



You Choose, We Do It
St. JOSEPH'S COLLEGE OF ENGINEERING
 (An Autonomous Institution)
St. Joseph's Group of Institutions
 OMR, CHENNAI - 119



AUGUST 2025

DEPARTMENT OF SCIENCE NEWSLETTER



VISION & MISSION



The Department of Science strives to mould the students to the best of their ability to develop their knowledge in basic science required for a budding engineer, to compete and contribute to industry and research. The department hopes to train the young engineers to excel in scientific thinking and logical reasoning.

To create awareness of the potential of Science and scope of its applications to the diversified areas of engineering and technology in industries and research. To secure a pass percentage of above 95% results in university examinations



DEPARTMENT ACTIVITIES**ENGINEERING EXCELLENCE -
SCHOOL EVENT**

The Department of Science was proudly represented by Lef Eden Matric Higher Secondary School, Ponneri at the Engineering Excellence event held on 1st August 2025 at St. Joseph's College of Engineering. A total of 122 students from the school actively took part in the event, demonstrating remarkable enthusiasm and making a significant contribution to its success.

Their energetic participation reflected a deep interest in engineering and technology, helping to enhance an event that brought together 276 students from three reputed schools across the Chennai region.



STAFF ACHIEVEMENTS

RESEARCH PUBLICATIONS

**Dr. P. Saravanan**

ASSOCIATE PROFESSOR & HEAD

Dr. P. Saravanan, Associate Professor and Head of the Department of Science, authored the article titled "A Review on the Evolution of Ionic Liquids: Sustainable Synthesis, Applications, and Future Prospects", published in *Materials Today Sustainability* (Impact Factor: 7.9) on 5 July 2025, with the DOI 10.1016/j.mtsust.2025.101160.

**Dr. P. Saravanan**

ASSOCIATE PROFESSOR & HEAD

Dr. P. Saravanan, Associate Professor & Head, Department of Science, has authored a research article entitled "Green hydrogen in the renewable energy transition exploiting: A systematic review", published in the journal *Molecular Catalysis* (Impact Factor - 4.9). The article appears in Volume 586 (2025) and was published in August 2025. It is available online at <https://doi.org/10.1016/j.mcat.2025.115396>.

**Dr. N. Punitha**

PROFESSOR

Dr. N. Punitha, Professor, Department of Science, has published a research article titled "In-depth review of breast cancer and inflammation pre- and post-treatment strategies with conventional and novel steroid agents" in the journal *Advances in Biological Regulation*. The article was published in Volume 97 (2025) in August 2025. It is available online at <https://doi.org/10.1016/j.jbior.2025.101102>.

**Dr. K. Jayamoorthy**

ASSOCIATE PROFESSOR

Dr. K. Jayamoorthy, Associate Professor, Department of Science, along with Hao Tang, Xue Xia, Kanagaraj Rajalakshmi, Jian Shen, Selvaraj Muthusamy, Dongwei Zhu, Xiaojian Liu, and R. Sasikala, published a research article titled "Silicon Dioxide Functionalized with Benzimidazole: A Versatile Dual-Function Sensor and Enhanced Antimicrobial Agent" in the journal *Silicon* (Springer) in July 2025, DOI: 10.1007/s12633-025-03421-5

**Dr. B. Subash**

ASSOCIATE PROFESSOR

Dr. B. Subash, Associate Professor, Department of Science, has published a research article titled "Advanced Microscopic Characterization and Antimicrobial Applications of Green-Synthesized Zinc Oxide Nanoparticles in Clinical Wound Healing Bandages" in the journal *Microscopy Research and Technique*. The article was published in August 2025. It is available online at <https://doi.org/10.1002/jemt.70028>.

STAFF ACHIEVEMENTS



Dr. N. R. Rajagopalan
ASSOCIATE PROFESSOR

Dr. N. R. Rajagopalan, Associate Professor, Department of Science, published an Indian Patent titled "Fabrication of Green Synthesized Nanomaterials for Multi-Functional Energy Storage Applications" on 29th August 2025.



Dr. N. R. Rajagopalan
ASSOCIATE PROFESSOR

Dr. N. R. Rajagopalan, Associate Professor, Department of Science, published an Indian Patent titled "Nano-Enabled Antimicrobial Agents for Targeted Pathogen Neutralization in Healthcare and Agriculture" on 29th August 2025.



