



ANNOUNCEMENTS

1. FORTHCOMING MEETING OF THE INSTITUTE OF ACOUSTICS

All enquiries about the Institute of Acoustics should be addressed to the Secretary, Institute of Acoustics, Agriculture House, 5 Holywell Hill, St. Albans, Herts AL1 1EU, England; telephone +44 (0) 1727 848195; fax +44 (0) 1727 850553; E-mail Acoustics@clus.ulcc.ac.uk.

2. FECHNER DAY '97, POZNAN, POLAND, 16–19 AUGUST 1997

Fechner Day '97, the thirteenth annual meeting of International Society for Psychophysics (ISP), will take on 16–19 August 1997 in Poznan, Poland. Further information about Fechner Day '97 can be found at conference home page <http://www.ia.amu.edu.pl/FD97/>. Information about ISP and past meetings can be found at ISP home page <http://www.psychology.su.se/external/ISP/ISP.html>.

3. 3RD EURMECH SOLID MECHANICS CONFERENCE, STOCKHOLM, SWEDEN, 18–22 AUGUST 1997

The Conference, organized by the European Mechanics Society, will cover the entire field of theoretical and applied solid mechanics. As at the earlier conferences in Munich (1991) and Genoa (1994), the spirit will be that of a forum of friendly presentations and discussions of the state of the art. The scientific program will consist of one General Opening Lecture, eight invited Plenary Lectures and parallel Technical Sessions. Those who wish to receive information about the conference or to be placed on the circulation list for subsequent announcements are invited to write to Dr Per-Lennart Larsson, Secretary General, LOC, Department of Solid Mechanics, Royal Institute of Technology S-100 44, Stockholm, Sweden; telephone +46-8-790 7540; fax +46-8-411 2418; E-mail 3esmc@hallf.kth.se.

4. ACTIVE '97, 21–23 AUGUST 1997, AND INTERNOISE '97, 25–27 AUGUST 1997, TECHNICAL UNIVERSITY OF BUDAPEST, HUNGARY

Active '97 will be a satellite symposium of INTERNOISE '97. INTERNOISE '97 will be the 26th in a series of international congresses on noise engineering that have been held all over the world since 1972. It is sponsored by the International Institute of Noise Control Engineering and is being organized by the Acoustical Commission of the Hungarian Academy of Science and the Hungarian Scientific Society for Optics, Acoustics, Motion Pictures and Theatre Technology. Technical papers in all areas of noise control engineering will be presented at the congress and published in the Congress Proceedings. Further information can be obtained from INTERNOISE '97 Congress Secretariat OPAKFI, H-1027 Budapest, Föu. 68, Hungary; fax +36-1-202-0452.

5. 3RD INSTITUTE OF PHYSICS CONFERENCE ON MODERN PRACTICE IN STRESS AND VIBRATION ANALYSIS, UNIVERSITY COLLEGE DUBLIN, IRELAND, 3–5 SEPTEMBER 1997

The conference is being organized by the Stress and Vibration Analysis Group of the Institute of Physics, and is co-sponsored by the Society for Experimental Mechanics, The

British Society for Strain Measurement, The Dynamic Testing Agency, The National Agency for Finite Element Methods and Systems, and The Institution of Engineers of Ireland. The conference proceedings will be published formally and will be available to delegates upon registration. Further information can be obtained from the Conference Secretariat, Dr Michael D. Gilchrist, Mechanical Engineering Department, University College Dublin, Dublin 4, Ireland; telephone +353-1-7061890; fax +353-1-2830534; E-mail svcon97@ucd.ie; Conference Web page at <http://www.keelp.ac.uk./depts/ma/people/am/mpisava.html>

6. 3RD INTERNATIONAL CONFERENCE ON NEW ENERGY SYSTEMS AND CONVERSIONS, KAZAN, RUSSIA, 8–13 SEPTEMBER 1997

The principal aim of the conference is to provide an international forum for scientists and specialized researchers on energy systems, in which to exchange ideas and results of recent research experiments and technologies related to practical applications. The Conference Chairman is G. L. Degtyarev (Russia) and the Co-Chairmen are T. Ohta (Japan) and T. N. Veziroglu (U.S.A.). Further information can be obtained from Professor V. S. Tereshchuk, Kazan State Technical University, K. Marx Str., 10, 420111, Kazan, Russia.

7. 3RD EUROMECH FLUID MECHANICS CONFERENCE, GÖTTINGEN, GERMANY, 15–18 SEPTEMBER 1997

The conference will be open to all those interested. A programme for accompanying persons will be organized. The conference office will be open from 14 to 18 September 1997. The conference programme includes the 1997 EUROMECH Fluid Mechanics Lecture (1 hour) by U. Frisch (Nice), entitled “Towards a theory of intermittency”, ten 45 minute expository review lectures, an evening lecture (open to the public) by I. Rehberg (Magdeburg), entitled “Granular matter: shaken, not stirred. And very dry (with experiments)”, and three half-a-day Mini-Symposia, on, respectively, “Turbulent mixing—mechanisms and control”, “Dispersed multiphase flows” and “Forced flows with solidification”. Contributed papers will be presented in parallel oral sessions. There will be long (20 min including discussion) and short (10 min including discussion) presentations. These papers may also be presented as posters. There will be publication of a volume of proceedings for this conference. The mailing address for contributed papers is Dr Christoph Voigt, Institut für Angewandte Mechanik und Strömungsphysik, Universität Göttingen, Bunsenstrasse 10, D-37073 Göttingen, Germany; telephone +49 551 5176 546; fax +49 551 5176 595; E-mail EFMC97@MSFD1.GWDG.DE. Information about the conference can also be obtained from our WWW page at <http://msfm42.gwdg.de/efmc97/>.

