



ANNOUNCEMENTS

1. FORTHCOMING MEETINGS 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. 4TH AIAA/CEAS JOINT AEROACOUSTICS CONFERENCE, TOULOUSE, FRANCE, 2–4 JUNE 1998

The AIAA/CEAS 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 aspects of the generation, propagation and control of vehicle noise, and the effect of noise on structures and individuals, are to be included: 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. Technical 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. The Technical Cochairs are: Dr G. Fournier, ONERA, BP 72, 92322 Chatillon Cedex, France, fax 33 1 46 73 41 48, E-mail fournierg@onera.fr; Professor T. Colonius, Caltech, Mail code 104-44, Pasadena, California 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. Pauzin, ONERA-CERT/DERMES, telephone 33 5 62 25 25 72, fax 33 5 62 25 25 73, E-mail AIAA.CEAS98@oncert.fr.

3. TRANSPORT NOISE '98, TALLININ, 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 Tallinin Technical 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 investigations of vibration and radiation of transport structures; Diagnostics and measurement 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. 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 krylpb@sovam.com.

4. LOCALISED DAMAGE 98, BOLOGNA, ITALY, 8–10 JUNE 1998

For information, contact Liz Kerr, Conference Secretariat LOCALISED DAMAGE 98, Wessex Institute of Technology, Ashurst Lodge, Ashurst, Southampton, SO40 7AA, U.K.; telephone 44 (0) 1703 293223; fax 44 (0) 1703 292853; E-mail liz@wessex.ac.uk. Also, more information is available at <http://www.wessex.ac.uk>

5. 3RD INTERNATIONAL CONFERENCE ON VIBRATION MEASUREMENTS BY LASER TECHNIQUES, ANCONA, ITALY, 16–19 JUNE 1998

Information can be found at <http://www.unian.it/html/congres/aivela/aicrela.htm>.

6. 16TH INTERNATIONAL CONGRESS ON ACOUSTICS AND 135TH MEETING OF THE ACOUSTICAL SOCIETY OF AMERICA, SEATTLE, WASHINGTON, U.S.A., 20–26 JUNE 1998

This joint meeting of the ICA and ASA will bring together experts from all fields of acoustics and will provide an international forum for the open exchange of scientific information. The theme of this international meeting is *The Sound of the Future: A Global View of Acoustics in the 21st Century*. The meeting will consist of plenary lectures, invited and contributed papers, poster sessions and exhibits. Topics to be covered include acoustical oceanography, animal bioacoustics, architectural acoustics, biomedical ultrasound, bioresponse to vibration, engineering acoustics, musical acoustics, noise, physical acoustics, psychological and physiological acoustics, signal processing in acoustics, speech communication, structural acoustics and vibration, and underwater acoustics. In addition, there will be Technical Committee meetings and meetings on standards. Technical tours will include Boeing, Microsoft, the University of Washington and Advanced Technology Laboratories. Full conference registration includes a harbor cruise and salmon dinner on Blake Island. Tickets for accompanying persons will be available. One-day tours will be offered to areas of local interest such as Mt. Rainier, Olympic National Park and Historic Seattle. 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 the ICA/ASA '98 Conference Secretariat, Applied Physics Laboratory, 1013 NE 40th Street, Seattle, Washington 98105-6698, U.S.A.; telephone 206-543-1275; Fax 206 543-6785; E-mail ICA-ASA98@apl.washington.edu; [www:http://www.apl.washington.edu/ASA/asa.html](http://www.apl.washington.edu/ASA/asa.html). The Catgut Acoustical Society (CAS) and ASA are organizing a joint symposium on musical acoustics, to be held near Seattle, following ICA/ASA '98. For further information contact the CAS office, 112 Essex Avenue, Montclair, New Jersey 07042, U.S.A.; telephone 201-744-4029; fax 201-744-9197; E-mail: catgutas@msn.com.

