

**National Conference on
Luminescence and its Applications
(NCLA-2024)**

28 – 30th August, 2024

**Venue: Department of Physics, North-Eastern Hill
University (NEHU), Shillong, Meghalaya, India**



**Organized by
NEHU, Shillong, India
&
Luminescence Society of India**

Industrial Partner

**Nucleonix Systems Pvt. Ltd, Hyderabad, India
Kwality Photonics Hyderabad**

Format of NCLA-2024

Key Notes-4	Plenary Talks-4	Invited Talks	Invited Technical Talks	Group Presentations	Oral Presentations	poster
50 Minutes	45 Minutes	50	20 Minutes Total-30	7		

**National Conference on Luminescence and its Applications (NCLA-2024)
August 28 – 30, 2024**

**Theme of NCLA-2024: Smart Materials for Display, Forensic, Energy and Biomedical
applications**

About NEHU

The objectives of the University shall be to disseminate and advance knowledge by providing instructional and research facilities in such branches of learning as it may deem fit; to pay special attention to the improvement of the social and economic conditions and welfare of the people of the hill areas of the North-Eastern region, and, in particular, their intellectual, academic and cultural advancement

The North-Eastern Hill University Act (24 of 1973) passed by both Houses of Parliament received the assent of the President of India on May 26th, 1973.

In a short span of about 50 years NEHU has matured into an institution with a serious academic and social and cultural agenda and a clear vision for its future growth.

ABOUT THE DEPARTMENT OF PHYSICS

History

The department of Physics was established in 1976 with a view to build scientific manpower in this part of the country consistent with the NEHU Act. In the course of several years the Department could attract a wide spectrum of talented faculty and has identified Nuclear Physics (Experimental and Theoretical), Laser Physics (Experimental), Solid State Physics (Experimental and Theoretical) and High Energy/Particle Physics (Theoretical) as the thrust areas in its teaching and research programmes. These areas are included in the list of thrust areas by the Department of Science and Technology, Government of India.

Apart from conducting M.Sc. and Ph.D. programmes, faculty members have been invited by reputed national and international institutions for giving talks on their research contributions. Some members have been offered associateships and senior associateships for collaborative research work.

Profile

Courses offered by the department are

1. M. Sc
2. Ph. D

Thrust Area

Thrust Area of Research: Solid State Physics, High Energy Physics, Laser Physics and Nuclear Physics. The department has been selected under DST-FIST since July 2001. Compared to the initial strength, the M.Sc. (Physics) admission capacity has been increased nearly four times to meet the growing demand.

About Luminescence Society of India (LSI)

Luminescence Society of India (LSI), formed in 1990, provides a forum for interaction for Indian scientists and technologists having affiliation to different universities and research institutions in the field of luminescence and their applications by organizing annual conferences regularly. Four international conferences were successfully organized wherein Indian researchers were joined by a large number of foreign scientists. During the past thirty years, in addition to scientific sessions,

there has been an increase in the participation of delegates from industry as exhibitors of their products and for technical presentations. Moreover, rapporteur and oral sessions are being held regularly for the past 30 years in order to accommodate the papers of all participants in the technical sessions

The conference

National Conference on Luminescence and its Applications (NCLA-2024) is a prestigious event of the Luminescence Society of India (LSI). NCLA-2024 is going to be held during 28-30th August, 2024 at Shillong being organized by Department of Physics, North Eastern Hill University (NEHU), Shillong, Meghalaya, India in association with Luminescence Society of India (LSI). In addition, industrial partners Nucleonix Systems Pvt. Ltd and Kwality Photonics Shillong are ready to participate at NCLA-2024.

