

### NEWSLETTER



President's Address Short Report on General Assembly meeting, July 2010 Short Report on Congress Committee meeting, July 2010 IUTAM Symposia 2010, 2011, 2012 and 2013 IUTAM Summer Schools 2010, 2011, 2012 and 2013 IUTAM Co-Sponsored Events 2010

International Congress, XXIII ICTAM, Beijing, August 2012

**IUTAM Home Page:** 

http://www.iutam.net or: http://www.iutam.org

International Union of Theoretical and Applied Mechanics N-2010-2 November 2010

#### **President's Address**

Recipients of this newsletter will be fully aware that the 2010 meetings of the General Assembly and Congress Committee took place in Paris in July of this year. The meetings were held in the splendid Salon Honnorat at the Maison Internationale of the Cité Universitaire in the 14<sup>th</sup> arrondissement, and we are all extremely grateful to our Secretary-General for arranging everything so smoothly. We are also grateful to the Académie des Sciences and its President Jean Salençon for their hospitality at a reception held in the Salle des 5 Académies, where Professor Sébastien Candel made a warm welcoming speech which was greatly appreciated. In addition, the Bureau and the Executive of the Congress Committee had two meetings each in the premises of ICSU in rue Auguste Vacquerie in the 16<sup>th</sup> arrondissement, and we are most grateful to ICSU for making the meeting rooms available, and for providing facilities for lunch on the Friday and the Monday.

Most of the technical matters discussed by the General Assembly and Congress Committee are summarised below in the reports of the Secretary-General and the Congress Committee Secretary. Here I would like to highlight the fact that it was agreed to conduct a review of the workings of the Working Parties (WP). Some of these have been very successful while others are not so active. Some WP representatives expressed the view that working parties might feel more useful if they had a greater role in promoting IUTAM symposia and in suggesting sectional lecturers, minisymposium titles and organisers, and pre-nominated session chairs for future ICTAMs. This would be in addition to providing regular statements of developments in their fields for the benefit of the GA and other IUTAM bodies. Therefore a committee has been set up whose terms of reference include considering the role of the WPs, any ways in which their structure and procedures can be improved, how the new IUTAM website can be used to promote the activities of the WPs, etc. The membership of the committee is as follows: Professor Paul Linden, Professor Fernando Lund, Professor Werner Schiehlen and Professor Frédéric Dias: and anyone with views on the role of the WPs should communicate them to the Convener of the committee, Professor Paul Linden.

Next year's meetings of the Bureau and the XCCC will take place in Cambridge, UK on 12 - 15 August, 2011. The GA and CC will next meet during the  $23^{rd}$  ICTAM in Beijing in August 2012. I encourage everyone to start to make their plans to attend.

Tim Pedley Cambridge, 29 November 2010

> Tim Pedley President of IUTAM Cambridge

### Short Report on the General Assembly meetings, July 2010

The IUTAM General Assembly was held in two sessions on 17 and 18 July 2010 in the Maison Internationale of the Cité Universitaire, Paris, France. Among the items discussed and decided upon at the meeting were the following:

# Matters concerning Adhering, Associate and Affiliated Organizations:

The transformation of the Caribbean Congress of Fluid Dynamics to a new organization, named Latin American and Caribbean Congress of Theoretical and Applied Mechanics, was agreed, provided this transformation is supported by the Adhering Organizations from the Latin American countries Argentina, Brazil and Chile through their representatives.

The General Assembly agreed by substantial majority to support the application of BICTAM for Affiliated Organization status within IUTAM. The General Assembly agreed by substantial majority to support the application of Cyprus for Associate Organization status within IUTAM.

### IUTAM Symposia 2012 and 2013

The General Assembly agreed on 17 IUTAM Symposia to be held in the years 2012 and 2013. These Symposia are listed on the IUTAM website.

The Bureau assigned the members of the Scientific Committees according to expertise in the fields of the Symposia and based on their geographical distribution

#### **IUTAM Summer Schools 2012 and 2013**

The General Assembly agreed on two Summer Schools to be held in 2012/2013.

These Summer Schools are listed on the IUTAM website.

#### Working Parties / Standing Scientific Committees

The General Assembly appointed new chairpersons to the following Working Parties:

WP2 Dynamical Systems and Mechatronics

Chair: Prof. Yabuno, Japan

WP9 Education in Mechanics and Capacity Building

Chair: Prof. K. Moffatt, UK

All WPs are required to report to the General Assembly every two years.