7. FORUM ON HIGH SPEED JET FLOWS IV. ASME FLUIDS ENGINEERING CONFERENCE, WASHINGTON, D.C., U.S.A., 21–25 JUNE 1998

The forum is sponsored by the Fluid Mechanics Technical Committee of the ASME Fluids Engineering Division, with co-sponsorship from the Co-ordinating Group on Fluid Measurements (CGFM) and the Co-ordinating Group for Computational Fluid Dynamics (CGCFD). Topics of interest include: Supersonic jet screech; Shock wave interactions; Jet flow control; Jet mixing enhancement; Jet noise studies and jet reduction concepts; Multiple jet interactions; Jets confined within ejectors; Swirling jets; Jet impingement studies. Further information can be obtained from Dr G. Raman, Nyma Inc., NASA Lewis Res. Ctr. Group, 2001 Aerospace Parkway, Brookpark Ohio 44142, U.S.A.; telephone +1 (216) 977 1102; fax +1 (216) 977 1269; E-mail ganesh.raman@lerc.nasa.gov; Dr S. H. Walker, Wright Laboratory/FIMA, Bldg. 450, 2645 Fifth Str., Suite 7, Wright-Patterson AFB, Ohio 45433-7913, U.S.A.; telephone +1 (937) 255 6207; fax +1 (937) 656 4210; E-mail walker@fim.wpafb.af.mil; Professor J. M. Charbonnier, Von Kármán Institute for Fluid Dynamics, Chaussée de Waterloo 72, B-1640 Rhode-Saint-Genese, Belgium; telephone +32 (2) 359 9611; fax +32 (2) 359 9600; E-mail charbonnier@vki.ac.be; Dr C. J. Freitas, Southwest Research Institute, 6220 Culebra Road, San Antonio, Texas 7823-5166, U.S.A.; telephone +1 (210) 522 2137; fax +1 (210) 522 3042; E-mail cfreitas@swri.edu.

8. 7TH CONFERENCE ON NONLINEAR VIBRATIONS, STABILITY, AND DYNAMICS OF STRUCTURES, VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY, BLACKSBURG, VIRGINIA, U.S.A., 26–30 JUNE 1998

The seventh conference in this series will be held at the Donaldson Brown Continuing Education Center at VPI&SU, on 26–30 June 1998. The scope of the conference includes: Multibody dynamics; Dynamics of composite structures; Adaptive structures; Fluid–structure interactions; Parametric vibrations: Single- and multi-frequency excitations of single- and multi-degree-of-freedom systems; Computational techniques: Efficient algorithms, use of symbolic manipulators, integration of symbolic manipulation and numerical methods, and use of parallel processors; Experimental methods: benchmark experiments, measurements in hostile environments, and instrumentation techniques; Influences of nonlinearities on control systems; Identification of nonlinear systems. The registration fee is \$200 per person (reduced fee available). Further information can be obtained from Professor A. H. Nayfeh or Professor D. T. Mook, Department of Engineering Science and Mechanics, Virginia Polytechnic Institute & State University, Blacksburg, Virginia 24061-0219, U.S.A.; telephone +1 (540) 231 5453; fax: +1 (540) 231 4574; E-mail sally@vt.edu.

9. INTERNATIONAL COMPRESSOR ENGINEERING CONFERENCE, AND INTERNATIONAL REFRIGERATION CONFERENCE, PURDUE UNIVERSITY, WEST LAFAYETTE, INDIANA, U.S.A., 14–17 JULY 1998

The 1998 International Compressor Engineering Conference and the 1998 International Refrigeration Conference will be held concurrently on 14–17 July 1998 at Purdue University, West Lafayette, U.S.A., preceded by Compressor and Refrigeration Short Courses, on 12–13 July 1998. Further information can be obtained from Cynthia Quillen, Purdue University, 1077 Ray W. Laboratories, West Lafayette, Indiana 47907-1077, U.S.A.; telephone +1 (765) 494 6078; fax +1 (765) 494 0787; E-mail herlconf@ecn.purdue.edu; <http://herrick.www.ecn.purdue.edu/CONFERENCE/Index/html>.

10. SYMPOSIUM ON UNDERWATER ACOUSTIC CALIBRATION AND MEASUREMENTS, NATIONAL PHYSICAL LABORATORY, TEDDINGTON, MIDDLESEX, 20–21 JULY 1998

This Symposium is organized by the Underwater Acoustics Group of the Institute of Acoustics. Information can be obtained from either of the two Convenors: Victor Humphrey, Department of Physics, University of Bath, Bath BA2 7AY, U.K.; telephone +44 (0) 1225 826 826 ext 5439, fax +44 (0) 1225 826 110, E-mail v.f.humphrey@gdr.bath.ac.uk; Stephen Robinson, National Physical Laboratory, Teddington, Middlesex TW11 0LW, U.K.; telephone +44 (0) 181 943 7152, fax +44 (0) 181 943 6161, E-mail spr@npl.co.uk.

