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## Symposium Organizing Committee

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To


**DAE-BRNS  
NATIONAL LASER SYMPOSIUM-31**

NLS-31

December 3 - 6, 2022

Organized at

INDIAN INSTITUTE OF TECHNOLOGY  
KHARAGPUR WEST BENGAL - 721302, INDIA



In collaboration with  
Indian Laser Association



Sponsored by  
Board of Research in Nuclear Sciences,  
Department of Atomic Energy,  
Government of India

Website: <https://ila.org.in/nls31/>

## Symposium Overview

The 31<sup>st</sup> National Laser Symposium (NLS-31), sponsored by the Board of Research in Nuclear Sciences (BRNS), Department of Atomic Energy (DAE), will be organized at the Indian Institute of Technology Kharagpur from **December 3 to 6, 2022**. The NLS aims to create a platform for budding researchers in laser physics and technology to interact and network with eminent scientists in the field. The symposium will have invited talks by leading experts, poster presentation of contributed papers and thesis presentation by Ph.D. students. The symposium organizing committee cordially invites all scientists, engineers and students engaged in basic and applied research in the broad areas of laser physics, technology and applications to participate in the symposium.

## Topics of Interest

- ☐ **Physics and Technology of Lasers**
- ☐ **Lasers in Nuclear Science & Technology**
- ☐ **Laser Materials, Devices and Components**
- ☐ **Quantum Optics and Atom Optics**
- ☐ **Ultrafast lasers and Applications**
- ☐ **Nonlinear Optics and Devices**
- ☐ **Lasers in Materials Science and Nano-Technology**
- ☐ **Laser Plasma Interaction**
- ☐ **Lasers in Space, Industry and Defense**
- ☐ **Laser Spectroscopy and Application**
- ☐ **Lasers in Chemistry, Biology & Medicine**
- ☐ **Laser Based Instrumentation**
- ☐ **Electronics and Instrumentation for Lasers**
- ☐ **Machine Learning & AI in Laser Applications**

The Indian Laser Association (ILA) will organize short tutorial courses for students on **December 1 & 2, 2022** at the conference venue. Details will be announced separately by ILA.

ILA will also award prizes for the "Best thesis" and "Best poster" presentation at NLS-31.

The annual general body meeting of ILA will be held during the symposium.

**For updates on NLS-31 and the ILA courses, please visit the symposium website**

<https://ila.org.in/nls31/>

## Important Dates

- Paper submission deadline - **September 26, 2022**
- Thesis summary submission deadline - **September 26, 2022**
- Intimation of paper/ thesis acceptance - **October 15, 2022**
- Last date for accommodation request - **October 25, 2022**
- Last date for registration - **November 15, 2022**

## Paper Submission

Authors are requested to submit a full-length manuscript in the specified format by **September 26, 2022** as per the guidelines and instructions provided on the NLS-31 website. Use MS word 2007 or higher version. The length of the manuscript should be at least 2 pages and not more than 4 pages (including figures, references, tables etc.). A separate short abstract (maximum 100 words) as per the guidelines should also be submitted.

Ph.D. students who have submitted their thesis in the topics of interest of the symposium, or expect to submit the thesis by **December 31, 2022**, and those who have been awarded Ph.D. degree after **January 1, 2022**, are eligible for thesis presentation. Those interested should send a four-page summary of their thesis by **September 16, 2022**, along with a certificate from their Ph.D. guide specifying the date of submission of thesis or award of the degree.

A 'Book of Abstracts' containing abstracts of peer reviewed contributed papers, invited talks and thesis summaries, and a CD containing full manuscripts will be made available to the participants during the symposium.

A poster board of area of 1m X 1m will be provided for each poster presentation. Please see the symposium website for a template for poster preparation.

The invited talks, papers selected for the "Best Paper Award", and articles based on the work of "Best Thesis Award", will be published in Kiran, the ILA Newsletter.

For queries related to the invited talks, submission of manuscript, Ph.D. thesis, etc., please contact: [nls31@ila.org.in](mailto:nls31@ila.org.in)

## Venue

NLS-31 is being organized in the beautiful and green academic campus of IIT Kharagpur spread over ~ 1600 acres at Kharagpur, West Bengal, India.

The Indian Institute of Technology Kharagpur is the first IIT established in 1951, with a capacity of more than 14,500 students pursuing undergraduate and post graduate programs in diverse subjects. Several faculty members of the Institute belonging to various Departments are actively involved in different areas of research on lasers and its applications.

The weather in Kharagpur is quite pleasant during the symposium period. Kharagpur is well connected by road and rail. The nearest airport is Netaji Subhash Chandra Bose International Airport at a distance of about 140 km from the campus.

## Accommodation

Hostel accommodation on sharing basis will be provided to the student participants. There are limited number of Guest House rooms in the campus, wherein the other participants can be accommodated. Invited speakers will be provided Guest House accommodation inside the campus.

All the accommodation requests should be entered on NLS-31 web site.

Hotel accommodation outside the campus is also available. For more details about the hotels, please visit the NLS-31 website. Accommodation in hotels can be booked directly by contacting them.

For queries on the local organization, including accommodation, travel etc., please contact: [nls31@phy.iitkgp.ac.in](mailto:nls31@phy.iitkgp.ac.in)

## Financial Assistance

Financial assistance towards travel by train (3-AC) by the shortest route can be provided to a limited number of deserving students, who are currently not in receipt of any fellowship. Applications for assistance must be accompanied by a letter of recommendation from their research guide / Head of the Department. Only students with contributory papers may apply for this assistance.

Request may be made on the symposium website by duly submitting all required details and documents.

## Registration fee and procedure

Sl. No	Category	Fee
I	Students	1000 /-
II	Delegates from Educational Institutes & Govt. Organizations	3000 /-
III	Delegates from Public Sector Undertakings & Industries	5000 /-

For payment of registration and accommodation fee, please see details on the NLS-31 web site.

Registration fee and advance amount for accommodation booking will be accepted in the NLS-31 bank account through electronic bank transfer only, details of which shall be posted on the symposium website.

