



NEWSLETTER

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IUTAM Home Page:

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

International Union of Theoretical and Applied Mechanics
N-2018-1 **June 2018**

President's Address

It has been a pleasure to continue to serve as President of IUTAM and to work with many of you during this exciting time for the field of mechanics. Since my last communication in the fall, we have focused much of our work on preparing for the upcoming IUTAM General Assembly (GA), Congress Committee (CC) and associated meetings, which will occur in Boston, Massachusetts on 22-25 July, 2018. While the various meetings and the banquet are planned on the campus of Northeastern University, centrally located in the city of Boston, the reception will take place during a cruise on Boston Harbor. Please visit the event website at <https://www.northeastern.edu/iutam2018>. There, you will find not only the details of the meetings, but also visitor information for those of you who plan to spend additional time visiting the historical and cultural capital of the Commonwealth of Massachusetts and its surroundings. Please make sure to finalize your travel plans and hotel reservation as soon as possible if you have not done so already.

The GA and CC will meet on Monday and Tuesday, 23-24 July, while Sunday and Wednesday, 22 and 25 July, will be dedicated to the meetings of the Bureau and the Executive Committee of the Congress Committee (XCCC). The members of the Symposia Panels also plan to meet on Sunday to discuss their final recommendation to the GA.

At the GA meeting, Professor Petryk, Secretary-General, Professor Eberhard, Treasurer, and Professor McMeeking, Secretary of the Congress Committee, will present their reports of the past two years. We will also have the privilege of attending a presentation by Professor Reddy, Officer of the Executive Board of the International Council for Science (ICSU). Matters concerning Adhering, Associate and Affiliated Organizations will be discussed, and the GA will make decisions on the future members of the Electoral Committee, the Congress Committee, and the Symposia Panels. Finally, the GA will select the upcoming IUTAM Symposia and Summer Schools, as well as vote on a proposed revision of the IUTAM statutes.

Professor Corigliano, President of the 25th International Congress of Theoretical and Applied Mechanics, ICTAM 2020, together with the local Organizing Committee and the IUTAM Executive Committee of the Congress Committee, have continued to work on the planning of the next International

Congress, which will take place in Milan on 23-28 August 2020. While topics for six mini-symposia (along with their co-chairs), as well as those for fifty thematic sessions (19 in fluids, 19 in solids and 12 in solids/fluids) were decided at the XCCC meeting in Milan last summer (see the ICTAM 2020 website at <http://www.ictam2020.org>), many important selections will be made at the CC meeting in Boston. These will include the Opening and Closing Lecturers, the Sectional Lecturers, and the Co-Chairs of the Thematic Sessions. Such choices will be crucial to ensure the success of ICTAM 2020.

Finally, as you know IUTAM is a Union Member of the International Council for Science (ICSU) and you may recall that I represented IUTAM at the 32nd General Assembly of ICSU in Taipei on 23-26 October, 2017. As I previously reported, this was a historical moment as the members of ICSU and ISSC (International Social Science Council) voted to merge and form a new organization named International Science Council (ISC). On behalf of IUTAM, I plan to attend the Founding General Assembly of ISC, which will be hosted by the French Academy of Sciences and take place in Paris on 3-5 July, 2018. The agenda (see <https://www.icsu.org/events/international-science-council-founding-general-assembly>) will include a members' forum, the GA meeting with elections of the new ISC Governing Board, and the formal inauguration of ISC.

I wish you a pleasant start of the summer, and very much look forward to seeing many of you in July in Boston.

June 2018

Nadine Aubry
President of IUTAM
Boston, MA

From the Office of the Secretary-General

IUTAM Report 2017:

The IUTAM Report 2017 is now available online:

<http://iutam.org/wp-content/uploads/2018/06/Annual-Report-2017.pdf> .

Printed versions will be distributed at the IUTAM General Assembly meeting in Boston in July 2018 and later will also be available upon request.

