



NEWSLETTER

President's Address

From the Office of the Secretary-General

IUTAM Symposia 2015, 2016 and 2017

IUTAM Summer Schools 2015 and 2016

IUTAM Co-Sponsored Event 2015

International Congress, XXIV ICTAM, Montreal, August 2016

IUTAM Home Page:

**<http://www.iutam.net>
or: <http://www.iutam.org>**

International Union of Theoretical and Applied Mechanics

N-2015-1

June 2015

President's Address

The plans for our next ICTAM in Montreal August 2016 are developing as expected. The First Announcement and Call for Abstracts was sent out at the end of February. Here the names of the Opening and Closing Lecturers were announced together with the names of the Sectional Lecturers. Also the co-chairs of the six Minisymposia were listed. For the 44 Thematic Sessions, listed in the Announcement, most of the co-chairs are now in place. The ICTAM President, Maciej Floryan, is working hard on the details of the practical arrangements for our Congress in Montreal. We will have time to discuss further issues for the Congress when the XCCC and the Bureau meet in Stuttgart on August 29 and 30.

After the GA meetings in August it was suggested in the Bureau that we should discuss in some detail a number of subjects of importance to the future of IUTAM. It was decided to focus on the following four subjects: [1] Co-sponsoring or endorsing international meetings that are not formally IUTAM symposia (perhaps also attracting new Affiliated Organisations). [2] Proceedings (keep the rigid requirement, or relax the requirement, or no proceedings at all). [3] Annual decisions about symposia and initiatives to get proposals (do we want annual decisions, and how do we attract more quality proposals). [4] Symposia grants - usage and procedures (only for participants in need, or free use. A flexible size of the grant could allow for more symposia). For each subject we established Discussion Groups, consisting of four Bureau members, who should consider a number of relevant ideas and prepare a proposed text to be discussed in the whole Bureau. The subjects are now further discussed between all Bureau members, and will be on the agenda when the Bureau meets in Stuttgart at the end of August. The idea is that hopefully this can lead to a modernization of some of the procedures we use in IUTAM, to an increased interest in our Congress and our Symposia, and to a higher visibility of IUTAM. The final proposals can then be presented to the GA during the Montreal Congress.

Viggo Tvergaard
President of IUTAM
Lyngby, Denmark

From the Office of the Secretary General

IUTAM Report 2014:

The IUTAM Report 2014 will be printed in July 2015 and sent by post in September 2015. It contains in particular the minutes of the General Assembly held in Lyngby, Denmark, in August 2014.

Summer 2015 meetings of the Bureau and the XCCC:

The summer 2015 meetings of the Bureau and the XCCC will be held in Stuttgart, Germany, on 29 and 30 August. Agenda items to be discussed at the Bureau meeting are:

- Matters concerning Adhering and Associate Organizations
- Matters concerning Affiliated Organizations
- Matters concerning ICSU
- Reports by the Treasurer and the Secretary-General
- Co-sponsoring of international meetings
- Publication of Proceedings
- Proposal for evaluating Symposia applications every year
- Usage of Symposia grants

Call for Symposia and Summer Schools 2018-2019:

The call for the next wave of IUTAM Symposia and Summer Schools will open shortly online. The deadline for submission will be 1 June 2016.

Procedia IUTAM

Five new volumes (12 to 16) have been published since the beginning of 2015. All papers are open access and can be accessed at <http://www.sciencedirect.com/science/journal/22109838>

Frédéric Dias
Secretary-General of IUTAM
Cachan, France & Dublin, Ireland

IUTAM Symposia 2015

15-3 = GA.12-11 IUTAM Symposium on Growing solids

Place: Moscow, Russia
Date: June 23 – June 27, 2015
Chairman: **Prof. A. Manzhirov**
Department for Modeling in Solid Mechanics
Institute for Problems in Mechanics
Russian Academy of Sciences
Vernadsky Ave 101 Bldg 1
119526 Moscow, Russia
Email: manzh@inbox.ru
Website: <http://sgs2015.ipmnet.ru/>

IUTAM Representative on Scientific Committee: Prof. N. Gupta

15-4 = GA.12-15 IUTAM Symposium on Analytical methods in nonlinear dynamics

Place: Darmstadt/Frankfurt, Germany
Date: July 06 – July 09, 2015
Chairman: **Prof. P. Hagedorn**
Dynamics & Vibrations Group
Numerical Methods in Mechanical Engineering, fnb
Technische Universität Darmstadt
Dolivostr. 15
64293 Darmstadt, Germany
Email: hagedorn@dyn.tu-darmstadt.de
Co-chairman: **Dr. G. Spelsberg-Korspeter**
Email: speko@dyn.tu-darmstadt.de
Website: <http://www.iutam.tu-darmstadt.de/>

IUTAM Representative on Scientific Committee: Prof. P. Eberhard

15-5 = GA.12-03 IUTAM Symposium on Multiphase continuum modelling of particulate flows

Place: Gainesville, USA
Date: December 9 – December 11, 2015
Chairman: **Prof. J. Butler**
Dept. of Chemical Engineering
University of Florida
32611-6005 Gainesville, USA
Email: butler@che.ufl.edu
Co-Chairman: **Prof. E. Guazzelli**
Laboratoire IUSTI - CNRS UMR 7343
13453 Marseille cedex 13, France
Email: Elisabeth.Guazzelli@univ-amu.fr

IUTAM Representative on Scientific Committee: Prof. G. Leal

IUTAM Co-Sponsored Event**2015 ECCOMAS Thematic Conference on Multibody Dynamics**

Place: Barcelona, Spain
Date: June 29 – July 02, 2015
Coordinator: **Prof. Josep M. Font-Llagunes**
Email: josep.m.font@upc.edu

Website: <http://www.multibody2015.org/>

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

Place: 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

IUTAM Representative on Scientific Committee: Prof. T. Pedley

16-3 = 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

16-4 = 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

16-5 = 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

16-6 = GA.14-16 IUTAM Symposium on Integrated computational structure-material modeling of deformation and failure under extreme conditions

Place: Baltimore, USA
Date: June 6 – June 8, 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

16-7 = 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

16-8 = 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

IUTAM Representative on Scientific Committee: Prof. G. Stepan

16-6 = GA.14-04 IUTAM Symposium on Jet noise modelling and control

Place: Palaiseau, France
Date: **2016, no exact dates available yet**
Chairman: **Prof. L. Lesshafft**
Laboratoire d'Hydrodynamique
École polytechnique
91128, Palaiseau
France
Email: lutz.lessshafft@ladhyx.polytechnique.fr

IUTAM Representative on Scientific Committee: Prof. P. Huerre

16-8 = GA.14-12 IUTAM Symposium on Mechanics of stretchable electronics

Place: Hangzhou, China
Date: **2016, no exact dates available yet**
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

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 Schools

2015

IUTAM-CISM Summer School on Measurement, Analysis and Passive Control of Thermoacoustic Oscillations

Place: Udine, Italy
Event dates: June 29 – July 3, 2015
Coordinator: **Prof. M. Juniper**
University of Cambridge, Engineering Trumpington Street
CB2 1PZ Cambridge, UK
Email: mpj1001@eng.cam.ac.uk

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

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.

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>

Notice on availability of IUTAM Newsletter

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