



# NEWSLETTER

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**International Congress, XXI ICTAM, Warsaw, August 2004**

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

**International Union of Theoretical and Applied Mechanics**

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## **President's Address**

The Final Announcement for ICTAM'04 (Warsaw, 15-21 August 2004) has now been widely circulated. May I encourage all members of our worldwide community to register and to submit papers in good time. The quadrennial ICTAM provides an unparalleled opportunity for the renewal of friendship and for interaction across the whole field of theoretical and applied mechanics, and should not be missed! For details, see below in this Newsletter.

I am very glad to have this opportunity to report that IUTAM's application to the ICSU 2004 grants programme, of which I gave notice in a previous Newsletter, has been successful, and that a grant of \$100K has been awarded to support the foundation of the African Institute for Mathematical Sciences (AIMS) in Cape Town, South Africa. The application was supported by five other International Scientific Unions (IMU, IUGG, IUPAP, IUPAC and IAU) and also by the Third World Academy of Sciences (TWAS). It was further supported by five National Scientific members of ICSU (South Africa, UK, Netherlands, Brazil and Egypt). This exceptionally broad level of support was a tribute to the quality of the proposal and ensured its success. IUTAM has committed a further \$20K from its own resources in support of the project.

The proposal falls within the ICSU priority area 'Capacity Building in Science Education', and will allow IUTAM to contribute significantly to this field. One of our recently established Working Parties is concerned with Capacity Building in the Mechanical Sciences, an indication of our growing commitment to this global need. The ICSU grant will allow IUTAM to be involved from the outset in a flagship enterprise in capacity building in the African continent.

Part of the grant will be used to finance a Workshop on Capacity Building in the Mathematical Sciences which will be held at AIMS 13-16 April 2004. This will bring together representatives of many of the African States to share experience and problems of the teaching of mathematics and the mathematical sciences in Africa, and representatives of the International Scientific Unions, and particularly IUTAM, concerned with the application of mathematics in real-world science.

AIMS was launched at an Opening Meeting held on 18/19 September, and 30 graduate students are now enrolled in the first one-year AIMS diploma course in which theoretical and applied mechanics plays a significant part. Ten further South African students will be enrolled in January 2004. The ICSU grant is contributing to the funding of these students.

Full information concerning AIMS may be found at the website <http://www.aimsforafrica.org> . Information concerning the above workshop will be posted on this website in due course. In the meantime, any expression of interest will be welcome.

Keith Moffatt  
President, IUTAM

## **Short Report on IUTAM Bureau Meeting , July 2003**

In 2003 the IUTAM Bureau meeting was held in two sessions on 5 and 6 July in the building of the Estonian Academy of Sciences in Tallinn. Among the items discussed at the meeting were the following:

- Matters concerning Adhering and Affiliated Organizations.  
The state of affairs with respect to the IUTAM Archive at CISM was discussed.
- Matters concerning IUTAM Working Parties.  
The state of affairs with respect to the membership of the Working Parties was reviewed.
- Matters concerning ICSU and Inter-Union Committees.  
The results of the ICSU General Assembly held in Rio de Janeiro in September 2002 were discussed, as was the ICSU Grants Programme.
- Reports by the Treasurer and the Secretary-General.  
Based on the recommendations of a Study Group and the Solids Symposia Panel it was decided to accept the proposal for an IUTAM Symposium on Multiscale Modelling of Damage and Fracture Processes in Composite Materials for 2005.  
It was agreed to ask the Fluids Symposia Panel for advice on a proposal for an IUTAM-CISM Summer School on Dispersion of Particles in Turbulent Flows for 2005.
- Assessment actions.  
It was agreed to compose a draft report on the closure of the Assessment Actions for discussion by the General Assembly next year.
- Agreement with Kluwer.  
It was agreed to review the Agreement with Kluwer and to put this item on the agenda of the General Assembly next year.

Dick van Campen  
Secretary-General, IUTAM

## **Report on the meeting of the Executive of the Congress Committee Tallinn, Estonia, 5-6 July 2003**

This was the final meeting of the Executive before the 21st ICTAM in Warsaw in August 2004. It was almost entirely taken up with detailed planning of the Congress and preparation of the Final Announcement. In particular, the lists of speakers for the Opening and Closing Lectures, the Sectional Lectures and the Introductory Lectures for the Mini-Symposia were reviewed, as was the list of co-chairs for the Prenominate Sessions (PNS). Some gaps remained in the latter and suggestions for filling them were gratefully received by the Secretary. One new PNS, on Education in Mechanics, was added to the list.