### Election of members of the Congress Committee of IUTAM

The General Assembly decided to elect 8 persons as members of the Congress Committee for the period 2010 through 2014. The new membership of the Congress Committee from 1 November 2010 is recorded on the IUTAM website.

#### **IUTAM Proceedings**

The General Assembly unanimously approved the Elsevier proposal for Procedia. The most important feature of Procedia is the open access for a cost of 3,750 USD per Proceedings. There will be a new Procedia for IUTAM only, called Procedia IUTAM. The link to Procedia is www.elsevier.com/locate/procedia. The switch from the current agreement with Springer to the new agreement with Elsevier will take place on January 1st, 2011. The first volume of the new Procedia IUTAM will be the Proceedings of the IUTAM Symposium on Computational Aero-Acoustics (CAA) for Aircraft Noise Prediction, which took place in Southampton in March 2010 (chairman, Prof. J. Astley).

### Date and venue of next GA and Bureau meetings

The General Assembly decided to hold its next meeting during the 23rd ICTAM in Beijing, China, on 21 August and 22 August 2012. The next Bureau meeting will be held in Cambridge, UK, on Saturday afternoon, 13 August, and Sunday morning, 14 August, 2011.

Frédéric Dias Secretary-General of IUTAM Cachan & Dublin

### Short Report on the Congress Committee meetings, July 2010

The Congress Committee (CC) met twice during the General Assembly. In addition the Executive Committee of the CC met before and after the General Assembly meetings. The following are some highlights of the CC meetings:

### Follow-up to Executive Committee meetings in Beijing in August 2009

#### Appointment of co-chairs of Minisymposia

The Secretary reported that chairs had been invited and confirmed for all six mini-symposia. These individuals are now listed on the ICTAM2012 website

#### Appointment of International Papers Committee

The Secretary reported that all six members of the IPC named in Beijing had been invited and had accepted. In keeping with IUTAM tradition the names of the IPC members are only listed in the minutes of the XCCC meeting. The venue of the IPC meeting in March 2012 is still open for decision.

#### Final list of Pre-Nominated Sessions

No substantial changes to the list of prenominated sessions agreed upon in Beijing were made. This list now appears on the ICTAM2012 website.

# • Subcommittee documents on nominations/elections and statutes/rules of procedure submitted to IUTAM Bureau

These documents were submitted to the Bureau for consideration and presentation to the General Assembly. The Bureau provided no comments but there were some editorial comments when the documents were presented to the General Assembly. These will be addressed and a final version resubmitted to the Bureau with the hope that all issues can be finalized at the General Assembly in 2012.

# Presentation by President and Secretary-General of ICTAM2012, Beijing, China, August 19-24, 2010

The website http://www.ictam2012.org will henceforth become the main point of reference for general information on the upcoming congress. A mature draft of the preliminary announcement was circulated. The main challenges for the organizers are to achieve closure on various contracts with

the congress venue, hotels, and other vendors, and to raise funds to meet the commitments made in the proposal stage. The rate of exchange of the Chinese RMB relative to the USD was again mentioned as a point of concern but not one that the XCCC could do much about. The proposed registration fee continues to climb and needs to be finalized.

#### Decisions re ICTAM2012:

#### Opening and Closing lectures

Based on 28 nominations received from around the world the XCCC made two proposals for voting by the CC. The end result was that Shiyi Chen of China was invited to give the opening lecture in fluid mechanics, and L. Ben Freund of USA was invited to give the closing lecture. Both have since accepted these invitations.

#### Sectional lectures

From a list of 107 nominees preliminary voting by the CC via e-mail had narrowed down the competitive nominations to a short list of 33. This list was then subjected to further voting by the CC at its meetings and a clear list of 17 favored sectional lecturers was established. These are (in alphabetical order)

Kaushik Bhattacharya (USA)

René de Borst (The Netherlands)

Michael Brenner (USA)

Alberto Corigliano (Italy)

Peter Eberhard (Germany)

Mory Gharib (USA)

Robert Goldshtein (Russia)

Ray Goldstein (UK)

Yoichiro Matsumoto (Japan)

Parviz Moin (USA)

Alain Molinari (France)

Alan Needleman (USA)

K.R. Sreenivasan (USA)

Pierre Suquet (France)

Grae Worster (UK)

Wei Yang (China)

Stéphane Zaleski (France)

Subsequent to the meetings all sectional lecturers were invited and have accepted.

#### Co-chairs of Pre-Nominated Sessions

Nominations had been received from around the world. Particularly welcome was a long list of nominations from South America compiled by Luiz Bevilaqua of Brazil. Very few nominations had been received from Russia so additional names were solicited working through Felix Chernousko of the Bureau and our two Russian CC members.

