

## 2010 Society Award Winners Announced

### Arthur Casagrande Professional Development Award

*The Arthur Casagrande Professional Development Award is presented in recognition of outstanding accomplishments as evidenced by completed works, reports or papers in the field of geotechnical engineering. The award was established to provide professional development opportunities for outstanding young practitioners, researchers and teachers of geotechnical engineering.*

The 2010 Arthur Casagrande Professional Development Award is presented to **Scott J. Brandenburg, Ph.D., A.M.ASCE** and **Amy B. Cerato, Ph.D., P.E., M.ASCE**.

**Scott J. Brandenburg, Ph.D., A.M.ASCE**, is recognized for outstanding contributions to characterization of lateral spreading efforts on pile foundations and engineering applications of geophysics. Professor Brandenburg's research interests are related to geotechnical earthquake engineering with emphasis on the behavior of pile foundations in liquefied and laterally spreading ground, applications of geophysics to non-invasively image subsurface soil properties and embedded objects, the seismic performance of earthen levees founded on peaty organic soils, and physical testing and analysis of seismic site response under extreme loading conditions. He has compiled an extensive record of publications in top journals and conference proceedings, presentations at top conferences, and impact in engineering practice. Professor Brandenburg generously donates his time to professional societies including ASCE/GI and EERI through service on numerous boards and committees and journal paper reviews. Particularly noteworthy is his outstanding service as advisor to numerous student professional societies.



**Amy B. Cerato, Ph.D., P.E., M.ASCE** is honored for her outstanding contributions in research, teaching, and service to the geotechnical engineering profession. **Dr. Cerato** has rapidly established an outstanding record in geotechnical research and education focusing on expansive soils, soil stabilization and robust foundations for marginal soils. The depth and breadth of her professional accomplishments in geotechnical engineering represent an early career geotechnical engineer who has already created significant works, furthered the profession and shows great promise to continue her outstanding contributions.

### Columbia Medal

*The Award is granted for sustained outstanding contribution to the advancement of aerospace engineering, sciences and technology in at least one of the following areas: teaching, research, design, development, planning, construction, management, or direct participation in space-borne missions and/or ground-support activities.*



The 2010 Columbia Medal is presented to **Harrison H. Schmitt, Ph.D., A.M.ASCE** for sustained outstanding contribution advancing aerospace engineering as a scientist-astronaut and for his contributions as pilot of the lunar module for Apollo 17. Born in Santa Rita, New Mexico, Dr. Schmitt grew up in nearby Silver City. He received a B.S. degree in science from the California Institute of Technology in 1957 and then spent a year studying geology at the University of Oslo in Norway. He received a Ph.D. in geology from Harvard University in

1964, based on his geological field studies in Norway. In December of 1972 as Apollo 17 astronaut, he became the only scientist to set a foot on the Moon. In August 1975, Schmitt resigned from NASA and was elected as a US Senator from New Mexico. Dr. Schmitt is chair of the NASA Advisory Council, whose mandate is to provide technical advice to the NASA Administrator. Dr. Schmitt is an adjunct professor of engineering physics at the University of Wisconsin–Madison. He is the founder and serves as chairman of Interlune Intermars Initiative Inc., an organization whose goal is to advance the private sector's acquisition and use of lunar resources. Dr. Schmitt has provided an outstanding contribution to the advancement of aerospace engineering, sciences and technology.

### **Simon W. Freese Environmental Engineering Award and Lecture**

*The Simon W. Freese Environmental Engineering Award and Lecture is awarded to a distinguished environmental engineer whom the ASCE Executive Director will invite to deliver a lecture at a given meeting of the Society.*



The 2010 **Simon W. Freese Environmental Engineering Award and Lecture** is presented to **Jerald Schnoor, Ph.D., P.E., M.ASCE, NAE** for pioneering research and philosophy in global air pollution issues and the linkage to surface water acidification and quality and for advancing the theory and practice of hydrologic sciences, including watershed and reservoir modeling. Professor Schnoor is the Allen S. Henry Chair in Engineering and the Co-Director of the Center for Global and Regional Environmental Research at the University of Iowa. He is a member of the National Academy of Engineering (elected in 1999) for his research using mathematical models in science policy decisions. Professor Schnoor chaired the U.S. Environmental Protection Agency's ORD Board of Scientific Counselors, 2000-2004, and is a member of EPA's Science Advisory Board and the National Institutes of Health (NIH) National Advisory Environmental Health Sciences (NAEHS) Council. He is considered one of the founding fathers of phytoremediation. He serves as Editor-in-Chief of *Environmental Science and Technology*.

