



NEWSLETTER

President's Address

From the Office of the Secretary General

IUTAM Symposia 2016 and 2017

IUTAM Summer School 2016

IUTAM Co-Sponsored Event 2016

International Congress, XXIV ICTAM, Montreal, August 2016

IUTAM Home Page:

**<http://www.iutam.net>
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International Union of Theoretical and Applied Mechanics

N-2015-2

December 2015

President's Address

The annual meetings of the Bureau and the XCCC took place in Stuttgart during two days at the end of August 2015. The XCCC meetings were focused on final plans for ICTAM 2016 in Montreal. The Final Announcement and Call for Abstracts was discussed, and has now been sent out. The deadline for submission of abstracts is 15 January 2016. A recent submission report from the organizers in Montreal has shown that the system is active, and that already a number of abstracts have been received. The subcommittee for the 2016 congress committee elections was discussed. Regarding bids for ICTAM 2020, the status and the procedure for obtaining final bids were on the agenda.

At the Bureau meetings the focus was first centered on the results of the four Discussion Groups that had been active during the last year, since the General Assembly meetings in Kgs. Lyngby. After some further discussion it was decided to prepare texts on three of the subjects discussed: "Group 1 – Endorsement of meetings by IUTAM, and Affiliated Organizations", "Group 2 – Proceedings", and "Group 4 – IUTAM Symposia Grants, Usage and Procedures". These texts were prepared after the meetings, were reiterated over a few days, and are now ready to be sent by the Secretary General to the GA for decision at the meeting next year. Besides the standard items on the agenda, a book on the history of IUTAM was presented. The book edited by Stephen Juhasz in 1988 has been updated with much effort by Peter Eberhard and his students. The Bureau was enthusiastic about the work and looks forward to seeing the book made available to everybody. The next ICSU meeting of the International Scientific Unions, midway between the General Assemblies, will be held in Paris 11-12 April 2016. I will attend as the ICSU representative for IUTAM.

The process has also started for electing the members of the new Bureau, which will take over on 1 November 2016. The members of the GA have been asked by the Electoral Committee to nominate new members. Based on these nominations the Committee will make a proposal to the GA in Montreal next summer, where the new Bureau will be elected.

December 2015
Viggo Tvergaard, President of IUTAM
Lyngby, Denmark

From the Office of the Secretary General

In 2015 the IUTAM Bureau meeting was held in two sessions on 29 and 30 August at the University of Stuttgart, Germany. Among the items discussed at the meeting were the following:

- *Matters concerning Adhering and Affiliated Organizations.*

The state of affairs with respect to some of the Adhering and Affiliated Organizations was discussed.

- *Reports by the Treasurer and the Secretary-General.*

The financial state of the Union was discussed, as well as the call for proposals for IUTAM Symposia and IUTAM Summer Schools for 2018 and 2019. **The deadline for submission of proposals will be 16 May 2016. The online call for proposals will open in January 2016.**

- *Co-sponsorship of Meetings by IUTAM and Affiliated Organizations, Publication of Proceedings, Grants*

Three committees prepared texts to be distributed to the members of the General Assembly in 2016. These texts were discussed by the Bureau Members.

- *Procedia IUTAM.*

There are now 17 volumes available on the website:

http://www.elsevier.com/wps/find/journaldescription.cws_home/724870/description

Frédéric Dias
Secretary General of IUTAM
Cachan & Dublin

IUTAM Symposia 2016

16-1 = GA.14-10 IUTAM Symposium on Filling gaps in material property space

Place: Cambridge, UK
Date: March 14 – March 16, 2016
Chairman: **Prof. N. Fleck**
Cambridge University
Engineering Department
Trumpington Street
CB2 1PZ, Cambridge
UK
Email: naf1@eng.cam.ac.uk

IUTAM Representative on Scientific Committee: Prof. V. Tvergaard

16-2 = GA.14-12 IUTAM Symposium on Mechanics of stretchable electronics

Place: Hangzhou, China
Date: March 17 – March 18, 2016
Chairman: **Prof. J. Song**
Zhejiang University
Zheda Road 38
310027, Hangzhou, China
Email : jzsong@zju.edu.cn