For all sessions a minimum of five nominations were available. For the more popular topics the list of nominees would run as high as 15-20. The CC went through the list at its second meeting and named two primary and two alternate co-chair nominees for each PNS. Subsequently, the Secretary has invited co-chairs according to this list. At the time of writing we have confirmed co-chairs for almost all Pre-Nominated Sessions.

#### Decisions re Congress Committee membership

The CC recommended that all members completing a first term and eligible for a second term be re-elected without contest. These members are:

Carl Herakovich (USA) Jean-Baptiste Leblond (France) Nikita Morozov (Russia) Nigel Peake (UK) Genki Yagawa (Japan)

From the competitive elections the following new members were elected:

Renato Cotta (Brazil)
Peter Eberhard (Germany)
Bruno Eckhardt (Germany)
GertJan van Heijst (The Netherlands)
K. Ravi-Chandar (USA)
Stépán Gabor (Hungary)
Howard Stone (USA)
Kazuo Tanishita (Japan)

The Secretary subsequently confirmed that the individuals elected were willing to serve and welcomed them to the CC. The Secretary also sent letters of thanks to all retiring members.

#### • Membership of the Executive Committee

An election by secret ballot was held at the second meeting of the CC and Viggo Tvergaard (Denmark) was elected to the XCCC to replace the vacancy created by Bernhard Schrefler (Italy) having rotated off.

#### Discussion of preliminary bids re ICTAM2016

The set of preliminary proposals presented before the CC at its second meeting was felt to be adequate for identifying a suitable congress venue in 2016. Preliminary bids have been submitted by Canada, Hungary, India, Italy, and a Scandinavian consortium.

Hassan Aref Secretary of the Congress Committee

#### **IUTAM Symposia 2010**

#### 10-1 = GA.08-01 IUTAM Symposium on Computational Aero-Acoustics (CAA) for Aircraft Noise Prediction

Place: Southampton, UK

Date: March 29 – March 31, 2010

Chairman: **Prof. J. Astley** 

University of Southampton

Institute of Sound and Vibration Research

Highfield

Southampton SO17 1BJ UK **Email**: rja@isvr.soton.ac.uk

IUTAM Representative on Scientific Committee: Prof. A. Kluwick

### 10-2 = GA.08-07 IUTAM Symposium on Nonlinear Stochastic Dynamics and Control

Place: Hangzhou, China

Date: May 10 – May 14, 2010

Chairman: Prof. W.Q. Zhu

Zhejiang University

Department of Mechanics 310027 Hangzhou China

Email: wqzhu@yahoo.com

Co-Chairman: **Prof. Y.K. Lin** 

Florida Atlantic University

Center for Applied Stochastics Research

777 Glades Rd, 33431-0991 Boca Raton, FL, USA

Email: linyk@fau.edu

IUTAM Representative on Scientific Committee: Prof. K. Sobczyk

### 10-3 = GA.08-15 IUTAM Symposium on Dynamics Modeling and Interaction Control in Virtual and Real Environments

Place: Budapest, Hungary

Date: June 07 – June 11, 2010

Chairman: Prof. G. Stépán

**Budapest University of Technology and Economics** 

Department of Applied Mechanics

Muegyetem rkp 5

H-1111 Budapest Hungary **Email**: stepan@mm.bme.hu

Email: iutam2010@mm.bme.hu Webpage: http://www.iutam2010.org

IUTAM Representative on Scientific Committee: Prof. F.L. Chernousko

### 10-4 = GA.08-03 IUTAM Symposium on Bluff Body Wakes and Vortex-Induced Vibrations

Place: Capri Island, Italy

Date: June 22 – June 25, 2010 Chairman: **Prof. C.H.K. Williamson** 

Cornell University

Department of Mechanical and Aerospace Engineering

252 Upson Hall

NY 14853-7 Ithaca USA **Email**: cw26@cornell.edu

Co-Chairman **Dr. T. Leweke** 

CNRS / Université Aix- Marseille I & II Institut de Recherche sur les Phénomènes Hors

Equilibre (IRPHE)

49, rue F. Joliot-Curie - B.P. 146 F-13384 Marseille Cedex 13 France

Email: Thomas.Leweke@irphe.univ-mrs.fr

IUTAM Representative on Scientific Committee: Prof. P.A. Monkewitz

# 10-5 = GA.08-14 IUTAM Symposium on Nonlinear Dynamics for Advanced Technologies and Engineering Design (NDATED)

Place: Aberdeen, UK

Date: July 27 – July 30, 2010 Chairman: **Prof. M. Wiercigroch** 

University of Aberdeen, School of Engineering

Centre for Applied Dynamics Research Kings College, AB24 3UE Aberdeen UK **Email**: m.wiercigroch@abdn.ac.uk