Proposals for IUTAM Symposia and IUTAM Summer Schools 2020/2021:

The call for proposals has resulted in 19 proposals for Symposia (6 in fluids, 8 in solids, and 5 in the fluids/solids area) and 3 proposals for Summer Schools. The proposals are subject to evaluation by the Symposia Panels and they will be discussed by the General Assembly in Boston.

Symposia proceedings:

From 2018, if the organizers of an IUTAM Symposium decide to publish proceedings, the recommended form of publication is the IUTAM Bookseries by Springer. Several volumes of the IUTAM Bookseries are already planned.

From 2011 to 2017, Procedia IUTAM was the preferred publisher of the symposia proceedings and published 26 volumes freely accessible online at: <http://www.sciencedirect.com/science/journal/22109838> .

IUTAM website:

The IUTAM website has recently been substantially modified and upgraded to comply with the current website design standards, to increase security and improve access from mobile devices. The upgrade will also simplify possible further enhancements of the website.

June 2018

Henryk Petryk
Secretary-General of IUTAM
Warsaw, Poland

IUTAM Symposia 2018

18-1 = GA.16-09 IUTAM Symposium on Recent advances in moving boundary problems in mechanics

Place: Christchurch, New Zealand
Date: February 12 – February 15, 2018
Chairman: **Dr. S. Gutschmidt**
University of Canterbury
Dept. of Mechanical Engineering
Private Bag 4800
8140 Christchurch, New Zealand
Email: stefanie.gutschmidt@canterbury.ac.nz
Website: <http://iutam2018.nz>

IUTAM Representative on Scientific Committee: Prof. P. Eberhard

18-2 = GA.16-05 IUTAM Symposium on Dynamics and stability of fluid interfaces

Place: Gainesville, USA
Date: April 2 – April 5, 2018
Chairman: **Prof. R. Narayanan**
University of Florida
P.O. Box 116 005
32611 Gainesville, USA
Email: ranga@ufl.edu

IUTAM Representative on Scientific Committee: Prof. N. Aubry

18-3 = GA.16-02 IUTAM Symposium on Motile cells in complex environments

Place: Udine, Italy
Date: May 15 – May 18, 2018
Chairman: **Prof. C. Marchioli**
University of Udine
Via delle Scienze 206, 33100 Udine, Italy
Email: marchioli@uniud.it

Co-Chairman: **Prof. E. Climent**
Institut de Mécanique des Fluides de Toulouse
1, Allée du Professeur Camille Soula
31400 Toulouse, France
Email: ecliment@imft.fr

Website: <http://158.110.32.35/IUTAM2018>

IUTAM Representative on Scientific Committee: Prof. B. Schrefler

18-4 = GA.16-13 IUTAM Symposium on Model order reduction of coupled systems (MORCOS 2018)

Place: Stuttgart, Germany
Date: May 22 – May 25, 2018
Chairman: **Prof. J. Fehr**
University of Stuttgart
Institute of Engineering and Computational Mechanics
Pfaffenwaldring 9
70569 Stuttgart, Germany
Email: joerg.fehr@itm.uni-stuttgart.de

Co-Chairman: **Prof. B. Haasdonk**
University of Stuttgart
Institute of Applied Analysis and Numerical Simulation
Pfaffenwaldring 57
70569 Stuttgart, Germany
Email: haasdonk@mathematik.uni-stuttgart.de

Website: www.itm.uni-stuttgart.de/iutam2018

IUTAM Representative on Scientific Committee: Prof. P. Eberhard

18-5 = GA.16-22 IUTAM Symposium on Size-effects in microstructure and damage evolution

Place: Lyngby, Denmark
Date: May 27 – June 1, 2018
Chairman: **Prof. C. Niordson**
Technical University of Denmark
Nils Koppels Allé, building 404
2800 Kgs. Lyngby, Denmark
Email: cn@mek.dtu.dk
Website: <http://www.conferencemanager.dk/iutam>

IUTAM Representative on Scientific Committee: Prof. V. Tvergaard

18-6 = GA.16-23 IUTAM Symposium on Acoustic/elastic metamaterials, their design and applications

