

GRADUATE STUDY at



The Department of Mechanical Engineering and Materials Science (MEMS) offers graduate degree programs that emphasize fundamental and applied aspects of mechanical engineering and materials science. The graduate educational and research programs lead to degrees of Master of Science (MS), Doctor of Philosophy (PhD), Master of Mechanical Engineering (MME), and Master of Materials Science (MMS). The MS and PhD degrees require research and theses, while the MME and MMS are non-thesis degrees.

Graduate education and research in mechanical engineering includes the traditional subjects such as mechanics, fluid dynamics, heat transfer, dynamics and control, and robotics. Specialized areas of interest of our outstanding faculty include computational mechanics, stochastic mechanics, biomedical systems, and aerospace sciences.

The graduate program in materials science and engineering is an interdisciplinary program with its core activity in advanced materials research. Special research opportunities include nanotechnology, metals physics, statistical mechanics, metallic solid thermodynamics, materials chemistry, aspects of composites, coatings and thin films, and interface science. Materials science has several faculty with joint appointments in other science and engineering areas, assuring a diverse program in a broad materials science field.

The MEMS graduate program actively partners with other departments, campus institutes, the Texas Medical Center, and industry in its educational and research activities. These collaborations reflect the comprehensive scope of the research activities that make graduate study in MEMS a rewarding experience.

#### **DEGREE REQUIREMENTS**

The M.S. degree requires successful completion of at least 30 semester hours of study (including six hours of thesis), of which 24 hours must have been at Rice. Upon completion of the thesis, students are required to defend the M.S. dissertation in a public oral examination. The non-research master's degree requires the completion of at least 30 semester hours of course work approved by the department.

The Ph.D. degree requires successful completion of 48 semester hours of course work, a minimum of 90 total semester hours (thesis research + course work) and an oral qualifying examination. Graduate students are required to defend the dissertation for their Ph.D. in a public oral examination.

The minimum residence requirement is four semesters for the Ph.D. degree and one semester for the master's degree. All entering graduate students pursuing a thesis degree will be subject to the Preliminary Can¬didacy Evaluation for the highest degree they intend to pursue. Students will be evaluated within the second semester of enrollment.

#### **FACULTY**

**Pulickel Ajayan.** Benjamin M. and Mary Greenwood Anderson Professor of Mechanical Engineering and Materials Science. Ph.D. (1989) Northwestern University. Dr. Ajayan's research has focused on various applications of carbon nanotube architecture. In 2006, he was named a Research Leader in *Scientific American* 50 and was awarded the Materials Research Society Medal. In 1998, Dr. Ajayan received a National Science Foundation CAREER early development award. He spent two years as a research scientist at the CNRS Laboratoire de Physique des Solides, a year and a half as an Alexander von Humboldt fellow at the Max-Planck-Institut für Metallforschung and a year as a visiting professor at the Université Louis Pasteur's Institut de Science et d'Ingénierie Supramoléculaires. He has published around 350 journal papers that have been cited more than 23,500 times.

**J. E. Akin.** Professor of Mechanical Engineering, Professor of Computational and Applied Mathematics. Ph.D. (1968) Virginia Polytechnic Institute. Dr. Akin's fields of interest are finite element analysis, computer-aided design and object-oriented programming. His research activities involve adaptive finite element analysis and the use of computational mechanics in industrial applications. He is the author of six textbooks and has published more than 120 papers. Dr. Akin is a fellow of the American Society of Mechanical Engineers (ASME). He is a member of the American Society of Civil Engineers, the Society of Petroleum Engineers, the American Society for Engineering Education and the editorial board of the journal *Engineering Computations*.

# GRADUATE STUDY IN MECHANICAL ENGINEERING AND MATERIALS SCIENCE

RICE UNIVERSITY

WWW.MEMS.RICE.EDU

FOR ADMISSION IN 2014

Enrique V. Barrera. Professor of Mechanical Engineering and Materials Science. Ph.D. (1987) University of Texas at Austin. Dr. Barrera's research interests are in the areas of composites, coatings and thin film interface systems, with special interest in nanotechnology, where he develops new materials based on fullerenes and nanotubes. He is an NSF National Young Investigator and recipient of two Hispanic Engineer National Achievement Award Conference Awards in Technical Achievement and Education. He also received the 2002 Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring. He is a member of the American Society of Materials and the Materials Society. Dr. Barrera established the Materials Technology Consortium and the Outreach with Mexico Programs at Rice. He is director for the Infrastructure Center for Advanced Materials and a registered professional engineer in the state of Texas. He is the technical lead for the "Changing the Face of Math and Sciences" Program funded by the Air Force. Dr. Barrera was selected as a 2006 Hispanic Business Magazine's 100 Most Influential.

