



## INTRODUCTION

The Eighth National Conference on Wave Mechanics and Vibrations [8th WMVC- 2018] will be held from November 26-28,2018 at the National Institute of Technology Rourkela (NITR), Odisha. Academicians, Scientists and researchers working in this field are cordially invited to contribute papers for presentation and active participation in all deliberations of the conference.

### National Scientific Committee:

Prof. A. Adimurthi, TIFR CAM, Bangalore.  
Prof. V. D. Sharma, IIT Bombay, Mumbai.  
Prof. D. K. Sinha, Ex Vice-Chancellor, Visva-Bharati University.  
Prof. C. S. Manohar, IISC Bangalore.  
Prof. D. Ghose, IISC Bangalore.  
Prof. D. Roy, BRNS, DAE, Mumbai.  
Dr. V. K. Gahalaut, Director, National Centre for Seismology, MoES, New Delhi  
Dr. S. K. Agrawal, Executive Director, BMTPC, New Delhi.  
Prof. B.N. Rao, IIT Madras.  
Prof. S. K. Deb, IIT Guwahati.  
Prof. A. Chattopadhyay, IIT-ISM, Dhanbad.  
Prof. B. Ishwar, BRA Bihar University, Muzaffarpur  
Dr. S. K. Panigrahi, CBRI, Roorkee.  
Prof. G. Khadekar, RTM Nagpur University, Nagpur  
Prof. Uma Basu, University of Calcutta (Retired).  
Prof. Susmita Sarkar, University of Calcutta.  
Prof. Vipin Tyagi, JUET, Raghogarh, Guna(MP).  
Prof. P.M. Reddy, Kakatiya University, Warangal.  
Prof. K. Ray, Amity University, Jaipur, Rajasthan.  
Prof. R. Chatteraj, BIT, Deoghar.  
Dr. M. Ghosh, Dinhat College, Dinhat.  
Dr. D.S. Hooda, GJUST, Hissar, Haryana.  
Dr. A. Raychoudhury, SMIT, Majitar, Sikkim.  
Dr. S. Nayak, Amrita University, Coimbatore.  
Dr. K. K. Pradhan, P MEC, Berhampur.

### ORGANIZING COMMITTEE:

Prof. A. Kumar.	Prof. B. Sahoo.	Prof. D. Singh.
Prof. J. Mohapatra	Prof. M.R. Tripathy	Prof. S.S. Ray
Prof. S. Chakraverty	Prof. S.R. Pattanaik	Prof. B.K. Ojha
Prof. D. Choudhuri	Prof. G.K. Panda,	Prof. K.C. Pati,
Prof. R. Kar	Prof. S. Pradhan	Prof. S. Kayal

## TENTATIVE TOPICS TO BE COVERED

1. Computational and analytical methods in vibration problems and wave mechanics
2. Dynamics of concrete and steel structures
3. Earthquake engineering, seismic vibrations and soil dynamics
4. Nonlinear dynamics
5. Under- water Shock Waves (Tsunami)
6. Vibration problems associated with nuclear power reactors, aerospace and marine structures
7. Vibrations of transport systems
8. Random vibrations
9. Buckling and Vibrations of beams, Plates and Shells, Thermal Vibrations and Thermal Shocks
10. Intelligent and nano materials in sound and vibrations
11. Theoretical Astrophysics, Celestial Mechanics and related recent development
12. Fractional/arbitrary order Differential Equations in Wave Mechanics and Vibrations
13. Uncertainty models in Wave Mechanics and Vibrations
14. Soft computing, artificial intelligence and uncertainty in Wave Mechanics and Vibrations
15. Robot dynamics
16. Any other problems related to Sound and Vibration

## REGISTRATION FEE

**Authors: Rs.3000/-**

**Accompanying Person: Rs.1000/-**

**Student Delegates: Rs.2000/-**

For Late registration, additional amount of Rs. 500/-(in each of the category) is payable after September 15, 2018.

Registration Fee includes Inauguration, Participation in the Technical Sessions, Conference kits, Book of Abstracts of Papers, Conference Working Lunch, Dinner and Snacks for conference days only.

The Registration Fee should be paid through a **Demand Draft**, drawn in favor of “**CONFERENCE NIT Rourkela**” Payable at NIT Campus Branch (IFSC: SBIN0002109) Rourkela. The completed registration form along with the DD should be sent to

Prof. S. Chakraverty

(*Conference Director and Organizing Secretary*  
WMVC-2018)

Department of Mathematics, NIT Rourkela,  
Odisha- 769008, India

Phone: 0661- 2462713 (O)

## ACCOMMODATION

Some rooms have been reserved in the Institute Guest House to accommodate the outstation delegates from November 26-28, 2018 as per the charges mentioned in NITR web site and may be allotted on first come first serve basis **ON PAYMENT BASIS** only. They may also stay in nearby hotels if they so desire. The institute is situated at only 15 minutes driving distance from Rourkela railway station. For institute accommodation please contact the Convener well in advance.  
[Email: [wmvc2018@gmail.com](mailto:wmvc2018@gmail.com)]

## Submission of Abstracts and full-length papers:

Abstracts of papers neatly typed in A-4 size format in MSWord may be submitted **through E-mail only** on or before **September 15, 2018**. The full-length paper within 10-20 A-4 size pages in MSWord must be submitted by e-mail attachment before 15<sup>th</sup> September, 2018. (Full length paper if chosen for including in the book may also be submitted later in LATEX if the publisher wants so).

**Selected peer-reviewed papers will be published by Springer as a Scopus indexed proceedings book.** However, book of Abstracts of papers shall be available during the Conference in the Registration Counter.