



**One Day Workshop
on
Optical Characterization in Materials Chemistry**

4th April 2025

Venue: PSG Institute of Advanced Studies



Organized by

Department of

**Nanoscience & Technology and
Chemistry**

PSG Institute of Advanced Studies

Peelamedu, Coimbatore - 641 004

Tamil Nadu, India

PSG & SONS' CHARITIES (Since 1926)

One Day Workshop on



Optical Characterizations in Materials Chemistry

About PSG Institutions

PSG Group of Institutions, founded in 1926, has played a pioneering role in shaping education and industry in India. With a legacy that stretches across the nation and around the globe, PSG continues to uphold its commitment to academic excellence. The institutions offer a diverse range of courses, from Arts and Sciences to Engineering, Medicine, and Management, providing comprehensive learning experiences. With a robust teaching staff of nearly 1,000 and a student community of up to 16,000, PSG has consistently set new benchmarks in education, empowering students to break barriers and excel in their respective fields.

About PSG Institute of Advanced Studies (PSG IAS)

PSG IAS, established in the year 2006 by the PSG and Sons' Charities Trust, is located in the heart of Coimbatore. This institute was founded with the vision of advancing science and technology through translational research. It is committed to fostering high-quality research in specialized fields and promoting collaborations between PSG institutions and international universities. The primary objective of the institute is to develop research and development (R&D) facilities in key areas while establishing academic partnerships with industries, research organizations, and universities both nationally and internationally. With its state-of-the-art research infrastructure, PSG IAS supports both fundamental and advanced research. The institute also offers joint academic programs with renowned global universities (USA, UK, Germany and Australia).

“Let there be charity, so that others can share my family’s prosperity”

Shri. P. S. Govindaswamy Naidu, Founder, PSG & Sons' Charities

About the Workshop

The workshop will bridge theoretical knowledge and practical application, empowering attendees to effectively use these techniques in their own research by

- Introducing SPR and its relevance to various material phenomena and providing a hands-on demonstration of its applicability to multiple fields such as gas sensing and energy storage.
- Providing an overview of FTIR theory and its applications by an extensive practical session which will demonstrate acquiring and interpreting FTIR spectra
- Introducing PL spectroscopy, focusing on the rubrics of emission of light from a material following light absorption as well as through a hands-on experience with PL instruments for collecting emission spectra and analyzing material properties like bandgap, defect states, and luminescent behavior

Who can apply?

Master's students, research scholars and faculty members

Number of Participants is Restricted to 30

Tentative schedule

08.30-09.00 AM	Registration
09.00-09.15 AM	Inauguration
09.15-10.15 AM	SPR- Theory and applications – Dr. D. Gnanaprakash
10.15-10.30 AM	Break
10.30-11.30 AM	Fluorescence of nanomaterials – Dr. S. Chandirasekhar
11.30-12.30 PM	Sensitization on FTIR – Dr. R. Sivasubramanian
12.30-01.45 PM	Lunch
01.45-03.30 PM	Demonstrations / hands-on sessions
03.30-03.45 PM	Break
03.45-04.00 PM	Valedictory function

Registration Fee Details

Students	:	Rs. 900/- (Plus 18% GST)
Faculty Members	:	Rs. 1500/- (Plus 18% GST)

Kindly Submit the Google Form after Registration with Payment Details:
<https://forms.gle/won4hRQwNqQ7FBpW7>

Bank Account Details

Account Name	:	PSG Institute of Advanced Studies
Account Number	:	1481412317
IFSC Code	:	CBIN0280913
Bank Name	:	Central Bank of India
Branch	:	Peelamedu, Coimbatore

Last Date for Registration is 30.03.2025

Chief Patron

Shri L. Gopalakrishnan
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Dr. J. Kanchana
Deputy Director, PSG IAS

Organizing Secretary

Dr. D. Gnanaprakash
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