Members of the Executive made suggestions for changes to the draft of the Final Announcement that had been prepared by the Local Organising Committee (LOC). These changes have been implemented, and the lists of names completed, and the Final Announcement can now be viewed on the Congress website (<http://ictam04.ippt.gov.pl>).

Other matters discussed and finalised were:

- electronic paper submission and handling procedure;
- mechanism of support for younger participants;
- timetable for the countdown to the Congress;
- Congress budget and registration fee;
- Tasks for the International Papers Committee, which will meet in Warsaw in March, 2004.

There was a brief discussion of preliminary actions for choosing the location of the 22nd ICTAM in 2008. Two firm bids have been received; it was agreed to announce to the Mechanics community that the deadline for the final forms of all bids to be received by the Secretary, including any new bids, should be 31 May, 2004.

Tim Pedley  
Secretary Congress Committee, IUTAM

## IUTAM Symposia 2004

### **04-1 (GA.02-12) IUTAM Symposium on Size effects on Material and Structural Behavior at Micron- and Nanometer-Scales**

Place: **Hong Kong, China**

Date: **May 30 – June 4, 2004**

Chairman: **Prof. P. Tong**

Hong Kong University of Science & Technology,  
Department of Mechanical Engineering, Clear Water  
Bay, Hong Kong

**Email:** pintong@ust.hk

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

### **04-2 (GA.02-11) IUTAM Symposium on Mechanics of Biological Tissue**

Place: **Graz, Austria**

Date: **June 27-July 2, 2004**

Chairman: **Prof. G. Holzapfel**

Institute for Structural Analysis, Computational  
Biomechanics, Schiesstattgasse 14/B, A-8010 Graz,  
Austria

**Email:** gh@biomech.tu-graz.ac.at

Co-Chairman: **Prof. R.W. Ogden**

University of Glasgow, Department of Mathematics,  
Glasgow G12 8QW, UK,

**Email:** rwo@maths.gla.ac.uk

IUTAM Representative on Scientific Committee: Prof. J. Engelbrecht

**04-3 (GA.02-04) IUTAM Symposium on Non-Uniqueness of Solutions to the Navier-Stokes Equations and their Connection with Laminar-Turbulent Transition**

Place: **Manchester, UK**  
Date: **August 9 – 11, 2004**  
Chairman: **Prof. T. Mullin**  
Manchester University, Department of Physics,  
Manchester M13 9PL, UK  
**Email:** tom@reynolds.ph.man.ac.uk

IUTAM Representative on Scientific Committee: Prof. W. Schiehlen

**04-4 (GA.02-02) IUTAM Symposium on One Hundred Years of Boundary Layer Research**

Place: **Göttingen, Germany**  
Date: **August 12-14, 2004**  
Chairman: **Prof. G.E.A. Meier**  
Institute of Aerodynamics and Flow, DLR Aerospace  
Center, Bunsenstrasse 10, 37073 Göttingen, Germany  
**Email:** g.e.a.meier@dlr.de

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

**04-5 (GA.02-07) IUTAM Symposium on Elastohydrodynamics of Rough Surfaces**

Place: **Cardiff, UK**  
Date: **September 1-3, 2004**  
Chairman: **Prof. R.W. Snidle**  
Cardiff University, School of Engineering, Cardiff CF  
24 0YF, UK  
**Email:** snidler@cf.ac.uk

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

**04-6 (GA.02-14) IUTAM Symposium on Mechanics and Reliability of Actuating Materials**

Place: **Beijing, China**  
Date: **September 1-3, 2004**  
Chairman: **Prof. W. Yang**  
Tsinghua University, Department of Engineering  
Mechanics, Beijing 100084, China  
**Email:** yw-dem@tsinghua.edu.cn

IUTAM Representative on Scientific Committee: Prof. J. Salençon

**GA.02-01 IUTAM Symposium on Elementary Vortices and Coherent Structures: Significance in Turbulence Dynamics**

Place: **Kyoto, Japan**  
Date: **October 26-28, 2004**  
Chairman: **Prof. S. Kida**  
Theory and Computer Simulation Center, National  
Institute for Fusion Science, Oroshi-cho 322-6, Toki,  
509-5292, Japan  
**Email:** Kida@toki.theory.nifs.ac.jp

