



NEWSLETTER

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From the Office of the Secretary-General
IUTAM Symposia 2017, 2018 and 2019
IUTAM Summer Schools 2017 and 2019
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IUTAM Home Page:

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

International Union of Theoretical and Applied Mechanics
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June 2017

President's Address

I am deeply honored to have been elected President of IUTAM and most grateful to the mechanics community for the trust it has placed in me to lead this great organization. It is a very exciting time for IUTAM as it continues to stand firm behind a rigorous scientific approach, address the ever-growing applications of the field, attract the next generation of diverse scientists, and strengthen the relations between mechanicians from all parts of the world. All of these are important components of our mission and I very much look forward to working with all of you on continuing to make progress in every direction.

So far, I have already had many interactions with our Vice President, Viggo Tvergaard, who has been of tremendous help during this period of transition; our newly elected Secretary General, Henryk Petryk, who is already demonstrating immense dedication; and our continuing Treasurer, Peter Eberhard, who has enormous knowledge about IUTAM's finances. I am also delighted to be working with the other Bureau members, Norman Fleck, Atila Freire, Irina Goryacheva, and Bernhard Schrefler, whose wisdom, ideas, and support are greatly appreciated.

The new Bureau and Executive Congress Committee (XCCC) met for the first time on June 9-12 in Milan where ICTAM 2020 will take place. I am pleased to report that we were all impressed by the Congress site and the planning is off to a good start. It is a real pleasure to work with Robert McMeeking, Secretary of the Congress Committee, who brings much continuity and knowledge to the process; Alberto Corigliano, President of ICTAM 2020; and the XCCC. Exciting discussions are taking place to ensure a very successful 25th Congress.

I also want to share that shortly after the start of 2017, we have been deeply saddened by the loss of two of our precious IUTAM colleagues. Michael A. Hayes, Secretary General (1996-2000) and Member-at-Large (2000-2004), passed away in Dublin on January 1, 2017. Michael's research focused in the areas of continuum mechanics and nonlinear elasticity, with specific interest in the theory of wave propagation in solids. In addition to his professional long-lasting contributions, Michael will be remembered as a kind person at work and in all aspects of his life. Bruno A. Boley, Secretary of the Congress

Committee (1976-1984), Treasurer (1992-1996), and Life Member-at-Large, passed away in Providence on February 11, 2017. Bruno made influential contributions to the fields of thermoelasticity, structural dynamics, elastic stability, and heat conduction in solids. He was also known by all as a very supportive person who cared greatly about helping others, both professionally and personally. Michael and Bruno will be long remembered and sorely missed.

Nadine Aubry
President of IUTAM
Boston, MA

From the Office of the Secretary-General

IUTAM Report 2016:

The IUTAM Annual Report for 2016 will be printed in June 2017 and distributed in the summer of 2017. It contains in particular the minutes of the General Assembly held in Montreal, Canada, in August 2016.

Procedia IUTAM:

The Procedia IUTAM series, launched in 2011, has now 20 volumes. All papers are open access and are available on the website:

<http://www.sciencedirect.com/science/journal/22109838>

ICTAM 2016 Proceedings:

The 20th volume of Procedia IUTAM (2017) contains ICTAM 2016 proceedings. All 2-page papers presented during ICTAM 2016 are collected in the book published on the IUTAM website at:

http://iutam.org/publications/ictam-proceedings/ictam_2016/

Summer 2017 meetings of the Bureau and the XCCC:

The summer 2017 meetings of the Bureau and the XCCC were held in Milan, Italy on 10 and 11 June. Among the items discussed at the meeting were the reports by the Secretary-General and the Treasurer, as well as current matters concerning Adhering and Affiliated Organizations and IUTAM Symposia.

Call for Symposia and Summer Schools 2020-2021:

The call for the next wave of IUTAM Symposia and Summer Schools will open online at the end of 2017. The deadline for submission will be in May 2018.

Henryk Petryk
Secretary-General of IUTAM
Warsaw, Poland

IUTAM Symposia 2017

17-1 = GA.14-07 IUTAM Symposium on Computational mechanics of particle-functionalized fluid and solid materials for additive manufacturing and 3D printing processes

Place: Berkeley, USA
Date: May 30 – May 31, 2017
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
Co-Chairman: **Prof. E. Shaqfeh**
Stanford University, United States
Email: esgs@stanford.edu

IUTAM Representative on Scientific Committee: Prof. B. Schrefler

17-2 = GA.14-05 IUTAM Symposium on Dynamics and topology of vorticity and vortices

Place: Carry-le-Rouet, France
Date: June 13 – June 16, 2017
Chairman: **Prof. M. Brøns**
Technical University of Denmark
Department of Applied Mathematics and Computer Science
2800 Kongens Lyngby, Denmark
Email: mobr@dtu.dk

Website: <http://www.compute.dtu.dk/english/research/mathematics/iutam>

IUTAM Representative on Scientific Committee: Prof. K. Moffatt

17-3 = GA.14-13 IUTAM Symposium on Multi-scale fatigue, fracture and damage of materials in harsh environments

