President’s Address
From the Office of the Secretary-General
IUTAM Symposia 2019, 2020 and 2021
IUTAM Special Event 2020
IUTAM Summer Schools 2019 and 2020
IUTAM Endorsed Events 2019 and 2020
International Congress, XXV ICTAM, Milan 2020

IUTAM Home Page:

http://www.iutam.org
or http://www.iutam.net
President’s Address

As we continue work to implement the decisions taken at the IUTAM General Assembly (GA) and associated meetings in Boston last July, it is a pleasure for me to share with you that significant progress is being made.

Under the leadership of Alberto Corigliano, President of the 25th International Congress of Theoretical and Applied Mechanics (ICTAM), and with the support of the Local Organizing Committee as well as AIMETA, the Italian Association of Theoretical and Applied Mechanics, preparations for ICTAM2020 are progressing very nicely.

Particularly, the second announcement from the International Congress on ICTAM2020 is now available for you to peruse on the ICTAM2020 website at www.ictam2020.org. There you will find an inviting welcome message by ICTAM President Alberto Corigliano, as well as the preliminary programme with the names of the two Plenary Lecturers and the 16 Sectional Lecturers announced, followed by the titles of the six Mini Symposia and the 48 Thematic Sessions (18 in fluid mechanics, 18 in solid mechanics, and 12 in solid/fluid mechanics). Additionally, potential sponsors can select from a comprehensive list of sponsorship opportunities. Furthermore, I am pleased to report that all 96 Co-Chairs of the Thematic Sessions are now finalized, and plans for additional preparation details of both the Congress and the GA will be further discussed by the Bureau and the XCCC at our meetings to be held this summer in Rio de Janeiro, Brazil.

I would also like to take a few minutes to thank those of you who participated in the nomination process for the Rodney Hill Prize in Solid Mechanics and the Batchelor Prize in Fluid Mechanics. With the nomination period having ended at the end of May, our devoted committees are starting their thorough review of the nominations.

Let me also add a few words regarding the newly founded International Science Council (ISC), of which IUTAM is one of the 40 international scientific Union members. ISC established its first Governing Board (GB) at its founding General Assembly in Paris last July. The GB, led by ISC President Daya Reddy, provides the scientific and strategic leadership for the new organization. ISC’s vision is to promote “science as a global public good” and its mission to act as “the global voice for science”, with much of its work
taking place at the intersection of science and policy and at the international level. The ISC’s main activities span a broad range of issues from global sustainability, poverty, urbanization, disaster risk reduction, and climate change to data and science advice to governments. The next step is for ISC to finalize its Science Action Plan and appoint its Statutory Advisory Committees who will guide the implementation of such a plan. Additional information about ISC, as well as its activities and news, can be found at https://council.science/.

Finally, I am excited to report that as we pursue our goal to expand the impact of IUTAM, the Bureau has recently approved the IUTAM endorsement of a number of conferences around the world focused on advances in the field of mechanics. At this occasion, I would like to invite all of you to draw the attention of your colleagues worldwide to IUTAM for the possibility of additional collaborations and endorsements, as well as proposals for new associate, adhering, and affiliated organizations, especially from regions of the world where mechanics is still, unfortunately, underrepresented.

Let me now close by thanking all of you for your continued dedication to IUTAM—and more generally to the vibrant field of mechanics—and by wishing you a very enjoyable and productive summer.

June 2019

Nadine Aubry
President of IUTAM
Boston, MA
From the Office of the Secretary-General

IUTAM Report 2018:


Summer 2019 meetings of the Bureau and the XCCC:

The summer 2019 meetings of the Bureau and the XCCC will be held in Rio de Janeiro, Brazil on 22 and 23 July.

Call for Symposia and Summer Schools 2022-2023:

The call for the next wave of IUTAM Symposia and Summer Schools will open online at the end of 2019. The deadline for submission will be 31 March 2020.

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. Three volumes (nos. 33–35) of the Series have already been published since 2018 and several others are planned.