Dr. J. Sharmila
ASSISTANT PROFESSOR

Dr. J. Sharmila, Assistant Professor in the Department of Science, published a textbook entitled **Fundamentals of Analytical Chemistry (First Edition)**, recognized and certified by Alpha International Publication with ISBN: 978-93-5762-500-5, Year of Allotment: 2025.



Dr. A. Umadevi
ASSISTANT PROFESSOR

Dr. A. Umadevi, Assistant Professor in the Department of Science, published an edited book entitled **Hybrid Artificial Intelligence Models for Predictive Analytics, Deep Learning and Adaptive Systems (First Edition)**, recognized and certified by Rademics Publishing with ISBN: 978-93-49552-63-0, Year of Allotment: 2025



STAFF ACHIEVEMENTS

NOTABLE CERTIFICATIONS



Dr. P. Saravanan

ASSOCIATE PROFESSOR & HEAD

Dr. P. Saravanan, Associate Professor & Head, Department of Science, participated in the International Congress on Nutrition, Food, Agriculture and Climate held on August 21-22, 2025, at Istanbul, Türkiye, and delivered an oral presentation entitled "Value-Added Nanocellulose Valorized from Fruit Peel Waste for Potential Dermal Wound Healing and Tissue Regenerative Applications."



STAFF ACHIEVEMENTS

FACULTY DEVELOPMENT PROGRAM



Dr. P. Krishnan
ASSOCIATE PROFESSOR

Dr. P. Krishnan, Associate Professor, Department of Science, participated in a 6-Day Online Faculty Development Program on "Artificial Intelligence's Impact on Transforming Software, Robotics, Electrical, Electronics & Mechanical Fields (Series 3)" organized by Dhanish Ahmed College of Engineering, Chennai, from 21st to 26th July 2025.



Dr. A. Uma Devi
ASSISTANT PROFESSOR

Dr. A. Umadevi, Assistant Professor in the Department of Science, participated in the Faculty Development Programme on "Innovation in Sustainable Chemical Technologies for Industrial Applications" organized by the Department of Chemistry, Easwari Engineering College, Chennai, from 28th July 2025 to 2nd August 2025.



Dr. S. Rama
ASSISTANT PROFESSOR

Dr. S. Rama, Assistant Professor in the Department of Science, participated in the Faculty Development Programme on "Quantum Computing," organized by the Ramrao Adik Institute of Technology, D. Y. Patil Deemed to be University, Navi Mumbai, New Horizon College of Engineering, Bengaluru, and KIIT University, Bhubaneswar, in collaboration with ExcelR Edtech Pvt. Ltd., held from 11th to 18th August 2025.



STAFF ACHIEVEMENTS

FACULTY DEVELOPMENT PROGRAM



Dr. P. Krishnan
ASSOCIATE PROFESSOR



Dr. S. M. Prakash
ASSISTANT PROFESSOR

Faculty members **Dr. P. Krishnan** (ASP) and **Dr. S. M. Prakash** (AP) from the Department of Science successfully participated in the Six-Day Online International Faculty Development Programme on "Next Generation Research on Energy Materials," organized by the Department of Physics and Chemistry, Vel Tech Multi Tech Dr. Rangarajan Dr. Sakunthala Engineering College, Avadi, Chennai, from 4th to 9th August 2025.



Dr. N. R. Rajagopalan
ASSOCIATE PROFESSOR

Dr. N. R. Rajagopalan, Associate Professor, Department of Science, successfully participated and completed the AICTE Training and Learning (ATAL) Academy Faculty Development Programme on "Bioremediation and Green Technologies for Waste Management and Soil Health in the Agri-Food Sector," organized by Mohamed Sathak Engineering College, held from 25th to 30th August 2025.

