

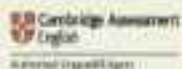


You Clavus, We Do It!
St. JOSEPH'S COLLEGE OF ENGINEERING
 (An Autonomous Institution)
St. Joseph's Group of Institutions



OMR, Chennai - 119

Approved by AICTE, New Delhi and Affiliated to Anna University



MARCH 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*

Student Achievements



Anjana Rangarajan, a first-year ECE student, was part of Team LUMEX, which secured 1st place in the AI Hackathon organized by St. Joseph's Institute of Technology from February 28 to March 1, 2025. Their project, "Aris: AI-Powered Research Companion," earned them a cash prize of Rs. 9,000 along with certificates. The team was mentored by Dr. P. Saravanan (Science) and Dr. G. Venkat Narayanan (Maths).

The first-year students of ECE - C, Vedhaswaruban S, Sai Harinarayanan J, and Sreenidhi T A, secured First Place in the "Lift & Drop" and second place in the "Spizer walk" event at CRISPO 2K25, a National Level Symposium organized by the Department of Electronics and Communication Engineering at New Prince Shri Bhavani College of Engineering and Technology. Their exceptional performance demonstrated strong technical skills and innovative problem-solving abilities, bringing pride to the institution.



The first-year students of ECE - C—Rupika Sri S, Swetha S, and Vedhaswaruban S—secured First Place in the Paper Presentation event at the National Symposium VISTA 2K25, organized by Vels University, Chennai. Their outstanding performance and innovative research earned them a ₹2,000 cash prize, showcasing their technical expertise and analytical skills. Additionally, the team also won Third Prize in the HUNKY BRAINS event, receiving a ₹500 cash prize, further demonstrating their intellectual prowess. Their achievements bring great pride to their institution.



Student Achievements

First-year ADS - C students Mridula J, Raju V, and Padma Priya R secured Third Place in the National-Level "Bot Meets World" event, held at St. Joseph's College of Engineering on March 19, 2025. Their achievement highlights their innovation and technical expertise, bringing pride to their institution.

First-year AML students Surya S (AML B) and Athijeevanan Mathivanan (AML A) secured Second Place in the National-Level "Working Models" competition, held at Thiagarajar College of Engineering on March 19, 2025. Their achievement showcases their creativity and technical skills, bringing pride to their institution.

First-year ECE - C student Surendar G R achieved remarkable success in two national-level competitions:

Second Place in "Brain Bowl" at Saveetha Institute on March 13, 2025.

Third Place in "UDYAT" at AMET University on March 14, 2025.

Dheekshitha R and Dharshini R of I ECE A secured 1st place in "MAKE-A-THON 1.0 (24-Hour Challenge)", held from March 19-20, 2025, organized by St. Joseph's College of Engineering, Chennai, under the Hardware Domain. They were awarded a cash prize of ₹10,000/- and were mentored by Dr. G. Murugan and Mr. S. Kaleel Mohammed Ibrahim.

Surendar G R of I ECE C secured 1st place in "RUGSMASH" held at Easwari Engineering College on February 22, 2025, winning a cash prize of ₹3,000/-. He also achieved 2nd place in "H₂O Rocketry" at Chennai Institute of Technology on February 26, 2025, earning a cash prize of ₹1,500/-. Congratulations on this outstanding achievement!

Shyam Kirthik A, Waseela Fathima K S, and Vaishnavi of I Chemical Engineering secured 1st place in the "Task and Tell" event held at Sri Venkateswara College of Engineering. Their exceptional performance earned them a cash reward of ₹500/-. Congratulations to the team on this remarkable achievement!

Sai Harinarayanan J and Vedhaswaruban S of I ECE C secured 1st place in the National-level "Lift and Drop" event held at New Prince Shri Bhavani College of Engineering & Technology on March 15, 2025. Their impressive performance in the competition earned them a total cash reward of ₹500/-. Congratulations to both for this remarkable achievement!

Lokeshwarma K of I EEE A achieved 1st place in the prestigious National-level "Byte Breach" event held at New Prince Shri Bhavani College of Engineering & Technology on March 15, 2025. His exceptional performance earned him a cash reward of ₹500/-, showcasing his skills and dedication in the competition. Congratulations on this outstanding achievement!