Co-Chairman: **Prof. G. Rega** 

Sapienza Universita di Roma

Dipartimento di Ingegneria Strutturale e Geotecnica

Via Antonio Gramsci 53, 00197 Roma, Italy

Email: giuseppe.rega@uniroma1.it

IUTAM Representative on Scientific Committee: Prof. D.H. van Campen

10-6 = GA.08-08 IUTAM Symposium on Surface Effects in the

Mechanics of Nanomaterials and

Heterostructures

Place: Beijing, China

Date: August 08 – August 13, 2010

Chairman: **Prof. A. Cocks** 

University of Oxford

Department of Engineering Science ParkRoad, OX1 3PJ Oxford UK **Email**: alan.cocks@eng.ox.ac.uk

Co-Chairman: **Prof. J.-X. Wang** 

Peking University

Dept of Mechanics & Aerospace Engineering

100871 Beijing, China **Email**: jxwang@pku.edu.cn

IUTAM Representative on Scientific Committee: Prof. B.L. Karihaloo

### 10-7 = GA.08-12 IUTAM Symposium on Analysis and Simulation of Human Motion

Place: Leuven, Belgium

Date: September 13 – September 15, 2010

Chairman: Prof. J. van der Sloten

K.U. Leuven, Faculty of Engineering BMGO Celestijnenlaan 300c, 3001 Leuven Belgium **Email**: jos.vandersloten@mech.kuleuven.be

Co-Chairman: **Prof. I. Jonkers** 

Faculty of Kinesiology and Rehabilitation Sciences

Department Biomedical Kinesiology,

Research Center for Movement Control and

Neuroplasticity,

Tervuursevest 101, 3001 Leuven, Belgium **Email**: Ilse.Jonkers@faber.kuleuven.be

IUTAM Representative on Scientific Committee: Prof. F. Pfeiffer

#### **IUTAM Symposia 2011**

### 11-1 = GA.08-05 IUTAM Symposium on Mechanics of Liquid and Solid Foams

Place: Austin, TX, USA

Date: May 8 – May 13, 2011 Chairman: **Prof. S. Kyriakides** 

University of Texas at Austin

Center for Mechanics of Solids, Structures and Materials

210 East 24th Street

WRW 110, TX 78712 Austin USA

Email: skk@mail.utexas.edu

Co-Chairman: Dr. A.M. Kraynik

Sandia National Laboratories, Dept. 1514-MS 0836

NM 87185-0836 Albuquerque, USA

Email: amkrayn@sandia.gov

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

### 11-2 = GA.08-09 IUTAM Symposium on Linking Scales in

Computations: From Microstructure to Macro-

scale Properties

Place: Shalimar, FL, USA

Date: May 17 – May 19, 2011

Chairman: **Prof. O. Cazacu** 

University of Florida

REEF, 1350 N. Poquito Road

Shalimar FL USA

Email: cazacu@reef.ufl.edu

IUTAM Representative on Scientific Committee: Prof. J.B. Leblond

### 11-3 = GA.08-11 IUTAM Symposium on Human Body Dynamics: From Multibody Systems to Biomechanics

Place: Waterloo, Canada
Date: June 5 – June 8, 2011
Chairman: Prof. J.J. McPhee

University of Waterloo

Department of Systems Design Engineering

N2L 3G1 Waterloo, Canada **Email**: mcphee@real.waterloo.ca

Co-Chairman: **Dr J. Kovecses** 

McGill University, Canada

Email: jozsef.kovecses@staff.mcgill.ca

IUTAM Representative on Scientific Committee: Prof. F.L. Chernousko

### 11-4 = GA.08-10 IUTAM Symposium on Full-field Measurements and Identification in Solid Mechanics

Place: Cachan, France
Date: July 4 – July 8, 2011

Chairman: **Prof. F. Hild** 

LMT-Cachan, 61 Avenue du President Wilson, F-94235

Cachan cedex, France

Email: hild@lmt.ens-cachan.fr

Co-Chairman: **Prof. D. Espinosa** 

Nortwestern University

Department of Mechanical Engineering

60208-3111 Evanston IL USA **Email**: <a href="mailto:espinosa@northwestern.edu">espinosa@northwestern.edu</a>