11. MOVIC '98, FOURTH INTERNATIONAL CONFERENCE ON MOTION AND VIBRATION CONTROL, ETH ZURICH, SWITZERLAND, 25–28 AUGUST 1998

Information can be obtained at <http://www.ifr.mavt.ethz.ch/movic98>, or from Professor Gerhard Schweitzer, Chairman MOVIC '98, Institute of Robotics, ETH Zurich, 8092 Zurich, Switzerland; telephone +44 1 632 3568, fax +41 1 632 10 78, E-mail movic@ifr.mavt.ethz.ch.

12. CADCOMP 98—6TH INTERNATIONAL CONFERENCE ON COMPUTER METHODS IN COMPOSITE MATERIALS, MONTREAL, CANADA, 26–28 AUGUST 1998

Sponsored by the Canadian Association for Composite Structures and Materials and the Concordia Centre for Composites, Canada, and organized by the Wessex Institute of Technology, U.K. and Concordia University, Canada, this Conference will bring together engineers and scientists interested in the use of computers for the design and analysis of composite materials and will cover topics relating to the simulation, modelling and experimentation of composite materials. Methods relating to design, optimization and the manufacturing of composite systems will be included. Further information can be obtained from Rachel Jibson, CADCOMP 98 Conference Secretariat, Wessex Institute of Technology, Ashurst Lodge, Ashurst, Southampton SO40 7AA, England; telephone +44 (0) 1703 293223; fax +44 (0) 1703 292853; E-mail rjibson@wessex.ac.uk; <http://www.wessex.ac.uk>.

13. FLOWCON-IUTAM SYMPOSIUM ON MECHANICS OF PASSIVE AND ACTIVE FLOW CONTROL, GÖTTINGEN, GERMANY, 7–11 SEPTEMBER 1998

Jointly organized by DLR, Göttingen, Germany and NAL, Bangalore, India, and co-chaired by Professor Dr G. E. A. Meier (DLR-Institut für Strömungsmechanik) and Dr P. Viswanath (NAL, Bangalore), the major aim of this symposium is to take stock of the current understanding of the mechanics of passive and active flow control. The application areas include drag reduction, transition, turbulence and separation control, unsteady flows, including flow instabilities, and vortex flows on wings and bodies. The following topics would be considered: Passive control methods (shape, bumps; roughness, riblets, spoilers; vortex generators; ventilation, slots); Active control methods (suction and blowing; sound and oscillatory suction; vibration and surface waves; heating/cooling; MEMS; miscellaneous topics); Control concepts (non-linear dynamic systems control; new concepts). Further information can be obtained from Mrs E. Winkels, Conference Secretariat, IUTAM Symposium "FLOWCON" 1998, c/o DLR-Institut für Strömungsmechanik, Bunsenstrasse 10, D-37073 Göttingen, Germany; IUTAM.FLOW.CON@DLR.DE.

14. ACÚSTICA 98—CONGRESSEO IBÉRICO DE ACÚSTICA, LISBON, 14–16 SEPTEMBER 1998

The Portuguese Acoustical Society (SPA), together with the Spanish Acoustical Society (SEA) and the Iberoamerican Acoustical Federation (FIA), announce the Congress ACUSTICA 98 to take place in Lisbon, on 14–16 September 1998. The main topics will be: Architectural acoustics; Acoustic Materials; Bioacoustics; Effects of noise on man; Electroacoustics; Musical acoustics; Noise mapping; Psychoacoustics; Signal processing; Ultrasonics; Underwater acoustics; Urban noise. The Congress will host the First Symposium of the Iberoamerican Acoustical Federation on Industrial and Environmental Noise. The Congress programme will include invited lectures, workshops, contributed papers and technical exhibition. Official languages are Portuguese, Spanish and English. Further information can be obtained from ACÚSTICA 98, CAPS—Instituto Superior Técnico, Av. Rovisco Pais, P-1096 Lisboa Cedex, Portubal; telephone +351 1 841 9393/39; fax +351 1 352 3014; E-mail capsist@alfa.ist.utl.pt.

15. BIOT CONFERENCE ON POROMECHANICS, LOUVAIN-LA-NEUVE, BELGIUM, 14–16 SEPTEMBER 1998

To honour the pioneering contributions of Maurice A. Biot (1905–1985) to the mechanics of porous media and his profound influence in various science and engineering disciplines, the Université Catholique de Louvain (UCL) is organizing a Biot Conference on Poromechanics, with the aim of bringing together researchers involved in theoretical, numerical or experimental works in the disciplines of geomechanics, materials sciences, geophysics, acoustics and biomechanics. Further information can be obtained from Professor J.-F. Thimus, Unité de Génie Civil, Université Catholique de Louvain, place du Levant 1, B-1348 Louvain-la-Neuve, Belgium; telephone +32 10 472 122; E-mail <http://www.gc.ucl.ac.be/gc/geotech/geomater.html> # Biotconf.