The Batchelor Prize in Fluid Mechanics and the Rodney Hill Prize in Solid Mechanics:

The call for nominations closed on 31 May 2019.

June 2019

Henryk Petryk
Secretary-General of IUTAM
Warsaw, Poland
IUTAM Symposia 2019

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

Place: Austin, USA
Date: April 28 – May 2, 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.M. 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. L.G. Leal
IUTAM Symposium on Fluid-structure interaction – in honour of Michael Paidoussis

Place: Montreal, Canada
Date: August 12 – August 15, 2019
Chairman: Prof. M. Amabili
McGill University
Department of Mechanical Engineering
817 Sherbrooke Street West
H3A 0C3 Montreal, Canada
Email: marco.amabili@mcgill.ca

Co-Chairman: Dr. K. Karazis
Framatome Ltd
Lychburg, USA
Email: kostas.karazis@framatome.com

Website: http://fsi.symposium.mcgill.ca

IUTAM Representative on Scientific Committee: Prof. T.J. Pedley

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.J. Pedley
19-7 = 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
Website: https://vpf8.ceb.cam.ac.uk

IUTAM Representative on Scientific Committee: Prof. N. Aubry
IUTAM Symposia 2020

20-1 = GA.18-10  IUTAM Symposium on Mechanics of smart and tough gels

Place: Austin, USA
Date: May 31 – June 4, 2020
Chairman: Prof. R. Huang
University of Texas at Austin
210 E 24th Street, C0600
78712-1221 Austin, USA
Email: ruihuang@mail.utexas.edu

Co-Chairman: Prof. X. Zhao
Massachusetts Institute of Technology
Boston, USA
Email: zhaox@mit.edu

IUTAM Representative on Scientific Committee: Prof. N.A. Fleck

20-2 = GA.18-07  IUTAM Symposium on Ultralarge-scale topology optimization

Place: Kongens Lyngby, Denmark
Date: June 8 – June 10, 2020
Chairman: Prof. O. Sigmund
Technical University of Denmark
Nils Koppels Allé, building 404
2800 Kongens Lyngby, Denmark
Email: sigmund@mek.dtu.dk

IUTAM Representative on Scientific Committee: Prof. V. Tvergaard
**20-3 = GA.18-01**  IUTAM Symposium on Particles, drops and bubbles in stratified environments

Place: Toulouse, France  
Date: June 15 – June 19, 2020  
Chairman: **Prof. J. Magnaudet**  
CNRS & Toulouse University  
Institut de Mécanique des Fluides de Toulouse  
Allée Camille Soula  
31400 Toulouse, France  
Email: magnau@imft.fr

IUTAM Representative on Scientific Committee: Prof. A.P.S. Freire


**20-4 = GA.18-02**  IUTAM Symposium on Interface mechanics of complex flows and soft matter

Place: Beijing, China  
Date: June 21 – June 24, 2020  
Chairman: **Prof. H. Duan**  
Peking University  
Department of Mechanics and Engineering Science  
No.5 Yiheyuan Road, Haidian District  
100871 Beijing, China  
Email: hlduan@pku.edu.cn

Co-Chairman: **Prof. C. Sun**  
Tsinghua University  
Beijing, China  
Email: chaosun@tsinghua.edu.cn

IUTAM Representative on Scientific Committee: Prof. G. McKinley
20-5 = GA.18-11  IUTAM Symposium on Turbulent structure and particles-turbulence interaction

Place: Lanzhou, China  
Date: June 26 – June 29, 2020  
Chairman: Prof. X.J. Zheng  
Xidian University  
710126 Xi’an, Shaanxi, China  
Email: xjzheng@xidian.edu.cn  
Co-Chairman: Prof. S. Balachandar  
University of Florida  
Department of Mechanical & Aerospace Engineering  
231 MAE-A, P.O. Box 116250  
Gainesville, FL 32611, USA  
Email: bala1s@ufl.edu

