

## 6th National Symposium on ROTOR DYNAMICS

Organized by

Propulsion Division, CSIR-National Aerospace Laboratories, Bangalore-560037

In association with

**Vibration Institute of India** 

## **About the Symposium**

Rotor Dynamics is the key element in design and maintenance of all rotating machinery, which forms the backbone of infrastructure in our country. It is important that we discuss this subject at national level to bring the desired awareness on the advances in this field to the government and industry by the rotor dynamic community of the country. In view of this the first National Symposium on Rotor Dynamics (NSRD-2003) was held at Indian Institute of Technology, Guwahati in December 15-17, 2003. Subsequently, four more symposiums were organized at IIT, Chennai (2011), Dr. AIT, Bangalore (2014), NIT, Rourkela (2015) and IIT, Patna (2017). The sixth symposium is being organized at CSIR-NAL, Bangalore during July 1-2, 2019, the *Centenary Year of Jeffcott Rotor Model (1919)*.

This symposium focuses on latest trends in rotor dynamics and various challenges encountered in the design of rotating machineries through several invited talks by peers in the field of rotor dynamics. The symposium also offers a good platform to researchers from academia & industry to present their work through contributed papers. A short course on rotor dynamics using latest trends of simulation based engineering science will be held as a preconference workshop

## **About the Institution**

National Aerospace Laboratories (CSIR-NAL) is a premier research lab in India and a constituent of the autonomous Council of Scientific & Industrial Research (CSIR) under the ministry of Science & Technology. This research lab was set up in June 1, 1959, as National Aeronautical Research Laboratory and re-christened as National Aerospace Laboratories on 1st April 1993. CSIR-NAL is involved in all the major aerospace programs of the country, notably, The Light Combat Aircraft program of Aeronautical Development Agency, Satellite & Launch vehicle programs of Indian Space Research Organisation and various programs of Defence Research & Development Organisation in addition to a few programs of Department of Atomic Energy. In the recent years, CSIR-NAL has taken up Civil Aircraft development programs such as two seater trainer (HANSA) and small transport aircraft (SARAS) to meet the requirement of the country.



#### Patron

Shri Jitendra J Jadhav, Director, CSIR-NAL

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## **Convener / Contact**

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### Contact

Direct all queries to convener

## **Symposium Themes**

The broad themes include:

- Analytical, Computational and Experimental methods
- Nonlinear, parametric effects on rotor
- Misalignment, rotor-bow, crack, rub-impact analyses
- Bearings, dampers and seals
- Vibration control using active and semi active methods
- Condition monitoring, diagnostics & Prognostics of rotors
- Bladed disc systems
- Micro rotors and developments
- Any other relevant issues related to rotor dynamics
- Rotor dynamics of Turbomachinery and IC engines

#### **Call for Papers**

Prospective authors are requested to submit extended abstract including figures, graphs & results not exceeding two pages with keywords. Paper format can be downloaded from <a href="https://www.nal.res.in/nsrd2019.html">www.nal.res.in/nsrd2019.html</a>.

Paper can be submitted through the https://easychair.org/conferences/?conf=nsrd2019

before deadline. Selected papers will be published in a special issue of **Journal of Vibration Engineering and Technology**, published by Springer

## **Preconference Workshop**

A 1-day preconference workshop on 'Techniques of Rotor dynamics' is planned on 1<sup>st</sup> July 2019. This workshop will be helpful to the people working in areas of condition monitoring and diagnostics. Interested participants can register by sending e-mail in proper format. The workshop will be organized at the REVA University, Bangalore. Please refer conference website for details.

#### Souvenir

A souvenir will be published giving the details of program, abstract of the invited lectures as well as technical papers to be presented, the names of sponsors, co-sponsors, advertisements, etc. Proceeding of presented papers and keynote lectures will be published as a booklet/CD format.

## 2<sup>nd</sup> - 3<sup>rd</sup> July 2019

## **Important Dates**

Abstract Submission : 15<sup>th</sup> Dec 2018
Acceptance of Abstract : 31<sup>st</sup> Dec 2018
Full length Paper Submission : 28<sup>th</sup> Feb 2019
Intimation of Paper Acceptance : 15<sup>th</sup> Apr 2019
Camera ready papers deadline : 30<sup>th</sup> Apr 2019
Early Registration deadline : 15<sup>th</sup> May 2019

#### Registration

	Dantisimenta Catagony	Registration Fees* (Rs)	
	Participants Category	Early	Late
	Participants from Academic / R&D Institutions	6,000/-	8,000/-
-	Participants from industries	8,000/-	10,000/-
	Student research scholars	2,000/-	2,500/-
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The registration fee includes conference proceedings, registration material, inauguration high tea, lunch & dinner.

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## Mode of payment

Payment is accepted in the form of Demand Draft favoring **The Director**, **CSIR-NAL**, payable at SBI, Bangalore, India or through online transaction. The account details for online transaction are:

A/c Name: National Aerospace Laboratories

A/c No.: 30268539001

Bank Name: State Bank of India Bank Branch Name: NAL

Branch Address: Old Airport Road, Kodihalli,

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in contact above.

<sup>\*</sup> GST extra as applicable (NAL GSTN: 29AAATC2716R1ZB)