16. ISMA 23, INTERNATIONAL CONFERENCE ON NOISE AND VIBRATION ENGINEERING, KATHOLIEKE UNIVERSITEIT, LEUVEN, BELGIUM, 16–18 SEPTEMBER 1998

The 1998 Leuven Conference on Noise and Vibration Engineering will be held on 16–18 September in Leuven, Belgium. It is the 23rd in a series of annual courses and biennial conferences on structural dynamics, modal analysis and noise and vibration engineering, organized by the Department of Mechanical Engineering of the Katholieke Universiteit Leuven. The conference will provide a forum for engineers, researchers and other professionals active in the field of modelling, analyzing, testing and improving the noise and vibration characteristics of mechanical systems and civil structures. The conference combines expertise in the noise and vibration fields by stressing common measurement, modelling, analysis and control technologies. The meeting will provide a further impetus to the cross-fertilization of ideas in both areas. The conference program will include keynote addresses and invited and contributed papers in specialized areas of sound and vibration engineering. The focus of the conference is on topics in which the interaction between noise and vibration behaviour is crucial, such as vibro-acoustic modelling, noise and vibration harshness (NVH) and active noise and vibration control. Special attention will be paid to recent applications in automotive, aerospace and civil engineering. Modal testing remains one of the backbones of the conference: recent (modal) application fields such as structural integrity assessment and condition monitoring will be stressed as well as the accuracy problems generated by product and test variability. In addition, a series of special sessions will be organized on research activities and results of EC funded research projects (Brite-Euram) related to vibro-acoustics. Contributed papers covering theoretical and experimental research as well as technology application in the following areas are

solicited: Acoustic holography; Active noise control; Active vibration control; Condition monitoring and diagnostics; Failure detection and condition assessment using dynamic characteristics; Finite element analysis; Instrumentation, transducers; Measurement techniques; Mid-frequency system modelling; Modal analysis; Modal and response based model updating; Noise and vibration harshness; Non-linearities; Passive and active damping; Product and test variability; Signal processing; Smart structures; Sound quality engineering; Source localization, transfer path identification; Statistical energy analysis; Structural dynamic optimization techniques; Structural integrity and durability testing; Vibration energy flow analysis; Vibrations in rotating machinery; Vibro-acoustic modelling. The conference will be held on the city campus of the Katholieke Universiteit Leuven, college "de Valk" Tiensestraat 41, located in the old centre of Leuven. The Katholieke Universiteit Leuven, founded in 1425, is one of the oldest and most famous universities of the European continent. The historic and artistic past is present everywhere in this charming city, which is the true capital of Brabant. The town hall, the beguinage, the numerous churches, monasteries, convents and university colleges are evidence of a glorious past and lend the town a medieval character. Whether it is one of the numerous beer cellars of the Old Market, in the restaurants around the famous Town Hall, or amid the peace and tranquility of the beguinage, nowhere has the fresh wealth of youth greater vitality than in the city of the Alma Mater, which after 570 years as a university still attracts the Flemish youth and nurtures it on wisdom, erudition and broadmindedness.

Leuven is located in the center of Belgium, only 30 km from Brussels and 20 km from Brussels National Airport. Further information can be obtained from the conference secretary, Mrs L. Notré, K. U. Leuven, Division PMA, Celestijnenlaan 300B, 3001 Leuven, Belgium; telephone (+32) 16 32 24 82; fax (+32) 16 32 29 87; E-mail lieve.notre@mech.kuleuven.ac.be.

17. SMART STRUCTURES 98, ROME, ITALY, 21–23 SEPTEMBER 1998

This 1st International Conference is organized by the Wessex Institute of Technology, U.K., and the National Technical University of Athens, Greece. Information can be obtained from Paula Doughty-Young, Conference Secretariat, SMART STRUCTURES 98, Wessex Institute of Technology, Ashurst Lodge, Ashurst, Southampton, SO40 7AA, U.K.; telephone 44 (0) 1703 293 223, fax 44 (0) 1703 292853, E-mail paula@wessex.ac.uk.

18. EURO-NOISE 98: DESIGNING FOR SILENCE, MÜNCHEN, GERMANY, 04–07 OCTOBER 1998

This third European Conference on Noise Control is being organized by the German Acoustical Society (DEGA) in association with the European Acoustics Association (EAA) and the International Institute of Noise Control Engineering (I-INCE). The conference is devoted to the significance, state of the art and mutual completion of three basic elements of any low-noise design process: prediction, measurement, and evaluation of noise and vibration quantities. Further information can be obtained from the Conference Secretariat and Exhibition management: e-mail, csn_congress@compuserve.com; fax (+49) 8142 5 47 35; telephone (+49) 8142 57 01 83.

