# **Topics To Be Covered**

- BioTribology
- BioPolymers
- Biofluid Dynamics
- Bio Corrosion
- Mechanobiology
- Implant Design, Manufacturing and Testing
- Rehabilitation
- Sports Biomechanics
- Cardiovascular Biomechanics
- Musculoskeletal Modeling and Simulation
- Gait Analysis
- Clinical Dosimetry

## **Hands-On Session**

- Reverse Engineering
- 3D Anatomical Modeling
- Assembling and FEA of Implants
- Scaffold CAD Modeling
- Dental Biomechanics
- Geometric Optimization
- Multi-Modeling
- Mechanical Characterizations
- Filament Extrusion
- FDM 3D Printing
- Contact Angle Measurement
- Surface Roughness Measurement
- Gait Analysis

### **CHIEF PATRON**

Prof. N. V. Ramana Rao Director, NIT Raipur

### **PATRONS**

Prof. Prabhat Diwan Dean (R&C), NIT Raipur &

Prof. Subhojit Ghosh Chairman CEC, NIT Raipur

#### **COORDINATORS**

Dr. Nishant Kumar Singh & Dr. M. Marieswaran

Assistant Professor Dept. of Biomedical Engineering, NIT Raipur

# **ORGANIZING COMMITTEE**

Dr. Rati Verma
Ms. Varsha Pandey
Mr. Lavish Patel
Ms. Joana Rai
Dept. of Biomedical Engineering,
NIT Raipur

#### **CORRESPONDENCE**

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High-End Workshop (KARYASHALA) on Mechanics and Materials for Biomedical

Applications

Date: April 30 to May 6, 2024

Sponsored by: SERB, Government of India





Organized by

Department of Biomedical Engineering National Institute of Technology Raipur - 492010 (Chhattisgarh)

# **RESOURCE PERSONS**



DR. S.K. RAI



DR. DINESH K



PROF. R. P. TEWARI MNNIT. PRAYAGRAJ



**PROF. ASHISH DIWAN**UNIV OF SYDNEY



DR. DILPREET SINGH CSIR-CMERI



PROF. SHEKHAR KUMTA
UNIV OF MELBOURNE



**DR. NITIN SAHAI**NEHU SHILLONG



**DR. VIJAY MEENA**CSIO, CHANDIGARH



DR. GOVINDA K



**DR. VINOD PARMAR**CSIO. CHANDIGARH



DR. L. R. BHUYAR
AIIPMR MUMBAI



**DR. ANUJ SONI**BARC, MUMBAI

# About The Accelerate Vigyan & Karyashala

Accelerate Vigyan (AV) under Science & Engineering Research Board (SERB). Government of India, strives to provide a big push to high-end scientific research and prepare scientific manpower which can venture into research careers and knowledge-based economy. Recognizing that all research has at its base as development of quality, well-trained researchers. AV will initiate and strengthen mechanisms of identifying research potential, mentoring, training and hands-on workshops, on a broadbased national scale. The aim is to expand the research base in the country, with three broad goals - consolidation / aggregation of all scientific training programs, initiating High end Orientation Workshops (KARYASHALA) and creating opportunities for Training and Skill Internship (Vartika).

### **About The NIT Raipur**

National Institute of Technology (NIT) Raipur, formerly known as Government Engineering College (GEC) Raipur, was established in 1956. The institute has established its unique identity for the development of high-quality human and knowledge resources. It was declared as 'National Institute of Technology' by the Government of India on 1st December 2005 and then an 'Institute of National Importance' in May 2007 vide the National Institute of Technology Act 2007. NIT Raipur now offers 12 UG and 16 PG programs. In addition to the UG and PG programs, NIT Raipur also offers Ph.D. in 18 disciplines of science and technology.

# **RESOURCE PERSONS**



OSMANIA UNIV



DR. R.K SAHU NIT. RAIPUR



DR. BIKESH K. SINGH



DR. ARINDAM BIT



DR. NISHANT K. SINGH NIT, RAIPUR



**DR. G.SRINIVASU**NIT, RAIPUR



DR. M. MARIESWARAN NIT. RAIPUR

# **About The Department of Biomedical Engineering**

The Department of Biomedical Engineering was started in the year 2003 and it offers undergraduate course in Biomedical Engineering and Ph.D. program. The department has well-equipped laboratories including the Biomedical Instrumentation lab, Tissue Engineering lab, Biomedical Equipment lab, Biomaterials and Biomechanics Lab, Image Processing Lab and Biosignal processing lab to enable the students and the scholars to pursue research inhouse.

# REGISTRATION

Registration must be done through the following QR Code/ Google form link.



https://forms.gle/xhCrDXkgi91THyct6

Candidates selected to participate in the workshop will receive notification via email according to the schedule. Shortlisted participants are required to pay a fee of Rs. 2,500 which will be fully reimbursed upon successful completion of the training program. Account details for fee payment will be communicated to the selected candidates. Organizers will reimburse/provide travel allowance (3 Tier AC by train), accommodation, and food for participants during the event. Certificates will be issued only to participants who attend the entire course.

# **Important Dates**

Last Date for registration through google form link: April 5, 2024

Announcement of selected participants: April 6, 2024



#### FORMAT FOR NOC

Date:

To Whom It May Concern

This letter is to certify that [Student's Full Name], a student of [School/Institution Name], has sought permission to attend a workshop titled **Mechanics & Materials for Biomedical Applications**, which is scheduled from April 30 to May 6 2024 at NIT, Raipur. We hereby confirm that we have no objection to the student attending the workshop and encourage their participation in such educational events that can further enhance their knowledge and skills.

Signature of the applicant Date and place:

Recommended and forwarded

Signature of the Head of the Department / Head of the Institution with seal

#### TARGETED PARTICIPANTS

Prospective participants should be PG, Ph.D. or final year UG students motivated to undergo training in advanced techniques in the Biomechanics and Biomaterials field.

#### **ACKNOWLEDGMENT**

The workshop coordinators are thankful to Science & Engineering Research Board (SERB), Government of India for providing financial support to this training program through a project grant under Accelerate Vigyan KARYASHALA scheme.