Association for Machines and Mechanisms NewsBulletin

Volume 11, No. 1&2

January & April 2019



Objectives and Activities

The main objective of AMM is to contribute to mechanical design at all levels starting from academic research to industrial initiatives, thereby enhancing the quality and reliability of indigenous machines. With this in view, AMM organises the International & National Conference on Machines and Mechanisms, iNaCoMM, and the workshops on Industrial Problems on Machines and Mechanisms, IPRoMM regularly.

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Message from the Editor-in-Chief

After publishing Volume 10 No. 4 October 2018 issue of the Bulletin of the Association for Machines and Mechanisms, now a combined January and April (1 & 2) issue, 2019 of Volume 11 of the Bulletin of the AMM is being brought out after a long gap. Prof. Pushparaj Mani Pathak, the Secretary of the AMM, requested me to take initiative to edit this issue. A new editorial team will be decided shortly.

Till a new team is getting formulated, the existing Editorial Board Members are assumed to be active. The present Office Bearers should be thanked for their active support to bring out this issue of the Bulletin of the AMM.

Bulletin of the AMM **Volume 11, No. 1&2, January & April 2019** issue is being published with the sole responsibility of Prof. Santanu Das, the Editor-in-Chief. Due to intense work load of him, publication of this issue is made a bit late and he is sorry for this.

A number of Brochures of forthcoming events is included in this issue as usual.

AMM members and others are requested to send contribute articles and technical briefs to the editorial team for July 2019 issue. Constructive suggestions, comments for improvement of the Bulletin of the AMM are most welcome.

On behalf of the Editorial Team of the Bulletin of AMM, I thank all concerned for their support, good wishes and suggestions for bringing out of this Bulletin.

Prof. Santanu Das Editor-in-Chief

About the Association of Machines and Mechanisms (AMM)

The AMM headquarter is currently located at the Department of Engineering Design, IIT Madras. A new set of office bearers have taken charge of the affairs of AMM. AMM invites both individual and corporate membership from Indian academia, research organizations and industry. Membership benefits and other information about AMM are available at www.ammindia.org. The body of Zonal Vice Presidents (ZVPs) is active over the past several years with representations from the four corners of the country. They are playing the role of nodal agencies so as to decentralise the AMM official activities and to organise workshops under the aegis of AMM to popularise the mechanism science in their respective regions. They also form the editorial team of this news bulletin. AMM invites contributory articles from its members and others working in the various fields of mechanisms science for this quarterly news bulletin. Interested people can contact the editorial team.

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Imagination is more important than knowledge.

--- Albert Einstein



ADVANCES IN ROBOTICS AIR 2019

4th International Conference of The Robotics Society Indian Institute of Technology Madras, Chennai, 600036 India

02 - 06 July 2019

Organizing Committee

Prof. Bhaskar Ramamurthi, Director, IIT Madras

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Plenary Speakers

Prof. Blake Hannaford

Professor and Director Bio robotics Laboratory, University of Washington, USA

Prof. Eduardo Nebot

Director,

Australian Centre for Field Robotics University of Sydney, Australia

Prof. Jan Peters

Dept. of Computer Science, Technische Universitat Darmstadt, Germany

Keynote Speakers

Prof. Davide Scaramuzza

University of Zurich, Switzerland

Prof. Nobuto Matsuhira

Shibaura Institute of Technology, Japan

Prof. Taewon Seo

Hanyang University, South Korea

CALL FOR PAPERS

International Conference on Advances in Robotics (AIR) is a series of biennial conference organized by The Robotics Society (TRS). The conference aims to create a forum to present and exchange new ideas by researchers and developers from India and abroad working in the fields of robotics and its applications.

AIR 2019 will be held at IIT Madras, Chennai, during 02-06 July 2019. Contributed Papers

The organizers of the conference invite unpublished research work in the following fields of Robotics (representative list, can include other related topics):

- · Kinematics, dynamics, control and simulation of autonomous intelligent
- Design of robotic mechanisms
- · Man-machine interface and integration
- · Robotics-related computer hardware, software, and architectures
- Vision and non-contact sensory systems
- Tactile and other contact sensory technology
- · Active sensory processing and control
- · Machine learning and artificial intelligence for robotics
- · Medical, rehabilitation and assistive robotics
- · Bio-mimetic and bio-inspired robotic systems
- Swarm robotics
- · Navigation and control of unmanned vehicles - Ground, Underwater
- Drones and drone applications
- · Virtual reality and haptics
- Tele-robotics
- · Humanoid robots
- Soft robotics

Workshop and Tutorials

A full day during the conference is dedicated to workshop and/or tutorials on robotics, conducted by renowned resource persons.

Doctoral Symposium

A symposium will be held involving presentation from PhD students working in all areas of robotics. It would provide an opportunity to showcase their ongoing research work and interact with experts in the field for feedback. Both the student and research advisor should attend. More details can be found at conference website

Submission Instructions

The authors have to follow ACM format of double column, within 6 page limit. The submitted papers will be double blind peer-reviewed to determine acceptance. The accepted papers, after incorporation of reviewer's comments, will be published by ACM as International Conference Proceedings Series.