000

Andrew R. Barron. Charles W. Duncan, Jr.–Welch Chaired Professor of Chemistry and Professor of Materials Science. Ph.D. and D.I.C. (1986) Imperial College of Science and Technology. Dr. Barron's fields of interest involve the interface between nanotechnology and biological systems as well as the application of nanotechnology in environmental engineering and green chemistry. He has published more than 250 papers and is the inventor on numerous patents. He is a fellow of the Royal Society of Chemistry, a recipient of the Humboldt Senior Scientist Research Award and the first recipient of the Norman Hackerman Award in Chemical Research from the Robert A. Welch Foundation. Dr. Barron is on the editorial boards of several journals and is a science adviser to the Houston Fire Department.

000

Yildiz Bayazitoglu. Harry S. Cameron Professor in Mechanical Engineering and Materials Science. Ph.D.(1974) University of Michigan. Dr. Bayazitoglu's research interests are in the area of thermal sciences, including thermal properties; radiation heat transfer; and problems of combined conduction, convection and radiation in manufacturing and material processing. In 1999, Dr. Bayazitoglu received the George R. Brown Award for Superior Teaching at Rice University. She was a recipient of the Society of Women Engineers' National Distinguished Engineering Educator Award in 1997. In 2002, she received the Will Rice College Outstanding Associate Award, the Graduate Student Association Mentoring and Teaching Award and the Rich Inventor Award. She is the 2003 recipient of the Chance Prize for Excellence in Teaching. She is a fellow of ASME, fellow of AAAS, associate fellow of AIAA, recipient of the 2004 Heat Transfer Memorial Award and a member of the U.S. Scientific Committee of the Center for International Heat Transfer. Dr. Bayazitoglu is an editorial board member of the *Thermal* Science and Engineering Journal and the editor-in-chief of the International Journal of Thermal Sciences.

000

Michael M. Carroll. Burton J. and Ann M. McMurtry Professor of Computational and Applied Mathematics and Professor of Mechanical Engineering. Ph.D. (1965) Brown University; D.Sc. (1979) National University of Ireland. Dr. Carroll's research interests are in solid mechanics, the mechanics of porous materials, and mechanics and sport. He is a member of the National Academy of Engineering; fellow of the American Academy of Arts and Sciences, American Academy of Mechanics; fellow and honorary member of the American Society of Mechanical Engineers. Dr. Carroll is a former chair of the Applied Mechanics Division of ASME and a former president of the Society for Engineering Science and of the American Academy of Mechanics. He is chair of the Peer Review Committee of the HENAAC Hall of Fame and a recipient of the HENAAC Chairman's Award. He is an adjunct professor of mathematical physics at the National University of Ireland, Galway; and he received an L.L.D. (honoris causae) from the National University of Ireland. He held the Shell Distinguished Chair at the University of California, Berkeley, 1983–88, and he served as the dean of the George R. Brown School of Engineering at Rice University, 1988–98.

Andrew Dick. Assistant Professor of Mechanical Engineering and Materials Science. Ph.D. University of Maryland. Dr. Dick's research focuses on nonlinear vibrations and dynamics, system modeling, and signal analysis with applications to resonant micro-structures, atomic force microscope, and structures subjected to impulsive loading. He was a Air Force Office of Scientific Research Summer Faculty Fellow in 2008 and 2010. He is a member of the American Society of Mechanical Engineering, the American Society of Engineering Education, SAE, and Sigma Xi.

000

Fathi H. Ghorbel. Professor of Mechanical Engineering and Bioengineering, Schlumberger Chair in Mechatronics and Robotics. Ph.D. (1991) University of Illinois at Urbana–Champaign. A joint member of the Departments of Mechanical Engineering and Bioengineering, Dr. Ghorbel has research interests in the areas of control systems, robotics and biomedical systems. He is a Management Committee Member of the IEEE/ASME Transactions on Mechatronics, and a past Associate Editor of the IEEE Transactions on Control Systems Technology, the ASME Journal of Dynamic Systems, Measurements, and Control, and the International Journal of Robotics and Automation. He is a member of the American Society of Mechanical Engineers and a senior member of the Institute of Electrical and Electronics Engineers.

