

ABOUT THE DEPARTMENT



Department of Biotechnology and Medical Engineering (BM) was started in August 2007 and currently has 21 faculty members having Ph.D. degree from reputed institutions in India and Abroad. Faculty members are actively engaged in research activities and have **sponsored research projects** from different governmental agencies such as DST, DBT, CSIR, ICMR, SERB, etc. The department is successful in receiving research assistance from DBT Program Supports (~3.4 Cr.), MHRD-FIST (~2.5 Cr.) and MHRD-TEQIP (~5.0 Cr.). These financial supports from different governmental agencies have strengthened the research infrastructure of the department. The department has **well-developed laboratories** for Medical Electronics and Instrumentation, Bio signals, Cell and Molecular Engineering, Gene Manipulation, Protein Engineering, Structural Biology and Nanomedicine, Computational Biology, Bioinformatics, Smart Agricultural & Environmental Biotechnology, Anatomy and Physiology, Bioprocess Engineering, Rehabilitation and Regenerative Medicine, Stem Cell Culture, Smart Materials, Scaffold Fabrication, Biomaterials and Tissue Engineering, Biomechanics and Bio transport.

ABOUT SERB SCIENTIFIC SOCIAL RESPONSIBILITY

The Program is sponsored by the Science and Engineering Research Board (SERB), Department of Science and Technology, Government of India under the scheme of Scientific Social Responsibility (SSR).

ABOUT THE INSTITUTION



National Institute of Technology Rourkela (NIT Rourkela) is an Institute of National Importance created under the Act of Parliament. NIT Rourkela provides quality education in a diverse and multicultural environment. The vision of the institute is to become an internationally acclaimed institution of higher learning that will serve as a source of knowledge and expertise for the society and be a preferred destination for undergraduate and graduate studies. The institute offers Ph.D., M.Tech., B.Tech., MBA and M.Sc. programmes in **21 branches** of Engineering, Management and Science. The institute research centers are engaged in consultancy, research and developmental activities and have received funding from several bodies such as BARC, BRNS, CSIR, DST, DBT, DAE, DRDO, ISRO, ICMR and other private industries. **QS World University- ASIA Rankings 2022** has figured NIT Rourkela in the list of **271-280**. NIT Rourkela has been placed within **801-1000** in The **World University 2022** rankings and **601-800** for The **World University Rankings by subject (Engineering) 2021** category. BRICS 2019 has figured NIT Rourkela in the place of 121st among top universities in Brazil, Russia, India, China and South Africa. **Asia University Rankings** also figured NIT Rourkela in the place of **201-250** among Asian universities. **NIRF Engineering ranking 2022** has figured NIT Rourkela at **20th position in Engineering** category and 41st position in overall category.



Five day online short-term program on
*Recent Advances in Biomedical
Signal and Image Processing*

30th May 2022 - 3rd June 2022



Patron:

Prof. K. Umamaheshwar Rao
Director, NIT Rourkela

Coordinators:

Dr. J. Sivaraman
Dr. Bala Chakravarthy Neelapu
Dr. Kunal Pal (Chairman)

Organized by:

**Department of Biotechnology & Medical
Engineering**
National Institute of Technology Rourkela,
Odisha 769008

Sponsored by:

Science and Engineering Research Board

Technically co-sponsored by:



The aim of this public outreach activity is to bring science and engineering to the society by conducting workshops, programs, lectures, etc. Dissemination of engineering sciences will focus on communicating research outputs to the general public and to inform the public about the research activities that are being carried out by public funding and also to enhance the public understanding of science and engineering.

ABOUT THE PROGRAM



This program **main aim** is to **impart and disseminate the basic knowledge and recent advances** in the field of **biosignals and image processing** and to address the faculty member and research students about the **current scope and research gaps** in the field. This program will help the attendees to familiarize with the theoretical and practical knowledge of biomedical signal processing. This program will help the attendees to advance their knowledge and **widen their horizons** in the field of image processing and biosignals.

RESOURCE PERSON

- **Prof. Peter Macfarlane:** Emeritus Professor and Honorary Senior Research Fellow at the University of Glasgow, Scotland, UK.
- **Prof. Johnson Francis:** Former Professor of Cardiology, Government Medical College, Kozhikode.
- **Prof. Rama Subba Reddy:** Professor of Biomedical Engineering at Department of Applied Mechanics, IIT Madras.