CERTIFICATES



STAFF ACHIEVEMENTS

FACULTY DEVELOPMENT PROGRAM



Dr. V. Swarnalatha
ASSISTANT PROFESSOR



Dr. A. Mahalakshmi
ASSISTANT PROFESSOR



Dr. N. R. Rajagopalan
ASSOCIATE PROFESSOR



Dr. J. Sharmila
ASSISTANT PROFESSOR



Mrs. S. Savitha
ASSISTANT PROFESSOR



Dr. K. Jayamoorthy
ASSOCIATE PROFESSOR



Dr. B. Subash
ASSOCIATE PROFESSOR



Dr. S. M. Prakash
ASSISTANT PROFESSOR



Dr. G. Sasikumar
ASSISTANT PROFESSOR



Dr. C. Chandrasatheesh
ASSISTANT PROFESSOR



Dr. T. L. Ajeesha
ASSISTANT PROFESSOR

Faculty members **Dr. V. Swarnalatha (AP)**, **Dr. A. Mahalakshmi (AP)**, **Dr. N. R. Rajagopalan (ASP)**, **Dr. J. Sharmila (AP)**, **Ms. S. Savitha (AP)**, **Dr. K. Jayamoorthy (ASP)**, **Dr. B. Subash (ASP)**, **Dr. S. M. Prakash (AP)**, **Dr. G. Sasikumar (AP)**, **Dr. C. Chandrasatheesh (AP)** and **Dr. T. L. Ajeesha (AP)** from the Department of Science successfully took part in the AICTE Training and Learning (ATAL) Academy Faculty Development Programme on "Advancement and Applications of Smart Materials in Environment and Technologies," organized by Marthandam College of Engineering and Technology, from 18th to 23rd August 2025.

CERTIFICATES



STAFF ACHIEVEMENTS

FACULTY DEVELOPMENT PROGRAM



Dr. P. Saravanan
ASSOCIATE PROFESSOR
& HEAD



Dr. S. Suresh
ASSOCIATE PROFESSOR



Dr. V. Swarnalatha
ASSISTANT PROFESSOR



Dr. N. R. Rajagopalan
ASSOCIATE PROFESSOR



Dr. A. Uma Devi
ASSISTANT PROFESSOR



Dr. J. Sharmila
ASSISTANT PROFESSOR



Mrs. S. Savitha
ASSISTANT PROFESSOR



Dr. K. Jayamoorthy
ASSOCIATE PROFESSOR



Dr. B. Subash
ASSOCIATE PROFESSOR



Dr. S. M. Prakash
ASSISTANT PROFESSOR



Dr. G. Sasikumar
ASSISTANT PROFESSOR



Dr. T. L. Ajeesha
ASSISTANT PROFESSOR

Faculty members **Dr. P. Saravanan** (ASP & Head), **Dr. S. Suresh** (ASP), **Dr. V. Swarnalatha** (AP), **Dr. A. Uma Devi** (AP), **Dr. N. R. Rajagopalan** (ASP), **Dr. J. Sharmila** (AP), **Ms. S. Savitha** (AP), **Dr. K. Jayamoorthy** (ASP), **Dr. B. Subash** (ASP), **Dr. S. M. Prakash** (AP), **Dr. G. Sasikumar** (AP), and **Dr. T. L. Ajeesha** (AP) from the Department of Science participated in the International Faculty Development Programme on "Role of Physics in the Development of Advanced Materials," organized by the Department of Physics, NPSBCET, held from 25th to 29th August 2025.

CERTIFICATES



STAFF ACHIEVEMENTS

Professional Recognitions and Certifications



Dr. S. Kiruba

ASSOCIATE PROFESSOR

Dr. S. Kiruba, Associate Professor in the Department of Science, served as a resource person and delivered a lecture on "Environmental and Health Impacts of Earth Materials" as part of the One-Week Online Faculty Development Program on Advancement and Applications of Smart Materials in Environment and Technologies, organized by Marthandam College of Engineering and Technology (MACET) under AICTE Training and Learning (ATAL) Academy on 19th August 2025.



Dr. V. Swarnalatha

ASSISTANT PROFESSOR

Dr. V. Swarnalatha, Assistant Professor in the Department of Science, served as a resource person and delivered a lecture on "Smart materials in everyday life-Innovations and Applications" as part of the One-Week Online Faculty Development Program on Advancement and Applications of Smart Materials in Environment and Technologies, organized by Marthandam College of Engineering and Technology (MACET) under AICTE Training and Learning (ATAL) Academy on 23rd August 2025.



STAFF ACHIEVEMENTS

Journal Reviewing certifications

S.No	Name of the staff	Journal reviewed	No. of Article	Month
1	Dr. S. Suresh (Associate Professor)	Physica Status Solidi (A)	1	AUG
2	Dr. N. R. Rajagopalan (Associate Professor)	Journal of Cardiovascular Electrophysiology	1	AUG
3	Dr. K. Jayamoorthy (Associate Professor)	Journal of Photochemistry & Photobiology, B_ Biology	3	AUG
		Current Organic Chemistry	1	
		Chemistry and Biodiversity	1	
		Mini-Reviews in Organic Chemistry	3	
		Journal of Molecular Structure	2	
4	Dr. P. Krishnan (Associate Professor)	Current Nanoscience	1	AUG

