



of the American Society of Civil Engineers

CORE BITS

News briefs of interest to members of the geo-industry

WINTER 2000

Introducing Geo Strata

Since the Geo-Institute's inception, its founders have been unanimous in the belief that the G-I needs a practice-oriented magazine as its flagship periodical. In fact, many of us believe that the very success of the G-I concept hinges on such a magazine. **But why did we arrive at this conclusion?**

A review of G-I demographics today, with proportionally few non-ASCE members, shows that approximately 90% of our 8,600 members are practitioners. Second, only about 2,200 G-I members receive *Geotechnical News* by their voluntary membership in the International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE). Finally, even fewer members subscribe to the *G-I Journal*, which predominately serves our research community. In short, the vast majority of G-I members are not served by current periodicals. This is not a healthy situation for our current practitioner members and provides no incentive for recruiting other geo-professionals.

In the final analysis, ASCE agreed that it was in the best interest of all of us to invest in a new G-I magazine to be published by the ASCE publications group. As a result, the quarterly magazine *Geo Strata* will make its debut in April 2000. The inaugural issue will be mailed to every G-I member. The enclosed flyer introduces the magazine and contains advertising information. We look forward to your comments and contributions.

Geo-Institute Sponsors A2K:

Performance Confirmation of Constructed Geotechnical Facilities

Attend this specialized engineering conference, if you need to know how to verify performance ■ manage large volumes of data ■ assure reliability ■ apply lessons learned from the verification process.

Plenary Sessions include: Allen Marr, Geocomp Corp., on high volume data management and Boston's Central Artery Project; Greg Baecher, University of Maryland, on the use of statistics and reliability in performance confirmation evaluations; and Ed Kavazanjian, GeoSyntec Consultants, on geo-environmental issues of verification associated with remediated sites.

The Technical Program includes: two sessions on National Geotechnical Experimentation Sites plus a visit to current project; and an engineering geology field trip and three short courses. An optional Partners Program is open to registrants, too.

Visit www.ecs.umass.edu/cee/geohome for conference details, updates, travel and lodging information, and more.



GeoDenver 2000: Unearthing the Latest Opportunities

August 5-8, 2000 (Preconference short courses August 3-4)

Denver Technical Center Marriott — Denver, Colo.

GeoDenver 2000 promises to uncover exciting possibilities and rock-solid solutions to promote the geo-industry's evolution. Current implementation really only scratches the surface. Consider the vast opportunities that abundant funding for earthquake research, TEA-21, and rapid urbanization in arid and semi-arid areas have opened. What's more, new developments in earthquake simulation, arid regions, and paving and modeling are leading the way to research and cooperative efforts among consultants and academics.

Share your knowledge and insights, gain practical experience, and discover exciting advancements in areas such as: ■ Unsaturated soils ■ Geophysical exploration ■ Assessment of soil and rock properties ■ Earthquake engineering ■ Environmental geotechnics ■ Pavements and pavement subgrades.

Back by popular demand are field demonstrations, technical tours, and exhibits. This year's highlights also include 12 preconference short courses, and focus on practical information that you can take home and apply on the job. Topics include:

- Finite elements in geotechnical engineering
- Ground improvement, reinforcement, and treatment
- Geosynthetic reinforced soil wall technology
- Design of helical screw piles and tension anchors
- Estimation of soil properties for foundation design
- Flexible pavement design
- Geotechnical risk and liability
- Innovations in grouting and deep mixing
- Unsaturated soils in engineering practice
- Drilled shaft rock sockets

For more information on GeoDenver 2000, visit www.asce.org/conferences/geo2000, or call (800) 548-2723.



Take Part in the G-I Process

Nominations for Elected Governor of the G-I Board Due February 1

It's nominations and election time again! Each year, one of the elected governors of the Geo-Institute (G-I) rotates off the G-I Board of Governors (BoG), and the membership at large elects a new governor. As stipulated in the G-I bylaws, the BoG first appoints a Nominations and Elections Committee (NEC). This NEC solicits nominations of potential candidates from the membership and submits these names to the BoG for its consideration. If there is more than one candidate, the NEC conducts an election.

