



शरीरमाद्यं खलु धर्मसाधनम्



Photonics4Clinics

Bridging Lab Innovation with Bedside Impact

 9th-10th April 2026

Venue : Dr. Ramalingaswami Board Room, AIIMS, New Delhi



**WORKSHOP
BROCHUERE**

Welcome Message

On behalf of the Organising Committee, it gives us immense pleasure to welcome you to “**Photonic4Clinics**”, a two-day interdisciplinary workshop scheduled on **9–10 April 2026** at **All India Institute of Medical Sciences, New Delhi**, under the esteemed patronage of the Director, AIIMS.

Photonic4Clinics is conceived as a forward-looking academic initiative that seeks to meaningfully connect clinical insight with technological innovation. As healthcare systems worldwide evolve toward precision, personalization, and digital integration, the convergence of photonics and artificial intelligence offers unprecedented opportunities to transform diagnostics, monitoring, and therapy.

Over two focused days, participants will engage in high-level scientific deliberations, practical discussions, and collaborative brainstorming sessions aimed at identifying clinically relevant challenges and co-creating feasible, scalable solutions.

We look forward to your active participation in shaping discussions, defining problem statements, and building partnerships that will drive the next generation of technology-enabled clinical solutions.

Warm regards,

Organizing Committee
Photonic4Clinics

ORGANISING COMMITTEE

Organizing Chairperson



Dr. Vivek Tandon



Dr. D.S. Mehta



Dr. Balpreet Singh Ahluwalia

Organizing Secretary



Dr. Deepika Mishra

Co-Organizing Secretary



Dr. Varun Surya

Coordinators



Dr. Mrinali Gupta



Dr. Barath Raj

Introduction

PHOTONICS 4 CLINICS is a two-day workshop that brings together clinicians, researchers, engineers, and AI experts to explore how photonics and artificial intelligence can improve healthcare. The workshop focuses on translating advances in optical imaging, diagnostics, sensing, devices, and computational tools into meaningful clinical applications.

Organized through Indo-Norwegian academic collaboration, the workshop creates a platform for discussion on how emerging technologies can support better diagnosis, treatment, monitoring, and patient care.

Why This Workshop

Healthcare today needs solutions that are accurate, affordable, scalable, and clinically relevant. Photonics offers powerful tools for non-invasive imaging, rapid diagnostics, precision interventions, and point-of-care technologies. When combined with AI, these tools can strengthen clinical decision-making and improve healthcare delivery.

This workshop is designed to connect clinical needs with technological innovation, ensuring that research developments are guided by real healthcare challenges.

Scope of the Workshop

The workshop focuses on how light-based technologies are changing global healthcare. It highlights the role of advanced microscopy, spectroscopy, lab-on-a-chip systems, optical diagnostics, and AI-powered image analysis in enabling faster, more accurate, and more accessible care. Key application areas include earlier cancer detection, rapid infection diagnostics, point-of-care testing, and precision decision-making. The workshop also emphasizes innovation pathways from laboratory research to scalable healthcare solutions, including translation, industry collaboration, and startup development.

Themes of the Workshop

Photonics for Healthcare — Focus on optical imaging, spectroscopy, fluorescence, biosensing, and point-of-care optics for improved diagnosis and clinical care.

AI in Biomedicine — Explores AI for medical imaging and signals, multimodal fusion, workflow integration, and clinical decision support.

Translational Pathway — Highlights validation, clinical deployment, safety, data quality, and governance required to move innovation into practice.

Use-Cases That Matter — Emphasizes real clinical applications in microbiology, operation theatre and ICU settings, triage, monitoring, early detection, and precision guidance.

Expected Outcomes

The workshop aims to:

- Identify priority healthcare challenges that can benefit from photonics and AI
- Strengthen collaboration between clinicians, scientists, and engineers
- Promote translational research and multi-institution partnerships
- Support pathways for validation, implementation, and funding
- Encourage development of practical solutions for clinical use

Funding / Support

The workshop is supported through two international collaborative programmes:

- **UTFORSK Programme**
Administered by the Norwegian Directorate for Higher Education and Skills under the Norwegian Ministry of Education and Research.
- **Indo-Norwegian Cooperation Programme in Higher Education and Research (INCP2)**
Jointly funded by the Norwegian Directorate for Higher Education and Skills and the University Grants Commission (UGC), India

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