Registration

Indian Delegates:

Govt. & Academic Institutes: Rs. 5,000 Industries : Rs. 10,000

Full-time students(with a valid ID): Rs. 3,000 20% discount for TRS members

International Delegates:

Academic & Industries : USD 200 Students : USD 100

Important Dates

Call for papers :01 Dec 2018 Submission deadline :15 Feb 2019 :05 April 2019 Decision notification Camera-ready Submission:05 May 2019 : 02-06 July 2019 Conference dates

For more info., please visit

http://advancesinrobotics.com/



Organized by



IIT Madras

Proceedings

Published by ACM

In association with



Consulate General of Switzerland

Contact Us

Conference Secretariat - AIR 2019, Room No.: 114, Dept. of Engg. Design, IIT Madras, Chennai 600036, India. email: 2019@advancesinrobotics.com



www.lftomm2019.

Call for Papers

18th IFTotAM World Congress will be held in Kralsow, Poland in June 30 — July 4, 2019. IFToMM World Congress is held every 4 years and is the largest congress on mechanism and mechine actiones. If will provide opportunityfor researchers, scholars and students with interests in the tweey and practice of mechanisms and mechines for new Ideas, sharing appelances, and discussing future developments. We hereby would like to extend our direct vectors to you and to ensure all of you a wonderful congress and a memorable visit during your stay in Krakow during 2019 IFToMM World Congress!

Sincerely yours Organizing Committee

TOPICSOFTHS CONORSIS

Papers are revisions on the general areas of the theory and practice of numbers and machinelisms, but not limited, to the topics of the PTCHMM Technical Committees and Permanent Committeebra, manufact Il Homochanical explanating Il Computational infrantation

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PRINCIPATION AND PROCESSORS

The efficient brogungs in Signific, Populational participants and recolors are Philad Processings. Published in Marie State Life (until be considered in label).

PAPERSTRMISSION

All papers must be submitted electronically and they will be reviewed. Authors are requested to submit a full length paper, 4 pages (minimum) to 10 pages (mesimum). The abstracts are NOT acceptable. The format will follow the IFToMM template that to evallable. In the congress webpage

IMPORTANTDATES

16 August, 2018	Registration Sturi	
18 Herember, 2213	Full Paper automission deadline	
18 Jamey 2017	TC acceptance of the paper	
18 Politoury, 2819	Current ready	
1550min, 2010	Motification on final paper Asseguence	
21 March, 2217	Dead line for paying fee of presenting sushors	
21 March, 2217	Pinel Pull paper submission	
90 June - July 4, 2019	IFTokild Congress	

COMPRESSOLUTATION

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ACCOMODATION

A vertexy of hotels with special rate in a with the ream rate ranging from EURO 50 to EURO 160 will be listed in the IFTOMM 2019 website.

TRAVELIR PORMATION

Rindow eirport is boarted about 10 ien from the dity centre and has a number of direct flight connections with angle European alsports (Manlain, Frankfurt, Vienna, Barlin, Paris, Brusenia, London, and stham).

International alsport in Rindow (10 izm from the dity) http://www.lasticeaaport.p/ren international alsport in Rindow (50 izm from the city) http://www.lasticeaaport.p/ren

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-	MOBIL	400 EJR	460 ELR
	200 EUR	290 EUR	300 ELR





Our lamana processings will be published as an a-basis by Springer which is improved in Wels of Springer, Spripe, and others.

Forthcoming Events

5 Joint International Conference on IMSD The 10th

ACMD 2020



Multibody System Dynamics Asian Conference on Multibody Dynamics



First Call for Papers

The Sixth Joint International Conference on Multibody System Dynamics (IMSD 2020) and the 10th Asian Conference on Multibody Dynamics (ACMD 2020) will be held during November 1-5 2020 at the Indian Institute of Technology (IIT) Delhi, New Delhi, India.

IIT Delhi is one of the 23 ITs in India which was established in 1961. It is one of the best technical institutes in India and ranked highly worldwide. The Department of Mechanical Engineering in the institute will be hosting the two conferences jointly. The Department has more than 40 faculty working in different areas of mechanical engineering with a very strong interest in the area of multibody dynamics applied to robotics, automotive technologies, crash simulation, vibration and rotor dynamics, precision machines, and technologies for rural sectors. IIT Delhi is one of the attractive destination to foreign students and faculty for academic/professional purposes.

The IMSD and ACMD conferences are biannual series that serve as a meeting point for the international multibody community and as an opportunity to exchange high-level, current information on the theory and applications of multibody systems.

The previous IMSD conferences were held at Lappeenranta, Finland (2010); Stuttgart, Germany (2012); Busan, Korea (2014); Montreal, Canada (2016) and Lisbon, Portugal (2018).

The previous ACMD conferences were held at Iwaki, Japan (2002); Seoul, Korea (2004); Tokyo, Japan (2006); Jeju, Korea (2008); Kyoto, Japan (2010); Shanghai, China (2012); Busan, Korea (2014); Kanazawa, Japan (2016) and Xi'an, China (2018).