This year's NEC, comprised of Bob Holtz, Dick Reynolds, Joe Welsh, Steve Wright, and Joe Cibor, asks you, the G-I members, to nominate individuals who would make good G-I governors. The elected governor must have been a G-I member in good standing for at least one year prior to the election, and must be willing to serve on the Board for 5 years. Note that G-I governors receive no salary or compensation, although they do receive partial reimbursement for travel expenses.

Send nomination letters and the candidate's resumé to the Geo-Institute of ASCE, ATTN: NEC, 1801 Alexander Bell Drive, Reston, VA 20191-4400; fax: (703) 295-6351; e-mail: <mbarfield@asce.org>; or to any NEC member:

Bob Holtz: fax (206) 685-3836;
e-mail <holtz@u.washington.edu>

Dick Reynolds: fax (617) 367-9882;
e-mail <reynoldsR@prodigy.net>

Joe Welsh: fax (410) 551-1900;
e-mail <welshjd@smart.net>

Steve Wright: fax (512) 471-6548;
e-mail <swright@mail.utexas.edu>

Joe Cibor: fax (713) 773-5600;
e-mail <jcibor@fugro.com>

Nominations must be received by February 1, 2000.

For more information on the nominations and elections process, including the opportunity for a petition candidate, visit the G-I Web site at <www.geoinstitute.org>.

Log on for instant G-I information:
<www.geoinstitute.org>

GEO CHARLOTTE '99 Offers Latest Advancements on Residual Soils



ASCE President 1999 Daniel Turner presents the 35th Karl Terzaghi Lecture award to William F. Marcuson, III.



Standing before an audience of Terzaghi Lecture attendees, Ron Smith passes the G-I presidential gavel to Priscilla P. Nelson, who will serve through October 2000.

At the 1999 Civil Engineering Conference & Exposition in Charlotte, N.C., in October, the Geo Institute (G-I) organized one of seven concurrent technical tracks centered on residual and unsaturated soils. Participants gained a fresh perspective on geotechnical issues, technological advancements, and professional opportunities, including in-situ investigations, site characterization, and unsaturated soils engineering, with emphasis on the Piedmont geological region. The G-I technical track offered eight concurrent sessions:

- Improvement, Reinforcement, and Treatment of Residual Soils
- Deep Foundations in Residual Soils: Design, Parameters, and Behavior (2 sessions)
- Residual Soil Site Characterization (2 sessions)
- Current Topics and Directions in Unsaturated Soils Engineering (2 sessions)
- Current Practices in North Carolina

Another highlight among G-I offerings was the 1999 Terzaghi Lecture, delivered by William F. Marcuson, Ph.D., U.S. Army Corps of Engineers Waterway Experiment Station, Vicksburg, Miss. Marcuson presented his address, titled "Soil Mechanics and the U.S. National Defense — A Mutually Beneficial Relationship," to an audience of more than 400 civil engineers.

Geo-Institute to Honor Its First Geotechnical Hero

Ralph B. Peck, Ph.D., widely known for his pioneering work and contributions to the art and science of subsurface engineering, will be feted as one of the field's heroes at a special gala on Saturday, August 5, during the opening day of the Institute's GeoDenver 2000 conference in Denver, Colo.

Professor Emeritus of Foundation Engineering at the University of Illinois at Urbana-Champaign and namesake of the prestigious Ralph B. Peck Award, Peck was chosen as the geotechnical field's first hero to be so honored by the Geo-Institute. Proceeds from the black-tie-optional gala will be donated to a fund the G-I is creating in honor of Peck to facilitate technology transfer between academia and practice in the new millennium.

For more information on the gala and/or the new fund, call (800) 548-2723, ext. 6350. Updates will be posted on the Geo-Institute Web site <www.geoinstitute.org>.

Ishihara Delivers Third H.B. Seed Memorial Lecture on Foundations

Kenji Ishihara, Ph.D., delivered the third H.B. Seed Memorial Lecture on December 9, 1999, in Berkeley, Calif., before more than 200 geotechnical professionals and students. The lecture, "Performance of Foundation Piles Undergoing Lateral Flow in Liquefied Deposits,"

covered empirical, physical modeling, and theoretical approaches to develop appropriate sub-grade modulus values for design analyses.