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

**GA.02-05 IUTAM Symposium on Laminar-Turbulent Transition**

Place: **Bangalore, India**  
Date: **December 13–17, 2004**  
Chairman: **Dr. R. Govindarajan**  
Jawaharlal Nehru Centre for Advanced Scientific  
Research, Fluid Dynamics Unit, Jakkur, Bangalore 560  
064, India  
**Email:** rama@jncasr.ac.in

IUTAM Representative on Scientific Committee: Prof. R. Narasimha



**GA.02-06 IUTAM Symposium on Recent Advances in Disperse Multiphase Flow Simulation**

Place: **Urbana-Champaign, IL, USA**

Date: **2004, no dates available yet**

Chairman: **Prof. S. Balachandar**

University of Illinois at Urbana-Champaign, Department of Theoretical and Applied Mechanics, 216 Talbot Lab, Urbana, IL 61801, USA

**Email:** s-bala@uiuc.edu

Co-Chairman: **Prof. A. Prosperetti**

Johns Hopkins University, Department of Mechanical Engineering, 122 Latrobe Hall, 34th & Charles Streets, Baltimore, MD 21218, USA,

**Email:** Prosperetti@jhu.edu

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

**IUTAM Symposia 2005****GA.02-03 IUTAM Symposium on Flow Control with Mems**

Place: **London, UK**

Date: **2005, no dates available yet**

Chairman: **Dr. J.F. Morrison**

Department of Aeronautics, Imperial College, London SW7 2BY, UK

**Email:** j.morrison@ic.ac.uk

IUTAM Representative on Scientific Committee: Prof. C. Cercignani

**GA.02-08**                    **IUTAM Symposium on Mechanical Behavior and  
Micro-mechanics of Nanostructured Materials**

Place:                    **Beijing, China**  
Date:                    **2005, no dates available yet**  
Chairman:                **Prof. Y. Bai**  
                              Chinese Academy of Sciences, Institute of Mechanics,  
                              Beijing 100080, China  
                              **Email:** Baiy1@lnm.imech.ac.cn

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

**GA.02-09**                    **IUTAM Symposium on Multiscale Problems in  
Multibody System Contacts**

Place:                    **Stuttgart, Germany**  
Date:                    **2005, no dates available yet**  
Chairman:                **Prof. P. Eberhard**  
                              University of Stuttgart, Institute B of Mechanics,  
                              Stuttgart, Germany  
                              **Email:** eberhard@mechb.uni-stuttgart.de

IUTAM Representative on Scientific Committee: Prof. W. Schiehlen

**GA.02-10**                    **IUTAM Symposium on Impact Biomechanics-from  
Fundamental Insights to Applications**

Place:                    **Dublin, Ireland**  
Date:                    **July 4-8, 2005**  
Chairman:                **Dr. M. Gilchrist**  
                              National University of Ireland - Dublin, Department of  
                              Mechanical Engineering, Belfield, Dublin 4, Ireland  
                              **Email:** Michael.Gilchrist@ucd.ie

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

**GA.02-13**                    **IUTAM Symposium on Vibration Control of  
Nonlinear Mechanisms and Structures**

Place:                    **Munich, Germany**  
Date:                    **2005, no dates available yet**  
Chairman:              **Prof. H. Ulbrich**  
TU München, Lehrstuhl Angewandte Mechanik,  
Boltzmannstrasse 15, 85748 Garching, Germany  
**Email:** ulbrich@amm.tu-muenchen.de

IUTAM Representative on Scientific Committee: Prof. W. Schiehlen

**GA.02-15**                    **IUTAM Symposium on Topological Design  
Optimization of Structures, Machines and Materials  
- Status and Perspectives**

Place:                    **Aalborg and Lyngby, Denmark**  
Date:                    **2005, no dates available yet**  
Chairman:              **Prof. M.P. Bendsoe**  
Technical University of Denmark, Department of  
Mathematics, Building 303, DK-2800 Lyngby, Denmark  
**Email:** M.P.Bendsoe@mat.dtu.dk

Co-Chairman:        **Prof. N. Olhoff**  
Aalborg University, Institute of Mechanical Engineering  
Pontoppidanstraede 101, DK-9220 Aalborg East,  
Denmark  
**Email:** no@ime.auc.dk

Co-Chairman:        **Prof. O. Sigmund**  
Technical University of Denmark, Department of  
Mechanical Engineering, Section of Solid Mechanics,  
Building 404, DK-2800 Lyngby, Denmark  
**Email:** sigmund@mek.dtu.dk

