

ARIARATNAM SUMMARY STATEMENT

My track record of professional volunteer service in the underground utility and pipeline industry includes various leadership roles and spans several decades. I held Board positions at the regional and national levels with the North American Society for Trenchless (NASTT) from 1997-2006. From 2005-2016, I served on the Executive Committee of the International Society for Trenchless Technology (ISTT) including serving as Chair from 2010 to 2013, where I oversaw a 9 member Executive Committee and a 27 member Board of Directors representing 40 countries.

I have a long history of service to ASCE including involvement in three different Institutes: Construction Institute (CI); Geo-Institute (G-I); and the Utility Engineering and Surveying Institute (UESI). I have had several ASCE leadership roles including serving on the UESI Pipelines Division Executive Committee (ExCom) from 2004-2019. I had the honor of serving as ExCom Chair in 2017-18 and the Conference Co-Chair for Pipelines 2017 in Phoenix, AZ. In total, I have attended 21 Pipelines Conferences and have published and presented 33 papers. In 2016, I brokered an MOU between the UESI Pipelines Division and Zhengzhou University in China where three Pipelines ExCom members travel annually to China to participate in a pipeline-related conference. I currently represent UESI on the ASCE Walter L. Huber Civil Engineering Research Prize Committee. I previously served as an Associate Editor for the ASCE Journal of Pipeline Systems Engineering and Practice from its initiation in 2010 to 2020.

I have received several awards from ASCE including the John O. Bickel Award (2001), Arthur M. Wellington Prize (2015), Pipeline Division Award of Excellence (2019), and the Stephen D. Bechtel Pipeline Engineering Award (2021). I was elected as Distinguished Member of ASCE in 2022. Furthermore, I am a member of the Canadian Academy of Engineering (CAE), U.S. National Academy of Construction (NAC), and the European Academy of Sciences and Arts (EASA). In 2023, I was named the Sunstate Chair of Construction Management & Engineering at Arizona State University.

I served on the Pipelines ExCom when UESI was first approved by ASCE in 2015. Additionally, I have served on the UESI Board of Governors since 2021. This has given me a unique perspective of the activities of the UESI Board of Governors. In my opinion, the Board of Governors has done an excellent job of growing the Institute and I see opportunities for further growth with the introduction of new initiatives and collaborations.

If elected as President of UESI Board of Governors, I promise to work tirelessly for the membership towards accomplishing the following:

- Increasing membership by continuing to nurture new regional UESI chapters
- Working on a marketing strategy for promotion of UESI
- Fostering better integration between the UESI divisions
- Enhancing the Public Sector Utility and Student Scholarship programs
- Fostering collaborations with other similar utility associations/societies such as the North American Society for Trenchless Technology (NASTT), Common Ground Alliance (CGA), American Water Works Association (AWWA), Water Environment Federation (WRF), and the American Gas Association (AGA)
- Increasing attendance at the annual Pipelines Conference
- Using my network to encourage more companies to be sponsors and exhibitors at the annual Pipelines Conference
- Increasing the global outreach of UESI

SERVICE VOLUNTEER ACTIVITIES

Professional Organizing Committees (*Denotes ASCE and UESI activities)