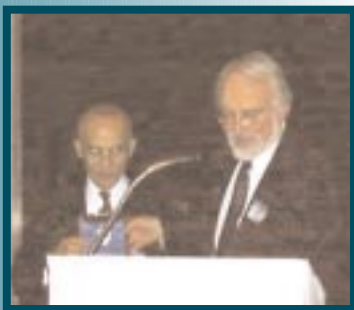
R.B. Seed, son of the late H.B. Seed, introduced Ishihara, and Robert Holtz, G-I vice president, presented Ishihara with the H.B. Seed Medal and Honorarium following the lecture.

The H.B. Seed Memorial Lecture is presented every 2 years by a distinguished recipient in Geotechnical Engineering selected by the G-I Board of Governors. Every other lecture is presented in Berkeley by a Geotechnical Engineer specializing in earthquake engineering, with

alternating lectures covering more general geotechnical topics.

Prior to the lecture, Richard Goodman received the American Society of Civil Engineers (ASCE) Archie Carter Publishing Award for his book, *Karl Terzaghi, the Engineer as Artist*. Past ASCE Publications Committee Chair and current Geo-Institute Governor Edward Rinne made the presentation. The Archie Carter Publishing Award is given each year to the author of an ASCE book or publication that the Publications Committee selects as outstanding among the year's ASCE offerings.

The ASCE San Francisco Section Geotechnical Group, chaired by Zia Zafir, organized this event. It was sponsored by the University of California, Berkeley, and 11 Bay Area geotechnical consulting firms that provided funds for travel expenses and student support.



Kenji Ishihara receives the ASCE Seed Medal from G-I Vice President Bob Holtz.



Richard Goodman receives the ASCE Archie Carter Publishing Award from G-I Governor Ed Rinne.

See JGGE's Survey Results at www.geoinstitute.org

Late last spring the *Journal of Geotechnical and Geoenvironmental Engineering (JGGE)* sent a questionnaire to 1,000 randomly selected members of the Geo-Institute. A remarkably strong response of nearly 25% provided valuable feedback to the editors and to the Geo-Institute Committee for Technical Publications. The survey revealed that a majority of respondents: were senior members of engineering consulting firms, but their opinions were very similar to those of university professors; rated the value and usefulness of papers in *JGGE* as good to satisfactory; would like to see more papers on case histories and state-of-the-art topics; would like to see expanded coverage in several topical areas, especially in engineering geology, rock mechanics, and geosynthetics; and were receptive to the probable need for a cost increase of 10 to 20% for an expanded Journal. G-I members are encouraged to read the complete results, which are posted on the Web at www.geoinstitute.org. *Comments and opinions concerning the significance of the findings are most welcome, and should be sent to Hal Olsen, Editor-in-Chief, c/o Colorado School of Mines, Division of Engineering, Golden, CO 80401.*

Members in the News

Julia A. Jackson Honored With AIPG Outstanding Achievement Award

The American Institute of Professional Geologists Susan Landon (AIPG President, 1990) presented the organization's Outstanding Achievement Award to Julia A. Jackson at AIPG's 36th Annual Meeting in Girdwood, Ala., on October 6, 1999. The Outstanding Achievement Award was established by the 1989 Executive Committee to honor a nonmember of AIPG who is widely recognized as a major contributor to the profession of geology.

During the past 2 years, Jackson has worked with the American Geological Institute (AGI) to establish a multifaceted public outreach program. The centerpiece of this effort was the first annual Earth Science Week that occurred in October 1998. In presenting the award, Landon characterized Jackson as "the mastermind and muscle behind the very successful Earth Science Week."



C.O. "Chuck" Brawner Receives R.F. Legger Award

C.O. "Chuck" Brawner, consulting

geotechnical engineer, North Vancouver, B.C., has been selected to receive the R.F. Legger Award, the highest award of the Canadian Geotechnical Society, for his contributions to Geotechnical Engineering. Brawner has also been elected a Fellow of the Canadian Institute of Mining for his geotechnical contributions in the mining industry.