Luminescence Society of India had organized an International Symposium cum Workshop on Luminescence Materials (ISWLM-2015) during 18-19th December, 2015 at Baroda, India as a celebration in the YEAR OF LIGHT-2015. Since the inception of LSI, this conference is the 28th in a series of annual conferences organized by LSI. The conference is the follow-up of previous one ICLA-2023 (CSIR-IICT, Hyderabad), NCLA-2021 (Govt. V.Y.T.PG. Auto. College Durg) NCLA-2020 (NIT-Warangal), ICLA-2019 (Pt. RSS University, Raipur), NCLA-2018, (NIIST, Trivandrum), NCLA-2017, (IICT, Hyderabad) NCLA-2016, (R.T.M. Nagpur University, Nagpur), ICLA-2015 (PESIT, Bengaluru), NCLA-2014 (Jabalpur), NCLA-2013 (PESIT, Bengaluru), ICLA-2012 (IICT, Hyderabad), NCLA-2011 (Pt. RSS University, Raipur), NCLA-2010 (GRU, Gandhigram), NCLA-2009 (CGCRI, Kolkata), ICLA-2008 (NPL, New Delhi), NCLA-2007 (BU, Coimbatore), NCLA-2006 (SGB University, Amravati), NCLA-2005 (BU, Bengaluru), ICLA-2004 (BARC, Mumbai), NCLA-2003 (NPL, New Delhi), RDU, NCLA-2002 (Jabalpur), NCLA-2001 (OU, Hyderabad), ICLA-2000 (MSU, Baroda), NCLA-1998 (MU, Imphal), NCLA-1997 (Bilaspur), NCLA-1995 (RU, Raipur), NCLA-1992 (MSU, Baroda).

Themes of NCLA-2024

NCLA 2024 envisages diversified and multi-disciplinary technical sessions; amongst few are plenary lectures and an exhibition of equipment and other materials. Latest developments in the field of luminescence research and its applications will be reviewed and the conference is expected to provide an interactive platform to the academia, researchers and the industry. Participations from different industries, universities and academic institutions from all over the globe are anticipated. The organizing committee hereby invites scientists/technologists engaged in basic as well as applied research in Universities, Research Institutions and Industries to participate. The scientific sessions will comprise plenary talks, invite talks and contribute papers (both oral and poster) on the following topics:

1. Photoluminescence
2. Electroluminescence
3. Thermoluminescence
4. Phosphors and nanophosphors (preparation and characterization)
5. Photonic materials and lasers
6. Luminescence for improving efficiency of solar cells
7. Luminescence from glasses and glass ceramics
8. Luminescence from organic compounds

9. Luminescence in gemstones and diamonds
10. Luminescence for improving agriculture productivity
11. Optical materials (nanomaterials, quantum dots, biomaterials, ceramics etc.)
12. Optically Stimulated Luminescence (OSL)
13. Mechano, sono and chemiluminescence
14. Optoelectronic devices (LEDs, OLEDs, Fiber optic sensors, etc.)
15. Radiations effects on luminescence and dosimetry
16. Luminescence dating [TL and OSL]
17. Space dosimetry
18. Luminescence instrumentation
19. Phosphors for LED applications
20. Phosphors for bio-medical and security applications
21. Biodegradable phosphor composites
22. Novel applications of luminescence
23. Industrial applications of phosphors
24. Theoretical aspects of luminescence

Conference language: The conference presentations and deliberations will be in English.

Call for abstracts

Authors should submit an abstract of an original, unpublished paper not exceeding 300 words without figures or tables. The abstract format can be downloaded from the conference or LSI web sites i.e. www.lumsocindia.org. The abstract must be submitted by online through conference web site [google form]. Each registered participant can submit two abstracts only. If there is any difficulty during the abstract submission please contact via e-mail: nclanehu2024@gmail.com

Proceedings

All the abstracts accepted from registered participants will be published in the conference proceeding with ISBN number. Papers presented at NCLA-2024 are planned to be published in the International Journal of Luminescence and its Applications after regular refereeing process. The journal format for manuscripts can be downloaded from the web sites i.e. www.lumsocindia.org and <http://ijlaindia.org/>.

Publication in Journal with prior review:

Phosphors for Radiation Dosimetry

Guest editors: Prof. Vikas Dubey - Submission deadline: 31 July 2024

Articles submitted to this special issue have a reduction of 30% for the Article Publishing Charge!