Place: Beijing, China
Date: June 5 – June 9, 2018
Chairman: **Prof. G. Hu**
Beijing Institute of Technology
5 South Zhongguanchun Street
100081, Beijing, China
Email: hugeng@bit.edu.cn
Co-Chairman: **Prof. A. Norris**
Rutgers University
98 Brett Road
Piscataway, NJ 08854-8058, USA
Email: norris@rutgers.edu
Website: <https://www.iutam-sam2018.com>

IUTAM Representative on Scientific Committee: Prof. W. Yang

18-7 = GA.16-11 IUTAM Symposium on Critical flow dynamics involving moving/deformable structures with design applications

Place: Santorini Island, Greece
Date: June 18 – June 22, 2018
Chairman: **Prof. M. Braza**
Institut de Mécanique des Fluides de Toulouse UMR
CNRS 5502
Allée du Prof. Camille Soula
31400 Toulouse, France
Email: marianna.braza@imft.fr
Website: www.smartwing.org/iutam

IUTAM Representative on Scientific Committee: Prof. B. Schrefler

18-8 = GA.16-21 IUTAM Symposium on Mechanical environments of living cells

Place: Xi'an, China
Date: June 28 – June 30, 2018
Chairman: **Prof. T.J. Lu**
Xi'an Jiaotong University
28 Xianning West Road
710049 Xi'an, Shaanxi, China
Email: tjlu@xjtu.edu.cn
Co-Chairman: **Prof. G. Genin**
Washington University in St. Louis
Email: genin@wustl.edu
Co-Chairman: **Prof. Feng Xu**
Xi'an Jiaotong University
Email: fengxu@mail.xjtu.edu.cn

IUTAM Representative on Scientific Committee: Prof. N. Fleck

18-9 = GA.16-15 IUTAM Symposium on Exploiting nonlinear dynamics for engineering systems

Place: Novi Sad, Serbia
Date: July 15 – July 19, 2018
Chairman: **Prof. I. Kovacic**
University of Novi Sad
Faculty of Technical Sciences, CEVAS
Trg Dositeja Obradovica 6
21000 Novi Sad, Serbia
Email: ivanakov@uns.ac.rs
Co-Chairman: **Prof. S. Lenci**
Polytechnic University of Marche
Ancona, Italy
Email: lenci@univpm.it
Website: <http://enolides.ftn.uns.ac.rs>

IUTAM Representative on Scientific Committee: Prof. P. Eberhard

18-10 = GA.16-17 IUTAM Symposium on Mechanical design and analysis for AM technologies (AMT 2018)

Place: Moscow, Russia
Date: August 20 – August 25, 2018
Chairman: **Prof. A. Manzhurov**
Russian Academy of Sciences
Ishlinsky Institute for Problems in Mechanics
Vernadsky ave 101 Bld 1
119526 Moscow, Russia
Email: manzh@inbox.ru
Website: <http://ipmnet.ru/amt2018/>

IUTAM Representative on Scientific Committee: Prof. I. Goryacheva

**18-11 = GA.16-14 IUTAM Symposium on Mechanics of
electro/magneto-active materials and structures**

Place: Beijing, China
Date: August 26 – August 30, 2018
Chairman: **Prof. D. Fang**
University of Pekin
Room 511, Mechanical Building
5 Yiheyuan road, Haidan
100871 Beijing, China
Email: fangdn@pku.edu.cn

Co-Chairman: **Prof. C. Lynch**
University of California, Los Angeles
46-147G Engineering IV
420 Westwood Blvd
Los Angeles, CA 90095, USA
Email: cslynch@seas.ucla.edu

Website: <http://conf.scholarset.com/meeting/details?fid=25>

IUTAM Representative on Scientific Committee: Prof. H. Gao

**18-12 = GA.16-08 IUTAM Symposium on Stochastic dynamical
systems approaches to fluid flow transitions**

Place: Ithaca, New York, USA
Date: September 12 – September 14, 2018
Chairman: **Prof. H. Dijkstra**
Utrecht University
Dept. of Physics and Astronomy
Princetonplein 5
3584 CC Utrecht, The Netherlands
Email: had54@cornell.edu

