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Kumar G. Ravindra	TIFR, Mumbai
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Sriram K. V.	LEOS, Bengaluru
Venkatraman B.	IGCAR, Kalpakkam
Vinayak Seema	SSPL, New Delhi

Symposium Organizing Committee

Nakhe S. V.	RRCAT, Indore: Chairman
Majumder S. K.	RRCAT, Indore: President, ILA
Achanta Venugopal	NPL, New Delhi: Vice-President, ILA
Verma Sunil	RRCAT, Indore: Convener, NLS-32
Saxena Manoj K.	RRCAT, Indore: Organizing Secretary, NLS-32
Upadhyay Ajit	RRCAT, Indore: Scientific Secretary, NLS-32
Palani I. A.	IIT, Indore: General Secretary- I, ILA
Paul C. P.	RRCAT, Indore: General Secretary - II, ILA
Benerji N. S.	RRCAT, Indore: Treasurer, ILA
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Nagraj A.	BRNS, Mumbai
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Saxena Piyush	RRCAT, Indore
Sendhil Raja S.	RRCAT, Indore
Sharma Archana	BARC, Mumbai
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Local Organizing Committee

Nakhe S. V.	RRCAT, Indore: Patron
Majumder S. K.	RRCAT, Indore: Chairman
Verma Sunil	RRCAT, Indore: Convener, NLS-32
Saxena Manoj K.	RRCAT, Indore: Organizing Secretary, NLS-32
Upadhyay Ajit	RRCAT, Indore: Scientific Secretary, NLS-32
Paul C. P.	RRCAT, Indore: General Secretary-II, ILA
Benerji N. S.	RRCAT, Indore: Treasurer, ILA
Talwar Sandeep	RRCAT, Indore: Treasurer, NLS-32
Dave Ishant	RRCAT, Indore: Webmaster, ILA
Narwat Dhruvdeep	RRCAT, Indore: Webmaster, NLS-32
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Andrews J. T.	SGSITS, Indore
Bhatnagar Prateek	RRCAT, Indore
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Ganesh P.	RRCAT, Indore
Gupta Sharad	IIT, Indore
Khanwalkar Jagriti	RRCAT, Indore
Krishna Hemant	RRCAT, Indore
Kumar Vijay	RRCAT, Indore
Mishra G. K.	RRCAT, Indore
Mishra P. K.	RRCAT, Indore
Misra Pankaj	RRCAT, Indore
Patidar Rajesh	RRCAT, Indore
Rai A. K.	RRCAT, Indore
Rawlani Bharat	RRCAT, Indore
Sahu Khageswar	RRCAT, Indore
Satapathy S.	RRCAT, Indore
Sharma Sanjay	RRCAT, Indore
Shrivastava R.	RRCAT, Indore
Upadhyaya B. N.	RRCAT, Indore
Vanchhani D.	RRCAT, Indore

Contact persons for NLS-32

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For ILA Short Courses, please contact:	
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Email: nls32@ila.org.in



32वां पञ्च-बीआरएनएस राष्ट्रीय लेजर संगोष्ठी

32nd DAE-BRNS

NATIONAL LASER SYMPOSIUM

January 29 to February 01, 2024



Organized by
Raja Ramanna Centre for Advanced Technology
Indore-452013, M.P.



Light Exploratorium

DAE Diamond Jubilee Structure



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

In collaboration with
Indian Laser Association



www.ila.org.in/nls32

Symposium Overview

The 32nd National Laser Symposium (NLS-32), sponsored by the Board of Research in Nuclear Science (BRNS), Department of Atomic Energy (DAE), will be organized in collaboration with the Indian Laser Association (ILA) at the Raja Ramanna Centre for Advanced Technology (RRCAT), Indore during **January 29–February 01, 2024**.

The symposium aims to create a forum for researchers in the field of laser physics and technology, and their applications to interact with each other and network with eminent experts in the field. The symposium will cover invited talks by leading experts in the field, poster presentations of the contributed papers, thesis presentations by Ph.D. students, and Industrial exhibition. The symposium organizing committee cordially invites all the scientists, engineers, research scholars, and industry participants engaged in basic and applied research in the broad areas of laser and related fields to participate in the symposium. The main themes of deliberations during the symposium will be:

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

ILA Short Courses

The Indian Laser Association (ILA), the co-organizer of the NLS-32, will conduct short tutorial courses on January 27 - 28, 2024 at the symposium venue. ILA will announce the details of these courses on the ILA website shortly. Please contact General Secretary-II, ILA.