Conference on Soft Ground Technology

Noordwijkerhout, The Netherlands
May 28-June 2, 2000

A United Engineering Foundation Conference on Soft Ground Technology will be held in The Netherlands on May 28 to June 2, 2000, under co-sponsorship of the G-I. The conference site — at the Leeuwenhorst Conference Center in Noordwijkerhout — is about 25 km from Amsterdam's Schipol Airport. This location will permit attendees to visit the Delft Geotechnical Laboratory to examine the facility's many accomplishments in soft ground engineering.

The conference will offer major technical sessions each morning and evening. Afternoons are available for informal gatherings, subgroup meetings, and relaxation. This open time is designed to enhance rapport among participants and promote dialogue on developments during the meeting.

Additional information about this event can be found at <www.engfnd.org/engfnd/0ap.html>. The United Engineering Foundation can be contacted at: Three Park Avenue, 27th Floor, New York, NY 10016-5902; phone (212) 591-7836; fax (212) 591-7441; e-mail <engfnd@aol.com>.

International Young Geotechnical Engineers Conference

University of Southampton, U.K.
September 8-13, 2000

The British Geotechnical Society will host the first International Young Geotechnical Engineers Conference (YGEC 2000) at the University of Southampton, U.K., September 8 to 13, 2000. Two delegates will be invited from each International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE) member society, including the Geo-Institute. Invited delegates will be offered a substantial subsidy on accommodation and registration costs. The estimated costs for invited delegates are expected to be about 100 British pounds, with the possibility of a few additional delegates authorized to attend at a cost of 300 British pounds.

YGEC 2000 aims to bring together young (35 and younger) geotechnical engineers from around the world to present short papers on their work, along with main sessions featuring keynote speakers and parallel sessions. Keynote lecturers include Suzanne Lacasse, Robert Mair,

and Kenji Ishihara.

Due to the emphasis on papers and the open discussion of delegates' presentations, conference organizers expect each delegate to submit a one-page (double-sided) synopsis of an element of his or her work. Publication-quality papers are not expected.

The G-I will nominate two delegates in February. If you are interested in being considered for one of these G-I delegate slots, please send a brief resumé [with current position, degree(s), and employment history] and an indication of the area of your proposed presentation to Harvey Wahls, International Secretary, Geo-Institute. E-mail (<wahls@eos.ncsu.edu>) is preferred. Preference will be given to G-I members who have elected to become members of USNS/ISSMGE.

XV International Conference on Soil Mechanics and Geotechnical Engineering

Istanbul, Turkey
August 27-31, 2001

Bulletin 1 for the XV International Conference on Soil Mechanics and Geotechnical Engineering (ICSMGE) is now available in electronic form at <www3.itu.edu.tr/~icsmge>. Harvey Wahls, <wahls@eos.ncsu.edu>, G-I International Secretary to ISSMGE, has about 200 hard copies of the Bulletin, which will be distributed, on request, to ISSMGE members of the G-I.

Conference themes and instructions for submitting abstracts appear in Bulletin 1, and instructions for preparing full papers will appear in Bulletin 2. The Geo-Institute will be given a page allocation in the proceedings and will recommend which papers should be included in its page quota. Mary Ellen Hynes is Chair of the G-I Ad Hoc Review Committee that will select abstracts and full papers from G-I members.

Abstracts must not exceed one page and must be received by the G-I Ad Hoc Review Committee by March 15, 2000. *Submit abstracts to Dr. Mary Ellen Hynes, CEERD-GG, Geotechnical Laboratory, USAE Waterways Experiment Station, 3909 Halls Ferry Road, Vicksburg, MS 39180-6199.*

Sections & Branches Council Bolsters G-I's National Presence

The Sections and Branches Council (S&B), with input from a special task force of G-I members from around the country, has drafted a model agreement. G-I hopes to enter into agreements with each ASCE Section that has a geotechnical group, to delineate how each section will involve G-I-only (i.e., non-ASCE) members in its section activities. The draft document has been developed as a starting point for sections to use in preparing their own, customized agreements with the G-I. It has been reviewed and approved by the G-I Board of Governors for implementation, pending ASCE approval.

Currently, the Pittsburgh Section is in the process of customizing its agreement. Boston, Philadelphia, and other sections are already beginning their implementation process.

The S&B has also developed a set of model geotechnical group bylaws for use by sections starting new geotechnical groups. These model bylaws have been reviewed and approved by the G-I and are currently being reviewed by ASCE, the Southern Idaho Section, and other sections.