IUTAM Representative on Scientific Committee: Prof. N. Aubry

18-13 = GA.16-16 IUTAM Symposium on Architected material mechanics

Place: Chicago, USA
Date: September 17 – September 19, 2018
Chairman: **Prof. T. Siegmund**
Purdue University
School of Mechanical Engineering
585 Purdue Mall
47907 West Lafayette, USA
Email: siegmund@purdue.edu
Co-Chairman: **Prof. F. Barthelat**
McGill University
Department of Mechanical Engineering
817 Sherbrooke Street
QC H3A 2K6 Montreal, Canada
Email: francois.barthelat@mcgill.ca
Website: <https://engineering.purdue.edu/IUTAM2018AMS>

IUTAM Representative on Scientific Committee: Prof. V. Tvergaard

18-14 = GA.16-18 IUTAM Symposium on When topology optimization meets additive manufacturing – theory and methods

Place: Dalian, China
Date: October 8 – October 12, 2018
Chairman: **Prof. G. Cheng**
Dalian University of Technology
State key Lab. of structural analysis for industrial equip.
Liaoning
116023 Dalian, China
Email: chenggd@dlut.edu.cn

IUTAM Representative on Scientific Committee: Prof. N. Olhoff

18-15 = GA.16-06 IUTAM Symposium on Dynamics of complex fluids and interfaces

Place: Kanpur, India
Date: December 17 – December 20, 2018
Chairman: **Prof. I. Sharma**
Indian Institute of Technology
Dept. of Mechanical Engineering
213B, Northern Laboratories I
208016 Kanpur, India
Email: ishans@iitk.ac.in

IUTAM Representative on Scientific Committee: Prof. A. Freire

IUTAM Symposia 2019

19-1 = GA.16-20 IUTAM Symposium on Phase transformation in shape memory materials: modeling and applications

Place: Austin, USA
Date: January 12 – January 17, 2019
Chairman: **Prof. C. Landis**
University of Texas
210 East 24th street, 78712 Austin, Texas, USA
Email: landis@utexas.edu
Co-Chairman: **Prof. S. Kyriakides**
University of Texas
210 East 24th street, 78712 Austin, Texas, USA
Email: skk@utexas.edu
Co-Chairman: **Prof. D. Lagoudas**
Texas A&M University
3141 TAMU, College Station TX 77843-3141, USA
Email: lagoudas@aero.tamu.edu

IUTAM Representative on Scientific Committee: Prof. H. Petryk

19-2 = GA.16-10 IUTAM Symposium on Physics and mechanics of sea ice

Place: Espoo, Finland
Date: June 3 – June 7, 2019
Chairman: **Prof. J. Tuhkuri**
Aalto University, School of Engineering
Dept. of Mechanical Engineering
P.O. Box 14300
FI-00076 Espoo, Finland
Email: jukka.tuhkuri@aalto.fi

IUTAM Representative on Scientific Committee: Prof. R. McMeeking

19-3 = GA.16-03 IUTAM Symposium on Computational modelling of instabilities and turbulence in separated two-phase flows

Place: Dublin, Ireland
Date: June 10 – June 12, 2019
Chairman: **Prof. L. O’Naraigh**
University College Dublin
Belfield
D04 V1W8 Dublin, Ireland
Email: onaraigh@maths.ucd.ie
Website: <https://maths.ucd.ie/cfd2019>

IUTAM Representative on Scientific Committee: Prof. J. Magnaudet

19-4 = GA.16-04 IUTAM Symposium on Vortex dynamics in science, nature and technology

Place: San Diego, USA
Date: June 24 – June 28, 2019
Chairman: **Prof. S. Llewellyn Smith**
University of California, San Diego
Dept. of Mathematical and Aerospace Engineering
9500 Gilman Dr
92093-0411 La Jolla, USA
Email: sgls@ucsd.edu