IUTAM Representative on Scientific Committee: Prof. H. Gao

16-3 = GA.14-03 IUTAM Symposium on Helicity, structures and singularity in fluid and plasma dynamics

Place: Palazzo Franchetti, Istituto Veneto, Venice, Italy

Date: April 11 – April 15, 2016

Chairman: **Prof. R. L. Ricca**

University of Milano-Bicocca

Department of Mathematics & Applications

Via Cozzi 55

20125, Milano

Italy

Email: renzo.ricca@unimib.it

Website:

www.matapp.unimib.it/~ricca/IUTAM2016Venice/

IUTAM Representative on Scientific Committee: Prof. T. Pedley

16-4 = GA.14-15 IUTAM Symposium on Advances in biomechanics of hearing

Place: Stuttgart, Germany

Date: May 17 – May 20, 2016

Chairman: **Dr. P. Ziegler**

Institute of Engineering and Computational Mechanics

University of Stuttgart

Pfaffenwaldring 9

70569, Stuttgart, Germany

Email : iutam2016@itm.uni-stuttgart.de

Honorary Chairman: **Dr. A. Eiber**

Website: <http://www.itm.uni-stuttgart.de/iutam2016/>

IUTAM Representative on Scientific Committee: Prof. W. Schiehlen

16-5 = GA.14-08 IUTAM Symposium on Dynamic instabilities in solids

Place: Madrid, Spain
Date: May 17 – May 20, 2016
Chairman: **Prof. J. A. Rodríguez-Martínez**
University Carlos III of Madrid
Avenida de la Universidad, 30 28911
Leganés, Spain
Email: jarmarti@ing.uc3m.es
Co-Chairman: **Prof. D. Rittel**
Technion
Faculty of Mechanical Engineering
32000 Haifa, Israel
Email: merittel@technion.ac.il
Website: <http://iutam2016madrid.com/>

IUTAM Representative on Scientific Committee: Prof. K. Ravi-Chandar

16-6 = GA.14-14 IUTAM Symposium on Nanoscale physical mechanics

Place: Nanjing, China
Date: May 23 – May 27, 2016
Chairman: **Prof. W. Guo**
Nanjing University of Aeronautics and Astronautics
29, Yudao Street
210016, Nanjing
China
Email: wlguo@nuaa.edu.cn

IUTAM Representative on Scientific Committee: Prof. H. Gao

16-7 = GA.14-16 IUTAM Symposium on Integrated computational structure-material modeling of deformation and failure under extreme conditions

Place: Baltimore, USA
Date: June 19 – June 22, 2016
Chairman: **Prof. S. Ghosh**
Johns Hopkins University, Baltimore, Maryland
203 Latrobe, 3400 N. Charles Street
21218 Baltimore, USA
Email: sghosh20@jhu.edu

IUTAM Representative on Scientific Committee: Prof. B. Schrefler

16-8 = GA.14-04 IUTAM Symposium on Jet noise modelling and control

Place: Porquerolles Island, France
Date: June 27 – June 29, 2016
Chairman: **Prof. L. Lesshafft**
Laboratoire d'Hydrodynamique
École polytechnique
91128, Palaiseau
France
Email: lutz.lesshafft@ladhyx.polytechnique.fr

IUTAM Representative on Scientific Committee: Prof. P. Huerre

16-9 = GA.14-01 IUTAM Symposium on Storm surge modelling and forecasting

Place: Shanghai, China
Date: October 17 – October 19, 2016
Chairman: **Prof. H. Liu**
Shanghai Jiao Tong University
Mulan Building A-801, School of NAOCE, SJTU,
800 Dongchuan Road
200240 Shanghai
China
Email: hliu@sjtu.edu.cn

IUTAM Representative on Scientific Committee: Prof. F. Dias

16-10 = GA.14-09 IUTAM Symposium on Nonlinear and delayed dynamics of mechatronic systems