19. 3RD INTERNATIONAL CONFERENCE ON ACOUSTICAL AND VIBRATORY SURVEILLANCE: METHODS AND DIAGNOSTIC TECHNIQUES, SENLIS, FRANCE, 13–15 OCTOBER 1998

This is the third in the series of international conferences emphasizing acoustical and vibratory methods in surveillance and diagnostics held in CETIM, Senlis, France, and organized by the French Society of Mechanics (SFM), the French Society of Acoustics (SFA) and the International Measurement Confederation (IMEKO). A diagnostic system determines the internal state of a system and the need for operational actions. The

determination is based upon information from sensors and an *a priori* knowledge of the processes involved. The methodology of monitoring and diagnosis is currently benefitting from dramatic developments in signal processing, information theory, etc., which are being put to practical use through advances in sensor technology and real time computation. The range of application encompasses all areas of science, engineering, manufacturing and medicine. Monitoring and diagnosis are essential to the improved competitiveness of various industries, in that machinery “down-time” is reduced, safe operation is increased, quality control in production is ensured on line, predictive maintenance decreases costs and standards are more stringently adhered to (noise, vibration, pollution, etc.). There has been a major expansion in research and applications of monitoring and diagnosis in recent years, utilizing new processing techniques and sensors. However, in spite of this, implementation of diagnostic systems is still limited in industry. Reliable systems require a multi-disciplinary approach linking physical modelling (or knowledge) with advanced signal processing and information theory concepts. This conference is intended to be a forum for presentation and exchange of information from researchers and industrial people in various fields (acoustic, vibrations and modelling, reliability analysis, safety in automation, diagnostic, control, signal processing, sensors). Topics include the following: 1. Methods: acoustics and vibration modelling, finite element modelling, model updating, vibration intensity; 2. Diagnostic techniques: signal processing techniques, model-based diagnosis and surveillance, pattern recognition techniques (neural networks, fuzzy, uncertainty, etc.), data fusion, expert systems 3. Predictive maintenance: state of the art, use of reliability data, prognosis techniques, case histories; 4. Machines: application to different types and size of machines (electric motors, pumps, generators, machine tools, reciprocating machines, etc.); 5. Specific faults detection and characterization: shaft crack detection, cavitation, leak detection; transient phenomena; 6. Practical means of surveillance: metrology, new transducers, holography, antennas, data acquisition and processing, architecture of surveillance systems, associated strategies and software; 7. Experience feedback: case studies, technical and economic assessments of surveillance methods. This conference is open to the whole scientific and industrial community in several related domains: Acoustics, Vibration, Machines, Signal processing, Automatic Control and Diagnostics, Transducers, etc. Further information can be obtained from UTC, Laboratoire Heudiasyc, Congrès “Surveillance 3”, Centre de Recherche de Royallieu—BP 20529, F-60205 Compiègne cedex, France, fax 33 (0) 3 44 23 44 77; E-mail surveillance_3@hds.utc.fr. Papers will be published in the conference book under the responsibility of the Scientific Committee. Selected papers may be reviewed for publication in the journal *Mechanical Systems and Signal Processing*.

20. INTER-NOISE 98, CHRISTCHURCH, NEW ZEALAND, 16–18 NOVEMBER 1998

Inter-Noise in 1998 will be held in Christchurch, New Zealand on 16–18 November. The venue is to be the Christchurch Convention Centre, which is adjacent to the Town Hall and the Park Royal Hotel. The conference has been scheduled so that it immediately precedes the International Commission on the Biological Effects of Noise (ICBEN), being held in Sydney, Australia on 23–27 November 1998. A satellite symposium on “Recreational Noise” linking the two conferences is also to be convened in Queenstown, New Zealand, on 20 November. There will be both an accompanying persons program of sightseeing opportunities and a technical program of visits. There will be a trade exhibition of products, equipment and services to accompany the conference. You are invited to register your interest in attending the conference. To ensure space on the various tourist and recreational facilities at this peak time of the year, you are also invited to register your other interests by writing to The Inter-Noise 98 Secretary, NZ Acoustical