IUTAM Representative on Scientific Committee: Prof. N. Olhoff

**GA.02-16 IUTAM Symposium on Multiscale Modelling of Damage and Fracture Processes in Composite Materials**

Place: **Lublin, Poland**  
Date: **2005, no dates available yet**  
Chairman: **Prof. T. Sadowski**  
Technical University of Lublin, Department of Applied Mechanics, Nadbystrzycka 36, PL 20-618 Lublin, Poland  
**Email:** [tskms@archimedes.pol.lublin.pl](mailto:tskms@archimedes.pol.lublin.pl)

IUTAM Representative on Scientific Committee: Prof. J. Salençon

**IUTAM Summer Schools****2004 IUTAM Summer School on Biomechanics and Moleculars**

Place: **Beijing, China**  
Date: 2004, no dates available yet  
Coordinator: Prof. J. Fang, Beijing University, Department of Mechanics & Engineering Science, Beijing 100871, PR China  
**Email:** [jfang@pku.edu.cn](mailto:jfang@pku.edu.cn)

**2005 IUTAM-CISM Summer School on Dispersion of Particles in Turbulent Flows**

Place: **Udine, Italy**  
Date: 2005, no dates available yet  
Coordinators: Prof. Alfredo Soldati, Udine, Italy  
Prof. Michael Reeks, Ispra (Va), Italy  
**Email:** [soldati@uniud.it](mailto:soldati@uniud.it) and [mike.reeks@jrc.it](mailto:mike.reeks@jrc.it)

**XXI International Congress of  
Theoretical and Applied Mechanics  
15 – 21 August 2004, Warsaw, Poland  
(Home Page, <http://ictam04.ippt.gov.pl>)**

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.

Below, the current state of affairs is given with respect to the opening and closing lectures, the mini symposia and the pre-nominated sessions.

***Opening Lecturer:***

Prof. L. van Wijngaarden (The Netherlands): *Interplay between air and water*

***Closing Lecturer:***

Prof. K. Sobczyk (Poland): *Stochastic dynamics of engineering systems*

***Sectional Lecturers:***

Jorge Ambrosio (Portugal): *Multibody dynamics: bridging multidisciplinary applications*

Konrad Bajer (Poland): *Rapid formation of strong gradients and diffusion in the transport of scalar and vector fields*

Daniel Beysens (France): *Near-critical point hydrodynamics and microgravity*

John F. Brady (USA): *Suspensions: from micromechanics to macroscopic behaviour*

Huajian Gao (USA/Germany): *Nanoscale mechanics of biological materials*

Tom J. R. Hughes (USA): *Variational and multiscale methods in turbulence*

Roland Keunings (Belgium): *Non-Newtonian fluid mechanics using molecular theory*

Edwin Kreuzer (Germany): *Nonlinear dynamics in ocean engineering*

Pierre Ladevèze (France): *A bridge between the micro- and mesomechanics of laminates: fantasy or reality*

Marcel Lesieur (France): *Turbulence and large-eddy simulations*

Anatoly Neishtadt (Russia): *Probability phenomena in perturbed dynamical systems*

Raymond W. Ogden (UK): *Mechanics of rubberlike solids*

André Preumont (Belgium): *Some issues in active vibration control of smart structures*

Peter B. Rhines (USA): *Ocean circulation and its influence on climate*

Erich Sackmann (Germany): *Microviscoelasticity of cells: cells as viscoplastic bodies*

Dudley A. Saville (USA): *Electrokinetics & electrohydrodynamics in microfluidics*

Edward A. Spiegel (USA): *Problems in astrophysical fluid dynamics*

Harry L. Swinney (USA): *Scaling in quasi-2D turbulence experiments in a rotating flow*

### ***Mini Symposia***

#### ***MS1. Smart materials and structures***

N. Sottos (USA) – Chair

J. Holnicki-Szulc (Poland) – Co-Chair

Introductory Lectures:

R. D. James (USA) A way to search for smart materials with unprecedented physical properties

W. Ostachowicz (Poland) Elastic wave propagation development for structural health monitoring

S. R. White (USA) Autonomic healing of polymers and composites

#### ***MS2. Tissue, cellular and molecular biomechanics***

P. Janmey (USA) – Chair

D. Barthès-Biesel (France), A. Hoger (USA) – Co-Chairs

Introductory Lectures:

C. Schmidt (Netherlands) Molecular mechanics

S. Margulies (USA) Tissue mechanics

A. Mogilner (USA) Cell mechanics

#### ***MS3. Mechanics of thin films and nanostructures***

K.S. Kim (USA) – Chair

Z. Suo (USA), H.M. Jensen (Denmark) – Co-Chairs

Introductory lectures:

H. M. Jensen (Denmark) Mechanics of thin film structures

R Ruoff (USA) Mechanics of nano-structured materials

Z. Suo (USA) Mechanics of micro- and nano-structural evolution

#### ***MS4. Microfluidics***

P. Tabeling (France) – Chair

R. J. Adrian (USA), J. Santiago (USA) – Co-Chairs

Introductory Lectures:

D. S. Stewart (USA) Miniaturization of explosive technology and microdetonics

J. Santiago (USA) Electrokinetic flow instabilities in microfluidic systems

P. Tabeling (France) Slip, patterns, and other small things in microfluidic systems

*MS5. Microgravity flow phenomena*

J.C. Legros (Belgium) – Chair

P. Neitzel (USA), J. I. D. Alexander (USA) – Co-Chairs

Introductory Lectures:

G. M. Homsy (USA) Microgravity and microscale fluid mechanics

M. Louge (USA) Collisional granular flows with and without gas interactions in microgravity

D. Weaire (Ireland) Foams, films and surfaces in microgravity

*MS6. Atmosphere and ocean dynamics*

J. Sommeria (France) – Chair

M.E. McIntyre (U.K.) – Co-Chair

Introductory Lectures:

O. Bokhove (Netherlands) Wave-vortex interactions in the atmosphere and oceans, with applications to climate

P. H. Haynes (UK) Transport and mixing in the atmosphere

O. Talagrand (France) Data assimilation into numerical models of the atmospheric and oceanic circulation

*Pre-Nominated Sessions and chairs*

**Fluid Mechanics**

*FM1. Biological fluid dynamics*

M. Gharib (USA), F. van de Vosse (Netherlands)

*FM2. Boundary layers*

P. W. Duck (UK), A. Kluwick (Austria)

*FM3. Combustion and flames*

N. Peters (Germany), P. Wolanski (Poland)

*FM4. Complex and smart fluid*

B. Khusid (USA), A. L. Yarin (Israel)

*FM5. Compressible flow*

H. Hornung (USA), TBA

*FM6. Computational fluid dynamics (jointly with IACM)*

L. Kleiser (Switzerland), W. Schröder (Germany)

*FM7. Convective phenomena*

G. de Vahl Davis (Australia), K. Zhang (UK)

*FM8. Drops and bubbles*

J. Eggers (Germany & UK), A. Prosperetti (USA)

*FM9. Environmental fluid dynamics*

H. E. Huppert (UK), R. Narasimha (India)

*FM10. Experimental methods in fluid*

A. Leder (Germany), J. Westerweel (Netherlands)

*FM11. Flow control*

J. B. Freund (USA), M. Gad-el-Hak (USA)

*FM12. Flow in porous media*

A. K. Mojtabi (France), V. Nikolaevskiy (Russia)

*FM13. Flow instability and transition*

P. Huerre (France), P.A. Monkewitz (Switzerland)

*FM14. Flow in thin film*

N. Aksel (Germany), V. Shkadov (Russia)

*FM15. Fluid mechanics of materials*

F. Dupret (Belgium), R. Moreau (France)

*FM16. Fluid mechanics of suspensions*

R. Bonnecaze (USA), E. Guazzelli (France)

*FM17. Granular flows*

R. Behringer (USA), I. Goldhirsch (Israel)

*FM18. Low-Reynolds-number flow*

R. H. Davis (USA), C. Pozrikidis (USA)

*FM19. Magnetohydrodynamics*

P. A. Davidson (UK), A. Thess (Germany)



*FM20. Multiphase flows*

S. Balachandar (USA), J. Magnaudet (France)

*FM21. Solidification and crystal growth*

M. Glicksman (USA), M. G. Worster (UK)

*FM22. Stirring and mixing*

H. Aref (USA), E. Villermaux (France)

*FM23. Topological fluid mechanics*

P. L. Boyland (USA), K. Ohkitani (Japan)

*FM24. Turbulence*

O. Metais (France), R. D. Moser (USA)

*FM25. Vortex dynamics*

G. J. F. van Heijst (Netherlands), E. Krause (Germany)

*FM26. Waves*

W. K. Melville (USA), V. I. Shrira (UK)

**Solid Mechanics***SM1. Computational solid mechanics* (jointly with IACM)

T. Belytschko (USA), P. Wriggers (Germany)

*SM2. Contact and friction mechanics* (jointly with IAVSD)