In the future, the S&B will initiate local G-I affiliates in association with section geotechnical groups and university graduate geotechnical and geology programs. Efforts are already underway to establish a Pittsburgh Section Geo-Institute Affiliate.

For additional information or copies of these materials, or to participate in any of these activities, contact Art Hoffmann, S&B chairman, at (412) 922-5575 or Mary Faith Barfield, G-I administrator, at (703) 295-6034.

Las Vegas Starts New G-I Affiliate

Las Vegas holds two new distinctions: America's fastest-growing city and home to the newest Geo-Institute affiliate.

According to Coordinator Shari Davis, "The Geo-Institute is a self-directed organization within the American Society of Civil Engineers (ASCE). The G-I mission is to integrate the talents and perspectives of individuals in order to advance the geo-industry and provide leadership on educational, professional, and public policy issues. Basically, the G-I is a discipline-oriented group whose meetings focus on technical topics. This means that even though speakers are generally invited to address Geo-Institute gatherings based on their merit to the geotechnical discipline, other disciplines within civil engineering can benefit from the technical discussion as well."

In Las Vegas on October 27, Paul Branagan of Branagan & Associates discussed "Crosshole Sonic Logging" with the new local Geo-Institute group. Box lunches were served while Branagan explained how crosshole sonic logging can be used as a tool to determine the integrity of concrete in deep foundations. Some 25 geologists and engineers, along



with three UNLV graduate students, attended. The group extends a special thanks to Kleinfelder for sponsoring the student lunches.

Other Las Vegas Affiliate meetings are currently in their planning stages. *For those interested in having their names placed on the chapter mailing list, contact Shari Davis at (702) 736-2936; e-mail: <sldavis@kleinfelder.com>.*

University of Minnesota To Host 48th Annual Conference, February 18, 2000

The University of Minnesota 48th Annual Geotechnical Engineering Conference will take place on February 18, 2000. The conference typically attracts 150 engineering professionals who convene to hear practitioners and researchers discuss significant projects and current theories.

The Kersten Lecture, the keynote address named in honor of Miles Kersten, will feature Robert M. Koerner of Drexel University and director of the Geosynthetic Institute. Other speakers include Richard L. Handy, Iowa State University; Brian Herridge, Resolution Resources; Peter W. Osborn, Federal Highway Administration; Glen Ferguson, GeoSystems Engineering; and Joseph F. Labuz, University of Minnesota.

Conference topics will cover advances with geosynthetic-reinforced segmental walls, geotechnical-related problems in residential housing, application of geophysics in situ characterization, the Central Artery Project, fly ash stabilization of soils, and fabric-reinforced unpaved roads. Co-winners of the Young Engineer Paper competition will also give presentations. The conference will conclude with recent case histories presented during concurrent sessions.

The University of Minnesota 48th Annual Geotechnical Engineering Conference is co-sponsored by the Geo-Institute, Minnesota Geotechnical Society, and Consulting Engineers Council of Minnesota.

The program is posted at <www.ce.umn.edu/mgs/conf.html>. Inquiries should be directed to Joseph F. Labuz at <jlubuz@tc.umn.edu> or (612) 625-9060.

Call For Abstracts / Papers

2000 Conference on Hazardous Waste Research, May 23-25, Denver, Colo.

Technical papers are solicited for the "Waste Containment" track of the conference, co-sponsored by the Great Plains/Rocky Mountain Hazardous Substance Research Center and the Geo-Institute. Themes in this track include barrier and surface cover technologies, and methods to prevent migration of contaminants from source areas for protection of water and air resources.

Authors are requested to send abstracts via e-mail to <redi@ksu.edu>. Complete papers are due February 1, 2000, for peer-review and publication. Full details of conference themes may be found at <www.engg.ksu.edu/HSRC/Call2k.pdf>.

13th Annual Symposium on Application of Geophysics to Environmental and Engineering Problems (SAGEEP 2000)

Crystal City Hyatt, Arlington, Va.,
February 20-24, 2000

SAGEEP 2000 is a conference and trade show covering non-invasive geophysical techniques and their application to engineering and environmental challenges. These issues range from airborne geophysical surveys, geomechanics, and geophysics as an element in disaster response (e.g., Honduras, Colombia) to landfill characterization, toxic waste management/mitigation, and UXO and land mine detection. For more information, contact Mark Cramer, EXPO MASTERS Inc., (303) 771-2000; fax (303) 843-6232; e-mail <mrcramer@expomasters.com>; Web <www.sageep.com>.