IUTAM Representative on Scientific Committee: Prof. G. Maier

## 11-5 = GA.08-13 IUTAM Symposium on Impact Biomechanics in Sport

Place: Dublin, Ireland

Date: July 6 – July 8, 2011 Chairman: **Prof. M.D. Gilchrist** 

University College Dublin

Department of Mechanical Engineering

Belfield, Dublin 4

Ireland

Email: michael.gilchrist@ucd.ie

IUTAM Representative on Scientific Committee: Prof. D.H. van Campen

### 11-6 = GA.08-06 IUTAM Symposium on Computer Models in

**Biomechanics: From Nano to Macro** 

Place: Stanford, CA, USA

Date: August 29 – September 02, 2011

Chairman: Dr. E. Kuhl

Stanford University

Dept. of Mechanical Eng & Bioengineering

496 Lomita Mall, Durand 217 CA-94305-4 Stanford USA **Email**: ekuhl@stanford.edu

Co-Chairman: **Prof. G.A. Holzapfel** 

Graz University of Technology Institute of Biomechanics

Kronesgasse 5-I, 8010 Graz, Austria

Email: holzapfel@tugraz.at

IUTAM Representative on Scientific Committee: Prof. J. Engelbrecht

#### 11-7 = GA.08-04**IUTAM Symposium on 50 Years of Chaos:**

**Applied and Theoretical** 

Place: Kyoto, Japan

November 28 – December 02, 2011 Date:

Chairman: Prof. T. Hikihara

**Kyoto University** 

Department of Electrical Engineering Katsura, Nishikyo, 615-8510 Kyoto Japan Email: hikihara@kuee.kyoto-u.ac.jp

Co-Chairman: Prof. T. Kambe

Former professor (University of Tokyo), Higashi-yama

2-11-3

Meguro-ku, 153-0043 Tokyo, Japan Email: kambe@ruby.dti.ne.jp

IUTAM Representative on Scientific Committee: Prof. D.H. van Campen

#### 11-8 = GA.08-02**IUTAM Symposium on Bluff Body Flows**

Place: Kanpur, India

December 12 – December 16, 2011 Date:

Chairman: Prof. S. Mittal

Indian Institute of Technology

Department of Aerospace Engineering

UP 208016 IIT Kanpur, India Email: smittal@iitk.ac.in

Co-Chairman: Prof. G. Biswas

> Indian Institute of Technology, Department of Mechanical Engineering, UP 208016 IIT Kanpur

India

Email: gtm@iitk.ac.in

IUTAM Representative on Scientific Committee: Prof. T. Kambe

#### **IUTAM Symposia 2012**

# 12-1 = GA.10-12 IUTAM Symposium on Advanced materials modelling for structures

Place: Paris, France

Date: April 23 – April 27, 2012

Chairman: **Prof. S. Kruch** 

**ONERA** 

29 avenue Division Leclerc 92320 Chatillon, France

Email: serge.kruch@onera.fr

IUTAM Representative on Scientific Committee: Prof. V. Tvergaard

# 12-2 = GA.10-02 IUTAM Symposium on Topological fluid dynamics II

Place: Cambridge, UK

Date: July 23 – July 27, 2012

Chairman: **Prof. K. Moffatt** 

University of Cambridge

Dept. of Applied Mathematics and Theoretical Physics.