I. Goryacheva (Russia), A.I. Klarbring (Sweden), G. Szefer (Poland)

*SM3. Control of structures*

F. Chernousko (Russia), S. Pellegrino (UK)

*SM4. Damage mechanics*

M. Chrzanowski (Poland), P. Steinmann (Germany)

*SM5. Dynamic plasticity of structures*

N. Jones (UK), T. Wierzbicki (USA)

*SM6. Elasticity*

R. Kienzler (Germany), L. Wheeler (USA)

*SM7. Experimental methods in solid mechanics*

I. Emri (Slovenia), L. Jose Freire (Brazil)

*SM8. Fatigue*

J. Dominguez (Spain), K. Reifsnider (USA)

*SM9. Fracture and crack mechanics (jointly with ICF)*

D. Gross (Germany), A. Needleman (USA)

*SM10. Functionally graded materials*

R. Batra (USA), G. H Paulino (USA)

*SM11. Impact and wave propagation*

A Norris (USA), K Wilmanski (Germany)

*SM12. Material instabilities*

D. Bigoni (Italy), H. Petryk (Poland)

*SM13. Mechanics of composites*

S. Adali (South Africa), N. A. Fleck (UK)

*SM14. Mechanics of phase transformations (jointly with IACM)*

F. D. Fischer (Austria), A. Molinari (France)

*SM15. Mechanics of porous materials*

W. Ehlers (Germany), J. M. Huyghe (Netherlands)

*SM16. Mechatronics*

W. O. Schiehlen (Germany), M. Tomizuka (USA)

*SM17. Multibody dynamics*

M. Geradin (Belgium), F. Pfeiffer (Germany)

*SM18. Plasticity and viscoplasticity*

E. van der Giessen (Netherlands), P. Perzyna (Poland)

*SM19. Plates and shells (jointly with IACM)*

H. Mang (Austria), E. Ramm (Germany)

*SM20. Rock mechanics and geomechanics*

Z. Mroz (Poland), I. Vardoulakis (Greece)

*SM21. Solid mechanics in manufacturing*

B. Heimann (Germany), T. Inoue (Japan)

*SM22. Stability of structures*

Zs. Gaspar (Hungary), S. Kyriakides (USA)

*SM23. Stochastic micromechanics*

Y. Brechet (France), Y. Shibutani (Japan)

*SM24. Structural optimization* (jointly with ISSMO)

K. K. Choi (USA), J. Herskovits (Brazil)

*SM25. Structural vibrations*

I. Blekhman (Russia), K. Popp (Germany)

*SM26. Vehicle dynamics*

S. Iwnicki (UK), R. Sharp (UK)

*SM27. Viscoelasticity and creep*

F. Cocks (UK), N. Ohno (Japan)

**Topics involving both fluid mechanics and solid mechanics***FSM1. Acoustics*

T. Geers (USA), N. Peake (UK)

*FSM2. Chaos in fluid and solid mechanics*

I. Mezic (USA), G. Rega (Italy)

*FSM3 Continuum mechanics*

K. R. Rajagopal (USA), TBA

*FSM4. Fluid-structure interaction*

J. Grue (Norway), M. P. Paidoussis (Canada)

*FSM5. Mechanics of foams and cellular materials*

S. Hilgenfeldt (Netherlands), D. L. Weaire (Ireland)

*FSM6. Multiscale phenomena in mechanics*

A. Carpinteri (Italy), C. Miehe (Germany)

*FSM7. Education in mechanics*

R. Engel (USA), B. Karihaloo (UK)

### **Notice on IUTAM Symposia**

The IUTAM Symposia are reserved to invited participants. Those wishing to participate in an IUTAM Symposium are therefore advised to please contact the Chairman of the Scientific Committee in due time in advance of the meeting.

As from January 1996, Kluwer Academic Publisher is the preferred publisher of the refereed proceedings of the IUTAM Symposia (in rare cases the Proceedings are published as special issues of appropriate journals). A listing of all the published volumes may be found on the IUTAM website.

Prior to the publication by Kluwer, a short report of an IUTAM symposium may be found on the IUTAM website, as published in the IUTAM Annual Reports (<http://www.iutam.net/iutam/Publications/index.php/3>).

**IUTAM** is a member of **ICSU**

### **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>** or: **<http://www.iutam.info>**