GUEST LECTURE

The Department of Science at St. Joseph's College of Engineering successfully organized a Guest Lecture on "Unlocking Funding Opportunities: The Art of Research Proposals and Conference Grants" on March 11, 2025, from 1:30 PM to 2:30 PM at the AV Hall Library. The session was conducted by Prof. N Vijayan, Senior Principal Scientist (Professor - AcSIR) at CSIR-National Physical Laboratory, New Delhi.

The lecture aimed to equip students, researchers, and faculty members with essential knowledge on securing research funding, writing compelling research proposals, and obtaining conference grants. Prof. Vijayan shared his expertise on funding agencies, proposal structuring, key evaluation criteria, and effective grant writing strategies. The session also covered common challenges in research funding and how to navigate them successfully.

The event witnessed enthusiastic participation from students and faculty, who engaged in an interactive discussion with the speaker. This initiative provided a valuable learning experience, inspiring attendees to explore funding opportunities and enhance their research capabilities.



NATIONAL CONFERENCE

The Department of Science at St. Joseph's College of Engineering, in collaboration with the Tamil Nadu State Council for Science and Technology (TNSCST), is proud to organize the National Conference on Advances in Engineering Materials (NCAEM 2025) on March 21st and 22nd, 2025. This conference aims to provide a dynamic platform for researchers, academicians, industry professionals, and students to explore recent advancements, challenges, and future directions in the field of engineering materials.

The event will feature renowned resource persons, including:

- Dr. S. Arumugam – Vice-Chancellor, Tamil Nadu Open University
- Dr. S. Balakumar – Director of Research Scheme & Projects, University of Madras
- Dr. D. Kalpana – Senior Principal Scientist, CECRI, CSIR Madras
- Dr. S. Anandakumar – Associate Professor, Anna University, Chennai
- Mr. NSR Kanna – Vice President (Composites), Sundaram Brake Linings Limited
- Dr. P. Muthu Mareeswaran – Assistant Professor, Anna University, Chennai

These experts will share their insights and research findings, offering valuable knowledge to all participants. The conference will include expert lectures, paper presentations, and interactive discussions, fostering a collaborative environment for knowledge exchange. It will also provide a valuable opportunity for researchers to present their work, receive constructive feedback, and explore potential collaborations in academia and industry.

The event is led by Dr. P. Saravanan, Associate Professor & Head, as the Convener, with Dr. K. Satheshkumar and Dr. G. Sasikumar serving as the Coordinators.



St. JOSEPH'S COLLEGE OF ENGINEERING
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St. JOSEPH'S GROUP OF INSTITUTIONS
OMR, CHENNAI - 119

Tamil Nadu State Council for Science and Technology (TNSCST)

Sponsored/
Department of Science

Organiser
NATIONAL CONFERENCE ON ADVANCES IN ENGINEERING MATERIALS
(NCAEM 2025)

21-03-2025 & 22-03-2025
RESOURCE PERSONS



Dr. S. Arumugam
Vice-Chancellor,
Tamil Nadu Open University



Dr. S. Balakumar
Director, Research Scheme and Projects,
University of Madras



Dr. D. Kalpana
Senior Principal Scientist,
CECRI, CSIR Madras



Dr. S. Anandakumar
Associate Professor,
Anna University, Chennai



Mr. NSR Kanna
Vice President (Composites),
Sundaram Brake Linings Limited



Dr. P. Muthu Mareeswaran
Assistant Professor,
Anna University, Chennai



AV HALL
LIBRARY
BLOCK

GLIMPSES OF TWO DAYS NATIONAL CONFERENCEDAY-1

GLIMPSES OF TWO DAYS NATIONAL CONFERENCE**DAY-2**

**NCAEM-2025 WAS PUBLISHED IN THE
ULLATCHIMURASU NEWSPAPER**

உள்ளாட்சி துறை

TNSCST நிதியுதவியுடன் செயின்ட் ஜோசப் பொறியியல் கல்லூரியில் இரண்டு நாள் தேசிய மாநாடு



