

Elaine Moran

*Acoustical Society of America
Melville, NY 11747*



Jan D. Achenbach

Jan D. Achenbach awarded National Medal of Technology

Jan D. Achenbach, Walter P. Murphy Professor and Distinguished McCormick School Professor of the Departments of Mechanical Engineering and Civil and Environmental Engineering at the Robert R. McCormick School of Engineering and Applied Science at Northwestern University, has been awarded the 2003 National Medal of Technology. This award is the nation's highest honor for technological innovation, and it was awarded to Professor Achenbach at a White House ceremony on March 14, 2005.

The National Medal of Technology recognizes men and women who embody the spirit of American innovation and have advanced the nation's global competitiveness. The award, which was established in 1980 by an Act of Congress, is administered by the Department of Commerce.

Jan Achenbach was honored for seminal contributions to engineering research and education and for pioneering ultrasonic methods for the detection of cracks and corrosion in aircraft, leading to improved safety for aircraft structures.

In 1985, Achenbach established the Center for Quality Engineering and Failure Prevention, which he still

directs and which has become a state-of-art laboratory for quality control in structural mechanics, with a profound impact on the aircraft industry, particularly the monitoring of aging aircraft.

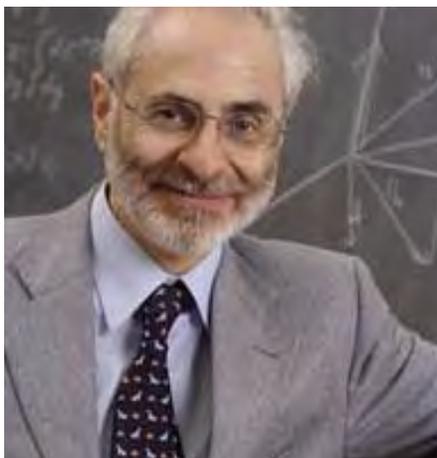
Achenbach was elected a member of the National Academy of Engineering in 1982, a member of the National Academy of Sciences in 1992, and a fellow of the American Academy of Arts and Sciences in 1994. In 1999 he was elected a Corresponding Member of the Royal Dutch Academy of Sciences. He is also an honorary member of the American Society of Mechanical Engineers (ASME) and a fellow of several organizations including the Acoustical Society of America. His awards include the Timoshenko Medal and the William Prager Medal.

Photos of the awards ceremony can be found at www.nationalmedals.org/current.htm.

Andrea Prosperetti and Adnan Akay receive American Society of Mechanical Engineers awards

ASA Fellows Andrea Prosperetti and Adnan Akay each received awards from the American Society of Mechanical Engineers in 2005.

Andrea Prosperetti, Charles A. Miller, Jr. Distinguished Professor of Mechanical Engineering at The Johns



Adnan Akay

Hopkins University and Berkhoff Professor of Fluid Dynamics, University of Twente, The Netherlands, received the 2005 Fluids Engineering Award "for sustained excellence in research on multi-phase flow problems of major engineering significance, including averaged-equations modeling, bubble dynamics, cavitation damage and noise, underwater acoustics, natural mechanisms of oceanic sound and air entrainment in liquid flows; and for leadership in the multi-phase flow research community."

Adnan Akay, Lord Professor at Carnegie Mellon University, received the 2005 Per Bruel Gold Medal for Noise Control and Acoustics "for significant contributions to acoustics and vibration as a scientist, in the areas of friction-generated noise and fluid-layer damping; as an educator, for outstanding mentoring; and as an engineering leader within the ASME, for co-founding the Noise Control and Acoustics Division."

New editor of National Council of Acoustical Consultants newsletter

Neil T. Shade was named the new editor of the National Council of Acoustics Consultants (NCAC) newsletter in February 2005. He succeeds William J. Cavanaugh and Peter Allen,

Andrea Prosperetti

who produced the newsletter for many years.

Army to award Corps' researchers for success in acoustics

Donald G. Albert and D. Keith Wilson, researchers with the U.S. Army Engineer Research and Development Center's (ERDC) Cold Regions Research and Engineering Laboratory (CRREL), were chosen to receive

Department of the Army Research and Development awards.