Society, P.O. Box 1181, Auckland 1001, New Zealand, telephone (09) 623 3147; fax (09) 623 3248; E-mail internoise98@auckland.ac.nz. The organizers have undertaken to work with the Helicopter Line Limited for Inter-Noise 98 who have provided the following information: Mauri, Great Sights and Newmans Tours welcomes to New Zealand delegates attending Inter-Noise 1998. We offer you an extensive range of pre- and post-conference tour options from which to choose when visiting New Zealand in November 1998. New Zealand is a small country with so much to see and do, and we recommend you allow at least 7 days either before or after the conference to explore our wonderful country. The most popular combinations of car and camper vans, local sightseeing or independent and organized coach tour packages have been especially selected. Prices which will be exclusive to delegates are available. October, November and December are prime touring months in New Zealand and early reservations are recommended. For further information or advanced bookings for any of the tour options, contact Rhonda Bowden, The Helicopter Line Limited, Private Bag 92133, Auckland, New Zealand, or E-mail info@helicopter.co.nz.

21. XVTH WORLD CONGRESS ON OCCUPATIONAL SAFETY AND HEALTH, SÃO PAULO, BRAZIL, 12–16 APRIL 1999

Information can be obtained by E-mail to xvcongresso@fundacentro.gov.br, or at the Home Page www.fundacentro.gov.br.

22. 6TH INTERNATIONAL CONGRESS ON SOUND AND VIBRATION, LYNGBY, DENMARK, 5–8 JULY 1999

The 6th International Congress on Sound and Vibration will be held on 5–8 July 1999 at the Technical University of Denmark in Lyngby, 10 km north of Copenhagen, Denmark. The third to be organized under the auspices of the International Institute of Acoustics and Vibration, it is sponsored by the IIAV and the Danish 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; transporation vibration and noise; underwater acoustics; vibration and shock; vibration sources; and wavelet analysis. Further information may be obtained from the ICSV6 Secretariat, Department of Acoustic Technology, Technical University of Denmark, Building 352, DK-2800 Lyngby, Denmark; telephone +45 45 88 16 22; fax +45 45 88 05 77; E-mail icsv6@dat.dtu.dk; web-server <http://www.icsv6.dat.dtu.dk>

23. FOURTH INTERNATIONAL CONFERENCE ON VIBRATION PROBLEMS, JADAVPUR UNIVERSITY, CALCUTTA, INDIA, 27–30 NOVEMBER 1999

Conference topics include the following: Nonlinear dynamic analysis of structures; Vibrations of beams, plates and shells; Vibrations due to thermal and mechanical loading; Shock-induced vibrations; Random vibrations; Buckling and post-buckling behaviour; Acoustics and vibration problems of physics; Vibration problems in bio-medical

engineering; Structural dynamics and extreme load analysis; Elastic waves and seismic response; Elastic-plastic behaviour of materials; Computational and numerical methods applicable to vibration problems; Vibration problems associated with nuclear structures; Nuclear and power engineering; Recent developments in related topics. Further information can be obtained from Dr M. M. Banerjee (Co-Chairman), ICOVP-Secretariat, Department of Mathematics, A.C. College, Jalpaiguri-735 101, W.B., India; telephone +91 3561 23629/22107; fax +91 3561 23149.

24. 9TH NORDIC SYMPOSIUM ON TRIBOLOGY-NORDTRIB 2000, PORVOO, FINLAND, 11–14 JUNE 2000

Contact person: Mr Peter Andersson, VTT Manufacturing Technology, P.O. Box 1702, FIN-02044 VTT, Finland; telephone +358 9 456 5387; fax +358 9 460 627; e-mail Peter.Andersson@vtt.fi