சென்னை, மார்ச் 21
 சென்னை செயின்ட் ஜோசப்ஸ்
 உள் செயின்ட் ஜோசப்
 பொறியியல் கல்லூரியில் நியூதூடு
 அறிவியல் தொழில்நுட்ப மாநில
 மாநாடு (TNSCST) நிதியுதவியுடன்
 "பொறியியல் பொருட்களில்
 முன்னேற்றம்" (NCAEM-2025)
 என்ற தலைப்பில் இரண்டு நாள்
 தேசிய மாநாடு நடைபெற்றது.
 மார்ச் 21 மற்றும் 22, 2025 ஆகிய
 தேதிகளில் நடத்தப்பட்ட இந்த
 மாநாடு கல்வி தொழில்துறை
 இடைவெளியான ஒத்துழைப்பை
 மேம்படுத்தி ஆராய்ச்சியாளர்களை
 பங்களிப்பு செய்வதற்காகமாக
 கொண்டுவந்தது.

இந்த மாநாட்டில் ஆசிரியர்கள்,
 ஆராய்ச்சியாளர்கள், மாணவர்கள்
 உட்பட 190 பேர் பங்கேற்றனர்.
 பொறியியல் பொருட்களில்
 புதுமைகள் மற்றும் ஆணை தலை
 முன்னேற்றங்கள், அறிவியல்
 மற்றும் தொழில்நுட்பத்தின்
 சூழல் தகவல்களை வெப்பநிலை,
 தொழில் முன்னேற்றங்கள்
 சவால்கள் மற்றும் வாய்ப்புகள்,
 கல்வி துள்ளறிவு (AI)
 அடிப்படையிலான பொருட்கள்
 மற்றும் பயன்பாடுகள் போன்ற
 முக்கியமான தகவல்கள்
 விவாதிக்கப்பட்டன.

முன்னவர் B பரபுயினாதர்
 (தலைவர் செயின்ட் ஜோசப்ஸ்
 கல்வி குழுமங்கள்), பேரரசோ
 (மேகாணமை இயக்குநர்), S
 ஜெயன் மீரீசா (செயல்
 இயக்குநர்) ஆகியோர் பொறியியல்
 பொருட்கள் முன்னேற்றம் குறித்த
 தேசிய மாநாட்டிற்கு தொடர்ந்த
 ஆதரவை உறுதிப்படுத்தினர்.

மாநாட்டில் தொடக்க
 தீர்மானம் தமிழ்நாடு சிறந்த நிலைய
 பயணங்களுக்கான துணைவிருந்து
 பேராசிரியர் ஆறுமுகம் அவர்கள்
 தொடங்கி வைத்தார். மேலும்,
 செயின்ட் ஜோசப் பொறியியல்
 கல்லூரியின் முதல்வர் டாக்டர்
 வி.டி. சேஷகிரி ராம் அவர்கள்
 மாநாட்டை தலைமை தாங்கி
 நடத்தினார்.

மாநாட்டில் சிறப்பு அம்சங்கள்
 இடம்பெற்றன, இதில் பங்களிப்பு
 கருவிகளும், தொழில்துறை சிறப்பு
 சிறப்பு விளக்கமும் சிறப்பு
 விருந்தினர்கள் கருத்துக்களை
 பகிர்ந்தனர்.

இதில், முன்னவர் பங்கு
 (மெட்ரான் பங்களிப்பு), முன்னவர்
 சைபரா (CECRI, CSIR, மெட்ரான் கம்பனிகள்),
 முன்னவர் ஆஸ்திரேலியா (அண்டர்
 பங்களிப்பு), முன்னவர்
 ஒத்த மாரிசுவரன் (அண்டர்

பங்களிப்பு), கண்டர்
 (துணைத் தலைவர், கத்தரம்
 பிரேக் கையெழுத்து கமிட்டி),
 இயோக்கன் கல்வி தொழில்துறை
 ஒத்துழைப்பின் முக்கியத்துவம்,
 ஆராய்ச்சியின் வளர்ச்சியாகும்,
 மற்றும் பொறியியல் பொருட்கள்
 (AI) பயன்பாடுகள் குறித்த
 தகவல்கள் பங்குள்ள உருத்தலை
 பகிர்ந்தனர்.

