The Institution of Engineers (India)

A Century of Service to the Nation

One Day Seminar on

"Recent Advances on Engineering Ferrous and Non-Ferrous Materials"

Date: 11th December 2026

organized by

The Institution of Engineers (India)

Coimbatore Local Centre

under the aegis of

Metallurgical and Materials Engineering Divisional Board, IEI

in association with

Department of Metallurgical Engineering
PSG College of Technology
Coimbatore - 641004

(IM000110-6)

Venue: PSG College of Technology
Peelamedu, Coimbatore - 641 004, Tamil Nadu

About The Institution of Engineers (India)

The Institution of Engineers (India) or IEI is the largest multidisciplinary professional body that encompasses 15 engineering disciplines and gives engineers a global platform for sharing professional interest. IEI has membership strength of above 2.6 lakh. Established in 1920, with its headquarter Kolkata, IEI has served the engineering fraternity close to a century. During this period of time, IEI has been inextricably linked with the history of modern-day engineering.

In 1935, IEI was incorporated by Royal Charter and remains the only professional body in India which has been accorded this honor. Today, its quest for professional excellence has given it a place of pride in almost every prestigious and relevant organization across the globe. It provides a vast array of technical, professional and supporting services to the Government, Industries, Academia and the Engineering fraternity, operating through its 124 Centres located across the country and 6 overseas chapters. Besides, IEI has bilateral agreements with about 31 international bodies and membership of another 8 international bodies of the developed nations across the globe. Being recognized as a Scientific and Research Organization (SIRO) by the Department of Scientific and Industrial Research, Ministry of Science and Technology, Government of India, IEI promotes the cause of research and development by providing Grant-in-Aid support to undergraduate, post graduate students and PhD Research Scholars of Engineering Institutions and Universities.

IEI has been recognized as Scientific and Industrial Research Organization (SIRO) by the Ministry of Science & Technology, Government of India and besides conducting its' own research, provides Grant-in-Aid to UG/PG/PhD students of Engineering institutes and Universities. IEI holds the International Professional Engineers (IntPE) Register for India under the global International Professional Engineers Alliance (IntPEA). The institution also awards the Professional Engineers (PE) Certification. IEI in collaboration with Springer regularly publishes peer-reviewed international journal in five series, namely, Series A, Series B, Series C, Series D and Series E covering fifteen engineering disciplines.

About Coimbatore Local Centre

IE(I) Coimbatore Local Centre, operating from the PSG College of Technology campus, has been actively serving the engineering fraternity for nearly 60 years. The IE(I), Coimbatore Local Centre has been one of the active centres of The Institution of Engineers (India) which is engaged in successfully translating the objectives and ethics of IE(I) into practice. The Centre was founded in the year of 1965, under the Chairmanship of Dr G R Damodaran, an educationist, the former Vice - Chancellor of Madras University, a philanthropist and also the architect of PSG College of Technology, Coimbatore, who lived for the technology development of the nation. Presently, IE(I), Coimbatore Local Centre has a strength of more than 3,000 corporate members, more than 6,000 student members, and 22 institutional members. It regularly organizes technical and special lectures in various fields of engineering. Industrial visits are also arranged to promote good technical interaction among the members and industries. It also observes the international / national events like World Water Day, World Telecommunication and Information Society Day, World Environment Day and Engineers Day and other IE(I) statutory days in a fitting manner by organizing technical talks on the selected themes with experts in field. One Day Seminar / Workshop, All India Seminar / Workshop funded by the IE(I), Headquarters, Kolkata are also being organized under different engineering divisions in association with various institutions. A few National Conventions of IE(I) are also organized by the Centre. The Centre served as an important examination centre in the region for many years conducting AMIE section A & B examinations during summer and winter sessions.

The Centre has many students' chapters which are active under different engineering divisions in various institutions in and around Coimbatore. Every year, outstanding engineers and young achievers are honored by the Coimbatore Local Centre. Student scholarships are also distributed from various endowment contributions. The Centre houses a library with about 1900 text and reference books for the benefit of members. Guidance classes are also being conducted to support associate and student members.

Golden jubilee of the IE(I), Coimbatore Local Centre was celebrated in the year 2015 - 2016 with the inauguration of Centre's own building, "PSG - GRD Bhavan". Rotary eClub of Coimbatore Changemakers honored IE(I), Coimbatore Local Centre with **"Changemaker of Coimbatore Award for the year 2022-2023"**. Recently, the Institution of Engineers (India), Coimbatore Local Centre, has been adjudged the **"Best Local Centre" for its all-round performance during the year 2025-2026**. This recognition was also received earlier for the years 2019-2020, 2022- 2023, 2023-2024 and 2024-2025.

About the College

PSG College of Technology, established in 1951 by PSG & Sons' Charities, is an ISO 9001:2015 certified autonomous institution affiliated with Anna University, Chennai. It celebrates its Platinum Jubilee alongside the Centenary Year of its founding trust, renowned for contributions to education and industry. The college offers 21 undergraduate and 24 postgraduate programmes in Engineering and Technology, Computer Applications, Management Sciences, and Basic and Advanced Sciences. It hosts advanced Centres of Excellence, including TIFAC-CORE in Product Design, Machine Tool Research Centre, Engineering Design Centre, Virtual Reality Centre, Tool and Die Centre, Centres for Nanotechnology, Robotics, Artificial Intelligence and Software, Non-Linear Dynamics, Climate and Energy (Danfoss), and Welding Engineering and Technology.