- *2024 ASCE Walter L. Huber Civil Engineering Research Prize Committee
- 2023 Honorary Chair and Technical Committee, 2023 ICPTT Conference, Shanghai, China
- *2023 ASCE Walter L. Huber Civil Engineering Research Prize Committee
- 2022 Honorary Chair and Technical Committee, 2022 ICPTT Conference, Zhengzhou, China
- 2022 Technical Program Chair, 2022 Int'l No-Dig Conference and Exhibition, Helsinki, Finland
- *2022 ASCE Walter L. Huber Civil Engineering Research Prize Committee
- *2021 ASCE Walter L. Huber Civil Engineering Research Prize Committee
- *2020 ASCE Walter L. Huber Civil Engineering Research Prize Committee
- *2020 Conference Co-Chair, 2020 ASCE Construction Research Congress, Tempe, AZ
- 2020 Program Committee, No-Dig Conference and Exhibition (2003-2024)
- *2019 ASCE Walter L. Huber Civil Engineering Research Prize Committee
- 2019 Honorary Chair and Technical Committee, 2019 ICPTT Conference, Changsha, China
- 2019 Technical Chair, 2019 International No-Dig Conference and Exhibition, Florence, Italy
- *2019 Conference Advisory Committee, 2019 Int. Conf. on Sustainable Infrastructure, Long Beach, CA
- *2018 ExCom Liaison, 2018 ASCE Pipelines Conference, Toronto, Ontario
- 2018 Honorary Chair and Technical Committee, 2018 ICPTT Conference, Hangzhou, China
- 2018 Technical Chair, 2018 International No-Dig Conference and Exhibition, Capetown, South Africa
- 2018 Technical Committee, 2018 CGA 811 Conference, Phoenix, AZ
- 2017 Honorary Chair and Technical Committee, 2017 ICPTT Conference, Wuhan, China
- *2017 Program Committee, 2017 International Conference on Sustainable Infrastructure, New York, NY
- *2017 Conference Co-Chair, Pipelines 2017 Conference, Phoenix, AZ
- *2016 Program Committee, 2016 International Conference on Sustainable Infrastructure, Shenzhen, China
- 2016 Technical Chair, 2016 International No-Dig Conference and Exhibition, Beijing, China
- 2016 Honorary Chair and Technical Committee, 2016 ICPTT Conference, Guangzhou, China
- 2015 Honorary Chair and Technical Committee, 2015 ICPTT Conference, Chengdu, China
- 2015 Technical Chair, 2015 International No-Dig Conference and Exhibition, Istanbul, Turkey
- *2014 Honorary Chair and Technical Committee, 2014 ASCE-ICPTT Conference, Xiamen, China
- 2014 Technical Chair, 2014 International No-Dig Conference and Exhibition, Madrid, Spain
- *2013 Honorary Chair and Technical Committee, 2013 ASCE-ICPTT Conference, Xian, China
- 2012 Technical Program Chair, 2012 International No-Dig Conference and Exhibition, Sao Paulo, Brazil
- *2012 Honorary Chair and Technical Committee, 2012 ASCE-ICPTT Conference, Wuhan, China
- *2011 Honorary Chair and Technical Committee, 2011 ASCE-ICPTT Conference, Beijing, China
- 2010 Chair, Sixth Annual Western Regional No-Dig Conference & Exhibition, Tempe, AZ
- *2010 Technical Committee, 2010 ASCE Construction Research Congress, Banff, Alberta
- *2009 Technical Program Chair, 2009 ASCE Construction Research Congress, Seattle, WA
- 2007 Chair, Third Annual Western Regional No-Dig Conference & Exhibition, Reno, NV
- 2006 Advisory Board, CGA Underground Safety Conference (2006-07)
- 2006 Advisory Board, Damage Prevention Conference (2006-07)
- *2007 Track Coordinator, 2007 ASCE Pipelines Conference
- 2007 Program Chair, 2007 No-Dig Conference and Exhibition, San Diego, CA
- *2007 Organizing Committee, 2007 ASCE G-I Geo-Denver, CO
- 2006 Chair, Second Annual Western Regional No-Dig Conference & Exhibition, Walnut Creek, CA
- 2005 Chair, First Annual Western Regional No-Dig Conference & Exhibition
- *2004 Track Coordinator, Geotrans 2004, American Society for Civil Engineers (ASCE)
- 2004 Cluster Facilitator, The LeaderShape Institute
- 2003 Program Committee, 2003 International No-Dig Conference and Exhibition

MEMBERSHIP/OFFICE OF NATIONAL OR INTERNATIONAL COMMITTEE (*Denotes ASCE and UESI activities)

*Governor	American Society of Civil Engineering Utility Engineering & Survey Institute Board, 2021-
*Chair	American Society of Civil Engineers Pipelines Division AdCom, 2019 - 2021
*Past Chair	American Society of Civil Engineers Pipelines Division, 2018 - 2019
*Chair	American Society of Civil Engineers Pipelines Division, 2017 - 2018
Member	National Academies Committee on the “Study of Propane Gas Pipeline Facilities”, 2017-18
*ExCom	American Society of Civil Engineers Pipelines Division, 2014 - 2019
Past Chairman	International Society for Trenchless Technology, 2013 - 2016
*Executive	Construction Education Committee, American Society of Civil Engineers, 2011-present
Member	Government Relations Committee, Distribution Contractors Association, 2010-present
Chairman	International Society for Trenchless Technology, 2010 - 2013
Member	National Academies Committee on “Underground Geoengineering for Sustainable Development”, 2010-2011
Vice Chairman	International Society for Trenchless Technology, 2007-2010
Member	Executive Sub-Committee, International Society for Trenchless Technology, 2005–2016
*Member	Research Committee, ASCE Pipeline Engineering Division, 2005-present
Chair	Western Society for Trenchless Technology, 2004–2009
Member	Fiesta Bowl “Yellow Jacket” Committee, 2002-present
Board	North American Society for Trenchless Technology, 2001-2006
Secretary	North American Society for Trenchless Technology, 2002-2003
Secretary	Northwest Chapter of the North American Society for Trenchless Technology, 1997-2000
*Member	Construction Research Council, American Society of Civil Engineers (ASCE), 1997-present