TL materials are extensively used in radiation dosimetry.

Link: [Call for papers - Journal of Radiation Research and Applied Sciences | ScienceDirect.com by Elsevier](#)

Book Chapter:

"**Luminescence Spectroscopy & Microscopy: Methods and Applications**" to be published by **Springer Nature**. Edited by Dr. Ram Gopal, Dr. Vikas Dubey and Dr. B. Latif

Link:

https://docs.google.com/forms/d/e/1FAIpQLSecVrEkUDEj2Ekz4IIFcOsFVfcEitzM70tdxpe3vGDeGrxnFg/viewform?usp=sf_link

Notable Plenary Talks

International Speakers

1. Prof. B. V. R. Chowdari NTU, Singapore
2. Prof. Dr. Yogendra Kumar Mishra, [FRSC](#), University of Southern Denmark
3. Prof. W. Streck, ILSR, Poland
4. Dr. Ajeet Kaushik, Florida Polytechnic University, Lakeland, FL, USA
5. Prof. Dirk Poelman, Ghent University, Belgium
6. Prof. Rameshwar Prasad Adhikari, Tribhuvan University, Nepal
7. Prof. Narayan Prasad Adhikari, Tribhuvan University, Nepal
8. Dr. R. P Rao, Speciality Phosphors, USA
9. Prof. K. V. R. Chary, Rowen University, USA
10. Prof. Lioz Etgar, The Hebrew University of Jerusalem, Israel
11. Prof. Frederic Sauvage, Université de Picardie Jules Verne, France
12. Prof. Ashraful Islam, National Institute of Material Science, Japan
13. Prof. Hari Upadhyaya, London South Bank University, UK
14. Prof. Kalyana Sundaram, EPFL, Switzerland
15. Prof. Neil Robertson, University of Edinburgh, Scotland
16. Prof. Senthilarasu Sundaram, UK
17. Dr. Marta Michalska-Domańska, Military University of Technology, Poland
18. Dr. Maria Elena Zayas, Sonora, Mexico
19. Dr. Jelena Mitric, Institute of Physics, Serbia
20. Dr. Z. Gigem Portakal, Adana, Turkey
21. Prof. Hedayat-Allah Salem, Professor at Egyptian Atomic Energy Authority
22. Prof. Atef El-TaHER, Al Azhar University, Egypt

National Speakers

1. Prof. B. N. Jagatap, IIT – Mumbai
2. Prof. K. V. R. Murthy, MS University – Baroda
3. Prof. S. J. Dhoble, RTMNU – Nagpur
4. Dr. Karunakaran Venugopal, CSIR-NIIST – Trivandrum
5. Dr. Santhosh Babu – CSIR-NCL – Pune
6. Prof. Subi George – JNCSAR – Bangalore
7. Prof. Anunay Samanta – University of Hyderabad – Hyderabad
8. Prof. A. Ajayagosh – CSIR-NIIST – Trivandrum
9. Prof. Soma Venugopal Rao – University of Hyderabad – Hyderabad
10. Dr. Sai Santosh Kumar R. – IIT – Hyderabad
11. Prof. D. Haranath – NIT – Warangal
12. Dr. Abhijit Hazarika – CSIR-IICT – Hyderabad
13. Prof. D. Kashinath, NIT – Warangal
14. Dr. Raghu Chitta – NIT – Warangal
15. Prof. Reji Varghese – IISER – Trivandrum
16. Dr. C. Vijaykumar – CSIR-NIIST – Trivandrum
17. Dr. Joshy Joseph – CSIR-NIIST – Trivandrum
18. Dr. Jatish Kumar – IISER – Tjirupati
19. Dr. Jino George – IISER – Mohali
20. Dr. Ravikumar Kanaparthi – Central University of Kerala
21. Dr. Ratheesh Kumar – IISER – Kolkata
22. Prof. Mahesh Hariharan – IISER – Thiruvananthapuram