CB3 0WA Cambridge - UK **Email**: hkm2@damtp.cam.ac.uk

Co-Chairman: **Dr. K. Bajer** 

Institute of Geophysics, Warsaw University

02-093 Warszawa, Poland

Email: Konrad.Bajer@fuw.edu.pl

Co-Chairman: **Prof. Y. Kimura** 

School of Mathematics Nagoya University Nagoya, Japan

Email: kimura@math.nagoya-u.ac.jp

IUTAM Representative on Scientific Committee: Prof. T. Pedley

# 12-3 = GA.10-03 IUTAM Symposium on Understanding common aspects of extreme events in fluids

Place: Dublin, Ireland

Date: 2012, no exact dates available yet

Chairman: **Dr. M.D. Bustamante** 

University College Dublin

School of Mathematical Sciences

Belfield, Dublin 4

Ireland

Email: miguel.bustamante@ucd.ie

IUTAM Representative on Scientific Committee: Prof. F. Dias

### 12-4= GA.10-06 IUTAM Symposium on Particle methods in fluid mechanics

Place: Kgs. Lyngby, Denmark

Date: 2012, no exact dates available yet

Chairman: **Prof. J.H. Walther** 

Department of Mechanical Engineering

Technical University of Denmark

2800 Kgs. Lyngby

Denmark

Email: jhw@mek.dtu.dk

IUTAM Representative on Scientific Committee: Prof. H. Aref

12-5= GA.10-07 IUTAM Symposium on Mobile particulate

systems: kinematics, rheology and compex

phenomena

Place: Bangalore, India

Date: 2012, no exact dates available yet

Chairman: **Prof. P. Nott** 

Indian Institute of Science

Department of Chemical Engineering

560012 Bangalore

India

Email: prnott@chemeng.iisc.ernet.in

IUTAM Representative on Scientific Committee: Prof. G. Leal

# 12-6= GA.10-08 IUTAM Symposium on Waves in fluids: Effects of nonlinearity, rotation, stratification and dissipation

Place: Moscow, Russia

Date: 2012, no exact dates available vet

Chairman: Pr. Y.D. Chashechkin

Institution of the Russian Academy of Sciences A.Yu.

Ishlinskii

Institute for Problems in Mechanics of the RAS

119526 Moscow

Russia

Email: chakin@ipmnet.ru

IUTAM Representative on Scientific Committee: Prof. F. Chernousko

## 12-7= GA.10-09 IUTAM Symposium on From mechanical to biological systems - an integrated approach

Place: Izhevsk, Russia

Date: 2012, no exact dates available yet

Chairman: **Prof. V. Kozlov** 

**Udmurt State University** 

Izhevsk

119991 Moscow

Russia

Email: Kozlov@ras.ru

IUTAM Representative on Scientific Committee: Prof. F. Chernousko

# 12-8= GA.10-11 IUTAM Symposium on Advances of optical methods in experimental mechanics

Place: Hsinchu, China-Tapei

Date: 2012, no exact dates available yet

Chairman: **Prof. W.-C. Wang** 

National Tsing Hua University

Department of Power Mechanical Engineering

30013 Hsinchu

Taiwan

Email: wcwang@pme.nthu.edu.tw

IUTAM Representative on Scientific Committee: Prof. B. Freund

## 12-9= GA.10-14 IUTAM Symposium on Fracture phenomena in nature and technology

Place: Brescia, Italy

Date: 2012, no exact dates available yet

Chairman: **Prof. D. Bigoni** 

Department of Mechanical and Stuctural Engineering

University of Trento Via Mesiano 77 38050 Trento, Italy

Email: bigoni@ing.unitn.it

IUTAM Representative on Scientific Committee: Prof. B. Freund

# 12-10= GA.10-15 IUTAM Symposium on Hysteresis and pattern evolution in non-equilibrium solid-solid phase

transitions

Place: Hong Kong, China

Date: 2012, no exact dates available yet

Chairman: **Prof. Q.P. Sun** 

Hong Kong University of Science and Technology

Kowloon Hong Kong China

Email: meqpsun@ust.hk

IUTAM Representative on Scientific Committee: Prof. S. Kyriakides

### 12-11= GA.10-16 IUTAM Symposium on Multiscale problems in stochastic mechanics

Place: Karlsruhe, Germany

Date: 2012, no exact dates available yet

Chairman: **Prof. C. Proppe** 

Karlsruhe Institute of Technology

76131 Karlsruhe

Germany

Email: proppe@kit.edu

IUTAM Representative on Scientific Committee: Prof. E. Kreuzer

#### **IUTAM Symposia 2013**

13-1 = GA.10-01 IUTAM Symposium on The dynamics of

extreme events influenced by climate change

Place: Lanzhou, China

Date: 2013, no exact dates available yet

Chairman: **Prof. X. Zheng** 

Department of Mechanics

Lanzhou University

222 South Tianshui Road

Lanzhou, Gansu 730000, China **Email**: xizheng@lzu.edu.cn

Co-Chairman: **Prof. P. Linden** 

Department of Mechanical & Aerospace Engineering

University of California, San Diego

9500 Gilman Drive

La Jolla, CA 92093-0411, USA **Email**: pflinden@ucsd.edu

IUTAM Representative on Scientific Committee: Prof. K. Moffatt

# 13-2 = GA.10-04 IUTAM Symposium on Vortex dynamics : formation, structure and function

Place: Kyushu, Japan

Date: 2013, no exact dates available yet

Chairman: **Prof. Y. Fukumoto** 

Kyushu University Faculty of Mathematics 744 Motooka, Nishi-ku 819-0395 Fukuoka Japan