Donald Albert, a research geophysicist, will receive this award with three colleagues from the Army Research Laboratory located in Adelphi, MD. His award-winning program is "Development of Acoustic/Seismic Components of Sympathetic Detonator." He specializes in outdoor sound propagation in different envi-

ronments, i.e., summer, winter, jungle, forest, and urban.

D. Keith Wilson, a research physical scientist, specializes in outdoor sound propagation and near-earth meteorology. His award-winning program is "Utility of Quasi-Wavelets for Problems Involving Sound Propagation in the Atmosphere."

In the awards notification letter, Thomas H. Killion, Deputy Assistant Secretary of the Army (Research and Technology), stated: "These scientists have distinguished themselves through their proven scientific and technical excellence. Their individual contributions promise to improve the Army's capability, and to enhance our national defense and welfare. Their hard work and dedication brings great credit to themselves, their organizations, the U.S. Army Corps of Engineers and the U.S. Army."

The awards will be presented at the 24th Army Science Conference in Orlando, FL, on 2 December.

Connecticut museum elects ASA member its new Chairman of the Board of Trustees

The Discovery Museum and Planetarium announced the election of Philip Rubin as its new Chairman of the Board of Trustees. Dr. Rubin is CEO, Vice President, and a Senior Scientist at Haskins Laboratories in New Haven, CT. He is also a Professor Adjunct in the Department of Surgery, Otolaryngology, at the Yale University School of Medicine and a Research Affiliate in the Department of Psychology at Yale University.

Dr. Rubin is a Fellow of the Acoustical Society of America, the American Association for the Advancement of Science, and the American Psychological Society.

ASA members elected fellows of AAAS

The following ASA members were elected Fellows of the American Association for the Advancement of Science (AAAS):

Mark A. Clements, professor in the School of Electrical and Computer Engineering at Georgia Institute of Technology, for contributions to speech signal processing and robust speech recognition.



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ISEF Winners and Charles E. Wallace

William Marshall Leach, professor in the School of Electrical and Computer Engineering at Georgia Institute of Technology, for contributions to electro-acoustics and nearfield antenna measurements.

H. Vincent Poor receives IEEE medal

H. Vincent Poor, George Van Ness Lothrop Professor in Engineering, Princeton University, was awarded the IEEE James H. Mulligan Education Medal “for leadership in electrical engineering education through inspired teaching, a classic textbook, innovative curricular development and research.”

Dr. Poor is a member of the National Academy of Engineering, and is a Fellow of the Acoustical Society of America, the AAAS, and other organizations. He has served as President of the IEEE Information Theory Society, and as a member of the IEEE Board of Directors. He is currently Editor-in-Chief of the IEEE Transactions on Information Theory.

The medal, which was established in 1956, is awarded annually.

ASA Fellow elected NAE Councillor

C. Dan Mote, Jr., president and Glenn Martin Institute Professor of Engineering, University of Maryland, was reelected to a three-year term as councillor in the National Academy of Engineering 2005 election.

ASA presents awards at 2005 Intel International Science and Engineering Fair (ISEF)

The 2005 Intel International Science and Engineering Fair was held at the Phoenix Civic Plaza Convention Center on 8–14 May, with 1444 high school students from more than 40 countries attending the competition. More than 1200 judges reviewed the projects and interviewed the students.

The ASA first place award of \$1000 was presented to the

team of Pen-Yuan Hsing and Wei-Kang Huang for their project titled *Enhanced Cooling of Microelectronic Devices by Using the Thermoacoustic Effect*. The students designed and built a thermoacoustic engine powered by a heated NiCr wire. In evaluating its performance, they measured the radiation, convection, conduction, and acoustic radiation. The heat generated by a microelectronic device is enough to trigger the thermoacoustic effect. The judges visited this project several times in order to better understand and appreciate the very high level of work. Mr. Hsing and Mr. Huang are students at the Taipei Municipal Lishan Senior High School in Taipei, Taiwan, R.O.C.

An Honorable Mention Award was given to Courtney Anne Rafes for her project titled *An Ear to the Track: An Ultrasonic Train Wreck Avoidance System*. In this experimental study, Ms. Rafes showed that the measurable ultrasonic waves can be sent from a train through the track to another train. This method can be used to avoid train collisions. Ms. Rafes is a student at the Northwest High School in Justin, Texas.