IUTAM Representative on Scientific Committee: Prof. H.K. Moffatt

20-6 = GA.18-13  IUTAM Symposium on Optimal guidance and control for autonomous systems

Place: Honolulu, USA  
Date: 2020, no exact dates available yet  
Chairman: Prof. D. Azimov  
University of Hawai’i at Manoa  
2540 Dole Street, Holmes 202  
96822 Honolulu, USA  
Email: azimov@hawaii.edu

IUTAM Representative on Scientific Committee: Prof. P. Eberhard
IUTAM Symposium 2021

21-1 = GA.18-06  IUTAM Symposium on Computational methods for large-scale and complex wave problems

Place:  Tokyo, Japan
Date:  June 25 – June 28, 2021
Chairman:  Prof. K. Kishimoto
Tokyo Institute of Technology
2-12-1 Oookayama, Meguro
152-8552 Tokyo, Japan
Email: kkishimoto@ocean.zaq.jp

IUTAM Representative on Scientific Committee: Prof. N. Aubry

21-2 = GA.18-03  IUTAM Symposium on Dynamics and interface phenomena of bubbles and droplets at multiple scales

Place:  Tokyo, Japan
Date:  2021, no exact dates available yet
Chairman:  Prof. S. Takagi
The University of Tokyo
7-3-1, Hongo, Bunkyo-ku
113-8656 Tokyo, Japan
Email: takagi@mech.t.u-tokyo.ac.jp

IUTAM Representative on Scientific Committee: Prof. A.P.S. Freire
21-3 = GA.18-12  IUTAM Symposium on Data-driven mechanics

Place: Paris, France
Date: 2021, no exact dates available yet
Chairman: Prof. F. Chinesta
Arts et Metiers
151 Boulevard de l'Hopital
75013 Paris, France
Email: Francisco.Chinesta@ensam.eu

IUTAM Representative on Scientific Committee: Prof. N.A. Fleck
IUTAM Symposia 2020/2021

2X-1 = GA.18-08  IUTAM Symposium on Generalized continua emerging from microstructures

Place:           Paris, France
Date:            2020/2021, no exact dates available yet
Chairman:       Prof. S. Forest
                 Mines ParisTech CNRS
                 60 Boulevard Saint-Michel
                 75006 Paris, France
                 Email: samuel.forest@mines-paristech.fr

IUTAM Representative on Scientific Committee: Prof. N.A. Fleck

2X-2 = GA.18-09  IUTAM Symposium on Computational fracture mechanics in multi-field problems

Place:           Siegen, Germany
Date:            2020/2021, no exact dates available yet
Chairman:       Prof. M. Ortiz
                 California Institute of Technology
                 Pasadena, CA 91125, USA
                 Email: ortiz@caltech.edu

IUTAM Representative on Scientific Committee: Prof. B.A. Schrefler
2X-3 = GA.18-14  IUTAM Symposium on Multiphysics analysis of wave propagation in electronic device structures

Place: Ningbo, China
Date: 2020/2021, no exact dates available yet
Chairman: Prof. J. Wang
Ningbo University
School of Mechanical Engineering and Mechanics
818 Fenghua Road
315211 Ningbo, China
Email: wangji@nbu.edu.cn

IUTAM Representative on Scientific Committee: Prof. H. Gao

2X-4 = GA.18-15  IUTAM Symposium on Mechanics of liquid crystal elastomers

Place: Houston, USA
Date: 2020/2021, no exact dates available yet
Chairman: Prof. P. Sharma
University of Houston
N207 Engineering Building 1
77204-4503 Houston, USA
Email: psharma@Central.UH.EDU

IUTAM Representative on Scientific Committee: Prof. B.A. Schrefler
IUTAM Special Event 2020

20-S = GA.18-04  Fluid mechanics in the spirit of G. K. Batchelor

Place: Cambridge, UK
Date: 2020, no exact dates available yet
Chairman: Prof. P.F. Linden
University of Cambridge
DAMTP
Centre for Mathematical Sciences
Wilberforce Road
CB3 0WA Cambridge, UK
Email: pfl4@cam.ac.uk