### **Martin S. Kapp Foundation Engineering Award**

*The Martin S. Kapp Foundation Engineering Award recognizes contributions to design or construction of foundations, earthworks, retaining structures, or underground construction. Emphasis is placed on constructed works in which serious difficulties were overcome or substantial economies were achieved.*



The 2010 **Martin S. Kapp Foundation Engineering Award** is presented to **Dov Leshchinsky, Ph.D., M.ASCE** for his innovative contribution to the unified method of design and analysis of earth retaining structures and slopes as well as the implementation of such technology through computer software and continuing education. Professor Leshchinsky is a highly recognized professor and researcher in geotechnical engineering, with a focus in the fields of earth retaining structures and slope engineering. His computer codes for the design of mechanically stabilized earth walls and steep soil slopes is world renown. Professor Leshchinsky is also very actively involved in continuing education efforts in the field of geotechnical engineering and has taught countless short courses and seminars for both national and international agencies.

### **Frank M. Masters Transportation Engineering Award**

*The Frank M. Masters Transportation Engineering Award is given to a member of the Society for the best example of innovative or noteworthy planning, design, or construction of transportation facilities.*



The 2010 **Frank M. Masters Transportation Engineering Award** is presented to **Stephen G. Ritchie, Ph.D., M.ASCE**, for his innovative work in the development and application of new technologies in transportation engineering. Dr. Ritchie has been prominent in the development of new technologies and methods for use in roadway maintenance and traffic control. His initial work on roadway distress characterization using expert systems has influenced numerous other researchers and has had a real impact on practice. His work on incident detection and response using neural networks and real time expert systems is forming an integral part of urban traffic control centers, beginning with the demonstration project within Dr. Ritchie's University of California Institute of Transportation Studies. He is now contributing work on vehicle emissions, especially greenhouse gas emissions from transportation. As a professional leader, Dr. Ritchie has been one of several leading figures in the application of artificial intelligence techniques to transportation problems. He has been an active participant in various committees of the American Society of Civil Engineers and the NAS Transportation Research Board. He has served as chairman or co-chairman for several very visible and successful conferences. He has also been involved in archival journals, most notably as founding editor of Transportation Research Part C, a new journal involving the application of new technologies. Dr. Ritchie is among the most distinguished academics throughout the world in the area of transportation engineering.

### **Ralph B. Peck Award**

*The Ralph B. Peck Award is presented for outstanding contributions to the geotechnical engineering profession through the publication of a thoughtful, carefully researched case history or histories, or the publication of recommended practices or design methodologies based on the evaluation of case histories.*



Izzat M. Idriss, Ph.D., P.E., Dist. M.ASCE, NAE is the recipient of the 2010 Ralph B. Peck Award in recognition of his extensive contributions to geotechnical earthquake engineering design methodologies and practice based on the evaluation of case histories. Dr. Idriss is Professor Emeritus at the University of California, Davis where he taught since 1989. Before his teaching career, he was a consultant at Woodward-Clyde Consultants for two decades. In these more than three decades he has had the most extraordinary career, where - as a consultant/researcher or as teacher/researcher/consultant - he has never stopped publishing seminal contributions to both our understanding and the practice of geotechnical earthquake engineering. Many of these contributions - and some of those which have had the most profound impact on the profession - relate to either detailed evaluation of important case histories, or to recommended practices and design methodologies based on the evaluation of case histories. These case histories have invariably started firm study of the observed response of soils and constructed facilities to

actual earthquakes, building from there useful insights and generalizations including calibrated analysis and design recommendations.

Nominations for the 2011 awards cycle are now being accepted. Please visit [www.asce.org/awards](http://www.asce.org/awards) for further information and to download nomination forms.