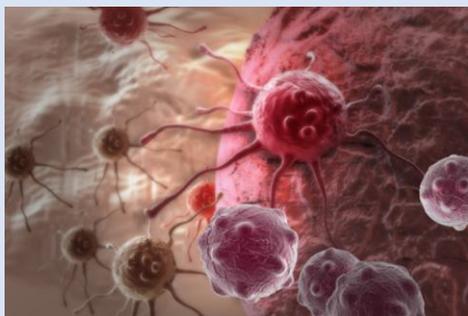


A five-day workshop on Cancer

Focusing on
Methodological frontiers in
cancer research: Bioinformatics
and cell culture approaches



April 1st - 5th, 2026



Department of Biotechnology and
Medical Engineering

National Institute of
Technology
Rourkela

Organizing Committee

PATRON

Prof. K. Umamaheshwar Rao
Director, NIT Rourkela

CHAIRMAN

Prof. Devendar Verma,
HOD-Department of Biotechnology and
Medical Engineering

CONVENOR

Dr. Amrita Singh
Assistant Professor,
Department of Biotechnology and Medical
Engineering

Address for Communication:

Dr. Amrita Singh
Department of Biotechnology and
Medical Engineering, National Institute of
Technology Rourkela, Odisha-769008.
Contact No - 8728829637

Email: sinaghm@nitrkl.ac.in

About Workshop:

The workshop is designed to underscore the importance of advancing cancer research by examining current trends, identifying gaps, and exploring opportunities for innovation. It combines conceptual discussions with practical training, offering exposure to both computational and laboratory approaches that support modern biomedical inquiry. By fostering research skills and collaborative perspectives, the workshop aims to strengthen capacity and promote research that can contribute to improved cancer care and long-term health impact.

Course Content:

- Significance of cancer research, highlighting research gaps and opportunities for innovation
- Practical session on designing and executing bioinformatics workflows using the Galaxy for high-throughput biological data analysis
- Hands-on exploration of protein-ligand docking for structure-based drug discovery focusing on molecular interactions and binding affinity prediction
- Introduction to infrastructure requirements, safety protocols, and aseptic practices for effective cancer cell culture
- Core techniques for maintenance, monitoring, and application of cell lines as reproducible models in advancing cancer research.

ABOUT NIT ROURKELA

The National Institute of Technology Rourkela (NIT Rourkela), formerly known as the Regional Engineering College until its renaming on 26th June 2002, is a premier government-funded institution dedicated to excellence in Engineering, Science, and Technology. Located in the steel city of Rourkela, Odisha, India, it is one of the 31 National Institutes of Technology in the country and has been recognized as an Institute of National Importance under the National Institutes of Technology Act, 2007. NIT Rourkela holds prestigious rankings, including 19th in the NIRF Rankings 2024 for Indian Engineering Universities, 317th in the QS Asia University Rankings 2025, 167th in the QS World University Sustainable Rankings 2025 (Asia region), and within the 601–800 band in the Times Higher Education World University Rankings (Engineering) for 2024–25. The institute's mission is to become an internationally acclaimed centre of learning, serving as a beacon of knowledge and expertise for society while establishing itself as a preferred destination for undergraduate and postgraduate studies

About the Department

The Department of Biotechnology and Medical Engineering, established in 2007 at NIT Rourkela, serves as a multidisciplinary hub for cutting-edge research and education at the interface of biological systems, engineering, and healthcare innovation. Over the years, the department has built a thriving ecosystem of translational research and technology development, committed to transforming scientific insights into real-world healthcare and environmental solutions. With over 1,600 peer-reviewed publications, more than 100 sponsored projects funded by leading agencies such as DBT, DST, SERB, and ICMR, and five patents filed or granted, the department exemplifies excellence in high-impact research.

The department is home to a highly qualified faculty, active research groups, and modern laboratories that support cutting-edge work in both fundamental and translational science. The faculty members have diverse research interests and they conduct both basic and applied research in diverse areas such as Cell & Molecular Engineering, Biomaterials & Tissue Engineering, Bioprocess Engineering, Environmental & Plant Biotechnology, Biomechanics & Biotransport Engineering, and Medical Electronics & Instrumentation.



Registration fee Details:

Faculty/Industry persons/Scholars	External Participants:	INR 500
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Registration Link:

<https://forms.gle/s9m7rBYCNw4rRAw38>

Note: NIT Rourkela faculty and students are not needed to pay the registration fee. They can upload their ID card in place of payment proof.

Payment details:

Account Name. -CONTINUING EDUCATION NIT ROURKELA
Account No.: 10338951784
IFSC Code: SBIN0002109
Branch: NIT Campus, Rourkela

UPI ID: 01389517841@sbi

QR CODE:



E-certificates will be provided to the registered participants upon successfully completing workshop

Student Coordinators:

Akansha Mohanty
Manti Biswas
Aishani Banerjee

Note:

• Accomodation (sharing) will be provided on payment basis.

• Hostel Accomodation (including food)-
INR 500 per person (Approx)

• Guest House Accommodation (without food & sharing basis) –INR 650 (Approx)*

*Food will be served in the Guest House/Hostel on payment basis.