குழு தலைவராக வெளியில்
 துறை இளை பேராசிரியர்
 முன்னவர் P.சரஸ்வதி மேலும்
 ஒத்துழைப்பாளர்களாக இயோக்கன்
 துறை உதயி பேராசிரியர் முன்னவர்
 சசிதேவா மற்றும் வெளியில் துறை
 உதயி பேராசிரியர் முன்னவர் மே.
 சசிதேவா ஆகியோர் தீர்மானங்களை
 ஒத்திவைத்திருந்தனர்.

இந்த மாநாடு கல்வியாளர்கள்
 மற்றும் தொழில்துறை நிபுணர்
 கருத்துப்பரிமாற்றம் மற்றும் உரையா
 சுவர்த்து, தொழில்துறையில்
 ஆராய்ச்சி மற்றும் புதுமைகள்
 செயல்படுத்த துறைகளை ஒரு
 முக்கியத்துவமான தளமாக
 அமைத்தது.

இறுதியாக, சிறந்த வாய்ப்பு
 பேராசிரியர் மற்றும் பொருட்கள்
 விளக்கப்பட சிகாரை விருதுகள்,
 மாணவர்கள் மற்றும் ஆராய்ச்சி
 மாணவர்களுக்கு வழங்கப்பட்டன.

INTERNATIONAL CONFERENCE

The International Conference on Innovations in Materials Science, Technology, Engineering, and Management for Sustainable Development (IMSTEM) – 2025 is organized by the Department of Science, St. Joseph's College of Engineering, Chennai, Tamil Nadu, India, in collaboration with RSP Research Hub, Coimbatore. The conference will be held on March 30–31, 2025, featuring keynote sessions by Prof. Rania Lampou, a STEM Instructor & Researcher from the Greek Ministry of Education, who will discuss Green Chemistry: Advancements in Sustainable Materials, and Mr. Senthil Thangavel, a Staff Engineer at PayPal Inc., USA, presenting on Enhancing Generative AI with External Knowledge. The event is convened by Dr. V. N. Nandini Devi (First Year Coordinator) and Dr. P. Saravanan (Head, Department of Science). The conference aims to bring together experts and researchers to explore advancements in sustainable materials and AI-driven technologies.



IMSTEM 2025
International Conference on Innovations in Materials Science, Technology, Engineering, and Management for Sustainable Development (IMSTEM) 2025
Organized by the Department of Science, St. Joseph's College of Engineering, Chennai, Tamil Nadu, India.

Keynote Speakers

Prof. Rania Lampou
STEM Instructor & Researcher from the Greek Ministry of Education

Mr. Senthil Thangavel
Staff Engineer at PayPal Inc., USA

Co-Chairpersons: Dr. V. N. Nandini Devi, Dr. P. Saravanan

Registration Link: <https://www.imstem2025.com>

St. JOSEPH'S COLLEGE OF ENGINEERING
CHENNAI - 600 082

The Choice of Disciplined Toppers



IMSTEM 2025
International Conference on Innovations in Materials Science, Technology, Engineering, and Management for Sustainable Development (IMSTEM) 2025
Organized by the Department of Science, St. Joseph's College of Engineering, Chennai, Tamil Nadu, India.

Conference Chairs

Co-Chairpersons: Dr. V. N. Nandini Devi, Dr. P. Saravanan

St. JOSEPH'S COLLEGE OF ENGINEERING
CHENNAI - 600 082

The Choice of Disciplined Toppers

The recipients of the Best Presentation (UG - Internal) award at St. Joseph's College of Engineering, Chennai, are:

Mr. Dinesh Aravind & Team (Chemical Engineering)

Topic: Enhancing Heat Exchanger Performance through Advanced Data Analytics and Predictive Maintenance.

Ms. Anjana Rangarajan & Team (Electronics and Communication Engineering)

Topic: Swarm Intelligence for Dynamic and Multi-Scale Toxicity Prediction in Drug Discovery.

Ms. Varnika S & Team (Biotechnology)

Topic: The Impact of Microgravity on Embryonic Development and Stem Cell Differentiation.