Through PSG Industrial Institute, the campus operates manufacturing units producing machine tools, pumps, and motors, along with off-campus foundries, providing hands-on industry exposure. The institution maintains strong collaborations with industries, research bodies, alumni, and entrepreneurs to foster innovation. PSG Tech ranks second nationally in ARIIA (Government and Government-Aided category) by the Ministry of Education and has been recognized as the Best Industry-Linked Institution by AICTE-CII. During India's G20 Presidency, it was selected among 75 institutions to host academic and cultural G20 engagement initiatives.

About the Department

The Department of Metallurgical Engineering was established in 1974, offering BE (Metallurgical Engineering) programme, which began in 1968 under the Department of Mechanical Engineering, along with a new ME (Industrial Metallurgy) programme. In the same year, PSG & Sons' Charities founded PSG Metallurgy and Foundry Division, strengthening the department's academic and industrial foundation. The department has highly qualified faculty and state-of-the-art laboratories supporting academic, industrial, and research activities across metallurgical engineering. Its alumni hold prominent global positions in industry, research laboratories, and academia. Numerous scholars have completed their PhDs in the department, contributing significantly to metallurgical research.

Active collaborations with leading research laboratories, industries, and academic institutions enhance research and consultancy activities. The department also provides testing and consultancy services and conducts training programmes for practicing engineers and faculty. Since 2009, it has offered a

postgraduate certificate programme in Welding and Quality Engineering in collaboration with BHEL Educational Society, Tiruchirappalli. In 2016, the Centre of Excellence in Welding Engineering and Technology (COEWET), funded by the Department of Heavy Industry, Government of India, was established with advanced research facilities. In 2024, the BE programme received six-year NBA accreditation, affirming its quality and relevance.

About the Seminar

The programme will delve into the latest breakthroughs in materials engineering, addressing the critical need for high-performance, sustainable, and cost-effective materials. For ferrous materials, sessions will explore the development of advanced high-strength steels (AHSS) for automotive industries, the application of novel thermo-mechanical processing for enhanced toughness, and innovations in coating technologies to combat corrosion and wear. In parallel, the programme will highlight significant strides in non-ferrous materials, including aluminum, titanium, magnesium, and copper alloys. Key topics will include the emergence of high-entropy alloys (HEAs), the role of additive manufacturing (3D printing) in creating complex geometries, and the growing importance of metal matrix composites for aerospace and defence applications. A special focus will be placed on sustainable practices, such as recycling strategies, green manufacturing processes, and life-cycle assessment of materials to align with global net-zero goals.

Sub Themes

- Advanced high-strength steels (AHSS) for automotive industries
- High-entropy alloys (HEAs) for high temperature applications
- Additive manufacturing (3D printing) in creating complex geometries
- Metal matrix composites for aerospace and defence applications
- Lightweight metals and alloys in electric vehicle manufacturing

Resource Persons

Expert members from various leading academic institutions, research laboratories and Industries.

Eligibility

IEI Members, UG and PG Students, Research Scholars, Faculty Members and Practicing Engineers.

How to Apply

Registration* for the seminar can be made by sending the duly filled application through email or by filling the registration link on or before **07.12.2026.**

Registration Link: https://forms.gle/ByVeiDJCwhcncNs9A

Note

- ***No registration fee***
- ***Limited seats only available***
- ***Pre-registration is mandatory***
- ***The registration will be confirmed on first come first served basis***
- ***Spot registration is strictly not permitted***

Chief Patron — **Shri L Gopalakrishnan**
Managing Trustee
PSG & Sons' Charities, Coimbatore

Patron — **Dr G Thilagavathi**
Principal
PSG College of Technology, Coimbatore

Organizing Committee

Chairman — **Dr M Senthilkumar**
Chairman, IEI Coimbatore Local Centre &
Professor and Head, Dept of Production Engg, PSG CT

Organizing Secretary — **Dr J Pradeep Kumar**
Honorary Secretary, IEI Coimbatore Local Centre &
Associate Professor, Dept of Production Engg, PSG CT

Convener — **Dr J Krishnamoorthi,** Member, MMDB, IEI
Immediate Past Chairman, IEI Coimbatore Local Centre &
Professor and Head, Dept of Metallurgical Engg, PSG CT

Members
Dr G Madhan Mohan, Immediate Past Honorary Secretary, IEI CLC
Dr M Senthilkumar, Committee Member, IEI CLC
Dr S Prabhakaran, Committee Member, IEI CLC
Mr K Saravanakumar, Committee Member, IEI CLC
Dr R Sivasankari, Committee Member, IEI Coimbatore Local Centre
Dr V V Senthil Kumar, Committee Member, IEI CLC
Dr K Krishna Kumar, Assistant Professor, Dept of Metallurgical Engg, PSG CT
Dr Jayanta Mondal, Assistant Professor, Dept of Metallurgical Engg, PSG CT
Dr Deepak Kumar Satapathy, Assistant Professor, Dept of Metallurgical Engg, PSG CT

Contact	
Dr J Pradeep Kumar Honorary Secretary The Institution of Engineers (India) Coimbatore Local Centre PSG College of Technology Campus Peelamedu, Coimbatore - 641004 Phone: 0422 - 2580733 / +91 8056652764 Email: coimbatorelc@ieindia.org	**Dr Jayanta Mondal** Assistant Professor Department of Metallurgical Engineering PSG College of Technology Peelamedu, Coimbatore - 641004 Email: jmd.metal@psgtech.ac.in

One Day Seminar on

"Recent Advances on Engineering Ferrous and Non-Ferrous Materials"

Date: 11th December 2026

Venue: PSG College of Technology
Peelamedu, Coimbatore - 641 004, Tamil Nadu

Registration Form

Name (in Block Letters) : ……..

Designation : …….

Organization / Institution : …….

IEI Membership No & Division : …….

Address for Communication : …….

…….

Mobile Number : …….

Email ID : …….

……..
Date: …… **Signature**