Deep Foundations Institute
Technical Activities

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DFI Technical Activities Manager
April 21, 2016
DFI Mission

To bring together multi-disciplined individuals and organizations to find common ground and create a shared vision and a consensus voice for continual advancement in the deep foundations industry.
GeoInstitute-DFI MOU

- Memo of Understanding signed (2015)
- Cooperation on projects with mutual benefit
  - Joint events
  - Committee collaboration
  - Providing Student Chapter speakers
  - Compiling slates of speaker abstracts for GI sections
  - Dedicated liaisons
  - Engaging practice-oriented researchers in DFI committees
Technical Committees and Working Groups

- Augered Cast-in-Place Piles (CFA Piles)
- Codes and Standards
- Deep Foundations for Landslides and Slope Stabilization
- Driven Piles
- Drilled Shafts
- Ground Improvement
- Helical Foundations and Tiebacks
- Manufacturers, Suppliers and Service Providers
- Marine Foundations
- Micropiles
  - International Society for Micropiles
- Seismic and Lateral Loads
- Slurry Walls
- Soil Mixing
- Subsurface Characterization for Deep Foundations
- Sustainability
- Testing and Evaluation
- Tiebacks and Soil Nailing
  - European Monitoring & Instrumentation
- Women in Deep Foundations
- Seepage Control
- Electric Power System Foundations
- Energy Foundations
DFI Women in Deep Foundations Committee

- Chair: Helen Robinson (Schnabel Engineering)
- Networking and mentoring group – men and women
- Retention of women in deep foundations careers
- Two Professional Development Grants for 2016
  - Attendance at 41st Annual Conference (New York, October 12-15, 2016)
  - $1750 each + free full annual conference registration
  - Application deadline May 15, 2016
  - Please see www.dfitrust.org/Programs
- Networking events
  - SuperPile Boat Cruise Fundraiser, Chicago, June 7, 2016
  - Speaker – Landslide Seminar, Denver, August 1, 2016
  - Reception – 41st Annual Conference, New York, October 11, 2016
Best Practices for Tremie Concrete

- EFFC-DFI joint project
- Free download from www.dfi.org
- Concrete rheology, mix design, reinforcement detailing, concrete cover, etc.
- Best practices for tremie concrete placement for drilled shafts and diaphragm walls
- 2nd Edition to incorporate field testing results and new test procedures
Post Grouting Workshop Report

- Report on Workshop on Quality Assurance for Post-Grouted Drilled Shafts
- Joint FHWA-Caltrans-DFI-ADSC Workshop
- Workshop date: October 2015
- State of the practice
  - Design, construction, inspection, verification, acceptance criteria, reliability and performance of post-grouting
- Identify gaps and needs
- To be published soon
AIA Geotechnical Contract

- New Geotechnical Scope of Services Exhibit C202-2015
- [www.aia.org/newdocs](http://www.aia.org/newdocs) - webinar
- Qualifications-based selection process
- In consultation with Owner/Architect, Geotech will
  - Prepare exploration plan
  - Reviews geotechnical report
  - Be on-call for consultation during design and construction
  - Provide written comments on geotechnical aspects of plans, specifications and design submittals
U.S. Levee Safety Coalition

- Multi-society effort to enhance levee safety in U.S.
- Free webinars on ILH
- Compendium of good practice
  - Comprehensive guidance
  - Design, construction, maintenance and improvement of levees
  - International state of the art
- Posted on ASDSO website at www.damsafety.org

The International Levee Handbook offers international good practice on levees based on current knowledge and experience from six countries in one single comprehensive handbook.
Committee Project Fund

- Funded $527,000 since inception in 2012
- In-kind contributions > $1,000,000
- Projects introduced and endorsed through DFI technical committees
- Benefits membership
- Practical, usable deliverables
- Next round of proposals due December 1, 2016
DFI Funding since 2012

- Augered Cast-in-Place Pile, $47,000
- Drilled Shaft, $70,000
- Driven Pile, $15,000
- Ground Improvement, $15,000
- Helical Piles and Tiebacks, $44,000
- Landslides/Slope Stabilization, $58,410
- Marine Foundations, $28,000
- Micropile, $44,800
- Seismic and Lateral Loads, $83,000
- Slurry Wall, $20,000
- Sustainability, $45,000
- Soil Mixing, $29,940
- Tiebacks and Soil Nailing, $26,900
Member In-kind Contributions since 2012