INTERNATIONAL CONFERENCE**IMSTEM 2025**

International Conference on Innovations in Materials
Science, Technology, Engineering and Management
for Sustainable Development (IMSTEM) - 2025

Organized by the Department of Science,
St. Joseph's College of Engineering, OMR, Chennai,
Tamilnadu, India.

Online mode

Conference Dates
30th & 31st March, 2025.

GLIMPSES OF DAY 1 IMSTEM 2025

INTERNATIONAL CONFERENCE**IMSTEM 2025**

International Conference on Innovations in Materials Science, Technology, Engineering and Management for Sustainable Development (IMSTEM) - 2025

Organized by the Department of Science,
St. Joseph's College of Engineering, OMR,
Chennai, Tamilnadu, India.

**GLIMPSES OF DAY 2 IMSTEM 2025**

Glimpses of SEERA Activities

17 Mar 2025

DEPARTMENT OF SCIENCE
STUDENT EMPLOYABILITY ENHANCING RESEARCH ACTIVITIES FOR FIRST YEAR BSC STUDENTS

High Lecture
Place: public lecture
Date: 17
Time: 1:00 pm to 2:00 pm

Placement
Place: Placement by Employer and Student of Job
Date: 17
Time: 2:00 pm to 3:00 pm

Workshop
Place: Skill Development
Date: 17
Time: 3:00 pm to 4:00 pm

17-03-2025
MONDAY, 1:00 PM TO 4:00 PM

DEPARTMENT OF SCIENCE
STUDENT EMPLOYABILITY ENHANCING RESEARCH ACTIVITIES FOR FIRST YEAR BSC STUDENTS

HIGH PACKAGE PLACEMENT
Place: High Package Placement
Date: 17
Time: 1:00 pm to 2:00 pm

PLACEMENT
Place: Placement by Employer and Student of Job
Date: 17
Time: 2:00 pm to 3:00 pm

SLOW LEARNERS AND COMMUNICATION
Place: Slow Learners and Communication
Date: 17
Time: 3:00 pm to 4:00 pm

Department of Science
STUDENT EMPLOYABILITY ENHANCING RESEARCH ACTIVITIES FOR 1 YEAR BSC STUDENTS

SEERA

Placement
Place: Placement by Employer and Student of Job
Date: 17
Time: 1:00 pm to 2:00 pm

Workshop
Place: Skill Development
Date: 17
Time: 2:00 pm to 3:00 pm

17-03-2025
MONDAY, 1:00 PM TO 3:00 PM

DEPARTMENT OF SCIENCE
STUDENT EMPLOYABILITY ENHANCING RESEARCH ACTIVITIES FOR 1 YEAR BSC STUDENTS

SEERA

High Package Placement
Place: High Package Placement
Date: 17
Time: 1:00 pm to 2:00 pm

Placement
Place: Placement by Employer and Student of Job
Date: 17
Time: 2:00 pm to 3:00 pm

Workshop
Place: Skill Development
Date: 17
Time: 3:00 pm to 4:00 pm

Department of Science
STUDENT EMPLOYABILITY ENHANCING RESEARCH ACTIVITIES FOR 1 YEAR BSC STUDENTS

SEERA

Placement
Place: Placement by Employer and Student of Job
Date: 17
Time: 1:00 pm to 2:00 pm

Workshop
Place: Skill Development
Date: 17
Time: 2:00 pm to 3:00 pm

Communication
Place: Communication
Date: 17
Time: 3:00 pm to 4:00 pm

DEPARTMENT OF SCIENCE
STUDENT EMPLOYABILITY ENHANCING RESEARCH ACTIVITIES FOR 1 YEAR BSC STUDENTS

SEERA

High Package Placement
Place: High Package Placement
Date: 17
Time: 1:00 pm to 2:00 pm

Placement
Place: Placement by Employer and Student of Job
Date: 17
Time: 2:00 pm to 3:00 pm

Workshop
Place: Skill Development
Date: 17
Time: 3:00 pm to 4:00 pm



CLUB ACTIVITIES

St. Joseph's College of Engineering organized College-Level Club Activities for first students, providing opportunities to engage in technical, cultural, and extracurricular activities, fostering skill development, teamwork, and creativity beyond academics. The event was held on March 12, 2025, from 1:40 PM to 5:00 PM.