8. HEARING AID RESEARCH AND DEVELOPMENT CONFERENCE, BETHESDA, MARYLAND, 22–24 SEPTEMBER 1997

The National Institute on Deafness and other Communications Disorders (NIDCD) and the Department of Veterans Affairs are sponsoring the second biennial Hearing Aid Research and Developing Conference for the presentation of ongoing or completed research relevant to hearing aid design and functions. Further information can be obtained from NIDCD/VA, Hearing Aid Research and Development Conference, c/o Tascon, 7101 Wisconsin Avenue, Suite 1125, Bethesda, MD 20814, U.S.A.; telephone +301-496-7243; TDD 301-402-0252.

9. EUROMECH COLLOQUIUM 369: FLUID-STRUCTURE INTERACTION IN ACOUSTICS, DELFT,
THE NETHERLANDS, 23–26 SEPTEMBER 1997

Topics covered include radiation and scattering from structural elements and fluid-loaded structures, including structures excited by flowing media. Both theoretical and experimental research included in the theme. Traditionally, the Euromech Colloquia are informal; there will be no parallel sessions or formal published proceedings. The number of participants will be limited to approximately 60. Participation by invitation will have priority. Young researchers are encouraged to apply for participation. Further information can be obtained from the Chairman—Adrian H. P. Van der Burgh, Delft University of Technology, Faculty of Mathematics and Informatics, P.O. Box 5031, 2600 GA Delft, The Netherlands, telephone +31/15/27/2784420; fax +31/15/2787209; E-mail burgh@dv.twi.tudelft.nl—or from the Co-chairman, Paul J. T. Filippi, Laboratoire de Mécanique et d'Acoustique, 31 Chemin Joseph Aiguier, 13402 Marseille CEDEX 20, France; telephone +33/291/164068; fax +33/291/228248; E-mail Filippi@lma.cnrs-mrs.fr.

10. 8TH INTERNATIONAL CONFERENCE ON ADAPTIVE STRUCTURES AND TECHNOLOGIES (ICAST '97), WAKAYAMA, JAPAN, 29–31 OCTOBER 1997

Conference topics include the following: adaptive structures; intelligent/smart materials and structures; actuators and sensors; controlled structures; vibration control and suppression; structured acoustic and noise control; quasistatic adjustment; system identification; space robots; on-line damage detection; pointing and alignment precision. Further information can be obtained from ICAST '97 Secretariat, Professor H. Okubo, Department of Aerospace Engineering, Osaka Prefecture University, 1-1 Gakuen-Cho, Sakai, Osaka 593, Japan; fax (+81) 722-59-3340; E-mail okubo@aero.osakatu-u.ac.jp.

11. FIRST CEAS–ASC WORKSHOP ON WIND TUNNEL TESTING IN AEROACOUSTICS, DNW,
NOORDSTPOLDER, THE NETHERLANDS, 5–6 NOVEMBER 1997

The Aeroacoustics Specialists' Committee (ASC) of the Confederation of European Aerospace Societies CEAS announces its first international workshop on Wind Tunnel Testing in Aeroacoustics to be held at the German–Dutch Wind Tunnel, DNW. The event is to outline the state of the art in this field and to discuss the latest achievements in wind tunnel testing techniques. The workshop will provide a unique possibility of scientific exchange among the participants. The first CEAS–ASC Workshop on Wind Tunnel Testing in Aeroacoustics will cover the following topics: source location techniques (acoustic arrays and mirrors); correlation between local unsteady flow and radiated sound; comparison of model and full-scale testing; suppression of microphone self-noise; test section reverberation and background noise; sound transmission through shear layers; signal processing. The workshop will be organized into formal presentations with an abstract being the only written material required. At the meeting a folder will be available containing the abstracts and copies of the viewgraphs shown. No parallel sessions are planned; time will be set aside for questions and discussion. Further information can be obtained from The Wind Tunnel Testing in Aeroacoustics, Workshop Secretariat, c/o National Aerospace Laboratory NLR, Attn Mrs A. Bredt, P.O. Box 90502, 1006 BM Amsterdam, The Netherlands; telephone +3120 511 3651 or 3244; fax +31 20 511 3210; E-mail asbr@nlr.nl.

12. ASME 4TH INTERNATIONAL SYMPOSIUM ON FLUID-STRUCTURE INTERACTIONS, AERO-ELASTICITY, AND FLOW-INDUCED VIBRATIONS AND NOISE, DALLAS, TEXAS, U.S.A., 16-21 NOVEMBER 1997

This is the sequel to the successful 1984, 1988 and 1992 Symposia, co-sponsored by JSME, IMechE, CSME and IAHR. All three were sponsored by the ASME Division of Applied Mechanics, Fluids Engineering, Heat Transfer, Noise Control & Acoustics Nuclear Engineering, and Pressure Vessels & Piping. The upcoming symposium will be co-sponsored by the same Division, but this time also by the Aerospace Division (the Aerospace Sessions will be coordinated by Professor Peretz Friedmann). Co-sponsorship by the same international organization is being sought for the 1997 Symposium. The 1984, 1988 and 1992 Symposia involved 70, 85 and 102 papers, and the proceedings were published in six, seven and eight volumes, respectively. The 4th International Symposium in 1997 is expected to increase in size, with 25-30 sessions involving 100-130 papers. Papers in the general areas of fluid-structure interactions, aeroelasticity, hydroelasticity, flow excitation and flow-induced vibrations and noise, and unsteady fluid dynamics related to FSI are included—both fundamental papers, with no particular application, and papers related to or inspired by specific systems in aerospace, mechanical and naval engineering. Theoretical, experimental and computational papers are equally welcome. Further information can be obtained from Michael P. Paidoussis, Department of Mechanical Engineering, McGill University, 817 Sherbrooke Street West, Montreal, QC, Canada H3A 2K6; telephone (514)-398-6294; fax (514)-398-7365; E-mail maryf@mecheng.lan.mcgill.ca.