Place: Nanjing, China
Date: October 17 – October 21, 2016
Chairman: **Prof. Z. Wang**
Nanjing University of Aeronautics and Astronautics
State Key Laboratory of Mechanics and Control of
Mechanical Structures
Yudao Street #29
210016, Nanjing
China
Email: zhwang@nuaa.edu.cn
Co-Chairman: **Prof. T. Insperger**
Budapest University of Technology and Economics
Department of Applied Mechanics
Budapest, H-1521
Hungary
Email: insperger@mm.bme.hu
Website: <http://iutam2016.nuaa.edu.cn/>

IUTAM Representative on Scientific Committee: Prof. G. Stepan

IUTAM Symposia 2017

17-1 = GA.14-05 IUTAM Symposium on Dynamics and topology of vorticity and vortices

Place: Lyngby, Denmark
Date: July 4 – July 7, 2017
Chairman: **Prof. M. Brøns**
Technical University of Denmark
Department of Applied Mathematics and Computer Science
2800 Kongens Lyngby, Denmark
Email: mobr@dtu.dk

IUTAM Representative on Scientific Committee: Prof. K. Moffatt

17-2 = GA.14-02 IUTAM Symposium on Wind waves

Place: London, UK
Date: September 4 – September 8, 2017
Chairman: **Prof. R. Grimshaw**
University College London
Department of Mathematics
Gower Street
WC1E 6BT London, UK
Email: r.grimshaw@ucl.ac.uk

IUTAM Representative on Scientific Committee: Prof. F. Dias

17-3 = GA.14-06 IUTAM Symposium on Co-simulation and solver coupling – Recent developments in theory and application

Place: Darmstadt, Germany
Date: **2017, no exact dates available yet**
Chairman: **Prof. B. Schweizer**
Department of Mechanical Engineering
Institute of Structural Dynamics
Technische Universität Darmstadt
Petersenstrasse 30
64287 Darmstadt, Germany
Email: schweizer@sds.tu-darmstadt.de

IUTAM Representative on Scientific Committee: Prof. P. Eberhard

17-4 = GA.14-07 IUTAM Symposium on Computational particle mechanics in fluid and solid systems

Place: Berkeley, USA
Date: **2017, no exact dates available yet**
Chairman: **Prof. T. Zohdi**
University of California, Berkeley
6117 Etcheverry Hall, Department of Mechanical Engineering, UC Berkeley
94720-1740 Berkeley, United States
Email: zohdi@berkeley.edu

IUTAM Representative on Scientific Committee: Prof. B. Schrefler

17-5= GA.14-11 IUTAM Symposium on Multiscale modelling of dislocations

Place: Oxford, UK
Date: **2017, no exact dates available yet**
Chairman: **Prof. S. Fitzgerald**
University of Oxford
Department of Materials
Parks Road OX1 3PH, Oxford, UK
Email: steven.fitzgerald@materials.ox.ac.uk

IUTAM Representative on Scientific Committee: Prof. W. Yang

17-6= GA.14-13 IUTAM Symposium on Multi-scale fatigue, fracture and damage of materials in harsh environments

Place: Galway, Ireland
Date: **2017, no exact dates available yet**
Chairman: **Prof. P. O'Donoghue**
National University of Ireland Galway
University Rd
Galway, Ireland
Email: padraic.odonoghue@nuigalway.ie

IUTAM Representative on Scientific Committee: Prof. V. Tvergaard

IUTAM Summer School

2016 IUTAM-CISM Summer School on Biological and Bio-inspired Fluid Mechanics

Place: Udine, Italy
Event dates: July 4 – July 8, 2016
Coordinators: **Prof. C. Eloy**
IRPHE, Aix-Marseille University
49 rue Joliot Curie
13013 Marseille, France
Email: eloy@irphe.univ-mrs.fr

Dr Eric Lauga
DAMTP, University of Cambridge
Wilberforce Road, Cambridge CB3 0WA, UK
Email: e.lauga@damtp.cam.ac.uk

IUTAM Co-Sponsored Event

2016 ICFDA16 International Conference on Fractional Differentiation and its Applications

Place: Novi Sad, Serbia
Date: July 18 – July 20, 2016
Coordinators: **Prof. Dragan Spasic**
Email: spasic@uns.ac.rs

