DEAR COLLEAGUES AND FRIENDS,

This issue of Currently at CUIRE will update you with some of our research, outreach, and educational activities.

After more than three years of planning, last June, CUIRE hosted the ASCE International Pipelines 2013 in Fort Worth with more than 700 attendees, 55 exhibitors and $160,000 sponsorships. Conference attendees had a chance to attend the pre-conference workshops, technical sessions, and visit with exhibitors from industry leaders. The conference began Saturday, June 22, with the Pipeline Research Needs Symposium (traditionally held every 6 years) and continued on Sunday, June 23, with two, full-day, pre-conference workshops covering Large-Diameter Water Transmission Pipelines, and Seismic Design of Buried Pipelines. Also on Sunday, Pipelines attendees had a chance to participate in the Sporting Clays Tournament before attending the Networking Reception with friends and colleagues at the Exhibit Hall. There were six technical paper tracks with more than 190 papers presented and published in the conference proceedings. The conference concluded on Wednesday noon with a closing keynote presentation. More than 150 attendees participated in the golf tournament as well as a special technical tour on Wednesday afternoon.

As always, please don’t hesitate to contact CUIRE at 817-272-9177 or cuire@uta.edu with any questions, suggestions, or comments you may have.

Warm Regards,

Mohammad Najafi | CUIRE Director | najafi@uta.edu
Abhay Jain | CUIRE Program Manager | jain@uta.edu

CUIRE RECEIVES A COMPETITIVE GRANT FROM WATER RESEARCH FOUNDATION

Evaluating Large Diameter HDPE Pipe for Water Applications

Last December, CUIRE received a competitive research grant from Water Research Foundation (WaterRF) for the U.S. Environmental Protection Agency’s program on “Innovation and Research for Water Infrastructure for the 21st Century.” Black & Veatch Corporation (Kansas City, Missouri) and Benton and Associates (Jacksonville, Illinois) provide technical assistance in this research. Additionally, many municipalities and water utilities provide guidance, case studies, and experiences with large diameter (16-in. and larger) HDPE pipe for water applications. Large diameter transmission mains are the most critical element of water infrastructure, since a failure can be catastrophic in addition to extended service interruptions for many customers in addition to water quality concerns. Recent advancements in polymer science have resulted in production of high-strength and durable high density polyethylene (HDPE) pipes. HDPE pipe has the potential to be a cost effective alternative and reliable option in terms of preserving water and water quality in transmission and distribution systems. However, most engineers and water utilities are reluctant to use HDPE due to lack of experience its maintenance, repairs, asset management, connections and tapping. Therefore, the objective of this study is to determine the durability and reliability of HDPE water mains as an economical alternative to other pipe materials. For more information on how to participate, contact Dr. Najafi at CUIRE, Phone 817-272-9177 or najafi@uta.edu.
SUNDAY, JANUARY 26, 2014

Mud School for Trenchless Technology Methods®
Everything you need to know to properly mix and apply drilling fluids for trenchless applications, including spoil removal and lubrication applications.

Pipe School®
Applications, advantages and limitations of each type of pipe, such as ductile iron, vitrified clay, PVC, HDPE, fiberglass, etc., and new developments in pipe materials and jointing systems.

Geotechnical School®
Geotechnical requirements for both trenchless and open-cut applications. Soft soils and rock investigations methods, and how ground conditions will impact trenchless feasibility and productivity will be presented. Utility locating, subsurface utility engineering (SUE), geophysical methods, and geological considerations will be discussed.

MONDAY, JANUARY 27, 2014

Advanced Horizontal Directional Drilling (HDD) School®
Planning, design, construction, of large, mid and small size HDD projects from inception to closeout and delivery. Includes, tracking and locating, pipe loads, bore planning, and case studies.

Pipe Lining & Replacement School®
Pipe lining (rehabilitation, renewal) and replacement of old and deteriorating pipelines using trenchless technology methods. Includes design, construction, inspection, and QA/QC for CIPP and pipe bursting.

Pipe Jacking and Microtunneling School®
Conventional pipe jacking, as well as pilot tube, microtunneling, horizontal auger boring, pipe ramming, and box culvert applications.

Large Diameter Pipeline Installation School®
Comparison of current and new design principles, use of native backfills, CLSM, cost comparisons, and sustainability issues.

All attendees will receive complimentary registration to Underground Construction Technology Conference (UCT 2014). Special discount is available for government agencies, groups, and early registrations. For more information call CUIRE at 817-272-9177 or Email: cuire@uta.edu.

CUIRE TO HOLD CERTIFICATION SCHOOLS
SUNDAY & MONDAY, JANUARY 26-27, 2014, HOUSTON, TEXAS

CUIRE AND BENTON ASSOCIATES RECEIVE WERF RESEARCH GRANT
Evaluating No-Dig Structural Rehabilitation of Sanitary Manholes

Last July, CUIRE and Benton Associates (Jacksonville, Illinois), received a research grant from the Water Environment Research Foundation (WERF) on “Evaluation of Manhole Rehabilitation Technologies.” While manholes are easily accessible, it is estimated that there are more than 21,000,000 sanitary manholes in the U.S. alone, and they offer a variety of challenges that are frequently misunderstood and overlooked. Similar to pipelines, manholes come in a variety of materials and sizes. They are commonly made of brick-mortar, precast concrete, concrete block and cast-in-place concrete. This research evaluates structural capabilities of common manhole rehabilitation materials by conducting physical testing, case studies, and literature search to develop a decision support system for manhole rehabilitation methods and materials. All utilities, municipalities and companies involved in manhole rehabilitation products and services are invited to participate in this unique project. The numbers of products that can be evaluated are limited, so early participation is encouraged. For more information, contact Dr. Firat Sever, Benton & Associates, Inc. Phone: 217-245-4146, Email: fsever@bentonassociates.com or Dr. Najafi, CUIRE, Phone: 817-272-9177 or Najafi@uta.edu.

CUIRE DEVELOPS A NEW MASTER OF CONSTRUCTION MANAGEMENT WITH FOCUS ON INFRASTRUCTURE

On the education side, currently CUIRE with help of its Industry Board Members and Friends is offering courses on pipelines and trenchless technology, infrastructure sustainability and asset management, as well as public private partnerships (P3) for infrastructure projects. Plans are underway to teach courses on sustainability, and building information modeling (BIM) for infrastructure applications. The new Master of Construction Management (MCM) with focus on infrastructure projects will be offered both in class and online. Students can take 10 graduate courses and potentially graduate with a Master of Construction Management in one year. There are 5 core construction management courses in the curriculum, and students are allowed to take additional five electives on pipelines and infrastructure courses.

FOR MORE INFORMATION REGARDING CUIRE: WWW.CUIRE.ORG