13. WESTPRAC VI 97, HONG KONG, 19-21 NOVEMBER 1997

The Western Pacific Regional Acoustics Conference is to be held for the second time in Hong Kong. Previous conferences have been in Singapore (1982), Hong Kong (1985), Shanghai (1988), Brisbane (1991) and Seoul (1994). The organizers are the Hong Kong Institute of Acoustics, the Hong Kong Polytechnic University and the Hong Kong Institute of Engineers. Co-organizers are the Acoustic Societies of America, Australia, Brazil, India, Italy, Japan and Korea, the Iberoamerican Acoustical Federation, the Institute of Acoustics, U.K., and the International Institute of Noise Control Engineering. Conference topics include the following: active noise and vibration control; architectural acoustics; computing technology for acoustics; environmental noise control; measurement and instrumentation; physical acoustics; speech analysis/signal proceeding; transportation noise; underwear acoustics. Accepted papers will be published in the conference proceedings. Further information can be obtained from the Secretary, Dr S. K. Tang, Department of Building Service Engineering, The Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong; telephone —(852) 27665855; fax —(852) 27746146; E-mail besktang@polyu.edu.kh. www—<http://www.polyu.edu.hk/~westprac>; <http://www.metu.edu.tr/~wwwichmt>.

14. 7TH ICOSSAR, KYOTO, JAPAN 24-28 NOVEMBER 1997

The 7th International Conference on Structural Safety and Reliability (ICOSSAR) will be held on 24-28 November 1997 in the beautiful historical city of Kyoto, Japan. Four to five hundred participants are expected. ICOSSAR is a major international forum for the exchange of information and discussion of recent developments in structural safety and reliability. The Conference will address the decision-making process for design, quality assurance and construction of major structural systems. Topics include basic theory and methods, design concepts and methods, damage/maintenance, deterioration/rehabilitation, applications to geotechnical, earthquake, offshore and wind engineering, and

social-economical impacts. Further information can be obtained from: ICOSSAR Secretariat, c/o School of Civil Engineering, Kyoto University, Kyoto, 606-01, Japan; telephone 81-75-753-5093; fax 81-75761-0646; E-mail; icos97@brdgeng.kyoto.u.ac.jp.

15. INSTITUTE OF ACOUSTICS 1997 AUTUMN CONFERENCE—NOISE AND VIBRATION: CODES STANDARDS AND CRITERIA, HYDRO HOTEL, WINDERMERE, 27–30 NOVEMBER 1997

The aim of The Autumn Conference, which is being organized by the Environmental Noise Group, is to examine the Codes of Practice, Standards and Criteria that provide the basis for assessing the effects of noise and vibration. Twelve sessions are planned, covering a wide range of topics: motor sports, clay pigeon shooting and gunshot noise, local authority guidance, 1982 codes, latest research, construction noise, vibration, PP6 24, industrial noise, building acoustics and sound insulation. Further information can be obtained from the Institute of Acoustics, 5 Holywell Hill, St. Albans, Herts AL1 1EU; telephone 01727 848195; fax 01727 850553; E-mail Acoustics@clus1.ulcc.ac.uk.

16. 5TH INTERNATIONAL CONGRESS ON SOUND AND VIBRATION, ADELAIDE, AUSTRALIA, 15–18 DECEMBER 1997

The 5th International Congress on Sound and Vibration will be held on 15–18 December 1997 at the University of Adelaide, South Australia. The second to be organized under the auspices of the International Institute of Aeronautics and Vibration, it is sponsored by IIAV, the University of Adelaide and the Australian Acoustical Society. Contributed papers are invited, covering theoretical and experimental research as well as technology application in the following areas: active noise control; active vibration control; aero-acoustics; architectural acoustics; boundary element and finite element methods; condition monitoring and diagnostics; damping—passive and active; environmental/community noise; human response to sound and vibration; inverse methods; machinery noise and vibration control; materials for noise and vibration control; measurement techniques; mechanisms of human hearing; modal analysis; musical acoustics; noise control elements; non-destructive testing; non-linear acoustics; non-linear vibration; occupational noise exposure and control; outdoor sound propagation; scattering of sound; signal processing; sound intensity; sound sources; sound transmission; statistical energy analysis; structural acoustics and vibration; structural intensity; transportation vibration and noise; underwater acoustics; vibration and shock; vibration sources; and wavelet analysis. Further information may be obtained from the ICSV5 Secretariat, Department of Mechanical Engineering, University of Adelaide, South Australia 5005, Australia; telephone +61 8 8303 5460; fax +61 8 8303 4367; E-mail icsv5@mecheng.adelaide.edu.au.

17. UNDERWATER BIO-SONAR SYSTEMS AND BIO-ACOUSTICS SYMPOSIUM, LOUGHBOROUGH UNIVERSITY, U.K., 16–17 DECEMBER 1997

This first Institute of Acoustics Symposium on Underwater Bio-Sonar and Bioacoustics is in response to the growing public interest in the effects of man-made sound on the environment. New regulations to enforce environmental impact studies are now common in many parts of the world. To make such impact studies more meaningful, acoustic engineers and oceanographers need to be more aware of the possible environmental effects of their activities and marine biologists need to address the serious lack of acoustic sensitivity data available for most marine species. To encourage appropriate cross-disciplinary participation, symposium topics include the following: marine biological sonar and communication signals; sound production and reception mechanisms in marine

organisms; environmental impacts of underwater acoustic systems; performance evaluation of underwater bio-sonar systems; data capture systems for the localization and classification of natural underwater sound sources; sound archive storage and retrieval techniques for the classification of natural underwater sounds. Papers given at this conference will be published in Volume 19 of the *Proceedings of the Institute of Acoustics*, which will be available to symposium delegates at registration. More details are posted at <http://www.lboro.ac.uk/departments/el/meetings/IOA-Bio97/index.html>. For more information or to register your interest, please contact, preferably by E-mail, either of the two Joint Convenors: Dave Goodson, Loughborough University, Department of Electronic & Electrical Engineering, Loughborough LE11 3TU, U.K.; E-mail: a.d.goodson@lboro.ac.uk; telephone: +44(0)1509 222846; fax: +44(0)1509 222854; Ed Harland, DRA, Winfrith Technology Centre, Dorchester, Dorset DT2 8XJ; E-mail: harland@dra.hmg.gb; telephone: +44(0)1305 212522; fax: +44(0)1305 212116.

