



4th International Conference on Machine Intelligence and Signal Processing (MISP2022), March 12-14, 2022
(<https://misp2022.nitr.ac.in/>)

Organized by

**Department of Computer Science and Engineering,
National Institute of Technology Raipur, India**

1. Title of the Special Session: Biomedical Signal & Image Processing and Machine Learning

2. Details of Session Chair and Co-Chair

Name (Session Chair): Dr. Pushpendra Singh, NIT Hamirpur

Email Id: spushp@gmail.com

Contact Number: 9899989278

Name (Session Co-Chair): Dr. Amit Singhal, NSIT Delhi

Email Id: singhalamit.iitd@gmail.com

Contact Number: 9899736322

Name (Session Co-Chair): Dr. Binish Fatimah, CMR Institute of Technology, Bengaluru

Email Id: binish.fatimah@gmail.com

Contact Number: 80500 69919

3. Aims & Scope (Theme of Session)

Biomedical signal and image processing and machine learning is a dynamic area of research involving biomedical information and clinical medicine. It involves theory and application of digital signal processing for biological data acquisition, segmentation, imaging, filtering, feature extraction, modelling and representation. It can help the physicians in improving the time efficiency of the diagnosis and can also highlight the relevant information present in the biomedical signal. The popular biomedical signals are essentially of two types, known as action potential and event-related potential. The former class consists of electromyogram (EMG), electroneurogram (ENG), electrocardiogram (ECG) and electroencephalogram (EEG), whereas electrogastrogram (EGG), phonocardiogram (PCG), carotid pulse (CP), signals from catheter-tip sensors, speech signal, vibromyogram (VMG), vibroarthrogram (VAG), otoacoustic emission signal are event-related potentials. The commonly used biomedical image modalities include functional magnetic resonance imaging (fMRI), computed tomography (CT), x-ray, ultrasound imaging and positron emission tomography (PET). With the impetus in sensor technology and artificial intelligence, this field of specialization has gained momentum.

This session aims to provide an inter-disciplinary international forum for the interchange of information on research in the measurement and analysis of signals and images in clinical medicine and the biological sciences.

4. Subtopics: Topics include (but are not limited to) following:

- Analysis and processing of biomedical signals
- Automated disease detection from biomedical images
- Computational Neuroscience
- Denoising of biomedical images and/or signals
- Human-Machine Interfaces
- Identification of abnormalities from biomedical signals
- Novel feature extraction techniques for biomedical images
- Signal/Image acquisition methods

**Contacts: All inquiries should be directed to the attention of Session Chair/Co-Chair:
All inquiries should be directed to the attention of Session Chair/Co-Chair:**

Name (Session Chair): Dr. Pushpendra Singh, NIT Hamirpur

Email Id: spushp@gmail.com

Contact Number: 9899989278

Name (Session Co-Chair): Dr. Amit Singhal, NSIT, Delhi

Email Id: singhalamit.iitd@gmail.com

Contact Number: 9899736322

Name (Session Co-Chair): Dr. Binish Fatimah, CMR Institute of Technology, Bengaluru

Email Id: binish.fatimah@gmail.com

Contact Number: 80500 69919

Submission Guidelines for Authors

- ❖ Prospective authors are invited to submit original research work that falls within the scope of the session. All submissions will be thoroughly peer-reviewed by experts based on originality, significance, and clarity.
- ❖ Only papers presenting novel research results or successful innovative applications will be considered for publication in the conference proceedings.
- ❖ Authors are requested to submit their Manuscripts through the Easy Chair System. <https://easychair.org/my/conference?conf=misp2022#>
- ❖ The paper must be in Springer format and of size of 12-15 pages. [Springer Author's Guidelines](#)
- ❖ Please visit conference website for paper format and other details: <https://misp2022.nitr.ac.in/#>
- ❖ All accepted and registered papers under MISP 2022 will be submitted for possible publication in Scopus Indexed Springer Book Series (approval pending).

Springer Policy on Plagiarism

- ❖ Authors are requested to kindly restrict from plagiarism in any form. Authors should submit their original and unpublished research work not under consideration for publication elsewhere.
- ❖ Papers found to be plagiarised during any stage of review shall be rejected.
- ❖ As per the copyright transfer agreement, Authors are deemed to be individually and collectively responsible for the content of manuscripts published by them.
- ❖ Hence, it is the responsibility of each author to strive for the highest ethical standards with respect to plagiarism.

Special Session Timeline

Special Session Submission Deadline: **15th January 2022**

Acceptance Notification (1st round): 30th January 2022

Acceptance Notification (2nd round): February 15th, 2022

Camera Ready Submission: 20th February 2022

Registration Due: 25th February 2022

Conference Date: 12th March – 14th March 2022.