International Erosion Control Association 2000 Annual Conference and Expo

Palm Springs (Calif.) Convention Center,
February 21-25, 2000

The theme of IECA's event, "Link Yourself to the Future," symbolizes how conference participants will link to one another and the erosion control industry through cutting-edge information, products and services, and valuable networking opportunities to solve erosion control problems. This conference, designed to appeal to contractors, developers, mining representatives, and others, will feature day-long training courses, half-day workshops, field tours, short presentations of technical papers, and two keynoters. Pearlie Reed, chief of USDA's Natural Resources Conservation Service (NRCS), will present an overview of NRCS's future role in improving air and water quality and conserving soil resources across the United States. Patricia Digh will enlighten delegates with a discussion of *Global Literacies: Lessons on Business, Leadership and National Cultures*, which she co-authored with Robert Rosen. The book is based on interviews with 78 CEO's from companies in 30 nations.

For details, contact IECA at P.O. Box 774904, Steamboat Springs, CO 80477-4904; (800) 455-4322 or (970) 879-3010; e-mail <ecinfo@ieca.org>; Web <www.ieca.org>.

"Finite Elements In Geotechnical Engineering"

Colorado School of Mines, March 13-15, 2000

Based on the successful textbook co-authored by the instructor (*Programming the Finite Element Method* by I.M. Smith and D.V. Griffiths, published by Wiley), this 3-day course combines lectures with supervised computing sessions. Participants will learn to run a powerful suite of finite element programs relating to practical geotechnical engineering.

The course should remove some of the mystique of "black-box" geotechnical software by giving participants insight into the workings of the finite element method and the basic architecture of the programs. Classical geotechnical applications will be covered, e.g., settlements, seepage, and slope stability; however, enough flexibility exists to allow the course to fit individual interests. Participants will receive a copy of the course textbook and all source codes on diskette.

For further information, contact course instructor Vaughan Griffiths: (303) 273-3669, fax (303) 273-3602; e-mail <d.v.griffiths@mines.edu>; or Melody Francisco at the Office of Special Programs and Continuing Education: (303) 273-3321; fax (303) 273-3314; e-mail <mfrancis@mines.edu>.

Louisiana University Team in Contention for National Engineering Research Center

In its quest to establish National Engineering Research Centers, the National Science Foundation (NSF) announced that it has narrowed its choice to seven sites. A Louisiana bid is among the seven chosen for an NSF site visit.

The proposal, submitted by a team from Louisiana Tech University, Louisiana State University (LSU), Southern University, and Grambling State University, focuses on building and managing the underground infrastructure in better ways.

"There are already more than 3.5 million miles of underground utility services in the United States. These services are aging and suffer from the problem 'out of sight, out of mind,'" says Ray Sterling, Contractors' Educational Trust Fund Professor of Civil Engineering and director of the Trenchless Technology Center (TTC) at Louisiana Tech.

"Reducing disruption to existing streets and neighborhoods and finding more cost-effective ways to manage underground services is a critical problem, not only in the United States, but worldwide," continues Mehmet Tumay, professor of Civil and Environmental Engineering and associate dean of research at LSU's College of Engineering.

Sterling and Tumay, whose specialties are in underground engineering, are the designated director and deputy director, respectively, of the proposed Center for Trenchless Infrastructure Systems (CeTIS). This center would focus on installation and repair methods for underground services in ways that do not require opening trenches in streets each time work must be done, hence the term *trenchless*. The center builds on the successful activities and national and international reputation of the TTC.

The proposed Louisiana center would create an expanded university-industry-government partnership to improve underground technologies. Technology needs

would be determined by the public works agencies and private utility companies that manage underground services. These technology needs would, in turn, determine the research advances that are required. "More than 65 industry firms, public works agencies, and professional associations have already committed to participate in the proposed center," Tumay reports.