The Department of Science played a key role in organizing three distinct clubs:

Science Club – Focused on scientific exploration, experiments, and discussions to encourage curiosity and innovation among students.

Music Club – Provided a platform for students passionate about music to showcase their talent and collaborate with peers.

Dance Club – Created a space for students to express themselves through dance, enhancing their artistic and performance skills.

This initiative aimed to help students discover their interests, develop new talents, and build a sense of community within the college.

S.NO	EVENT	I PRIZE	II PRIZE	III PRIZE
1	SCIENCE CLUB	M. PRANAY (I CHEM) M. AMARNATH (I CHEM) VISHAL VENKATESAN (I CYS)	N. S.ESWAR (I ADS) S.BALASUBRAMANIAM (I ADS) A. FREDRICKANDREW (I ADS)	K. PURUSHOTHAMAN (I EEE) S. SRINATH (I CYS) M. BALAMURUGAN (I CYS) D. ESWAR (I CYS)
2	MUSIC CLUB	SIVAVARSHIN I V (I IT)	SHRUTHIKA T (I ADS)	KEERTHIRAJA A (I MBA)
3	DANCE CLUB	M. HITESH (ECE A)	JANET FA SIFINA (IT A)	KENCY LEENA A (I CHEM) SRUTHIKA O (I CHEM) SARANYA V (I CHEM) NIVETHA SRINIVASAN (I CHEM)



TANSAM ORIENTATION

The Department of Science organized a TANSAM Orientation for first-year ADS, AML and Cyber Security students on March 19, 2025, at the Library AV Hall. The session featured Mrs. Hannah Robert, COO & Digital Technology Lead, Tamil Nadu Smart & Advanced Manufacturing Center, Chennai, as the chief guest. Resource persons included Mr. Shriram (Mendix Trainer), Mr. Ram (AR/VR Trainer), Mr. Vinoth (Mechanical Lead), and Mrs. Kousalya (Electronics Lead). Another session was scheduled for ECE, EEE, and Chemical Engineering students on March 24, 2025 providing insights into Industry 4.0 technologies and smart manufacturing concepts to enhance students' understanding of emerging technologies.

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VIRTUAL WORKSHOP

The Department of Science at St. Joseph's College of Engineering successfully conducted a Virtual Workshop on "Smart Resume Writing: Beating ATS with AI Strategies for Students" on March 29, 2025. The session, led by Shanmika M, a Business Partner & Technical Recruiter at Pivotal Associates (Talent Scout Management Solutions Pvt. Ltd.), Bangalore, India, provided valuable insights into AI-driven resume optimization techniques to enhance job prospects. Students actively participated and gained practical knowledge on crafting ATS-friendly resumes. The event, powered by ECLearnix, was well-received and proved beneficial for career development.



HIGHLIGHTS OF CLUB ACTIVITIES

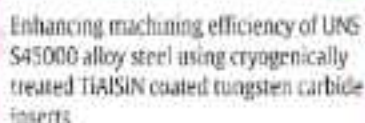


STAFF ACHIEVEMENTS

PUBLICATIONS



Dr. A. Uma Devi, Assistant Professor in the Department of Science, has published a research article titled "Enhancing Machining Efficiency of UNS S45000 Alloy Steel Using Cryogenically Treated TiAlSiN Coated Tungsten Carbide Inserts" in the journal Results in Engineering (Elsevier) on February 26, 2025. The article is available at DOI: <https://doi.org/10.1016/j.rineng.2025.104415>



Enhancing machining efficiency of UNS S45000 alloy steel using cryogenically treated TiAlSiN coated tungsten carbide inserts

Ms. S. Savitha, Assistant Professor in the Department of Science, has published a research article titled "Synthesis and Characterization of Benzothiazine Analogues" in the journal Cuestiones de Fisioterapia, Year 2025, Volume 54, Issue 4. The article is available at DOI: <https://doi.org/10.48047/ybpd4b06>.