Also receiving an Honorable Mention Award was Jhe-Rhong Wu for his project *Phylogeneic Analysis of Crickets by Acoustic Behavior and Mitochondrial Sequencing*. The acoustical aspect of Mr. Wu’s studies included measuring a cricket’s main frequency and its time characteristics such as pulse number, chirp rate and length of chirp. The differences in acoustic behavior can be regarded as an identification index among species. Mr. Wu is a student at the Taipei Municipal Chien-Kuo Senior High School in Taipei, Taiwan.

All four students also received a one-year membership in the Acoustical Society of America.

The ASA judges for 2005 were Mr. Duane Reynolds, retired aerospace engineer, Dr. Michael Dorman, Professor of Speech and Hearing, Arizona State University, and Dr. C.E. Wallace, Professor Emeritus, Aerospace Engineering, Arizona State University. Dr. Wallace was the chair of the judging team and presented the ASA awards at the awards ceremony. The judging team was extremely impressed with the quality of the student projects and of the energy and drive that each student exhibited. It was indeed a pleasure to spend these few days with these students.

These fairs have been held annually for the past 55 years. The next Intel ISEF will be held in Indianapolis, IN, on 7–13 May 2006 and in Albuquerque, NM, in 2007. [Charles E. Wallace]

MIT Lemelson Prize awarded for acoustic invention

The Massachusetts Institute of Technology (MIT) and the Lemelson Foundation awarded the 2005 Lemelson-MIT prize to Elwood Norris for inventing technology that uses ultrasonic energy to focus sound exactly where it is targeted. The \$500,000 Lemelson-MIT prize is considered one of the most prestigious awards exclusively for inventors.

Norris is founder and chairman of San Diego-based American Technology Corp., which is developing Norris’ “Hypersonic Sound” technology. In 2002, the first commercial version of the device became available.

The prize was awarded on 22 April at a ceremony at the Oregon Museum of Science and Industry in Portland, OR.

Additional details can be found at web.mit.edu/newsoffice/2005/lemelson-norris.html.

Report on the ASA Vancouver meeting by Society of Physics Students reporter

Kenneth Bader, a member of the Society of Physics Students (SPS) and an SPS reporter, wrote an article for the SPS Web site about his experiences in attending the Acoustical Society's spring 2005 meeting held in Vancouver, Canada. This report can be found on the SPS Web site at: www.spsnational.org/societynews/asa_05_report.htm.

Grants available from American Tinnitus Association

The American Tinnitus Association (ATA) awards as much as \$100,000 annually for up to three years for researchers directly concerned with tinnitus. The ATA invites grant applications twice annually, with deadlines of 30 June and 31 December.

The ATA Research Grant Program offers \$50,000 per year for up to two years or a maximum of \$100,000 per year for up to three years for exceptional projects. A \$10,000 Student Research Grant is also available for doctoral candidates and medical residents to use for tinnitus-related research to help them in their degree candidacy. For grant applications and guidelines, contact the American Tinnitus Association at www.ata.org or 1-800-634-8978.

Nanotechnology news

The annual meeting of the International Congress of Nanotechnology (ICNT) 2005 will be held on October 31–November 4, 2005, at the San Francisco Airport Marriott Hotel. For full details, visit www.nanotechcongress.com/.

ASTM International, one of the largest voluntary standards development organizations in the world, has announced the formation of a new committee, E56, to develop international consensus standards, definitions, terminology, and pro-

cedures covering nanotechnology. ASTM meetings are open to all interested individuals. For information on Committee E56, contact Pat A. Picariello, director of development operations at ASTM International, phone 610-832-9720; ppicarie@astm.org; or visit www.astm.org/

The Institute of Environmental Sciences and Technology (IEST) has been accepted as a voting member of the ANSI-accredited U.S. Technical Advisory Group (TAG) to Technical Committee 229, newly formed by the International Organization for Standardization (ISO) to address the nanotechnology disciplines. In this role, IEST will represent the environmental sciences at the cutting edge of global standards development for the emerging technologies.