IUTAM Representative on Scientific Committee: Prof. T.J. Pedley
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
Website:  http://bictam.org.cn/iutam2019

2019  IUTAM-CISM Summer School on Plant biomechanics

Place:  Udine, Italy
Event dates:  July 8 – July 12, 2019
Coordinators:  Prof. C. Eloy
IRPHE, Aix-Marseille University
49 rue Joliot Curie
13013 Marseille, France
Email:  eloy@irphe.univ-mrs.fr
Prof. Y. Forterre
CNRS/Aix-Marseille University
5 rue Enrico Fermi
13453 Marseille cedex 13, France
Email:  yoel.forterre@univ-amu.fr
Website:  http://www.cism.it/courses/C1908
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<th>Year</th>
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<tr>
<td>2020</td>
<td><strong>IUTAM-CISM Summer School on Instability and bifurcation of solids including coupled field phenomena</strong></td>
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**Place:** Udine, Italy  
**Event dates:** June 22 – June 26, 2020  
**Coordinators:**  
**Prof. R. Ogden**  
University of Glasgow  
School of Mathematics and Statistics  
University Place  
G12 8SQ Glasgow, UK  
Email: Raymond.Ogden@glasgow.ac.uk  
**Prof. L. Dorfmann**  
Tufts University  
Department of Civil and Environmental Engineering  
200 College Avenue  
Medford, MA 02155, USA  
Email: Luis.Dorfmann@tufts.edu
IUTAM Endorsed Events

2019 12th International Congress on Thermal Stresses 2019

Place: Hangzhou, China
Date: June 1 – June 5, 2019
Chairman: Prof. Weiqiu Chen
Email: chenwq@zju.edu.cn
Co-Chair: Prof. Richard B. Hetnarski
Email: 632hetna@rit.edu
Co-Chair: Prof. Naotake Noda
Email: nodanaotake@rx.tnc.ne.jp
Website: http://ts2019.zju.edu.cn

2019 13th International Conference on the Mechanical Behaviour of Materials

Place: Melbourne, Australia
Date: June 11 – June 14, 2019
Chairman: Prof. Raj Das
Email: raj.das@rmit.edu.au
Website: https://www.icm-13.com

2020 International Symposium on Co-Simulation and Solver Coupling in Dynamics

Place: Ferrol, Spain
Date: June 28 – July 1, 2020
Chairman: Dr. Francisco J. González
Email: f.gonzalez@udc.es
Co-Chair: Prof. Javier Cuadrado
Email: javier.cuadrado@udc.es
Website: http://lim.ii.udc.es/events/cosim2020
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<th>Year</th>
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| 2020 | 18th International Congress on Rheology | Place: Rio de Janeiro, Brazil  
Date: August 2 – August 7, 2020  
Chairman: Prof. Paulo R. de Souza Mendes  
Email: pmendes@puc-rio.br  
Website: [http://icr2020.com](http://icr2020.com) |
| 2020 | Joint IMSD/ACMD Conference on Multibody System Dynamics | Place: New Delhi, India  
Date: November 1 – November 5, 2020  
Chairman: Prof. Subir Saha  
Email: saha@mech.iitd.ac.in |
| 2020 | CISM-BICTAM Symposium on Dispersed Multi-Phase Flows: from Measuring to Modeling | Place: Beijing, China  
Date: 2020, no exact dates available yet  
Proposer: Prof. Cristian Marchioli  
Email: cristian.marchioli@uniud.it |
XXV International Congress of Theoretical and Applied Mechanics
23-28 August 2020, Milan, Italy
ICTAM 2020

The International Congresses of 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.ictam2020.org

or please contact:

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

Opening and Closing Lecturers

Opening Lecturer: Professor Nicola Pugno (Italy)
Closing Lecturer: Professor Elisabeth Guazzelli (France)