Place: Galway, Ireland

Date: August 28 – September 1, 2017

Chairman: **Prof. P. O'Donoghue**

National University of Ireland Galway

University Rd

Galway, Ireland

Email: padraic.odonoghue@nuigalway.ie

Co-Chairman: **Prof. S. Leen**

National University of Ireland Galway

University Rd

Galway, Ireland

Email: sean.leen@nuigalway.ie

Website: <http://www.conference.ie/Conferences/index.asp?Conference=493>

IUTAM Representative on Scientific Committee: Prof. V. Tvergaard

17-4 = 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

17-5 = GA.16-12 IUTAM Symposium on Intelligent multibody systems – dynamics, control, simulation

Place: Sofia, Bulgaria
Date: September 11 – September 15, 2017
Chairman: **Prof. E. Zahariev**
Bulgarian Academy of Sciences
Institute of Mechanics
Acad. G. Bonchev St., bl 4, 1113 Sofia, Bulgaria
Email: evtimvz@bas.bg
Website: <http://www.imbm.bas.bg/iutam>

IUTAM Representative on Scientific Committee: Prof. P. Eberhard

17-6 = GA.14-06 IUTAM Symposium on Co-simulation and solver coupling – Recent developments in theory and application

Place: Darmstadt, Germany
Date: September 18 – September 20, 2017
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

Website: http://www.ad.tu-darmstadt.de/startseite_ad/iutam_1/homepage_iutam.en.jsp

IUTAM Representative on Scientific Committee: Prof. P. Eberhard

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

Place: Austin, USA
Date: May 7 – May 10, 2018
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

18-4 = GA.16-02 IUTAM Symposium on Motile cells in complex environments

Place: Udine, Italy
Date: May 14 – 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

IUTAM Representative on Scientific Committee: Prof. B. Schrefler

18-5 = 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

18-6 = GA.16-22 IUTAM Symposium on Size-effects in microstructure and damage evolution

Place: Lyngby, Denmark
Date: May 28 – June 3, 2018
Chairman: **Prof. C. Niordson**
Technical University of Denmark
Nils Koppels Allé, building 404
2800 Kgs. Lyngby, Denmark
Email: cn@mek.dtu.dk

IUTAM Representative on Scientific Committee: Prof. V. Tvergaard

18-7 = 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

18-8 = 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

18-9 = 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

18-10 = 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

18-11 = 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

IUTAM Representative on Scientific Committee: Prof. I. Goryacheva

18-12 = 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

IUTAM Representative on Scientific Committee: Prof. H. Gao

18-13 = 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

18-14 = 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

18-15 = 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

18-16 = 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.16-01 IUTAM Symposium on Laminar turbulent transition

Place: London, UK
Date: **2019, no exact dates available yet**
Chairman: **Prof. P. Schmid**
Imperial College London
Dept. of Mathematics
South Kensington Campus
SW7 2AZ London, UK
Email: pjschmid@imperial.ac.uk

IUTAM Representative on Scientific Committee: Prof. T. Pedley

19-2 = GA.16-03 IUTAM Symposium on Computational modelling of instabilities and turbulence in separated two-phase flows

Place: Dublin, Ireland
Date: **2019, no exact dates available yet**
Chairman: **Prof. L. O’Naraigh**
University College Dublin
Belfield
D04 V1W8 Dublin, Ireland
Email: onaraigh@maths.ucd.ie

IUTAM Representative on Scientific Committee: Prof. J. Magnaudet

19-3 = GA.16-04 IUTAM Symposium on Vortex dynamics in science, nature and technology

Place: La Jolla, USA
Date: **2019, no exact dates available yet**
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

19-4 = 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

19-5 = GA.16-10 IUTAM Symposium on Physics and mechanics of sea ice

Place: Espoo, Finland
Date: **2019, no exact dates available yet**
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

19-6 = 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

2017 **IUTAM-CISM Summer School on Growth and remodeling in soft biological tissue**

Place: Udine, Italy
Event dates: June 12 – June 16, 2017
Coordinator: **Dr. C. Cyron**
 Technical University of Munich
 Dept. of Mechanical Engineering
 Boltzmannstrabe 15
 85748 Garching – Munich, Germany
 Email: cyron@lnm.mw.tum.de
Website: <http://www.cism.it/courses/C1705/>

2019 **IUTAM-BICTAM Summer School on Violent flows with a free surface**

Place: Shanghai, China
Event dates: **2019, no exact dates available yet**
Coordinator: **Prof. H. Liu**
 Shanghai Jiao Tong University
 800 Dong Chuan road
 200240 Shanghai, China
 Email: hliu@sjtu.edu.cn

IUTAM Co-Sponsored Events

2017 **EUROMECH Nonlinear Oscillations Conference**

Place: Budapest, Hungary
Date: June 25 – June 30, 2017
Coordinator: **Prof. Gabor Stepan**
Email: stepan@mm.bme.hu

2018 **International Conference on Multibody System Dynamics**

Place: Lisbon, Portugal
Date: June 24 – June 28, 2018
Coordinator: **Prof. Jorge Ambrosio**
Email: jorge.ambrosio@tecnico.ulisboa.pt

2018 **World Congress of Biomechanics**

Place: Dublin, Ireland
Date: July 8 – July 12, 2018
Coordinators: **Prof. Daniel Kelly**
Email: kellyd9@tcd.ie
 Prof. Fergal O'Brien
Email: fjobrien@rcsi.ie

2018 **Asian Conference on Multibody System Dynamics**

Place: Xi'an, China
Date: August 27 – August 29, 2018
Coordinator: **Prof. Hao Wang**
Email: wanghao@sjtu.edu.cn

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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<http://iutam.org/publications/newsletters/>

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