IUTAM Representative on Scientific Committee: Prof. G. Leal

19-5 = GA.16-01 IUTAM Symposium on Laminar turbulent transition

Place: London, UK
Date: September 2 – September 6, 2019
Chairman: **Prof. P. Schmid**
Imperial College London
Dept. of Mathematics
South Kensington Campus
SW7 2AZ London, UK
Email: pjschmid@imperial.ac.uk
Website: <http://www.iutamtransition2019.org>

IUTAM Representative on Scientific Committee: Prof. T. Pedley

19-6 = GA.16-07 IUTAM Symposium on Viscoplastic flows: from theory to application

Place: Cambridge, UK
Date: September 16 – September 20, 2019
Chairman: **Prof. G. McKinley**
MIT
Room 3-254
77 Massachusetts Avenue
MA 02139 Cambridge, USA
Email: gareth@mit.edu
Co-Chairman: **Prof. I. Wilson**
University of Cambridge
Cambridge, UK
Email: diw11@cam.ac.uk

IUTAM Representative on Scientific Committee: Prof. N. Aubry

19-7 = GA.16-19 IUTAM Symposium on Mechanics of advanced composites joining for structural applications

Place: Limerick, Ireland
Date: **2019, no exact dates available yet**
Chairman: **Prof. C. McCarthy**
University of Limerick
Plassey, Castletroy
V94 T9PX Limerick, Ireland
Email: conor.mccarthy@ul.ie

IUTAM Representative on Scientific Committee: Prof. N. Fleck

IUTAM Summer Schools

2019

IUTAM-BICTAM Summer School on Violent flows with a free surface

Place: Shanghai, China
Event dates: June 2 – June 8, 2019
Coordinator: **Prof. H. Liu**
Shanghai Jiao Tong University
800 Dong Chuan road
200240 Shanghai, China
Email: hliu@sjtu.edu.cn

IUTAM Endorsed Events

2018 **International Conference on Vibration Measurements by Laser and Noncontact Techniques**

Place: Ancona, Italy
Date: June 19 – June 22, 2018
Chairman: **Prof. Enrico Primo Tomasini**
Email: e.p.tomasini@univpm.it
Website: http://www.aivela.org/13th_Conference/index.html

2018 **International Conference on Multibody System Dynamics**

Place: Lisbon, Portugal
Date: June 24 – June 28, 2018
Chairman: **Prof. Jorge Ambrosio**
Email: jorge.ambrosio@tecnico.ulisboa.pt
Website: <http://imsd2018.tecnico.ulisboa.pt>

2018 **World Congress of Biomechanics**

Place: Dublin, Ireland
Date: July 8 – July 12, 2018
Chairmen: **Prof. Daniel Kelly**
Email: kellyd9@tcd.ie
Prof. Fergal O'Brien
Email: fjobrien@rcsi.ie
Website: <http://wcb2018.com>

2018 Asian Conference on Multibody Dynamics

Place: Xi'an, China
Date: August 19 – August 23, 2018
Chairman: **Prof. Hao Wang**
 Email: wanghao@sjtu.edu.cn
Website: <http://acmd2018.sjtu.edu.cn>

IUTAM General Assembly in 2018

The General Assembly of IUTAM will convene on 23-24 July 2018 in Boston, USA, with associated committees also meeting on 22-25 July. More detailed information can be found on the event's website at

<https://www.northeastern.edu/iutam2018> .

International Congress, XXV ICTAM, Milan 2020

August 23-28, 2020

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 please visit the ICTAM 2020 home page,

<http://www.ictam2020.org>

or please contact:

Professor Robert McMeeking

Secretary of the IUTAM Congress Committee

Department of Mechanical and Environmental Engineering

University of California

Santa Barbara, CA 93106

Email: rmcm@engineering.ucsb.edu

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.

As of January 2018, if the organizers of an IUTAM Symposium decide to publish proceedings, the recommended route of publication is the IUTAM Bookseries by Springer. Chairpersons of Symposia can contact the Secretary-General of IUTAM for the terms and conditions of publication in this series.

Acceptable forms for proceedings are also special issues of high-quality journals or other forms previously approved by the Bureau of IUTAM.

IUTAM is a member of ICSU

<http://www.icsu.org>

Notice on availability of IUTAM Newsletter

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