000

Jun Lou. Assistant Professor of Materials Science. Ph.D. (2004) Princeton University. Dr. Lou's research interests include nanomaterial synthesis, nanomechanical characterization and nanodevice fabrication for energy and biomedical applications. He is a recipient of the Air Force Office of Scientific Research Young Investigator Award and ORAU Ralph E. Powe Junior Faculty Enhancement Award. Dr. Lou is a member of the ASME Multifunctional Materials Committee and the TMS Nanomechanical Materials Behavior Committee and Biomaterials Committee. He also is a member of the Materials Research Society.

000

Rex B. McLellan. Professor Emeritus of Materials Science. Ph.D. (1962) Leeds University. An active researcher in thermodynamics, kinetics and statistical mechanics of metallic solid solutions, Dr. McLellan is an internationally recognized authority in his field. He has published and lectured extensively at universities and laboratories throughout the world. He is a member of the American Society for Metals, the American Institute for Mining and Metallurgical Engineers and the society of Sigma Xi and is a distinguished scientist of Tau Beta Pi. He has twice received the U.S. Senior Scientist Award of the German government.

000

Andrew J. Meade, Jr. Professor and Chair of Mechanical Engineering. Ph.D. (1989) University of California at Berkeley. Dr. Meade's research interests include the development of parallel, distributed and adaptive computing tools for experimental and numerical fluid dynamics and applications of computational intelligence. He is an associate fellow of the American Institute of Aeronautics and Astronautics as well as a member of the AIAA technical committee on intelligent systems. He also the chair of the American Society of Mechanical Engineers' Applied Mechanics Division/Fluid Dynamics technical committee and a member of the American Physical Society and the American Society for Engineering Education.

000

Angelo Miele. Research Professor and Foyt Professor Emeritus of Aerospace Sciences and Mathematical Sciences. Dr.A.E. (1946) University of Rome. Dr. Miele's research deals with flight mechanics, astrodynamics, applied aerodynamics, optimization theory and numerical methods. He has authored two books and served as a member of several national technical committees. Dr. Miele is editor of the *Journal of Optimization Theory and Applications* and editor of *Mathematical Concepts and Methods in Science and Engineering.* He is an honorary fellow of AIAA, a fellow of the American Astronautical Society and a member of the National Academy of Engineering, the Russian Academy of Science and the International Academy of Astronautics.

Satish Nagarajaiah. Professor of Civil and Mechanical Engineering, Ph.D. (1990) State University of New York at Buffalo. Dr. Nagarajaiah's teaching and research interests are in the areas of structural dynamic systems and control; smart-structures-materials-sensors; system identification; monitoring; applied nanotechnology; offshore structures; earthquake and wind engineering. His research is funded by the National Science Foundation, National Aeronautics and Space Administration, Department of Energy, Air Force Office of Scientific Research, other state and Federal Agencies. National Science Foundation has awarded him the prestigious CAREER award for his research in structural control. Dr. Nagarajaiah currently serves as the editor of the structural control and health monitoring [Wiley International Journal], and serves on the editorial board of four other international journals. He currently serves as the past chair and member of ASCE Structural Engineering Institute, Technical Activities Division Executive Committee that oversees all technical committees in the Structural Engineering Institute. He also serves as a member of the board of directors of the international association of structural control and monitoring. He served as the chairman of the U.S. panel on structural control and monitoring (2006-2008). He was the founding chair structural health monitoring and control committee (2004-2006), ASCE-Engineering Mechanics Institute, and chair of the structural control committee (1998-2002), ASCE Structural Engineering Institute. He is a member of ASME and AIAA. (Visit www.ruf.rice.edu/~nagaraja for full publication details.) 000

Marcia O'Malley. Associate Professor in Mechanical Engineering and Associate Professor of Computer Science. Ph.D. (2001) Vanderbilt University. Dr. O'Malley's research interests include haptic feedback and shared control between robotic devices and their human users for training and rehabilitation in virtual environments, control methodologies for improved performance of haptic interfaces and teleoperator systems, nanorobotic manipulation with haptic (force) feedback, and educational haptics. She is a 2004 Office of Naval Research Young Investigator and the recipient of the NSF CAREER Award in 2005. In 2008, she received the George R. Brown Award for Superior Teaching at Rice University. Additionally, she is chair of the IEEE Technical Committee on Haptics. She is a former Associate Editor for the IEEE Transactions on Haptics and currently serves on the editorial board of the ASME/IEEE Transactions on Mechatronics.