- **Prof. Ram Bilas Pachori:** Professor at Department of Electrical Engineering, IIT Indore.
- **Prof. Renu John:** Professor at Department of Biomedical Engineering, IIT Hyderabad.
- **Dr. M. Sabarimalai Manikandan:** Associate Professor at Department of Electrical Engineering, IIT Palakkad.
- **Dr. Srikanth Vasamsetti:** Principal Scientist of Imaging, Avionics, and Display Systems at CSIR-CSIO, Chandigarh.
- **Dr. Hariharan Muthusamy:** Associate Professor at Department of Electronics Engineering, NIT Uttarakhand.
- **Dr. Anton Gradišek:** Assistant Professor at Department of Intelligent systems, Jožef Stefan Institute, Ljubljana, Slovenia.
- **Dr. Varun P. Gopi:** Assistant Professor at Department of Electronics and Communication Engineering, NIT Tiruchirappalli.

ORGANIZING COMMITTEE MEMBERS

- Prof. Krishna Pramanik, Professor
- Prof. Subhankar Paul, Professor
- Prof. Mukesh Kumar Gupta, Professor
- Dr. A. Thirugnanam, Associate Professor
- Dr. Amit Biswas, Assistant Professor
- Dr. Bibhukalyan P. Nayak, Assistant Professor
- Dr. Sirsendu Sekhar Ray, Assistant Professor
- Dr. Nandini Sarkar, Assistant Professor
- Dr. Devendra Verma, Assistant Professor
- Dr. Nivedita Patra, Assistant Professor
- Dr. P. Balasubramanian, Assistant Professor
- Dr. Angana Sarkar, Assistant Professor
- Dr. Kasturi Dutta, Assistant Professor
- Dr. Anju R. Babu, Assistant Professor
- Dr. Ravi Kant Avvari, Assistant Professor
- Dr. Prasoon Kumar, Assistant Professor
- Dr. Earu Banoth, Assistant Professor
- Dr. Mirza Khalid Baig, Assistant Professor

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TARGET AUDIENCE

Faculty members, Research scholars, UG and PG from Biomedical/ Electronics/ Electrical/ Instrumentation Engineering working in the area encompassing biosignals and image processing are eligible to attend the program.

REGISTRATION

There is **NO REGISTRATION FEE** for this program. Last date for registration is **26th May 2022**. Link for online registration is <https://forms.gle/smdcwoys9wVtNmwaA>. **Selected candidates** will be intimated through E-mail by **28th May 2022**. **E-certificates** will be provided to the registered participants with full attendance in all sessions marked by **feedback form submission** compulsorily in the end of each session.

FOR ANY QUERIES CONTACT

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Mr. N. Prasanna Venkatesh: 9488669122(M)



National Institute of Technology Rourkela Department of Biotechnology & Medical Engineering



Five day online short-term program on

Recent Advances in Biomedical Signal and Image Processing

30th May 2022 - 3rd June 2022



No registration fee | Limited seats | For Registration scan the QR code

Last date of online registration 26th May 2022

E-certificates will be provided to the registered participants with full attendance in all sessions

**Morning sessions
10:00 am (IST)**

**Afternoon sessions
3:30 pm (IST)**

Day 1



➤ **Prof. Ram Bilas Pachori**

Professor at Department of
Electrical Engineering, IIT Indore.

➤ **Dr. Hariharan Muthusamy**

Associate Professor at Department
of Electronics Engineering, NIT
Uttarakhand.



Day 2

➤ **Prof. Johnson Francis**

Former Professor of Cardiology,
Government Medical College,
Kozhikode.



➤ **Prof. Renu John**

Professor at Department of
Biomedical Engineering, IIT
Hyderabad.

Day 3



➤ **Prof. Rama Subba Reddy**

Professor of Biomedical
Engineering, Applied Mechanics
Department, IIT Madras.

➤ **Prof. Peter Macfarlane**

Emeritus Professor and Honorary
Senior Research Fellow at the
University of Glasgow, Scotland, UK.



Day 4

➤ **Dr. Srikanth Vasamsetti**

Principal Scientist of Imaging,
Avionics, and Display Systems in
CSIR-CSIO, Chandigarh.



➤ **Dr. Anton Gradišek**

Assistant Professor at Department of
Intelligent systems, Jožef Stefan
Institute, Ljubljana, Slovenia.

Day 5



➤ **Dr. M. Sabarimalai Manikandan**

Associate Professor at Department of
Electrical Engineering, IIT Palakkad.

➤ **Dr. Varun P. Gopi**

Assistant Professor at Department
of Electronics and Communication
Engineering, NIT Tiruchirappalli.