18. ISROMAC-7, THE 7TH INTERNATIONAL MEETING ON TRANSPORT PHENOMENA AND DYNAMICS OF ROTATING MACHINERY, HONOLULU, HAWAII, 22–26 FEBRUARY 1998

The ISROMAC series has a reputation as a forum, both formal and informal, for specialists in rotating machinery to present both state-of-the-art technology and new developments. Further information can be obtained from Dr Agnes Muzynska, Chairperson ISROMAC-7, Bently Rotor Dynamics Research Corporation, 1711 Orbit Way, P.O. Box 2529, Minden, Nevada 89423, U.S.A.: telephone +702-782-3611 ext. 9674; fax +702-782-9236; E-mail agnes@brdrc.com. Also, for latest information, <http://www.bently.com>.

19. FOURTH AIAA/CEAS JOINT AEROACOUSTICS CONFERENCE, TOULOUSE, FRANCE, 2–4 JUNE 1998

The AIAA/CEA Aeroacoustics Conference provides an international forum for scientists and engineers from industry, government, research centers and universities to exchange knowledge and results of current studies and to discuss directions for future research. Papers that cover all aspect of the generation, propagation and control of vehicle noise; and the effect of noise on structures and individuals are solicited. The program's technical content will include theoretical, numerical and experimental contributions that describe original research results and/or innovative design concepts. In addition, in-depth reviews and timely surveys will be considered. Topics for the conference are listed below. Studies in other related areas, particularly the application of aerospace noise suppression technologies in other industries, are encouraged.

Technological session topics will include the following: acoustic/fluid dynamic phenomena; active noise control; advanced testing techniques; community noise and metrics; computational aeroacoustics; interior noise/structural acoustics; jet aeroacoustics; loads/sonic fatigue; propeller/prop-fan noise; rotorcraft and V/STOL noise; sonic boom/propagation; turbomachinery and core noise; airframe/high-lift noise; duct acoustics. Papers will be accepted on the basis of extended abstracts. The extended abstract must include paper titles, names, affiliations, addresses, telephone numbers and, if possible, fax numbers and E-mail addresses of all authors. The abstract and abstract submittal form (available from the Conference organizers) should be submitted in triplicate to one of the Technical Co-chairs by September 30, 1997. The Technical Co-chairs are: Dr. G. Fournier, ONERA, BP 72, 92322 Chatillon Cedex, France, Fax 33 1 46 73 41 48, E-mail, fornierg@onera.fr; Professor T. Colonius, Caltech, Mail code 104-44, Pasadena, CA 91125, U.S.A., Fax 818 568 2719, E-mail colonius@green.caltech.edu. Technical Session

presentations, papers and abstracts will be in English. A “no paper, no podium” rule will be in effect for all presentations. An author will not be permitted to give his or her presentation if a written paper has not been prepared and made available at the conference. AIAA and CEAS will not consider for presentation or publication any paper that has been or will be presented or published elsewhere. Authors will be required to sign a statement to this effect. Inquiries concerning the administrative arrangements for the conference should be directed to the Administrative Chair, Dr S. Pausin, ONERA–CERT/DERMES, telephone 33 5 62 25 25 72, fax 33 5 62 25 25 73, E-mail AIAA.CEAS98@oncert.fr.

20. TRANSPORT NOISE '98, TALLINN, ESTONIA, 8–10 JUNE 1998

This International Symposium conference on Transport Noise and Vibration is organized jointly by the East-European Acoustical Association, the European Acoustic Association and Tallinn Technological University, and is sponsored by the Krylov Shipbuilding Research Institute and the Baltic State Technical University. Topics within the conference scope include the following: theoretical investigation of vibration and radiation of transport structures; diagnostics and measurements of vibroacoustic characteristics of transport equipment and structures; methods and means of detecting noise and vibration sources; methods and means of transport vibration and noise control; methods of calculation of vibration and sound radiation of transport vehicles and traffic noise; experimental investigation of noise and vibration of vehicles; reduction of traffic noise by planning, barriers, etc.; effects of noise and vibration on people and the environment; anti-noise legislation and standards. Professor A. Nikiforov of Russia is the Symposium Chairman. The Scientific Advisory Committee includes members from Denmark, Estonia, France, Russia, Sweden and Ukraine. The official language of the Symposium will be English, and Proceedings in English will be given to participants. The deadline for abstracts is 30 September 1997 and for manuscripts of papers is 28 February 1998. Further information can be obtained from the Symposium Secretariat, East-European Acoustical Association, 196158, Moskovskoe Shosse, 44, St. Petersburg, Russia; telephone 7-812-2919981; fax 7-812-1279323; E-mail krylspb@sovam.com.