Pol D. Spanos. Lewis B. Ryon Professor of Mechanical Engineering and Civil Engineering. Ph.D. (1976) California Institute of Technology. Dr. Spanos's research interests are in the area of vibration and dynamics with emphasis on nonlinear and random aspects and applications to aerospace, biomedical, petroleum and structural engineering. In 1982 and 1991, he received ASME Gold Medals for outstanding achievement, and in 1984, he was named a NSF Presidential Young Investigator. In 1992, Dr. Spanos received the Freudenthal Medal for lifetime contributions to probabilistic mechanics. He received the George R. Brown Award for Superior Teaching at Rice University in 1995 and 1996 and a Humboldt Research Award for Senior Scientists from the A. von Humboldt Foundation, Germany, in 1995. He serves on the editorial boards of several international journals, and he is the editor-in-chief of the International Journal of Non-linear Mechanics and the Journal of Probabilistic Engineering Mechanics. He is a fellow of AAM, ASCE, ASME and AvHAA and a member of the National Academy of Engineering (U.S.A.), the National Academy of Greece and the National Academy of Engineering of India.

**Ilinca Stanciulescu.** Assistant Professor of Civil and Mechanical Engineering, Ph.D. (2005) Duke University. Dr. Stanciulescu's research focuses on computational mechanics (non-linear finite elements), constitutive modeling of materials, multiscale and multiphysics formulations, non-linear dynamics and stability of complex systems. She is a member of the United States Association for Computational Mechanics (USACM), the Society for Industrial and Applied Mathematics (SIAM),

000

the American Mathematical Society (AMS), the American Society of Civil Engineers (ASCE), the American Society of Mechanical Engineers (ASME), and the American Institute of Aeronautics and Astronautics (AIAA). Before joining the Ph.D. Program at Duke University, she served as a junior lecturer (1996-2000) in the Department of Strength of Materials of the Technical University of Civil Engineering (T.U.C.E.) in Bucharest, Romania. She has also worked as a structural design engineer (full-time in 1995 before joining the faculty at T.U.C.E., and part-time thereafter). Prior to joining Rice University as Assistant Professor in July 2009 she served as Assistant Professor in the Civil and Environmental Engineering Department at the University of Illinois, Urbana-Champaign (2006-2009) and as Postdoctoral Research Associate in the Duke University Computational Mechanics Laboratory (2005-2006).

000

Tayfun E. Tezduyar. James F. Barbour Professor in Engineering. Ph.D. (1982) California Institute of Technology. Dr. Tezduyar holds an NSF Presidential Young Investigator Award and is a Fellow of the American Society of Mechanical Engineers, the U.S. Association for Computational Mechanics, the International Association for Computational Mechanics, the American Academy of Mechanics and the School of Engineering at the University of Tokyo. He received the Computational Mechanics Award of the Japan Society of Mechanical Engineers, the Computational Fluid Dynamics Award of the U.S. Association for Computational Mechanics and the Computational Mechanics Award of the International Association for Computational Mechanics. Dr. Tezduyar was awarded an honorary doctorate from the Slovak Republic. He is editor of Computational Mechanics and an associate editor of Mathematical Models and Methods in Applied Sciences. Dr. Tezduyar is the chair of the ASME Applied Mechanics Division, the largest of the six divisions in the ASME Basic Engineering Technical Group. Dr. Tezduyar's research focuses on computational fluid mechanics, fluid-structure interactions, cardiovascular fluid mechanics, computer modeling of parachutes, moving boundaries and interfaces and finite element methods. For more information on Dr. Tezduyar's research, see http://www.tafsm. org/~tezduyar/.

Edwin L. Thomas. Professor of Materials Science and Professor of Chemical and Biomolecular Engineering. Ph.D (1974) Cornell University. Dr. Thomas' research interests are currently focused on using 2D and 3D lithography, direct-write and self-assembly techniques for creating metamaterials with unprecedented mechanical and thermal properties. Dr. Thomas is the former head of the Department of Materials Science and Engineering at the Massachusetts Institute of Technology, a position he held from 2006 until his appointment at Rice. He was named Morris Cohen Professor of Materials Science and Engineering in 1989 and is the founder and former director of the MIT Institute for Soldier Nanotechnology (2002-2006). Before joining MIT, Thomas founded and served as co-director of the Institute for Interface Science and was head of the Department of Polymer Science and Engineering at the University of Massachusetts. He is a recipient of the 1991 High Polymer Physics Prize of the American Physical Society and the 1985 American Chemical Society Creative Polymer Chemist award. He was elected to the National Academy of Engineering in 2009, Inaugural Fellow of the Materials Society in 2008, Fellow of the American Association for the Advancement of Science in 2003 and Fellow of the American Physical Society in 1986. He wrote the undergraduate textbook, The Structure of Materials, and has coauthored more than 350 papers and holds thirteen patents. Currently he serves as the William and Stephanie Sick Dean of the George R. Brown School of Engineering at Rice University.