23. Dr. S. Prasanthkumar – CSIR-IICT – Hyderabad
24. Dr. Rahul Dev Mukhopadhyay – Ramananda College – Kolkata
25. Dr. Samrat Ghosh – CSIR-CLRI – Chennai
26. Dr. Vishal D. – CSIR-CECRI – Chennai
27. Dr. Sreejith Shankar – CSIR-NIIST – Trivandrum
28. Dr. N. Unni – CSIR-NIIST – Thiruvananthapuram
29. Prof. Prasun Kumar Mandal, IISER, Kolkata
30. Prof. Santanu Bhattacharya, IISER Berhampur
31. Dr. Subhasis Panja, CSIR-NPL-New Delhi
32. Dr. Ankush Vij, Central University of Haryana
33. Dr. Sadhana Agrawal, NIT Raipur
34. Dr. Jagjeet Kaur Saluja, Govt. VYT PG Auto. College
35. Prof. D.P. Bisen, Pt. R.S.U. Raipur
36. Prof. Namita Brahme, Pt. R.S.U Raipur
37. Prof. Y.H. Gandhi, MS University Baroda
38. Dr. Subrata Das, CSIR-NIIST, Trivandrum
39. Dr. Manoj Gupta, CSIR-AMPRI, Bhopal
40. Dr. Sudhanwa Patra, IIT Bhilai
41. Dr. N. Kumarswamy, ISBM University
42. Dr. Ratnesh Tiwari, CV Raman University
43. Dr. Dharendra Kshtri,SSIPMT Raipur
44. Dr. Shubhra Mishra, Govt. College Raipur

Technical committee:

Chairman: Prof. B. V. R. Chowdari NTU, Singapore

Patron: Prof. P.K. Patra & Prof. KVR Murthy

Conveners: Dr. Vikas Dubey

Secretary: Dr. S P Pati

Jt. Secretary: Dr. Neha Dubey

Registration Guidelines: Registration fee (Nonrefundable) should be paid online bank transfer or at the counter. Registration fee includes conference kit, Lunch and High Tea.

Sponsors (Tentative)

DST, DAE- BRNS, CSIR, UGC, AICTE, DRDO, DIT, ICMR, DET.

Exhibition:

All instruments related to characterization of materials and luminescence measurements.

Interested can contact the Exhibition Convener:

Registration Fee for Overseas foreign participants in USD or equivalent: UG, PG students: USD 250/- Research [Ph. D] students: 300/- Faculties: 400/- Industry Delegates: 500/-. For invited speakers USD 200/- [Conference fee can be paid by bank transfer or on arrival]. Spouse Registration: USD 200/- Registration fee includes conference kit, Lunch and High Tea and Banquet.

Registration Fee for Indian participants

UG, PG Students: 1500 INR, Research [Ph. D] students: 2000 INR, Faculties: 3000 INR and Industry Delegates: 4000 INR

Registration Convener: Dr. S. Pandey, NEHU, Shillong

Co-Conveners: Dr. S.S. Pohlong, NEHU, Shillong

NCLA-2024 Organizing committee

Chief Patron



Prof. P.S. Shukla

Hon'ble Vice-Chancellor, NEHU, Shillong

Patron



Prof. P.K. Patra

Prof. & Head Department of Physics

Patron



Prof. K V R Murthy

President Luminescence Society of India

Convener



Dr. Vikas Dubey, NEHU, Shillong

Co-Convener



Dr. S.P. Pati, NEHU, Shillong

Organizing Secretary



Dr. S. Pandey, NEHU, Shillong

Organizing Secretary



Dr. S.S. Pohl原因, NEHU, Shillong

Member: **Dr. Neha Dubey**

Important Dates

Last date of submission of abstract	31 st July 2024
Acceptance of Abstract	10 th August 2024
Early Bird Registration	31 st July 2024
Late Registration	20 th August 2024

Accommodation and Travel

A limited number of accommodations for the participants will be arranged on a payment basis in the University Guest House on prior request. No travel support will be provided to the participants.

(*Registration fee does not include accommodation and travel support)

Registration Link

<https://forms.gle/ergctghvyW24qok1A>

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