- Augered Cast-in-Place Pile, $23,000
- Drilled Shaft, $64,000
- Driven Pile, $49,000
- Tiebacks and Soil Nailing, $125,000
- Helical Piles and Tiebacks, $375,200
- Soil Mixing, $10,500
- Slurry Wall, $83,160
- Seismic and Lateral Loads, $101,800
- Ground Improvement, $15,000
- Marine Foundations, $25,000
- Landslides/Slope Stabilization, $60,525
- Micropile, $46,500
- Sustainability, $59,400
<table>
<thead>
<tr>
<th>COMMITTEE</th>
<th>PROJECT</th>
<th>AWARD</th>
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<tbody>
<tr>
<td>Augered Cast-in-Place Pile</td>
<td>Fully monitored installation of instrumented ACIP piles (AME, Thermal Integrity Profiling, compression, tension and lateral load testing, pile extraction) – ACIP Piles Committee members.</td>
<td>$30,000</td>
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<tr>
<td>Helical Piles and Tiebacks</td>
<td>Analysis of shake table testing of helical piles – Prof. Amy Cerato (University of Oklahoma)</td>
<td>$20,000</td>
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<td>Micropiles</td>
<td>Proposed method to assess the capacity of an existing or proposed, bonded micropile-to-footing connection – Industry members</td>
<td>$29,500</td>
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<tr>
<td>Tiebacks and Soil Nails</td>
<td>Website to connect researchers to establish plan for developing standards and specifications for anchored walls in Peru – Industry members</td>
<td>$500</td>
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<tr>
<td>Seismic and Lateral Loads</td>
<td>Design guideline for inelastic behavior of bridge pile foundations under combined effects of liquefaction-induced lateral spreading and superstructure inertia – Prof. Arash Khosrovifar (Portland State University)</td>
<td>$30,000</td>
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</tbody>
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IBC Change Proposals - 2015

- International Building Code proposals
- Ongoing multi-society effort
- Detailed review and rewrite of Chapter 18 Foundations
- Submitted for voting January 2016
- Being defended this week in Louisville
- Implementation in 2018
• DFI partnership
• Delivery of geotechnical courses
• Expand reach of FHWA training vehicles
• Courses available upon request
# 2016 Seminars and Conferences

<table>
<thead>
<tr>
<th>DATE</th>
<th>LOCATION</th>
<th>EVENT</th>
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<tbody>
<tr>
<td>June 7-9</td>
<td>Chicago, IL</td>
<td><strong>SuperPile 2016</strong></td>
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<tr>
<td>June 9</td>
<td>National Harbor, MD</td>
<td>Foundation presence and Special Session at International Bridge Conference presented by DFI</td>
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<tr>
<td>August 11-12</td>
<td>Los Angeles, CA</td>
<td><strong>Helical Piles &amp; Tiebacks Seminar</strong></td>
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<td>July 18</td>
<td>Pittsburgh, PA</td>
<td>DFI Educational Trust Annual Golf Outing</td>
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<tr>
<td>August 1-3</td>
<td>Denver, CO</td>
<td><strong>DFI S3: Slopes, Slides and Stabilization</strong></td>
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<td>August 11</td>
<td>Hillsborough, NJ</td>
<td>DFI Educational Trust Annual Golf Outing</td>
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<tr>
<td>September</td>
<td>Orlando, FL</td>
<td><strong>Soil Mixing and Micropiles: States of Practice for Design, Construction and Quality Assurance</strong></td>
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<tr>
<td>September</td>
<td>Kolkata, India</td>
<td>DFI-India 2016: 6th Conference on Deep Foundations Technologies for Infrastructure Development in India</td>
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<td>October 17</td>
<td>Pleasanton, CA</td>
<td>DFI Educational Trust Annual Golf Outing</td>
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<tr>
<td>November</td>
<td>Orange County, CA</td>
<td><strong>DFI ACIP and DD Piles Seminar</strong></td>
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• Chicago, IL – June 7-9, 2016
• Keynotes
  • Osterberg Award Lecturer
    • Dr. David Crapps, P.E.
    • Lessons Learned From Dr. Jorj O. Osterberg and His Inventions
  • Gerwick Award Lecturer
    • Joint venture of Traylor-Massman-Weeks
    • Assembly line construction approach IHNC Storm Surge Barrier, New Orleans, LA
  • 120 Years of Caisson Foundations in Chicago
    • Robert Schock and Eric J. Risberg, Case Foundation Co.
• Illinois Sustainability Center Award Session
• Atlas Pipe Plant Tour
• www.deepfoundations2016.org
• Symposium on Seepage Control and Remediation (parallel track)
• Risk management for major dam and levee new/rehabilitation projects and flood control structures
• Committee meetings
Keynotes

- Dr. Saturo Ueda, Lead Dam Specialist, World Bank
  - Strategy and policy hydropower and water resources development

- George Pierson, President, Pierson Advisory Group, former president and CEO of Parsons Brinckerhoff (WSP)
  - Risk Management

- James C. Dalton, P.E., Chief, Engineering and Construction Division USACE
  - Technical and political challenges at Mosul Dam, Iraq
Regional Chapters

- DFI Europe
- DFI of India
- DFI Middle East
- Active members
- Conferences/workshops
Publications

- Bi-Monthly Magazine
- Bi-Annual Journal
- Committee guidance documents, manuals and white papers
- Conference and seminar proceedings
- www.OneMine.org
• Free Student Memberships
• School-Specific Scholarships
• At-large Scholarships
  • Deadline May 16, 2016
  • $2,000 to 5,000
DFI Staff

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