James M.Tour. T.T. and W.F. Chao Professor of Chemistry, Professor of Computer Science, and Professor of Mechanical Engineering and Materials Science. Ph.D. (1986) Purdue University. Postdoctoral training in synthetic organic chemistry at the University of Wisconsin and Stanford University. A synthetic organic chemist, Dr. Tour spent 11 years on the faculty of the Department of Chemistry and Biochemistry at the University.

000

000

sity of South Carolina before joining the Center for Nanoscale Science and Technology at Rice University in 1999. His scientific research areas include nanoelectronics, graphene electronics, carbon nanovectors for medical applications, "green carbon research" for enhanced oil recovery and environmentally friendly oil and gas extraction, graphene photovoltaics, chemical self-assembly, flame retarding polymer additives, carbon nanotube and graphene synthetic modifications, carbon composites, hydrogen storage on nanoengineered carbon scaffolds, synthesis of single-molecule nanomachines which include molecular motors and nanocars, use of the NanoKids concept for K-12 education in nanoscale science, Dance Dance Revolution and Guitar Hero science educational package development for middle school education, and methods for retarding chemical terrorist attacks. Tour has over 400 research publications and 50 patents.

Tour was elected Fellow of the American Association for the Advancement of Science (AAAS), 2009; he was ranked one of the Top 10 chemists in the world over the past decade, by a Thomson Reuters citations per publication index survey, 2009; won the Distinguished Alumni Award, Purdue University, 2009 and the Houston Technology Center's Nanotechnology Award in 2009. He won the Feynman Prize in Experimental Nanotechnology in 2008, the NASA Space Act Award in 2008 for his development of carbon nanotube reinforced elastomers and the Arthur C. Cope Scholar Award from the American Chemical Society for his achievements in organic chemistry in 2007. Tour was the recipient of the George R. Brown Award for Superior Teaching in 2007. He also won the Small Times magazine's Innovator of the Year Award in 2006, the Nanotech Briefs Nano 50 Innovator Award in 2006, the Alan Berman Research Publication Award, Department of the Navy in 2006, the Southern Chemist of the Year Award from the American Chemical Society in 2005 and The Honda Innovation Award for Nanocars in 2005.

000

Chao-Cheng Wang. Noah G. Harding Professor Emeritus of Computational and Applied Mathematics, Professor Emeritus of Mechanical Engineering. Ph.D. (1965) Johns Hopkins University. A joint member of the Departments of Mechanical Engineering and of Applied Mathematics, Dr. Wang has research interests primarily in the mathematical aspects of mechanics, principally in continuum mechanics, and his current research concerns nonlinear elasticity theory of inhomogeneous bodies.

000

Boris I. Yakobson. Professor of Mechanical Engineering and Materials Science and Professor of Chemistry. Ph.D. (1982) Russian Academy of Sciences. Dr. Yakobson's research interests are in theory and modeling of structure, kinetics and properties of materials, derived from both macroscopic and fundamental molecular interactions. Computational methods and simulation are used to visualize and enhance the understanding of underlying physics and to identify the efficient degrees of freedom in complex systems, especially in connecting different length scales of description. Dr. Yakobson serves as a scientific adviser for Cognitech, Inc. (Pasadena). He is an editorial board member of the *Journal of Nanoparticle Research* and a member of the American Physical Society and the Electrochemical Society.

#### **FACILITIES**

Graduate education and research are supported by state-of-the-art equipment within the department's main building, including a departmental computational and graphics facility. The powerful engineering OWLNET system of workstations and personal computers also are available to all MEMS students.

The MEMS department houses the Team for Advanced Flow Simulation and Modeling, the Advanced Thermal Processing Lab, the Biomedical System and Instrumentation Lab, the Dynamic Systems Vibrations and Control Lab and the Mechatronics and Haptic Interfaces Lab. The building includes a network of materials labs with two new electron microscopes, X-ray diffractometers, electron beam characterization systems, thin film equipment and advanced mechanical testing equipment to support research and education in materials science.