ISO/TC 229 Nanotechnologies will produce standards for classification, terminology and nomenclature, basic metrology, calibration and certification, and environmental issues.

More information is available online at www.iest.org.

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Violin Society of America publishes new journal

The Violin Society of America (VSA) announced the publication of a new journal, *VSA Papers*, to be published biannually beginning with the premiere issue of May 2005. Each issue will include articles on a broad array of subjects of interest to violin makers, as well as historians, violin dealers, and stringed-instrument musicians. The contents will include: violin and bow making methods, repair and preservation techniques, practical acoustics for violin makers, materials and accessories (wood, varnish, strings, etc.), instrument set-up and methods for improving tone, innovations in instrument design, history and documentation of instruments and bows of the violin family, biographies of makers and players, playing and performance, and market trends.

The initiation of *VSA Papers* was stimulated by the merger in 2004 of the Catgut Acoustical Society with the VSA, which included formation of the CAS Forum focused on reports of musical acoustics research and practical applications to stringed instruments. Like its predecessor, the *CAS Journal*, all articles in *VSA Papers* will be peer reviewed by knowledgeable experts.

Further information can be obtained from the VSA office at 48 Academy Street, Poughkeepsie, NY 12601; tel.: (845) 452-7557, fax: (845) 452-7618; or www.vsa.to/.

ASA membership directory and online handbook to be updated in 2006

The Acoustical Society of America Online Handbook will be updated in early 2006. The handbook contains useful information for members of the Society including membership benefits, meetings, standards, fellowships scholarships, prizes and grants, and detailed instructions for members who wish to become involved in the planning of special sessions at ASA meetings.

The Online Membership Directory is updated monthly. The biannual printed edition will be issued in early 2006 and may be purchased on 2006 membership renewal invoices.

RH Lyon staff joins Acentech

On 15 July 2005 Acentech announced its new RH Lyon (RHL) Division, which consults in product noise quality, machinery diagnostics, and active noise and vibration control. This division designs and engineers products for sound, vibration, and reliability. These areas of expertise complement Acentech's long-standing services in architectural acoustics, audiovisual system design, information technology, and transportation, community and industrial noise control.

RH Lyon has been a leading resource for industry for more than 30 years. Notable clients include Ford Motor Company, Gillette, General Electric, Raytheon Corporation, Smithsonian Astrophysical Laboratory, and Xerox Corporation; typical clients include product manufacturers and design firms.

Knowles Acoustics named EDN 2004 Innovation of the Year winner

Knowles Acoustics, a long-time sustaining member of the Acoustical Society of America, has been selected from a

field of hundreds as a winner in the 15th Annual EDN Innovation (Innovator) Awards. This awards program honors outstanding electronic products ranging from integrated circuits to test equipment—as well as the creative engineers who invent them.

The EDN Innovation Awards recognize significant advancements in products and technologies that were shipped in volume in the 2004 calendar year. This year's program featured 13 product categories. Knowles Acoustics' "Zero-Height" SiSonic MemS-based SMD Microphone was selected winner in the Passive Components/Sensors category. EDN, the premier design magazine of the electronics industry, is published by Reed Business Information.

For more information, visit www.knowles@acoustics.com.

Indian Ocean earthquake

A story on the undersea sounds generated by the December 2004 Indian Ocean earthquake appears on the Discovery Channel's Web site at dsc.discovery.com/news/briefs/20050718/megaquake.html.

The article reports on the study by Catherine de Groot Hedlin, whose paper on the earth-shattering rumble appears in the current issue of *Geophysical Research Letters*.

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U.S.A. meetings calendar

Listed below is a summary of meetings related to acoustics to be held in the United States in the near future.

2005

- 17–21 Oct 150th Meeting of the Acoustical Society of America joint with Noise-Con, Minneapolis, Minnesota, [Acoustical Society of America, Suite 1NO1, 2 Huntington Quadrangle, Melville, NY 11747-4502; tel.: 516-576-2360; fax: 516-576-2377; e-mail: asa@aip.org; Web: asa.aip.org].
- 27–29 Oct 5th International Symposium on Therapeutic Ultrasound, Boston, MA [www.istu2005.org; e-mail: info@istu2005.org].
- 18–20 Nov Annual Convention, American Speech-Language-Hearing Association, San Diego, CA [ASHA, 10801 Rockville Pike, Rockville, MD 20852; 1-800-498-2071, 301-897-5700 TTY; fax: 301-571-0457; Web: www.asha.org/about/events/convention/].