Engineering education and the transfer of resulting knowledge are important parts of proposed center activities. Southern University and Grambling State University are education and outreach partners in the proposed center. Individual faculty from six other universities across the country would bring specific research capabilities to the team.

The NSF site visits are scheduled for February, with the announcement of centers to be funded expected in April or May.

Corps Facilities Are Now at Your Service

Tax dollars built unique testing and analysis facilities at the research and development laboratories of the U.S. Army Corps of Engineers. Thanks to recent legislation passed by Congress, geo-professionals are among those who can now access these national assets for materials testing, physical and analytical modeling, remote sensing, and specialized technical advice. One objective of this initiative is to augment the capabilities of U.S. private industry to make it more competitive in the international market. Services and facilities provided on a reimbursable basis include:

- Centrifuge Research Center ■ Materials Testing Center ■ Tri-axial shake table ■ Environmental Testing Center ■ Field Research Stations: Micro-Tunneling, Geophysical, Coastal, Arctic ■ Pavements research facilities ■ Noise research facility ■ Heavy vehicle simulators ■ Remote Sensing Center ■ Specialized technical services.

Possible applications of these facilities are unlimited. In the centrifuge, researchers can grow sea ice, try out novel designs and construction techniques, simulate tunnel excavation at a depth of 1,000 ft, and even recreate environmental conditions on other planets. With heavy vehicle simulators, researchers can conduct thousands of passes of heavy equipment in frozen, temperate, desert, or tropical environments. You can also test earthquake-resistant designs on the shake table or centrifuge; get unclassified remote sensing imagery for a specific site; and request expert technical analysis or review of projects.

Corps R&D facilities are available to private industry, universities, and government agencies. The labs can provide offices, e-mail, and Internet access (in most cases) for visiting engineers, scientists, and students. *For more information, visit <www.erc.usace.army.mil>.*

Interested in Engineering Geophysics?

The **G-I Geophysical Engineering Committee** is looking for new members who wish to participate in its activities. Those with an interest in applying geophysics to problems in civil engineering should contact the chair, P. Michaels, by e-mail: <pm@cgiss.boisestate.edu> or phone: (208) 426-1929.

Activities include sponsoring technical sessions, short courses, workshops, and field days at national meetings. In addition, the committee sponsors Geotechnical Special Publications (GSP) on topics in engineering geophysics and is interested in the development of relevant computer software and standards. For further information, visit the committee Web page at <http://cgiss.boisestate.edu/~pm/geoph_cmtty/index.html>.

G-I TCC Requests Proposals for Special Projects, Case Histories

The **G-I Technical Coordination Council (TCC)** is soliciting proposals for special projects and case histories from G-I Technical Committees, Task Forces, and the entire membership. The goal of this program is to accomplish projects that ordinarily would not be possible, capitalize on new opportunities, and produce products of value to G-I members (with preference for new revenue-producing products). The intention is to use any new revenue generated by special project activities for additional technical committee and task force activities.

The special projects proposed might be similar to those funded in fiscal year 1998 that included:

- A mailing list used to promote a short course on landfill liners and covers (returning revenues to the G-I)
- A meeting with the International Committee on Dam Safety to determine the potential for the G-I to assist in development of consensus guidelines
- A Geotechnical Special Publication compiling data from National Geotechnical Experimentation Sites
- A white paper the role of sustainability considerations in geosciences practice
- Data acquisition from Germany and/or Brazil to add to a shallow foundations database.

The TCC will also consider proposals to help increase the number of high-quality case history articles submitted to the **G-I Journal**. The TCC expects to fund three to eight special projects, with grants ranging from about \$500 to \$5,000 each, during the current fiscal year (October 1, 1999, to September 30, 2000).

Proposals should be submitted by February 7, 2000, to the appropriate TCC Councilor for the Committee or Task Force, or to the TCC Chair for case history proposals. Please include a detailed justification of the proposed budget and identify deliverables, according to the proposal format. TCC contact information and the proposal format is located on the Geo-Institute Web site at <www.geoinstitute.org>.