Email: yasuhide@math.kyushu-u.ac.jp

IUTAM Representative on Scientific Committee: Prof. H. Aref

# 13-3 = GA.10-05 IUTAM Symposium on Nonlinear interfacial wave phenomena from the micro to the macro-scale

Place: Limassol, Cyprus

Date: 2013, no exact dates available yet

Chairman: Prof. D. Papageorgiou

Imperial College of London Department of Mathematics

Huxley Building, 180 Queen's gate

SW7 2AZ London UK

Email: d.papageorgiou@imperial.ac.uk

IUTAM Representative on Scientific Committee: Prof. F. Dias

13-4= GA.10-10 IUTAM Symposium on Recent developments in

impact testing of materials and structures

Place: Xi'an, China

Date: 2013, no exact dates available yet

Chairman: Prof. Y. Li

School of Aeronautics

Northwestern Polytechnical University

710072 Xi'an

China

Email: liyulong@nwpu.edu.cn

IUTAM Representative on Scientific Committee: Prof. B. Freund

### 13-5= GA.10-13 IUTAM Symposium on Materials and interfaces under high strain rate and large deformation

Place: Metz, France

Date: 2013, no exact dates available yet

Chairman: **Prof. S. Mercier** 

Université Paul Verlaine Metz

Ile du Saulcy

57045 Metz, France

Email: sebastien.mercier@univ-metz.fr

Co-Chairman: **Prof. J. F. Molinari** 

Ecole Polytechnique Fédérale de Lausanne,

CH 1015, Lausanne, Switzerland.

Email: jean-francois.molinari@epfl.ch

IUTAM Representative on Scientific Committee: Prof. N. Gupta

# 13-6= GA.10-17 IUTAM Symposium on Multiscale modelling and uncertainty quantification of materials and structures

Place: Athens, Greece

Date: 2013, no exact dates available yet

Chairman: Prof. M. Papadrakakis

NTUA

Zografou Campus 15780 Athens

Greece

Email: mpapadra@central.ntua.gr

IUTAM Representative on Scientific Committee: Prof. O. Allix

#### **IUTAM Summer Schools**

2010 IUTAM Summer School on Nanomechanics,

Nanomaterials and Micro-/Nano Manufacturing

Place: Evanston, IL, USA

Event dates: May 10 – May 12, 2010

Coordinator: Prof. W. (Wing Kam) Liu & Prof. Y. Huang

Northwestern University

Department of Mechanical Engineering

2145 Sheridan Road

IL 60208-3 Evanston USA **Email:** w-liu@northwestern.edu

2010 IUTAM-CISM Summer School on Modelling and

**Simulation of Multiscale Continuum System** 

Place: Udine, Italy

Event dates: June 28 – July 2, 2010

Coordinator: Prof. T.I. (Tarek) Zohdi & Prof. P. Papadopoulos

University of California at Berkeley Dept. of Mechanical Engineering

6117 Etcheverry Hall

Mailstop 1740

CA 94720-1 Berkeley USA **Email:** <u>zohdi@me.berkeley.edu</u>

2012 IUTAM Summer School on Biomechanics of Tissue

and Tissue-Cell Interaction

Place: Purdue, USA

Event dates: 2012, no exact dates available yet

Coordinators: **Prof. T. Siegmund** 

Purdue University

School of Mechanical Engineering

585 Purdue Mall

47907 West Lafayette USA **Email:** siegmund@purdue.edu

2012 IUTAM-CISM Summer School on Mechanics of

**Nanocrystalline Materials** 

Place: Udine, Italy

Event dates: 2012, no exact dates available yet

Coordinator: **Prof. M. Cherkaoui** 

School of Mechanical Eng. Georgia Institute of Technology

Atlanta, GA 30332-0405

USA

Email: mohammed.cherkaoui@me.gatech.edu

Co-Coordinator: **Prof. D. L. McDowell** 

School of Mechanical Eng. Georgia Institute of Technology

Atlanta, GA 30332-0405

USA

 $\pmb{Email}: david.mcdowell@me.gatech.edu$ 

#### **IUTAM Co-Sponsored Events**

2010 First Joint International Conference on Multibody

**System Dynamics** 

Place: Institute of Mechatronics and Virtual Engineering,

Department of Mechanical Engineering Lappeenranta

University of Technology Finland

Date: May 24 - May 27, 2010 Coordinator: **Prof. A. Mikkola** 

**Email:** aki.mikkola@lut.fi

2011 Conference "Mechanics and Physics of Porous Solids : A

tribute to late Pr. Olivier Coussy"

