery of Lipid Nanoparticles and Liposome's for Treatment of Bone Diseases | 19/07/2023 | 11-08-2023 |
| 20. | Chemistry & Physics | 6311021 | Granted | Maragathamani Sivakumar and Revathi Murugesan | Smart Glucose Monitoring Device | 18/09/2023 | 26/09/2023 |
| 21. | Mathematics | 202411007523A | Published | Dr.M.Sindhu | The role of machine learning in predicting positive emotions at work and its impact on teachers job satisfaction and well-being | 04.02.2024 | 16.02.2024 |
| 22. | Mathematics | 202341044069A | Published | Dr.M.Sindhu | Al and Machine Learning Based Approach for Predicting Shortest Path in Google Map | 30/06/2023 | 01-09-2023 |
| 23. | Mathematics | 202411009085 A | Published | Dr.M.Sindhu | A study on analyzing the role of design- oriented pedagogy and machine learning in transforming college education | 10.02.2024 | 16.02.2024 |
| 24. | Mathematics | 202321045086A | Published | C.Suganthi, R.M.Samukthaa and P.Vadivel | Neural Network Based Plan - Cancer Method for Primary Diagnosis of Mesothelioma Cancer | 05-07-2023 | 15/09/2023 |
| 25. | Mathematics | 202341055745 | Published | Dr.S.Kavitha | Differential equation approximation methods and properties for degenerate q-special polynomials | 21/08/2023 | 01-09-2023 |
| 26. | Mathematics | 202341000000 | Published | Mrs. P.Sudha | The theoretical Framework and applications of Labelling strategies in | 15.07.2023 | 01.09.2023 |

| | | | | | Communication Networks | | |
|-----|---------|---------------|-----------|-------------------------|--|------------|------------|
| 27. | English | 380926-001 | Published | Dr.K.Saravanan | IOT based sanitation cabinet for electronic devices | 07-03-2023 | 25/05/2023 |
| 28. | IT | 202341084573A | Published | K.Ashokkumar | Block chain-based supply chain management system for sustainable sourcing and procurement | 45242 | 45413 |
| 29. | MCA | 202441019788 | Published | Mr. M. K. Nageswaran | Machine learning and learning analytics based approaches for evaluating teachers performance in cl | 16/03/2024 | 29/03/2024 |
| 30. | MCA | 202441016549 | Published | Dr. U. Sridevi | Al based block chain-powered secure vault for personal data and identity management | 07-03-2024 | 22/03/2024 |