Prof. Teodor Atanackovic
Email: atanackovic@uns.ac.rs

Website: www.icfda16.com

International Congress, XXIV ICTAM, Montreal, 2016**August 21-26, 2016**

The International Congresses on Theoretical and Applied Mechanics (ICTAM), organized every four years by IUTAM, bring together scientists from all over the world for the purpose of exchanging information about recent developments in the field. Participation is unrestricted. **The deadline for extended abstract submission is 15 January 2016.**

For further information see ICTAM home page,
<http://www.ictam2016.org/>

or please contact:

Professor Robert McMeeking
Secretary of the IUTAM Congress Committee
UC Santa Barbara
Email: rmcm@engineering.ucsb.edu

Opening and Closing Lecturers

Opening Lecturer: Professor W. Richard Peltier (Canada)

Closing Lecturer: Professor Norman Fleck (UK)

Sectional Lecturers in Fluids:

John Bush, Tim Colonius, Anette Hosoi, Alex Smits, Eberhard Bodenschatz, Javier Jimenez

Sectional Lecturers in Fluids-Solids:

Charbel Farhat, George Haller, Haiyan Hu

Sectional Lecturers in Solids:

Peter Hunter, Samuel Forest, John Rogers, Basile Audoly, Daining Fang, Zhigang Suo, Patrick Onck

Minisymposia*MS 01: Bypass Transition*

Co-chairs:

Professor Bruno Eckhardt (Germany)

Professor Michael Graham (USA)

MS 02: Fluid Active Matter

Co-chairs:

Professor Eric Lauga (UK)

Professor Roman Stocker (USA)

MS 03: Multiphase Flow in the Processing Industry

Co-chairs:

Professor Patrick Anderson (The Netherlands)

Professor Staffan Lundström (Sweden)

MS 04: Nonlinear Dynamics in Engineering Systems

Co-chairs:

Professor Giuseppe Rega (Italy)

Professor Dick van Campen (The Netherlands)

MS 05: Soft Solid Active Matter

Co-chairs:

Professor Vikram Deshpande (UK)

Professor Zhigang Suo (USA)

MS 06: Topology Optimization

Co-chairs:

Professor Ole Sigmund (Denmark)

Professor Fred van Keulen (The Netherlands)

Thematic Sessions

Fluid Mechanics

FM1	Biological fluid dynamics
FM2	Boundary layers
FM3	Combustion and flames
FM4	Compressible flow
FM5	Convection
FM6	Drops, bubbles and multiphase flows
FM7	Flow instability and transition
FM8	Flow in thin films
FM9	Geophysical and environmental fluid dynamics
FM10	Low Reynolds number flows
FM11	Micro- and nano-fluidics
FM12	Non-Newtonian and complex fluids
FM13	Computational fluid dynamics
FM14	Turbulence
FM15	Vortex dynamics
FM16	Waves in fluids
FM17	Other topics in fluid mechanics

Solid Mechanics

SM1	Biomechanics and biomaterials
SM2	Contact and friction
SM3	Damage mechanics
SM4	Elasticity
SM5	Fracture mechanics
SM6	Geophysics and geomechanics
SM7	Impact and wave propagation
SM8	Multi-component materials and composites
SM9	Phase transformations and thermomechanical phenomena
SM10	Sizescale effects in materials
SM11	Multibody and vehicle dynamics
SM12	Nanostructures and MEMS
SM13	Plasticity, viscoplasticity and creep
SM14	Stability of structures
SM15	Computational solid mechanics
SM16	Vibrations and control of structures
SM17	Other topics in solid mechanics

Topics involving both fluid mechanics and solid mechanics

FS1	Acoustics
FS2	Exascale computing
FS3	Experimental methods in mechanics
FS4	Chaos and pattern formation
FS5	Porous media
FS6	Fluid structure interactions
FS7	Actuating and smart materials
FS8	Granular materials and flows
FS9	Foams and cellular materials
FS10	Education in mechanics

Notice on IUTAM Symposia

The IUTAM Symposia are reserved to invited participants. Those wishing to participate in an IUTAM Symposium are therefore advised to contact the Chairman of the Scientific Committee in due time in advance of the meeting.

IUTAM is a member of ICSU
<http://www.icsu.org>

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