# FINANCIAL INFORMATION

Applicants who are made offers of admission to a thesis degree program with financial support, referred to as a *fellowship*, receive an award of a tuition waiver plus a monthly stipend for nine months. The tuition for 2012–13 is \$36,610. The MEMS monthly stipend is \$1,850. The tuition for Professional Master's Degree programs is \$30,000.

#### **CAMPUS VISIT**

We encourage you to visit Rice at any time for a firsthand look at the department and the beautiful, tree-lined campus near the heart of historic Houston. During your time here, you will not only visit with faculty, but usually you'll be hosted by current graduate students from whom you can learn more about graduate life and lifestyles in Houston. In the meantime, feel free to contact the department with any questions you may have about its programs or the university.

#### **HOW TO APPLY TO THE GRADUATE PROGRAM:**

- You will find application instructions on the following MEMS Web site: www.mems.rice.edu
- You can access the online applications and instructions from the MEMS webpage above.
- General information about Rice University graduate school admissions can be found at: graduate.rice.edu

## For further information:

• You may write to

Graduate Coordinator

Department of Mechanical Engineering and Materials Science-MS 321

Rice University P.O. Box 1892

Houston, TX 77251-1892 Phone: 713-348-3582

Fax: 713-348-5423

• Or e-mail: mems@rice.edu

Questions regarding the application process and applications should not be emailed to the MEMS faculty.

Transcripts should be submitted by mail to the address above. All other application materials should be uploaded to the online application.

A complete application must include:

- Official transcripts from all colleges and universities attended
- Three letters of recommendation with Rice University recommendation forms attached (Online letters of recommendation are available.)
- \$70 application fee
- Please request the Educational Testing Service (ETS) to send us:
  - 1.) Official GRE scores taken within the last three years
- 2.) Official Test of English as a Foreign Language (TOEFL) or the IELTS, if English is a second language

Most of our students are admitted for the fall semester each year, as our classes and programs are structured to begin in the fall.

For more information, visit our Web site: www.mems.rice.edu



# **ABOUT RICE AND HOUSTON**

Rice is a leading American research university—small, private and highly selective—distinguished by a collaborative, interdisciplinary culture and a global perspective. Only a few miles from downtown Houston, it occupies an architecturally distinctive, 285-acre campus shaded by nearly 4,000 trees. State-of-the-art facilities and laboratories, internationally renowned centers and institutes and one of the country's largest endowments support an ideal learning and living environment.

The university attracts a diverse group of highly talented students and faculty with outstanding graduate and professional programs in the humanities, social sciences, natural sciences, engineering, architecture, music and business. With just 2,275 graduate students and 3,485 undergraduates, it offers an unusual opportunity to forge close relationships with eminent faculty scholars and researchers and the option to tailor graduate programs to specific interests.

Houston offers all the expected educational, cultural and com-

mercial advantages of a large urban center, and more. It's home of the Texas Medical Center, the largest concentration of medical schools, hospitals and research facilities in the world, as well as several other universities. Rice has cooperative programs with the University of Houston, Baylor College of Medicine, the University of Texas Health Science Center and Texas Southern University. Houston is one of the few U.S. cities with resident companies in all four major performing arts—drama, ballet, opera and symphony. It also boasts a museum district featuring exhibits of national and international prominence.

As urban as it is, Houston also is a surprisingly green city. Houstonians enjoy the outdoors in more than 300 municipal parks and 120 open spaces, and many frequent the beach at Galveston Island, only a 45-minute drive away. Other short trips include Austin, the state's capital, and historic San Antonio, both of which are a little more than three hours away.

## FOR MORE INFORMATION, CONTACT:

Rice University

Department of Mechanical Engineering and Materials Science-

MS 321

P.O. Box 1892 Houston, TX 77251-1892

Phone: 713-348-3582 Fax: 713-348-5423 E-mail: mems@rice.edu Web site: www.mems.rice.edu

#### FOR ADDITIONAL INFORMATION:

Rice University homepage: www.rice.edu

Rice University Office of Graduate and Postdoctoral

Studies homepage:

graduate.rice.edu

Rice University Office of International Students and

Scholars (OISS) homepage:

oiss.rice.edu

Graduate Student Association homepage:

gsa.rice.edu

City of Houston homepage:

www.houstontx.gov

Houston information from the *Houston Chronicle*:

www.chron.com

Houston information from the Greater Houston Partnership:

www.houston.org

Houston information from Citysearch:

http://houston.citysearch.com