HONORS AND AWARDS (*Denotes ASCE and UESI award)

2023	Elected to the European Academy of Sciences and Arts (EASA)
2023	Named Sunstate Chair of Construction Management and Engineering at Arizona State University
2022	Appointed to the Gas Pipeline Advisory Committee by Transportation Secretary Pete Buttigieg
*2022	Elected as Distinguished Member, American Society of Civil Engineers (ASCE)
2022	Elected as Fellow, Canadian Society for Civil Engineering (CSCE)
*2021	Stephen D. Bechtel Pipeline Engineering Award, American Society of Civil Engineers
2021	Named “Beavers-Ames Chair of Heavy Construction”, Arizona State University
2020	Elected to Fellow, International Society for Trenchless Technology (ISTT)
2019	International Society for Trenchless Technology (ISTT) Gold Medal
2019	Elected to the U.S. National Academy of Construction (NAC)
*2019	Pipeline Division Award of Excellence, American Society of Civil Engineers
2018	Elected as Fellow of the Canadian Academy of Engineering (CAE)
2017	National Academies Committee on the “Study of Propane Gas Pipeline Facilities”
*2015	Arthur M. Wellington Prize, American Society of Civil Engineers
*2015	Elected as Fellow, American Society of Civil Engineers
2014	Elected as Honorary Fellow, International Institute of Utility Specialists (IIUS)
2012	Named 2012 North American Trenchless Technology Person of the Year
*2010	Associate Editor, ASCE Journal of Pipeline Systems Engineering and Practice, 2010-2020
2010	Elected Chairman of the International Society for Trenchless Technology
2008	Appointed to the Plastic Pipe Institute Municipal Advisory Board
2007	Elected as Vice Chairman of the International Society for Trenchless Technology
2007	No-Dig 2006 Outstanding Paper Award (Assessment Category)
2006	The Phoenix Business Journal’s “Forty Under 40 List”
2005	Assistant Specialty Editor, ASCE Journal of Construction Engineering & Management, 2005-2015
2003	University of Illinois at Urbana-Champaign, Civil and Environmental Engineering Alumni Association’s Young Civil Engineer Achievement Award
*2001	John O. Bickel Award, American Society of Civil Engineers

SAMUEL T. ARIARATNAM, PH.D., P.E., P.ENG., F.CSCE, EASA, FCAE, NAC, Dist.M.ASCE

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RESEARCH INTERESTS

Research is in the area of “Sustainable Urban Underground Infrastructure Systems”. Focus is on using optimization techniques and performance models to evaluate and develop improved construction strategies/methods for installing, assessing, rehabilitating, and repairing underground infrastructure systems including municipal systems, telecommunications, energy pipelines, and electrical lines. Particular focus on trenchless engineering applications of horizontal directional drilling, pipe replacement, and asset management.

EDUCATION

Ph.D. in Civil Engineering, specialization in Construction Engineering and Management, University of Illinois at Urbana-Champaign, Illinois, 1994.
Master of Science (M.S.) in Civil Engineering, specialization in Construction Engineering and Management, University of Illinois at Urbana-Champaign, Illinois, 1991.
Bachelor of Applied Science (B.A.Sc.) in Civil Engineering (Co-operative Education Program), University of Waterloo, Ontario, Canada, 1989.