Place: Ecole des Ponts ParisTech

Champs-sur-Marne

France

Date: April 18 – April 20, 2011

Coordinator: **Prof. P. Dangla** 

UR Navier - CNRS 2, allée Kepler

77420 Champs sur Marne, FRANCE

Email: dangla@lcpc.fr

Webpage: http://navier.enpc.fr/events/mpps2011

2011 International Conference on Simulation Technology

Place: University of Stuttgart

Germany

Date: June 14 – June 17, 2011 Coordinator: **Prof. W. Ehlers** 

> University of Stuttgart Institute of Mechanics

70569 Stuttgart

Germany

Email: ehlers@mechbau.uni-stuttgart.de

2012 Second Joint International Conference on Multibody

**System Dynamics** 

Place: University of Stuttgart

Germany

Date: May 29 - June 1, 2012 Coordinator: **Prof. P. Eberhard** 

University of Stuttgart

Institute of Engineering and Computational Mechanics

70569 Stuttgart Germany

Email: eberhard@itm.uni-stuttgart.de

### **International Congress, XXIII ICTAM, Beijing 2012**

#### August 19-24, 2012

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, <a href="http://www.ictam2012.org/">http://www.ictam2012.org/</a>

#### or please contact:

Professor Hassan Aref Secretary of the IUTAM Congress Committee Virginia Tech Email: haref@vt.edu

#### **Opening and Closing Lecturers**

Opening Lecturer: Professor Shiyi Chen (China)
Closing Lecturer: Professor Ben Freund (USA)

#### Mini Symposia

#### MS 01. Mechanical challenges in energy

Co-chairs:

Professor Ken Reifsnider (USA)

Professor Jens Nørkær Sørensen (Denmark)

Professor Dongxiao Zhang (China)

#### MS 02. Mechanics of natural disasters

Co-chairs:

Professor Bernhard Schrefler (Italy)

Professor Pavel Tkalich (Singapore)

#### MS 03. Fluid-structure interactions in biological systems

Co-chairs:

Professor Gerhard Holzapfel (Austria)

Professor Eric Lauga (USA)

### MS 04. Mechanics of transport in microfluidic devices

Co-chairs:

Professor Matthew Begley (USA)

Professor Henrik Bruus (Denmark)

### MS 05 Dynamics and control of morphing structures

Co-chairs:

Professor Ephrahim Garcia (USA)

Professor Haiyan Hu (China)

### MS 06 Effects of small size scales in materials modeling

Co-chairs:

Professor Huajian Gao (USA)

Professor Marc Geers (Netherlands)

### **Pre-Nominated Sessions**

Fluid Mechanics		Solid Mechanics	
FM1	Biological fluid dynamics	SM1	Biomechanics and
			biomaterials
FM2	Boundary layers	SM2	Contact and friction
			mechanics
FM3	Combustion and flames	SM3	Damage mechanics
FM4	Compressible flow	SM4	Elasticity
FM5	Convection	SM5	Fracture mechanics
FM6	Drops, bubbles and	SM6	Geophysics and
	multiphase flows		geomechanics
FM7	Flow instability and	SM7	Impact mechanics and
	transition		wave propagation
FM8	Flow in thin films	SM8	Mechanics of multi-
			component materials and
			composites
FM9	Geophysical and	SM9	Mechanics of phase
	environmental fluid		transformations
	dynamics	~= -10	
FM10	Low Reynolds number flows	SM10	Mechatronics
FM11	Magnetohydrodynamics	SM11	Multibody and vehicle
ED 510	XX XX	C3 540	dynamics
<b>FM12</b>	Non-Newtonian and complex	SM12	Nanostructures and
EN //10	fluids	CN #12	MEMS
FM13	Stirring and mixing	SM13	Plasticity, viscoplasticity and creep
FM14	Turbulence	<b>SM14</b>	Stability of structures
FM15	Vortex dynamics	<b>SM15</b>	Structural optimization
	•		(Co-sponsored by ISSMO)
<b>FM16</b>	Waves in fluids	<b>SM16</b>	Vibrations and control of
			structures
FM17	General fluid mechanics	SM17	General solid mechanics

### Topics involving both fluid mechanics and solid mechanics

FS01	Acoustics	
FS02	Computational methods in mechanics	
FS03	Experimental methods in mechanics	
FS04	Chaos and pattern formation	
FS05	Electro- and magnetomechanical systems	
FS06	Fluid structure interactions	
FS07	Smart materials	
FS08	Granular materials and flows	
FS09	Mechanics of materials processing	
FS10	Porous media	
FS11	Foams and cellular materials	
FS12	Education in mechanics	

FS12

#### **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

The IUTAM Newsletter is available (free of charge) to whom it concern upon request from the IUTAM Secretary-General.

**IUTAM Home Page:** 

http://www.iutam.net

or: http://www.iutam.org