21. 16TH INTERNATIONAL CONGRESS ON ACOUSTICS AND THE 135TH MEETING OF THE ACOUSTICAL SOCIETY OF AMERICA, SEATTLE, WASHINGTON, U.S.A., 20–26 JUNE 1998

The theme of this joint meeting is “The Soul of the Future: A Global View of Acoustics in the 21st Century. Fifteen Plenary Lectures are scheduled, together with invited and contributed papers, poster sessions and exhibits. Also there are technical tours including Boeing, Microsoft, the University of Washington and Advanced Technology Laboratories. In addition non-technical one-day tours are offered to Mr. Rainer, Olympic National Park, and Historic Seattle, and a two-night, post meeting whale-watching excursion to Washington’s San Juan Islands and to Victoria, British Columbia, Canada is planned. Further information can be obtained from ICA/ASA '98 Conference Secretariat, Applied Physics Laboratory, 1013 NE 40th Street, Seattle, WA 98105-6698, USA; telephone +206-543-1275; Fax +206-543-6785; E-mail ICA-ASA 98 @apl.washington.edu. Also WWW: <http://www.apl.washington.edu/ASA/asa/html>.

22. EUROMECH MEETINGS IN 1997 AND 1998

The EUROMECH Council has overall responsibility for EUROMECH Colloquia and EUROMECH Conferences. EUROMECH Colloquia are informal meetings on specialized research topics. Participation is restricted to a smaller number of research workers actively

engaged in the field of each Colloquium. The organization of each Colloquium, including the selections of participants for invitation, is entrusted to a Chairman. Proceedings are not normally published. Those who are interested in taking part in a Colloquium should write to the appropriate Chairman. The Number, Title, Chairman or Co-chairman, Dates and Location for the remaining Colloquia in 1997, and preliminary information for some Colloquia in 1998, are as follows: 358. *Mechanical behaviour of adhesive joints: analysis, testing and design*, Professor A. Aivazdedeh, Institut Supérieur de l'Automobile et des Transports, 49, rue Mademoiselle Bourgeois, BP 31, F-58027 Nevers Cedex, France, Professor R. D. Adams, Bristol, Professor A. H. Cardon, Brussel, and Professor A. Rigolot, Paris, 3–5 September 1997, Nevers, France, 368. *Biomechanics of hearing*, Professor W. Schiehlen, Institute B of Mechanics, University of Stuttgart, D-70550 Stuttgart, Germany, E-mail wos@mechb.uni-stuttgart.de, Dr A. Eiber, Stuttgart, 10–10 September 1997, Stuttgart, Germany; 369. *Fluid–structure interaction in acoustics*, Dr A. H. P. van der Burgh, Faculty of Technical Mathematics and Informatics, University of Technology, P.O. Box 5031, 2600 GA Delft, The Netherlands, E-mail burgh@dv.twi.dudelft.nl, Dr P. J. T. Filippi, Marseille, 23–26 September 1997, Delft, The Netherlands; 370. *Synthesis of mechatronic systems*, Professor M. Hiller, Fachgebiet Mechatronik, Gerhard-Mercator-Universität-GH Duisburg, Lotharstr. 1, D-47057 Duisburg, Germany, E-mail hiller@mechatronik-uni-duisburg.de, Professor H. van Brussels, Leuven, 15–17 September 1997, Duisburg, Germany; 371. *Efficient and reliable continuum finite elements for linear and nonlinear analyses*, Professor K. Schweizerhof, Institut für Mechanik, University Karlsruhe, Kaiserstrasse 12, D-76128 Karlsruhe, Germany, E-mail gs01@rz.uni-karlsruhe.de, Professor E Ramm, Stuttgart and Professor P. Wriggers, Darmstadt, 17–19 September 1997, Bad Herrenalb (near Karlsruhe), Germany; 372. *Reliability in nonlinear structural mechanics*, Professor J.-C. Mitteau, Institut Français de Mécanique Avancée, BP 265, F-63175 Aubière Cédex, France, E-mail mitteau@ifma.ifma.fr, Professor O. Ditlevsen, Lyngby, 21–24 October 1997, Clermont-Ferrand, France; 373. *Modelling and control of adaptive mechanical structures*, Professor U. Gabbert, Otto-von-Guericke-Universität Magdeburg, Institut für Mechanik, Universitätsplatz 2, D-39106 Magdeburg, Germany, E-mail ulrich-gabbert@mb.uni-magdeburg.de, Professor E. Breitbach, Braunschweig, 11–13 March 1988, Magdeburg, Germany; 374. *Recent computational developments in steady and unsteady naval hydrodynamics*, Professor M. Guilbaud, C.E.A.T., 43 rue de l'Aérodrome, F-86036 Poitiers Cédex, France, E-mail guilbaud@univ-poitiers.fr, Dr G. Delhommeau, Nantes, 27–29 April 1998, Poitiers, France; 375. *Biology and technology of walking*, Professor F. Pfeiffer, Lehrstuhl B für Mechanik, UT/München, D-80290 Munich, Germany, E-mail Pfeiffer@lbm.mw.tu-muenchen.de, Professor H. Cruse, Bielefeld, 23–25 March 1998, Munich, Germany; 376. *Waves in two-phase flows*, Professor C. F. Delale, Department of Mechanical Engineering, Istanbul University, Avcilar Kampusu, 34850 Avcilar, Istanbul, Turkey, E-mail delale@yunus.mam.tubitak.gov.tr, Professor D. G. Crighton, Cambridge, April 1998, Istanbul, Turkey; 377. *Stability and control of shear flows with strong temperature or density gradients*, Dr F. Marsik, Institute of Thermomechanics, Academy of Sciences of the Czech Republic, Dolejskova 5, CZ-182 00 Praha 8, The Czech Republic, E-mail MARSIK.BIVOK@IT.CAS.CZ, Professor P. A. Monkewitz, Lausanne, 20–22 May 1998. Prague. Czech Republic.