ACADEMIC POSITIONS HELD

Professor & Construction Engineering Program Chair, Ira A. Fulton Schools of Engineering, Arizona State University, Tempe, Arizona (04/11-present)
Professor, Del E. Webb School of Construction, Ira A. Fulton Schools of Engineering, Arizona State University, Tempe, Arizona (07/08-present)
Associate Professor, Del E. Webb School of Construction, Ira A. Fulton Schools of Engineering, Arizona State University, Tempe, Arizona (08/01-07/08)
Associate Professor, Department of Civil and Environmental Engineering, University of Alberta, Edmonton, Alberta, Canada (07/00-08/01)
Assistant Professor, Department of Civil and Environmental Engineering, University of Alberta, Edmonton, Alberta, Canada (07/96-07/00)
Visiting Assistant Professor, Department of Civil and Environmental Engineering, United States Air Force Academy, Colorado Springs, Colorado (07/95-07/96)

PROFESSIONAL LICENSURE

- Professional Engineer (Arizona) - Arizona Board of Technical Registration #48591
- Professional Engineer (Ontario) - Association of Professional Engineers of Ontario #90449844

SELECTED PUBLICATIONS

Refereed Journals (ASCE Journal of Pipelines Systems Engineering and Practice ONLY)

1. Winston, D. and **S.T. Ariaratnam** (2022). “Navigating Federal and State HDD Guidelines for Interstate

- Natural Gas Pipeline Crossings”, *Journal of Pipelines Systems Engineering and Practice*, ASCE, 13(2): 04022008.
2. Feghaly, J., M. El Asmar, **S.T. Ariaratnam**, and W. Bearup (2021). “Design-Build Project Administrative Practices for the Water Industry”, *Journal of Pipelines Systems Engineering and Practice*, ASCE, 12(1); [https://doi.org/10.1061/\(ASCE\)PS.1949-1204.0000515](https://doi.org/10.1061/(ASCE)PS.1949-1204.0000515)
 3. Fenais, A., **S.T. Ariaratnam**, and N. Smilovsky (2020). “Assessing the Accuracy of an Outdoor Augmented Reality Solution for Mapping Underground Utilities” *Journal of Pipelines Systems Engineering and Practice*, ASCE, 11(3), [https://doi.org/10.1061/\(ASCE\)PS.1949-1204.0000474](https://doi.org/10.1061/(ASCE)PS.1949-1204.0000474)
 4. Cheng, L.Y., **S.T. Ariaratnam**, and S.X. Chen (2017). “Analytical Solution for Predicting Ground Deformation Associated with Pipe Jacking”, *Journal of Pipeline Systems Engineering and Practice*, ASCE, 04017008-1 to 04017008-11.
 5. Francom, T., M. El-Asmar, and **S.T. Ariaratnam** (2017). “Longitudinal Study of Construction Manager at Risk for Pipeline Rehabilitation”, *Journal of Pipeline Systems Engineering and Practice*, ASCE, 04017001-1 to 04017001-11.
 6. Tang, P., S. Zhenglai, M.P. Olson, and **S.T. Ariaratnam** (2016). “Time Series Analysis of Hydraulic Data for Automated Productivity of Pilot Tube Microtunneling”, *Journal of Pipeline Systems Engineering and Practice*, ASCE, 04015022-1 to 04015022-12.
 7. Francom, T., **S.T. Ariaratnam**, and M. El Asmar (2016). “Industry Perceptions of Alternative Project Delivery Methods Applied to Trenchless Pipeline Projects”, *Journal of Pipeline Systems Engineering and Practice*, ASCE, 7(1), 04015020-1 to 04015020-8.
 8. Olson, M.P., **S.T. Ariaratnam**, J.S. Lueke (2015). “Jacking Force and Productivity Analysis of Pilot Tube Microtunneling Installations”, *Journal of Pipeline Systems Engineering and Practice*, ASCE, 04015018-1 to 04015018-8
 9. **Ariaratnam, S.T.** (2014). “Analysis of Cross-Bores in Unmarked Service Laterals”, *Journal of Pipeline Systems Engineering and Practice*, ASCE, Vol. 5, No. 2, 04013015.
 10. Lueke, J., P. Sun, B. Carey, and **S.T. Ariaratnam** (2013). “Validation of Photogrammetric Monitoring for Trenchless Construction Applications”, *Journal of Pipeline Systems Engineering and Practice*, ASCE, Vol. 4, No. 1, pp. 24-31.
 11. Piratla, K. and **S.T. Ariaratnam** (2011). “Criticality Analysis of Water Distribution Pipelines”, *Journal of Pipeline Systems Engineering and Practice*, ASCE, Vol. 2, No. 3, pp. 91-101.
 12. Patel, A., A. Chasey, and **S.T. Ariaratnam** (2010). “Integrating Global Positioning System with Laser Technology to Capture As-Built Information during Open-Cut Construction”, *Journal of Pipeline Systems Engineering and Practice*, ASCE, Vol. 1, No. 4, pp. 147-155.