25. EUROMECH MEETINGS IN 1998 AND 1999

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 small number of research workers actively engaged in the field of each Colloquium. The organization of each Colloquium, including the selection 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-chairmen, Dates and Location for each Colloquium in 1998, and preliminary information for some Colloquia in 1999, are as follows: 379. *Aerodynamics and aeroacoustics of tracked high-speed ground transportation*, Professor G. E. A. Meier, DLR, Bunsenstrasse 10, D-37073 Göttingen, Germany, E-mail G.E.A. Meier@dlr.de, Professor H. Sockel, Vienna, and Professor S. Loose, Göttingen, 8–10 June 1998, Göttingen, Germany; 380. *Laminar-turbulent transition mechanisms and prediction*, Dr U. Ch. Dallmann, DLR, Institute of Fluid Mechanics, Bunsenstrasse 10, D-37073, Göttingen, Germany, E-mail uwe.dallmann@dlr.de, Professor D. S. Henningson, Stockholm, and Dr H. Bippes, Göttingen, 14–17 September 1998, Göttingen, Germany; 382. *Fatigue life in the gigacycle regime*, Professor C. Bathias, Conservatoire National des Arts et Métiers, 2 rue Conté, F-75003 Paris, France, E-mail bathias@cnam.fr, Professor S. Stanzl-Tschegg, Vienna, 29 June–3 July 1998, Paris, France; 383. *Continuation methods in fluid dynamics*, Dr D. Henry, Laboratoire de Mécanique des Fluides et d'Acoustique, UMR CNRS 5509, Ecole Centrale de Lyon, BP 163, F-69131 Ecully Cédex, France, E-mail henry@mecaflu-ec-lyon.fr, Dr H. BenHadid, Lyon, and Dr H. Dijkstra, Utrecht, 6–9 September 1998, Aussois, France; 384. *Steady and unsteady separated flows*, Dr P. W. Duck, Department of Mathematics, University of Manchester, Manchester M13 9PL, U.K., E-mail euro384@ma.man.ac.uk, Professor A. I. Ruban, Manchester, 6–9 July 1998, Manchester, U.K.; 385. *Inelastic analysis of structures under variable loads: theory and engineering applications*, Professor D. Weichert, Institut für Allgemeine Mechanik, RWTH-Aachen, Templergraben 64, D-52056 Aachen, Germany, E-mail weichert@uranus.iam.rwth-aachen.de, Professor G. Maier, Milano, 8–11 September 1998, Aachen, Germany; 386. *Dynamics of vibro-impact systems*, Professor V. I. Babitsky, Department of Mechanical Engineering, Loughborough University, Loughborough, Leicestershire LE11 3TU, U.K., E-mail V. I. Babitsky@lboro.ac.uk, 15–18 September 1998, Loughborough, U.K.; 387. *Surface slicks and remote sensing of air-sea interactions*, Dr N. H. Thomas, c/o Fluid Dynamics Research Centre, Mathematics Institute, University of Warwick, Coventry CV4 7AL, U.K.; E-mail nht-FRED@AOL.com, Dr J. C. Scott, Winfrith, 6–8 April 1998, Warwick, U.K.; 388.

Modelling of glass forming processes, Dr D. Lochegnies, L.A.M.I.H. Groupe de Recherches en Génie Mécanique, Le Monte Houy, BP 311, F-59304 Valenciennes Cédex, France, E-mail lochegnies@univ-valenciennes.fr, Professor J. Oudin, Valenciennes, 13–15 October 1998, Valenciennes, France; 389. *Physiological flows and flow-structure interactions*, Professor K. Perktold, Institute of Mathematics, Technical University Graz, Steyrergasse 30/3, A-8010 Graz, Austria, E-mail perktold@fmatdds01.tu-graz.ac.at, Professor T. Kenner, Graz, April 1999, Graz, Austria; 390. *Instability bifurcation and localization in fracture of materials*, Dr G. Rousselier, Electricité de France, Dept MTC, Site des Renardières, F-77818-Moret-sur-Loing Cédex, France, E-mail gilles.rousselier@der.edfgdf.fr, Dr A. Benallal, Cachan, 10–12 May 1999, Paris, France; 391. *Wind tunnel modelling of dispersion in environmental flows*, Dr Z. Janour, Institute of Thermomechanics, Dolejskova 5, CZ-182 00 Prague 8, the Czech Republic, E-mail janour@bivoj.it.cas.cz, Professor A. Robins, Surrey, and Professor M. Schatzmann, Hamburg, 13–15 September 1999, Prague, the 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 Dynamics 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 600. 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 1998 and one Conference in 1999 is as follows: ETC-7, *7th EUROMECH Turbulence Conference*, Professor U. Frisch, OCA, B. P. 4229, F-06304 Nice Cédex 4, France, E-mail for scientific matters uriel@obs-nice.fr, E-mail for administrative matters vcheron@obs-nice.fr, further information <http://www.obs-nice.fr/etc7>, 30 June–3 July 1998, Saint-Jean Cap Ferrat, France; EMMC-3, *3rd EUROMECH Mechanics of Materials Conference*, Professor E. P. Busso, Imperial College, Department of Mechanical Engineering, Exhibition Road, London SW7 2BX, U.K., E-mail e.busso@ic.ac.uk, Professor G. Cailletaud, Paris, November–December 1998, U.K.; ENDC-3, *3rd EUROMECH Nonlinear Dynamics Conference*, Professor R. Ohayon, Chaire de Mécanique, C.N.A.M., rue Conté, F-75003 Paris, France, E-mail ohayon@cnam.cnam.fr, Professor P. Destuynder, 1999, Paris, France.