Sectional Lecturers

Bala Balachandran (USA)
Alessandro Bottaro (Italy)
Vikram Deshpande (UK)
Antonio De Simone (Italy)
Frederic Dias (Ireland)
Xi-Qiao Feng (China)
Genta Kawahara (Japan)
Ellen Kuhl (USA)
Eric Lauga (UK)
Jean-Baptiste Leblond (France)
Christian Niordson (Denmark)
Clarence Rowley (USA)
Miles Rubin (Israel)
Cameron Tropea (Germany)
Roberto Verzicco (Italy)
Emmanuel Villermaux (France)

**Minisymposia**

**Modeling and Controlling Turbulent Shear Flows**
Co-Chairs
Professor Ivan Marusic (Australia)
Professor Beverley McKeon (USA)

**Local Mechanics of Climate Processes**
Co-Chairs
Professor Eberhard Bodenschatz (Germany)
Professor John Wettlaufer (USA)

**Biological Fluid-Structure Interaction at the Microscale**
Co-Chairs
Professor Prosenjit Bagchi (USA)
Professor Anne-Virginie Salsac (France)

**Nonlinear Dynamics for Design**
Co-Chairs
Professor Remco Leine (Germany)
Professor Stefano Lenci (Italy)

**Mechanics of Additive Manufacturing**
Co-Chairs
Professor Ferdinando Auricchio (Italy)
Professor Matthew Begley (USA)

**Mechanics of C-Allotropic Materials and Structures**
Co-Chairs
Professor Julia Greer (USA)
Professor Roberto Paroni (Italy)

**Thematic Sessions**

*Fluids Topics*
FM01 Biological Fluid Mechanics
FM02 Boundary Layers
FM03 Combustion and Flames
FM04 Compressible Flows
FM05 Convection
FM06 Drops, Bubbles and Interfaces
FM07 Multiphase and Particle-Laden Flows
FM08 Flow Instability and Transition
FM09 Thin Film Flows
FM10 Geophysical and Environmental Fluid Dynamics
FM11 Low-Reynolds-Number Flows and Suspensions
FM12 Micro- and Nano-Fluidics
FM13 Non-Newtonian and Complex Fluids
FM14 Computational Fluid Dynamics
FM15 Turbulence
FM16 Vortex Dynamics
FM17 Waves in Fluids
FM18 Electro- and Magneto- Hydrodynamics
FM19 Other Topics in Fluid Mechanics

Solids Topics
SM01 Biomechanics and Biomaterials
SM02 Tribology - Contact and Friction
SM03 Damage Mechanics
SM04 Elasticity
SM05 Fracture Mechanics
SM06 Geophysics and Geomechanics
SM07 Impact Mechanics and Wave Propagation
SM08 Multi-component, Composite and Hierarchical Materials
SM09 Phase Transformations and Thermomechanical Phenomena
SM10 Sizescalar Effects in Materials
SM11 Multibody and Vehicle Dynamics
SM12 Nanostructures and MEMS
SM13 Plasticity, Viscoelasticity and Creep
SM14 Stability and Instability of Materials and Structures
SM15 Computational Solid Mechanics
SM16 Vibrations and Control of Structures
SM17 Soft Materials and Extremely Deformable Structures
SM18 Metamaterials
SM19 Other Topics in Solid Mechanics
Solids/Fluids Topics
FS01 Acoustics
FS02 Exascale Computing
FS03 Experimental Methods in Mechanics
FS04 Nonlinear Dynamics and Pattern Formation
FS05 Porous Media
FS06 Fluid Structure Interactions
FS07 Smart Actuating Systems
FS08 Granular Materials and Flows
FS09 Foams and Cellular Materials
FS10 Optimization for Solids and Fluids
FS11 Inverse Problems in Solids and Fluids
FS12 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.

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 ISC

https://council.science

Notice on availability of IUTAM Newsletter

The IUTAM Newsletter is available online:

http://iutam.org/publications/newsletters

IUTAM Home Page:

http://www.iutam.org

or  http://www.iutam.net