Synthesis and Characterization of Benzothiazine Analogues

Mr. S. Kaleel Mohamed Ibrahim, Assistant Professor in the Department of Science, has published a research article titled "Spin-Dependent Resonant Tunneling in CdTe/Cd_{1-x}Mn_xTe Nanostructures: Effect of Polaronic Mass" in the journal The European Physical Journal B (Springer). The article was published on March 6, 2025, in Volume 38, Article Number 40 (2025).



Spin-dependent resonant tunneling in CdTe/Cd_{1-x}Mn_xTe nanostructures: effect of polaronic mass

STAFF ACHIEVEMENTS

PUBLICATIONS

Mr. S. Kiruba, Associate Professor in the Department of Science, has published a research article titled "The Influence of Bi Doping Concentration on Structural, Dielectric, and Optical Properties of Bi-Doped ZnO Thin Films" in the journal Semiconductors (Springer). The article was published on March 6, 2025, in Volume 59, pages 61-69.



The Influence of Bi Doping Concentration on Structural, Dielectric and Optical Properties of Bi-doped ZnO thin Films

Dr. A. Mahalakshmi, Assistant Professor in the Department of Science, has published multiple research articles in esteemed journals.

- Her article, "Exploring the Spectroscopic, Photoluminescence, Thermal, Dielectric, and Electrical Conductivity Properties of 4-Aminopyridine Nitrate (4APN): A Semi-Organic Material," was published in the Journal of Materials Research on January 6, 2025.
- She also authored "Innovative Accounting Practices: Bridging Traditional Methods with Modern Financial Reporting," which was published in the Journal of Information Systems Engineering and Management (JISEM).
- Additionally, she contributed the article "Exploring Trends in Financial Reporting and Business Growth" to JISEM (e-ISSN: 2468-4376).



Exploring the spectroscopic, photoluminescence, thermal, dielectric, and electrical conductivity properties of 4-aminopyridine nitrate (4APN): A semi-organic material

Innovative Accounting Practices: Bridging Traditional Methods with Modern Financial Reporting

Exploring Trends in Financial Reporting and Business Growth

STAFF ACHIEVEMENTS

PATENT PUBLICATIONS

Dr. P. Saravanan, Assistant Professor & Head, Department of Science, has published an Indian research patent titled "RNA ISOLATION KIT FOR LOW-VOLUME SAMPLES WITH ENHANCED PURITY ISOLATION OF LONG NON-CODING RNA (LNCrNA) FROM COMPLEX TISSUES" on March 14, 2025



Dr. S. M. Prakash, Assistant Professor, Department of Science, has been granted an Indian research patent titled "Elimination of Organic Pollutants via Innovative Metal-Organic Frameworks" on February 21, 2025. This patent focuses on the development of advanced metal-organic frameworks (MOFs) for efficient removal of organic pollutants, contributing to sustainable environmental solutions.

Dr. S. Suresh, Associate Professor in the Department of Science, has published an Indian patent titled "Compositions and Methods for Inhibiting Amyloid Fibril Aggregation," which was published on March 7, 2025.



Dr. N. Punitha, an Associate Professor in the Department of Physics, has published an Indian patent titled "Smart Charging and Battery Health Optimization in Electric Vehicles Using Deep Learning," which was published in March.



STAFF ACHIEVEMENTS

CERTIFICATIONS & HONORS



Dr. P. Krishnan, Associate Professor of Physics at St. Joseph's College of Engineering, was the Chief Guest at St. Thomas Vidyalyayam's Grand Expo 2025 on March 20, 2025 (Thursday). The event featured stunning performances by the students, captivating the audience.

- Dr. C. Senthil Murugan, Assistant Professor, Department of Physics, was appreciated for delivering a talk titled "A Gentle Introduction to Kagome Magnets: Fundamental Concepts and Emerging Perspectives" during the two-day workshop on "Advanced Transition Metal Dichalcogenides for Energy Storage Applications" (TMDE-2025) organized by Sri Sivasubramaniya Nadar College of Engineering (SSN), Chennai, on March 11, 2025.