EUROMECH Conferences are broad in scientific scope. They comprise the EUROMECH Solid Mechanics Conference, the EUROMECH Fluid Mechanics Conference, the EUROMECH Turbulence Conference, the EUROMECH Nonlinear Oscillations Conference and the EUROMECH Mechanics of Materials Conference. They are open to all those interested and are expected to have a number of participants between

150 and 160. The general purpose is to provide opportunities for scientists and engineers to meet and discuss current research. The responsibility for each series of Conferences is delegated to a Standing Conference Committee. The organizational work is carried out by Local Organizing Committees (LOC). Those who are interested in taking part in one of the Conferences should write to the Chairman or Secretary of the appropriate LOC. Information about the Conferences in 1997 is as follows. ESMC-3, *3rd EUROMECH Solid Mechanics Conference*, Professor B. Storåkers (Chairman) and Dr. P.-L. Larsson (Secretary), Department of Solid Mechanics, Royal Institute of Technology, S-100 44 Stockholm, Sweden, E-mail 3esmc@hallf.kth.se, 18–22 August 1997, Stockholm, Sweden; EFMC-3, *3rd EUROMECH Fluid Mechanics Conference*, Professor G. E. A. Meier (Chairman), DLR-Institut für Strömungsmechanik, Bunsenstrasse 10, D-37073 Göttingen, Germany, E-mail EFMC97@MSFD1.GWDG.DE, 15–18 September 1997, Göttingen, Germany.

23. VON KÁRMÁN INSTITUTE FOR FLUID DYNAMICS LECTURE SERIES

To encourage participation in the lecture series programme by university assistants and undergraduate students, the Institute has established a limited number of VKI Lecture Series Fellowships for participants from NATO countries which support the Institute. The recipient of a fellowship is entitled to attend the lecture series at a reduced fee. For example, the reduced fee applied to a lecture series carrying a full fee of 25 000 BF will be 12 500 BF for assistants or 1500 BF for undergraduate students. (In the latter case, meals are not included.) The request to be considered for an award must accompany the application to attend the lecture series, and the applicant must provide a recommendation from his professor. All possible alternative sources of funding should be investigated before aid is requested under this scheme, so that those most in need will benefit. Further information can be obtained from the von Kármán Institute for Fluid Dynamics Lecture Series Secretariat, Chaussée Waterloo 72, B-1640 Rhode-Saint-Genèse, Belgium; telephone 32-2-359.96.04; fax 32-2-359.96.00.

24. ISVR SHORT COURSES

The 1997 ISVR Short Courses include the following: 18–20 August, Active Control of Sound and Vibration; 1–5 September, Technical Audiology, 1–3 September, 16th Engine Noise & Vibration Control Course; 3–5 September, 6th Vehicle Noise & Vibration Course; 3–5 September, Vibration Control; 8–12 September, 26th Advanced Course in Noise and Vibration; 17–19 September, An Introduction to Mechanical Vibration Measurement Techniques.

Further information may be obtained from the ISVR Conference Secretary, Institute of Sound and Vibration Research, The University, Southampton, SO17 1BJ; telephone +44 (0) 1703 592294; fax +44 (0) 1703 593190.

25. SHORT COURSE ON “THE SCALED BOUNDARY FINITE-ELEMENT METHOD FOR UNBOUNDED AND BOUNDED MEDIA”, SWISS INSTITUTE OF TECHNOLOGY, LAUSANNE, 15–17 SEPTEMBER 1997

This so-called scaled boundary finite-element method (also known as the consistent infinitesimal finite-element cell method) has been developed at the Swiss Federal Institute of Technology in Lausanne. It not only combines the advantages of the finite-element and boundary-element methods but also has some eight attractive features of its own. The book *Finite-Element Modelling of Unbounded Media* by John P. Wolf and Chongmin Song, John

Wiley, 1996, serves as the text for the course, augmented by handouts. A source code of a computer program for the method is also provided. The book's authors are the course lecturers. Further scientific/technical information can be obtained from Dr John P. Wolf, Laboratory of Hydraulic Constructions, Department of Civil Engineering, Swiss Federal Institute of Technology, CH-1015 Lausanne; telephone: + +4121 693 24 05; fax: + +4121 693 22 64.

26. SHORT COURSE ON "MODERN OPTICAL FLOW MEASUREMENT", UDINE, ITALY, 13–17 OCTOBER 1997

The course is at an advanced level. It is designed for postgraduate students, research engineers and academics who are working in the field of flow measurement. It will be conducted by seven invited lecturers, including the Coordinator, G. E. A. Meier. Topics to be covered include the following: laser doppler velocimetry, laser two focus method; Moiré, Rayleigh-scatter, doppler global velocimetry; holographic and interferometric techniques; optical pressure measurements; particle image velocimetry; liquid crystal diagnostics, infrared techniques, differential interferometer; coherent anti-Sokes Raman scattering, laser induced fluorescence, electronic beam fluorescence, laser diode spectroscopy. Further information can be obtained from CISM, Palazzo del Torso, Piazza Garibaldi 18, 33100 Udine (Italy); telephone: + 39 (432) 294989 or 508251; fax: + 39 (432) 501523; E-mail: cism@cc.uniud.it; <http://www.uniud.it/cism/homepage.htm>.

27. IUTUM-IITD INTERNATIONAL WINTER SCHOOL AND WORKSHOP ON OPTIMUM DYNAMIC DESIGN, USING MODAL TESTING AND STRUCTURAL DYNAMIC MODIFICATION, INDIAN INSTITUTE OF TECHNOLOGY, HAUZ KHAS, NEW DELHI, 15–19 DECEMBER 1997

The school is aimed at presenting the technology of emerging optimum dynamic design tools; namely, modal testing, modal updating, optimal structural dynamic modification as applied to a broad range of simple, and complex mechanical structural systems. The above will be covered by invited plenary lecturers. Intending participants are advised to contact the Co-ordinators. Papers are invited for the workshop sessions. An abstract of about 300 words should reach the Co-ordinators by 30 June 1997, by mail/E-mail/fax. The deadline for camera ready papers for the workshop is 15 October 1997. An exhibition by the manufacturers of hardware/software packages will also be arranged. Details are on the Internet: <http://www.iitd.ernet.in/insodyd>. The Co-ordinators are: Professor T. K. Kundra and Professor B. C. Nakra, fax 91-11-6862037 or 91-11-6855227; E-mail tkkundra@mech.iitd.ernet.in, bcnakra@mech.iitd.ernet.in. Address: Mechanical Engineering Department, I.I.T., Hauz Khas, New Delhi 110 016, India.