Industrial Exhibition

ILA will also be organizing an industrial exhibition at the symposium venue to provide a platform to the manufacturers and suppliers of lasers and related equipment to showcase the latest technical developments in the field to the symposium attendees. A special 'Make in India' session will also be organized where Indian R&D organizations and Industries will be invited to make presentations on their laser and related products developed in India. The exhibition will run concurrently with the symposium from January 29 to February 01, 2024. The industry participants are encouraged to contact "General Secretary-II, ILA" in this regard.

Paper and Thesis Submission

Authors are requested to submit a full-length manuscript in the specified format by **November 30, 2023**, as per the guidelines and instructions provided at the NLS-32 website. Use MS word 2007 or higher version in '.docx' format. 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 provided on the NLS-32 website should also be submitted. A poster board of area 1m x 1m approx. will be provided for each poster presentation during the symposium.

Ph.D. students, who have submitted their thesis on-or-before **November 30, 2023**, and whose work fall in any of the themes of the symposium or those who have been awarded Ph.D. degree after **January 1, 2023** are eligible for thesis presentation. The interested students should send a four-page summary of their thesis by **November 30, 2023** along with a certificate from Ph.D. guide specifying date of submission of thesis or award of the degree.

Best Poster & Ph.D. Thesis Awards

A few outstanding contributory posters and Ph.D. thesis presented by the research scholars will be selected by a jury of eminent experts for the award of "BEST POSTER" and "BEST Ph.D. THESIS" awards.

Publications

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

KIRAN - ILA Bulletin: A special issue of "KIRAN – Bulletin of ILA" will be released during the symposium containing articles based on the invited talks presented during NLS-32. In addition, articles based on the "Best Poster" and "Best Ph.D. Thesis" awards will be published in a forthcoming issue of "KIRAN – Bulletin of ILA".

GBM of ILA

The annual General Body Meeting (GBM) of the ILA will also be held during the symposium.

Registration

Registration fee and advance booking charges for accommodation will have to be paid online in the NLS-32 bank account ONLY. For bank details kindly visit NLS-32 website. Registration charges as given below:

Category	Fee
Students	: Rs. 1,000
Delegates from Academic Institutes & Govt. Org.	: Rs. 3,000
Delegates from PSU & Industries	: Rs. 6,000

Accommodation

Since the accommodation at RRCAT Guest House is very limited, therefore most of the outstation participants will be accommodated in hotels in single/sharing (AC/non-AC) rooms. For more details about the hotels, please visit the NLS-32 website. All participants should upload the accommodation request on the NLS-32 website. One day room rent should be paid as an advance for the booking of hotel accommodation. Please note that accommodation in hotels would be booked only after receipt of an advance deposit.

Travel Assistance to Students

Efforts will be made to provide shared accommodation to the student participants in one of the hostels at RRCAT. Financial assistance towards local hospitality and travel by train (3rd AC) by the shortest route will be provided to a limited number of deserving students. Applications for the assistance with a letter of recommendation from Guide / Head of the Department and addressed to the Convener, NLS-32 should reach on or before **January 25, 2024**.

Important Deadlines

Paper / Thesis Submission : **November 30, 2023**
Paper/Thesis Acceptance : **December 15, 2023**
Registration with Payment : **January 10, 2024**
Accommodation with Payment : **January 15, 2024**

About Indore

Indore is the largest cultural, educational, economic and industrial city of Central India having several monuments of historical importance of the erstwhile Holkar dynasty of Indore. The city serves as the gateway to the many religious pilgrimage sites such as Jyotirlinga in Ujjain and Omkareswar. In addition, the nearby locations of tourist attraction are the Maheshwar fort and the city of Mandu.

About Symposium Venue: RRCAT, Indore

The symposium is being organized at Raja Ramanna Centre for Advanced Technology (RRCAT), Indore, a premier research institute under Department of Atomic Energy, Government of India working in the areas of Lasers and Particle Accelerators, with the motto "Photons in the service of mankind through Science and Technology". The symposium venue is an aesthetically constructed "RRCAT Convention Centre" with a picturesque view overlooking natural lakes surrounded by abundant flora and fauna. RRCAT campus is spread over 760 hectare picturesque site on the outskirts of Indore city. RRCAT Colony has been declared the "Cleanest Colony of Indore", while Indore itself has been declared for the 6th consecutive year, the "Cleanest City of India". Therefore, symposium is being hosted in the "Cleanest Colony of the Cleanest City of India". RRCAT is very well connected by different parts of India by train, road and air routes. The Indore airport is about 15 km and the railway station is 12 km from RRCAT campus.