Dr. P. Krishnan, Associate Professor from the Department of Science, has been awarded a certificate by the National Institute of Technical Teachers Training and Research, Chennai (under the Ministry of Education, Government of India) for successfully completing the program "Emerging Trends in Digital Learning Environment", held from March 17, 2025, to March 21, 2025.



STAFF ACHIEVEMENTS



CERTIFICATIONS & HONORS



Dr. S. Suresh, Associate Professor, Department of Science, has served as a Session Chair at the 4th International Conference on Multifunctional Materials and Radiation Measurements (ICMMRM-2025), held on March 21-22, 2025. The conference was organized by the Department of Physics Sri Sivasubramaniya Nadar College of Engineering (Autonomous), Chennai, in association with Sri Venkateswara College of Engineering (Autonomous), Sriperumbudur.



Dr. S. Suresh, Associate Professor in the Department of Science, received certifications from LMES Academy and Chitti & LMES on March 21, 2025. He successfully completed the STEM Educator Program, demonstrating proficiency in teaching strategies, digital literacy, technology integration, and STEM pedagogy. Additionally, he completed courses in DIY Science, Aeromodelling, Rocket Science, and App Development. The certificates were awarded by LMES Academy and Mr. Premanand, Founder of LMES & Chitti.

Dr. A. Mahalakshmi and Mr. Kaleel Mohamed Ibrahim S, Assistant Professors from the Department of Science, have successfully completed a 40-hour (3-credit equivalent) Faculty Development Programme on Quantum Technologies & Applications held from February 28 to March 22, 2025. The program was jointly organized by multiple academies, funded by MeitY, and endorsed by DST-NQM, AICTE, and UCC.



STAFF ACHIEVEMENTS

CERTIFICATIONS & HONORS

Dr. S. Suresh, Associate Professor in the Department of Science, received a consultancy amount of ₹11,500 for a transcription editing task for the courses "Appreciating Linguistics: A Typological Approach" (109106159) and "Programming in Modern C++" (106105234) at IIT Madras.



Dr. K. Jayamoorthy, Associate Professor in the Department of Science, has reviewed seven articles in the following journals:

- Materials Science in Semiconductor Processing
- Journal of Molecular Structure - 5 articles
- Current Organic Chemistry

Dr. B. Subash, Associate Professor in the Department of Science, has reviewed four articles in the following journals:

- Scientific Reports - 2 articles
- Current Analytical Chemistry - 1 article
- Nanotechnology for Environmental Engineering - 1 article

Dr. A. Dhivya, Assistant Professor in the Department of Science, has reviewed four articles in the following journals:

- ACS Omega - 2 articles
- Scientific Reports - 1 article
- Discover Applied Sciences

Dr. K. Dhanaraj, Assistant Professor in the Department of Science, has reviewed one article in the journal Journal of the Australian Ceramic Society.

Dr. S. M. Prakash, Assistant Professor from the Department of Chemistry, has contributed to Chapter 8 of the book, titled "Study on Advanced IoT Solutions for Enhancing Agricultural Productivity." His research emphasizes the role of IoT in enhancing agricultural efficiency. The chapter is published with the DOI: 10.4018/979-8-3693-2320-5.ch008.



Dr. A. Mahalakshmi, an Assistant Professor in the Department of Science, has authored the book "Introductory Approach to Research Methodology", ISBN 9788198164264.



STAFF ACHIEVEMENTS



CERTIFICATIONS & HONORS

The faculty members Dr. G. Sasikumar, Mr. Kaleel Mohamed Ibrahim S, Dr. J. Sharmila, Dr. S. Kiruba, Dr. N. R. Rajagopalan, Dr. S. Rama, and Dr. A. Dhivya from the Department of Science have successfully completed the NEP 2020 Orientation & Sensitization Programme under the Malaviya Mission Teacher Training Programme (MM-TTP) of the University Grants Commission (UGC). The program was organized by the Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram, Chennai, and took place from February 17 to February 27, 2025.



STAFF ACHIEVEMENTS

CERTIFICATIONS & HONORS



<https://stjosephs.ac.in/DW/Science/index.html>



<https://www.linkedin.com/groups/14477077>