26. VON KÁRMÁN INSTITUTE FOR FLUID DYNAMICS LECTURE SERIES

The lecture series schedule announced for 1998 is as follows: 19–23 January, Introduction to Computational Fluid Dynamics; 26–30 January, High Speed Propulsion; 9–13 February, Blade Row Interference Effects in Axial Turbomachinery Stages; 23–27 February, 29th Computational Fluid Dynamics; 9–13 March, Fluid Dynamics and Biological Flows; 23–27 March, Advances in Turbulence Modelling; 6–10 April, Advanced Measurement Techniques; 20–24 April, Higher Order Discretization Methods in Computational Fluid Mechanics; 11–15 May, Ventilation Systems and Air Quality; 25–29 May, Fluid Dynamics Research on Supersonic Aircraft.

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.

27. NATO ADVANCED STUDY INSTITUTE ON MECHANICS OF COMPOSITE MATERIALS AND STRUCTURES, TROIA, PORTUGAL, 12–24 JULY 1998

Information can be obtained from the ASI Secretariat, Mrs Andrea Marques, IDMEC/IST, Av. Rovisco Pais 1, 1096 Lisbon, Portugal; fax +351-1-8417915/8474045.

28. CISM PROGRAMME 1998

Among courses available at CISM during 1998 are the following: Identification of Media and Structures by Inversion of Mechanical Wave Propagation (coordinator: A. Wirgin (Marseille)), 13–17 July 1998; Fluid-Structure Interactions in Acoustics (coordinators: D. Habault (Marseille), N. Peake (Cambridge), van der Burgh (Delft)), 14–18 September 1988; Neural Network in Mechanics of Structures and Materials (coordinator: Z. Waszczyszyn (Krakow)), 19–23 October 1998. Detailed information concerning courses organized by the International Centre for Mechanical Sciences (CISM), Italy, can be obtained from CISM, Palazzo del Torso, Piazza Garibaldi 18, I-33100 Udine, Italy; telephone +39 (432) 294 989 or 508 251; fax +39 (432) 501 523; E-mail cism@cc.uniud.it; <http://www.uniud.it/cism/homepage.htm>.

29. ISVR SHORT COURSES AND CONFERENCES

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

30. PENN STATE GRADUATE PROGRAM IN ACOUSTICS—1998 SUMMER SESSIONS

Information can be obtained from Karen Brooks, Program Coordinator, Graduate Program on Acoustics, P.O. Box 30, State College PA 16804, U.S.A.; telephone + (814) 865-6364; fax + (814) 865-3119; E-mail acoustics@sabine.acs.psu.edu

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

The Commission has agreed to provide funded access for researchers to the large shaking tables and reaction-wall facility under its Training and Mobility of Researchers (TMR) Programme. Application for such access from nationals of a Member State of the Community or Associated State is now invited. Applicants (from universities, research/technical institutes or industries) with interests in research in structural engineering and dynamic testing should apply by submitting their research proposals and the likely amount of access required to ISMES or to any of the laboratories listed below for consideration by a Management Panel appointed by the Commission. Approved users will receive travel and subsistence costs from the host laboratory. The access to the facilities will be free of charge for the researchers and a contribution for the construction of test models will be supported. The Community requires the scientific interest of the proposed

research and the maximum publicity of the supported access. More precise details are available from Dr G. Franchioni, Structural Dynamic Testing Laboratory—ISMES Sp.A., Via Pastrengo, 9, 24068 Seriate (GB), Italy, telefax +39 35 302999, telephone +39 35 307612. Other Large scale Facilities include NTUA—Athens (GR), Professor P. G. Carydis, telefax +30 1 7721182, telephone +30 1 7721185; CEA—Saclay (F), Dr P. Sollogoub, telefax +33 1 69088331, telephone +33 1 69082716, ELSA—JRC Ispra (I), Dr G. Verzeletti, telefax +39 332 789049, telephone +39 332 789368, LNEC—Lisbon (P), Dr E. Carvalho, telefax +351 1 8497660, telephone +351 1 8482131, EERC—Bristol (U.K.), Professor R. T. Severn, telefax +44 117 9287783, telephone +44 117 9287708.

32. 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 or 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 distribution. The Prize will consist of a scroll or plate and a sum roughly equivalent to DM 6000. 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 Geotecnica, Via Eudossiana 18, I-00184 Roma, Italy; telephone +39.6.445851 55; fax +39.6.488 4852; E-mail augusti@scilla.ing.uniroma.it.