2006

- 30 Jan–2 Feb IMAC-XXIV Conference and Exposition on Structural Dynamics, St. Louis, MO [Society for Experimental Mechanics, 7 School St., Bethel, CT 06801; tel: 203-790-6373; fax: 203-790-4472; e-mail: sem@sem1.com; Web: www.sem.org].
- 9–12 Feb 46th Annual Convention, Illinois Speech-Language-Hearing Association, Rosemont, IL [ISHA, 230 E. Ohio St., Suite 400, Chicago, IL 60611-3265; tel.: 312-644-0828; fax: 315-644-8557; Web: www.ishail.org].
- 16–18 Feb 31st Annual Conference, National Hearing Conservation Association, Tampa, FL [NHCA, 7995 E. Prentice Ave., Suite 100 East, Greenwood Village, CO 80111-2710; tel: 303-224-9022; fax: 303-770-1614; e-mail: nhca@gwami.com; Web: www.hearingconservation.org].
- 6–9 June 151st Meeting of the Acoustical Society of America, Providence, RI [Acoustical Society of America, Suite 1NO1, 2 Huntington Quadrangle, Melville, NY 11747-4502; tel.: 516-576-2360; fax: 516-576-2377; e-mail: asa@aip.org; Web: asa.aip.org].
- 17–21 Sept INTERSPEECH 2006 (ICSLP 2006), Pittsburgh, PA [www.interspeech2006].

The month/year notation refers to the issue in which a complete meeting announcement appeared.**AT**

- 28 Nov–2 Dec 152nd Meeting of the Acoustical Society of America joint with the Acoustical Society of Japan, Honolulu, HI [Acoustical Society of America, Suite 1NO1, 2 Huntington Quadrangle, Melville, NY 11747-4502; tel.: 516-576-2360; fax: 516-576-2377; e-mail: asa@aip.org; Web: asa.aip.org].

- 3–6 Dec INTER-NOISE 2006, The 2006 International Congress and Exposition on Noise Control Engineering, Honolulu, Hawaii [Institute of Noise Control Engineering, INCE/USA Business Office, Iowa State University, 212 Marston, Ames, IA 50011-2153; tel.: 515-294-6142; fax: 515 294 3528; e-mail: IBO@inceusa.org; Web: www.inceusa.org

2007

- 4–8 June 153rd Meeting of the Acoustical Society of America, Salt Lake City, UT [Acoustical Society of America, Suite 1NO1, 2 Huntington Quadrangle, Melville, NY 11747-4502; tel.: 516-576-2360; fax: 516-576-2377; e-mail: asa@aip.org; Web: asa.aip.org].

- 28 Nov–2 Dec 154th Meeting of the Acoustical Society of America, New Orleans, LA [Acoustical Society of America, Suite 1NO1, 2 Huntington Quadrangle, Melville, NY 11747-4502; tel.: 516-576-2360; fax: 516-576-2377; e-mail: asa@aip.org; Web: asa.aip.org].

2008

- 29 Jun–4 Jul 2nd Joint Meeting of the Acoustical Society of America and the European Acoustics Association with the French Acoustical Society, Paris, France [Acoustical Society of America, Suite 1NO1, 2 Huntington Quadrangle, Melville, NY 11747-4502; tel.: 516-576-2360; fax: 516-576-2377; e-mail: asa@aip.org; Web: asa.aip.org].
- 28 Jul–1 Aug 9th International Congress on Noise as a Public Health Problem (Quintennial meeting of IC BEN, the International Commission on Biological Effects of Noise). Foxwoods Resort, Mashantucket, CT [Jerry V. Tobias, IC BEN 9, Post Office Box 1609, Groton CT 06340-1609; tel. 860-572-0680; e-mail icben2008@att.net; Web: www.icben.org.].