28. CISM COURSES PROGRAMME

Information on the short courses programme for 1997 of the International Centre for Mechanical Sciences, Udine, Italy, is available on <http://www.uniud.it/cism/homepage.htm>.

29. EARTHQUAKES AND THE BUILT ENVIRONMENT CD-ROM

Nearly 90 000 bibliographic records from three of the world's leading databases on earthquakes, earthquake engineering and related topics are available on *Earthquakes and the Built Environment Index*, a CD-ROM recently published by National Information Services Corporation (NISC). Comprising databases from the Information Service of the National Center for Earthquake Engineering Research (NCEER—State University of

New York at Buffalo), the National Information Service for Earthquake Engineering (NISEE—University of California at Berkeley) and the Newcastle Earthquake Project (Newcastle Region Public Library of Australia), *Earthquakes and the Built Environment Index* was first introduced in the fall of 1994. It represents the co-operative effects of the three organizations and NISC to make these resources available to users worldwide, in one easy-to-reference format. The latest version combines the three databases with bilingual searching capabilities in English and Spanish. Further information may be obtained from the NCEER Information Service, 304 Capen Hall, University of Buffalo, Buffalo, N.Y. 14260-2200, U.S.A.; telephone 716/645-3377; fax 716/645-3379; E-mail nercak@ubvms.cc.buffalo.edu, or Katie Frohberg at NISEE, University of California at Berkeley, 1301 South 46th Street, Richmond, California 94804-4698, U.S.A.; telephone 510/231-9401; fax 510/231-9461; E-mail katie@rock.eerc.berkeley.edu, or Ajita Lewis, Newcastle Earthquake Database, Newcastle Region Public Library, Newcastle, NSW, Australia: telephone intl +61 +49 258314; fax intl +61 +49 294157; E-mail exatl@dewey.newcastle.edu.au.

30. EUROPEAN UNION LARGE-SCALE PROGRAMME: ACCESS TO LARGE SHAKING TABLES AND REACTION-WALL FACILITIES

The Commission have agreed to provide funded access for research to the large shaking tables and reaction-wall facility listed below under its Training and Mobility of Research (TMR) Programme. Application for such access from nationals of Member State of the Community or Associated State is now invited. Applications with interests in research in Structural Engineering and Dynamics Testings (earthquakes engineering) should apply in writing to the Director of one of the laboratories for considerations by a Management Panel appointed by the Commission. Details should be given of the research proposed and the likely amount of access required. Approved users will receive travel and subsistence costs from the host laboratory. More precise details are available from the Director of each of the following laboratories: Dr E. Carvalho, Laboratorio Nacional de Engenharia Civil, Avenida do Brasil 101, 1799 Lisbon, Portugal, fax +351-1-8497660, telephone +351-1-8482131; Professor P. G. Carydis, Laboratory of Earthquake Engineering, National Technical University, 15700 Polytechniupoli Zografou, Athens, Greece, fax +30-1-7721182, telephone +30-1-7721185; Dr J. Donea, ELSA Reaction Wall Facility, Joint Research Centre, 1-21010 Ispra (VA), Italy, fax +39-332-789049, telephone +39-332-789989; Dr G. Franchioni, Structural Dynamic Testing, Laboratory, ISMES S.p.A., 24068 Seriate (BG), Italy, fax +39-35-302999, telephone +39-35-307111; Madame F. Gantenbein, CEA Saclay, DMT/SEMT, 91191 Gif sur Yvette, France, fax +33-1-69086905, telephone +33-1-69082027; Professor R. T. Severn, Earthquake Engineering Research Centre, University of Bristol, University Walk, Bristol BS8 1TR, U.K., fax +44-117-9287783, telephone +44-117-9287708.

31. CONFERENCE PROCEEDINGS—EUROMECH—2ND EUROPEAN NONLINEAR OSCILLATIONS CONFERENCE, PRAGUE, SEPTEMBER 1996

A number of copies may still be available of the Proceedings of the 2nd European Nonlinear Oscillations Conference, held in Prague, on 9–13 September 1996. The Proceedings are in three volumes containing 190 papers, including eight invited papers, which cover the following Conference topics: qualitative analysis of nonlinear dynamic systems; quantitative methods for nonlinear systems; bifurcation theory; numerical methods in nonlinear dynamics; nonlinear random vibrations; phenomena and criteria of

chaotic oscillations; computer aided symbolic methods in dynamics; vibration control; experimental methods in vibration theory; nonlinear continuous systems; applications in mechanical and electrical engineering, physics, biology, chemistry and other sciences; education of nonlinear dynamics. The price of the Proceedings is US \$80, inclusive of postage. Further information is available from Ing. F. Peterka, Dr. Sc., Institute of Thermomechanics of the AS CR, Dolejškova 5, 182 00 Prague 8, Czech Republic, fax +42/2/8584695; E-mail peterka@bivoj.it.cas.cz.

32. VIBRATION DATABASES ON THE INTERNET

Databases containing information on vibrations produced by road vehicles and hand-held machines are now accessible on the internet at <http://umetech.niwl.se>. Contacts are: Professor Ronnie Lundström, NIWL, Umeå; telephone +46 90 16 50 97; E-mail Ronnie.Lundstrom@niwl.se, and Bert Jacobsen, University Hospital of Northern Sweden, Umeå; telephone +46 90102756.