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Geo-Institute Expeditions

The Geo-Institute is proud to present two exclusive and extraordinary adventures as benefits of membership:

ALASKA! JULY 9-16, 2000

This summer, join members and friends of the Geo-Institute on a voyage of discovery to majestic Alaska. Explore the state's Coastal Wilderness, July 9 to 16, 2000, with a staff of naturalists and historians. Experience first hand the wild places and wildlife of southeast Alaska. Cruise the protected inland waterways on a 70-passenger expedition ship on lookout for humpback whales, sea otters, and calving glaciers. Walk through forests and native villages to see Haida and Tlingit totem poles and other native art, as well as local artists at work. To complete your Alaskan adventure, join members on an extension to Anchorage, Denali National Park (Mt. McKinley), and Fairbanks, July 16 to 20, 2000. *Trip fee: From \$3,680 per person, twin share (plus air and extension). For trip brochure and/or reservations, call: (800) 252-4910.*

MEXICO! DECEMBER 26, 2000 - JANUARY 2, 2001

Travel to Mexico's Sea of Cortez and Copper Canyon, December 26, 2000, to January 2, 2001, for a wilderness vacation and real new millennium fest. Explore the tropical waters of the Sea of Cortez on a 70-passenger expedition ship with a staff of naturalists and historians who will introduce you to the wonders of the sea and magnificent desert islands. Watch whales, dolphins, sea lions, and hundreds of colorful fish. Take naturalist walks to discover the unique plants and animals. Then, board the Chihuahua al Pacifico train, which winds from sea level through rugged Sierra Madre passes and numerous tunnels to above 8,000 feet. You have abundant opportunities to overlook the immense Copper Canyon, (four times larger than Arizona's Grand Canyon), which is home to the Tarahumara people, fleet-footed Aztec descendants. *(Brochure available by June 1.)*

ON THE GEO CALENDAR

February 2000

- 18 ★ **48th Annual Geotechnical Engineering Conference**, University of Minnesota. *Info: Joseph F. Labuz, phone: (612) 625-9060, e-mail: jlabuz@tc.umn.edu, <www.ce.umn.edu/mgs/conf.html>*
- 20-24 **SAGEEP 2000, "Geophysics: Driving Environmental and Engineering Decisions in the 3rd Millennium,"** Crystal City Hyatt, Arlington, Va. *Info: Lynn Cramer, phone: (303) 771-2000, e-mail: lcramer@compuserve.com, <www.sageep.com>*

April 2000

- 9-12 **Geo-Institute Conference, "Performance Confirmation of Constructed Geotechnical Systems,"** University of Massachusetts, Amherst. *Info: phone: (703) 295-6350, <www.geoinstitute.org>* ★

May 2000

- 23-25 **2000 Conference on Hazardous Waste Research**, Denver, Colo. *Info: <www.engg.ksu.edu/HSRC/Call2k.pdf>* ★
- 28-June 2 ★ **United Engineering Foundation, "Soft Ground Technology,"** Leeuwenhorst Conference Center, Noorwijkerhout, The Netherlands. *Info: phone: (212) 591-7836, e-mail: engfnd@aol.com, <www.engfnd.org/engfnd/0ap.html>*

June 2000

- 11-15 **17th National Meeting of the American Society for Surface Mining and Reclamation**, Tampa, Fla. *Info: G.G. Marino, MEA Inc., 907 Fairview Ave., Urbana, IL 61801, phone: (217) 384-2288, e-mail: gmarino@meacorporation.com*
- 12-14 **1st International Conference on Geotechnical Engineering Education & Training**, Sinaia, Romania. *Info: Prof. Jacint Manliu, phone: +40-1-2421161, e-mail: manoliu@hidro.utcb.ro*

July 2000

- 24-26 ★ **8th ASCE Joint Specialty Conference on Probabilistic Mechanics & Structural Reliability**, University of Notre Dame. *Info: e-mail: pmc2000@nd.edu, <www.nd.edu/~pmc2000>*

August 2000

- 5-8 **Geo-Institute Conference, "GeoDenver 2000,"** Denver, Colo. *Info: phone: (703) 295-6350, <www.geoinstitute.org>* ★
- 17-21 **2nd International Conference on Debris-Flow Hazards Mitigation: Mechanics, Prediction & Assessment**, Taipei, Taiwan, R.O.C. *Info: phone: 886-2-2365-5405, e-mail: kfliu@ccms.ntu.tw*

★ Geo-Institute-sponsored event