Contributed Papers

The organizers of the conference invite unpublished research work in the following fields of Multibody dynamics (representative and non-exhaustive):

- Theoretical and computational methods
- Flexible multibody systems
- · Contact and impact problems
- Control and mechatronics
 Multidisciplinary approaches
- Algorithms, integration codes and software
- Efficient methods and real-time applications
- Experiments and numerical verifications
- Optimization and sensitivity analysis
- Dynamics of machines and rotating structures
- Dynamics of all vehicles
 Debatic systems
- Robotic systems
 Biomechanics
- Other related topics

Plenary/Keynote Talks

During the conference, a set of high quality plenary talks will be delivered by experts in the field of multibody dynamics.

Workshop/Tutorials

A full day workshop and/or tutorials is planned during the conference.

Tentative Timeline

Abstract Submission: March 31, 2020
Notification of Acceptance/Rejection: April 30, 2020
Submission of Full paper: May 31, 2020
Notification of Acceptance/Rejection of Full papers: July 31, 2020
Registration (For presenters) Deadline: September 30, 2020
Registration (For attending) Deadline: October 15, 2020
Conference Dates: November 1-5, 2020

Tourism and Sight-seeing

New Delhi is the capital of the country and is directly connected by air from many cities worldwide. The weather during the conference will be pleasant (13° to 27° C). It has many historical monuments and is one of the most visited places by foreigners. Taj Mahal is one of the world can be reached in about 3 hours by road/rail.

Visa is required to visit India. Hence, attendees are requested to get in touch with organizing team for more details.

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... (More to be added)
Website: http://web.iitd.ac.in/~saha/imsd-acmd2020/index.html

, 2018

Forthcoming Events

4th International and 19th National Conference on Machines and Mechanisms (iNaCoMM 2019)

December 5-7, 2019

Organised by

School of Engineering, IIT Mandi



Under the aegis of Association for Machines and Mechanisms





Introduction

School of Engineering, IIT Mandi, under the aegis of Association for Machines and Mechanisms (AMM), is organising 4th International and 19th National Conference on Machines and Mechanisms (iNaCoMM 2019) at IIT Mandi.

About the Conference

iNaCoMM 2019 is the 19th in the series of biennial conferences organised under the aegis of AMM with international status being given from 2019. The conference aims at bringing together researchers, industry experts and students working in various aspects of design and analysis of machines and mechanisms. This year the conference starts with a one-day workshop, the topic for the same will be announced soon. The deliberations in conference will be in terms of oral as well as poster presentations. Besides this there will be keynote lectures by the leading experts in the field. Selected papers from the conference will be published in scientific journals. Further it is planned to hold Students' Mechanism Design contest, an event that became part of iNaCoMM2019

About Mandi

Mandi is in the state of Himchal Pradesh, India. Mandi is a small historic town in the centre of Himachal Pradesh, on the national highway from Chandigarh to Kullu/Manali. The main campus of IIT Mandi is situated at the forested hills of Kamandillage on the banks of the Uhl, a tributary of River Beas, which is approximately 18 kilometres away from Mandi town. The usual travel route to Mandi

is via Chandigarh from Delhi. The distance between Chandigarh and Mandi is "200 kms. The nearest airports to Mandi are Kullu (Bhunter), Dharmshalla (Gaggal) & Chandigarh. Chandigarh is well connected with non-stop flights from Delhi, Mumbai, Hyderabad, Bangalore, Kolkata and Chennai. Mandi is ideally located near several tourist places like Kullu (70 km), Manali (100 km), Rewalsar (25 km) and Parashar lake (52 km). The month of December falls in winter season with temperature ranging between 10-18 degree C

IIT Mandi

Nestled in the Sivalik Range of the Himalayas, away from the bustle of the metropolis, a new abode of learning, IIT Mandi, has germinated in 2009. The focus of IIT Mandi is to spearhead cutting edge research and development of technologies needed by the world in the years to come. Research groups will work together in creating and harnessing the newest technologies needed to serve the people of the region and the country, and to tackle problems of global importance. In order to achieve excellence and high impact locally and globally, IIT Mandi focusing on strongly foster inter-disciplinary R&D. With a view to innovating sustainable technologies for widespread use, IIT Mandi encourages strong Humanities and Social Sciences participation in technology R&D...

Scope of the Conference

The conference will cover following broad areas, but not limited to

 Kinematics and dynamics of machines, Compliant Mechanisms

Editorial Board

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Editorial Members: Dr. Shankar Sehgal, Panjab University, Chandigarh [Zonal Vice President (ZVP) North]

Dr. R. Ranganath, Spacecraft Mechanisms Group, ISRO Satellite Centre, Bangalore[ZVP South]

Prof. Ranjit Kumar Barai, Jadavpur University, Kolkata [ZVP East]

Prof. Shital S. Chiddarwar, VNIT, Nagpur [ZVP West]