33. NAR TO BECOME IJAV

Of the two abstract journals *Noise Abstracts and Reviews* (in English) and *Noise* (in Russian) which have in recent years been published in St Petersburg, Russia, as a co-operative effort of Russian, German and U.S.A. scientists, the first is to become, with a change of format to include four or five articles instead of just one review article, the *International Journal of Acoustics and Vibration* (IJAV), and as such will serve as the official journal of the International Institute of Acoustics and Vibration. The Editor-in-Chief of IJAV will be Dr H. Heller (Germany), the Scientific Editor Professor M. J. Crocker (U.S.A.), and the Deputy Chief Editor Professor N. Ivanov (Russia).

34. REPORT FROM THE WORKSHOP ON SOURCE CHARACTERIZATION—LIVERPOOL '96

There is an increasing belief that models and measurement methods used for characterization of acoustic fluid sources and structural sources have substantial similarities. At the same time, those working with structural sources do not read the work on fluid sources and *vice versa*. In view of this and the background given above, it appeared timely to bring the two groups together. A one-day workshop, "International Workshop on Fluid-borne and Structure-borne Sound Source Characterization", was held in Liverpool, with around 30 invited specialists, in conjunction with Inter-Noise '96. The organization committee consisted of Mats Åbom and Hans Bodén, Royal Institute of Technology, who are concerned with characterization of fluid sources in ducts, and Björn Petersson, Loughborough University and Barry Gibbs, Liverpool University, who are concerned with characterization of structural sources. The three principal aims of the workshop were as follows: to define what is meant by source characterization; to identify areas for continued research; to establish a forum for exchange of ideas and information. The workshop was informal, without detailed presentation by the participants. However, it was structured into four sessions, at which different aspects were addressed. (1) General aspects included the rationale for combining fluid- and structure-borne source characterization, machines or internal mechanisms as sources, linear or non-linear source models, unified or specific approaches, is a source characterization possible(?), and terminology. (2) Specific aspects included fluid-borne sources, structure-borne sources, fluid-structure interactions, influence of receiver and simplifications for classes of sources. (3) Source data included tonal and broadband sources, low or high frequency dominance, influence of multiple interfaces and operational conditions. (4) Future work included

continuation, priorities, collaboration, research funding and a forum for exchange of information.

From the open discussion addressing the topics listed, the moderators of the sessions were able to extract the following items summarizing the discussions: (i) the black box approach is a useful conceptual tool; (ii) a complete set of data is required to give power under any load; (iii) the black box approach is necessary to test efficiency of noise control proposals, but there is also a need for a fundamental understanding of generating processes; (iv) research is required into the influence of test conditions on source mechanisms; (v) the study of fluid-borne sources is more advanced in terms of understanding of basic mechanisms; (vi) structure fluid interaction remains an important issue; (vii) tonality of sources should be differentiated from correlation; (viii) frequency modulation should be explored experimentally and analytically; (ix) the meetings should continue; (x) practitioners should be invited to future meetings.

The following concluding remarks can be made: in view of the confusion perceived at the workshop over terminology, the organizing committee offers the following nomenclature: source mechanism, a physical process, an outcome of which is generation of sound and vibration; source, an assembly of one or more source mechanisms, or units containing source mechanisms, with boundaries defined by the application or parties involved; receiver, the medium to which sound and vibration energy is transferred; interface, the part or parts of the source boundary defined over which sound and vibration transmission to the receiver takes place; active characteristics, a map of the effect of the source mechanism or mechanisms *at the interface*; passive characteristics, the fluid or structural properties *at the interface* which are *independent* of the source mechanism or mechanisms; source characterization, the acquisition and organization of the active and passive characteristics of the source; emission, the *net* vibro-acoustic effect of the source at or remote from the interface. Note in connection with this nomenclature that a source characterization requires both the source active and passive characteristics for a complete description: The emission requires the receiver passive characteristics, in addition; Therefore, a source characterization alone cannot give emission and, *vice versa*, emission does not yield unambiguously a source characterization.

Those wishing to receive the complete minutes from the workshop or information on future activities, can get in touch with a member of the organizing committee at the following addresses: Dr Hans Bodén, and Dr Mats Åbom, The Marcus Wallenberg Laboratory for Sound and Vibration Research (MWL), Department of Vehicle Engineering, KTH, S-10044 Stockholm, E-mail hansb@fkt.kth.se, and matsa@fkt.kth.se; Professor Björn Petersson, Department of Aeronautical and Automotive Engineering, Loughborough University, Loughborough LE11 3TU, E-mail B.A.Petersson@lboro.ac.uk; Dr Barry Gibbs, School of Architecture and Building Engineering, Liverpool University, P.O. Box 147, L69 3BX, E-mail bmg@liv.ac.uk.

35. EASD/ANIV PRIZE FOR PAPER BY YOUNG RESEARCHER ON STRUCTURAL DYNAMICS OR WIND ENGINEERING

The European Association for Structural Dynamics (EASD) and the Italian Association for Wind Engineering (ANIV) announce a prize to be awarded to a paper on a subject of Structural Dynamics on Wind Engineering written by a European researcher not older than 35 years and published between 1 January 1996 and 31 December 1998 in a refereed journal (or Congress Proceedings) of international diffusion. The Prize will consist of a scroll or plate and a sum roughly equivalent to 6000 DM. It will be awarded in Prague in June 1999, during the 4th European Conference on Structural Dynamics, EURO DYN

'99, at which the winner will be invited to present a lecture on his/her researches. Further information and a copy of the rules governing the prize can be obtained from Prof. ing. Giuliano Augusti, President ANIV, Università di Roma "La Sapienza", Dip. Ingegneria Strutturale e Geotechnica, Via Eudossiana 18, I-00184 Roma, Italy; telephone +39.6.44 58 51 55; fax +39.6.488 4852; E-mail augusti@scilla.ing.uniroma.it.