Conference Proceedings (ASCE Pipelines Conferences ONLY)

1. **Ariaratnam, S.T.** and T. Lich (2023). “Technology to Monitor River Scour Exposure of Oil and Gas Pipelines”, *Proceedings of Pipelines 2023 Conference*, ASCE, San Antonio, Texas, August 12-16, Paper 165
2. Geisbush, J. and **S.T. Ariaratnam** (2022). “Developing a Reliability Centered Maintenance Model for Large Diameter Pipeline Maintenance”, *Proceedings of Pipelines 2022 Conference*, ASCE, Indianapolis, Indiana, July 31-August 3, Paper 67.
3. Winston, D. and **S.T. Ariaratnam** (2021). “Permitting and Designing an Interstate Natural Gas Pipeline Reiver Crossing While Navigating Federal and State HDD Guidelines”, *Proceedings of Pipelines 2021 Conference*, ASCE, Calgary, Alberta, August 3-6, on CD.
4. Yan, X., **S.T. Ariaratnam**, B. Ma, and C. Zeng (2020). “Ground Displacements and Pulling Forces of Pipe-Swallowing in Well-Graded Sands”, *Proceedings of Pipelines 2020 Conference*, ASCE, San Antonio, Texas, August 9-12, on CD.
5. Yan, X., **S.T. Ariaratnam**, and B. Ma (2019). “World Record 5.2 km HDD Twin Crossings of the Hong Kong Harbor”, *Proceedings of Pipelines 2019 Conference*, ASCE, Nashville, Tennessee, July 21-24, on CD.
6. *Feghaly, J., M.El Asmar, and **S.T. Ariaratnam** (2019). “Design-Build Project Administration: Case Studies from Water Utilities in the U.S. Southwest/Pacific Region”, *Proceedings of Pipelines 2019 Conference*, ASCE, Nashville, Tennessee, July 21-24, on CD.
7. El Asmar, M. and **S.T. Ariaratnam** (2018). “Which Delivery Method is Best for Water and Wastewater

- Projects? An Analysis of Alternative Project Delivery Methods Performance”, *Proceedings of Pipelines 2018 Conference*, ASCE, Toronto, Canada, July 15-18, on CD.
8. Fenais, A., **S.T. Ariaratnam**, and N. Smilovsky (2018). “Using Augmented Reality in Horizontal Directional Drilling to Reduce the Risk of Utility Damage”, *Proceedings of Pipelines 2018 Conference*, ASCE, Toronto, Canada, July 15-18, on CD.
 9. Cohen, A. and **S.T. Ariaratnam** (2017). “Developing a Successful Specification for Horizontal Directional Drilling”, *Proceedings of Pipelines 2017 Conference*, ASCE, Phoenix, AZ, August 6-9, on CD.
 10. **Ariaratnam, S.T.**, N. Guercio, J. Kim, and X. Panos (2017). “Asbestos Cement Drinking Water Replacement at the City of Yuma, AZ: A Case Study”, *Proceedings of Pipelines 2017 Conference*, ASCE, Phoenix, AZ, August 6-9, on CD.
 11. El Asmar, M. and **S.T. Ariaratnam** (2017). “Alternative Delivery Methods in the Water and Wastewater Industry: Challenges and Opportunities”, *Proceedings of Pipelines 2017 Conference*, ASCE, Phoenix, AZ, August 6-9, on CD.
 12. Francom, T., **S.T. Ariaratnam**, and M. El Asmar (2016). “Cost Performance of Job Order Contracting (JOC) Applied to Wastewater Pipeline Engineering and Construction Projects”, *Proceedings of Pipelines 2016 Conference*, ASCE, Kansas City, MO, July 17-20, on CD
 13. **Ariaratnam, S.T.** (2014). “Overview of the Explosion of a 30-Inch Steel Natural Gas Pipeline in San Bruno, California,” *Proceedings of Pipelines 2014 Conference*, ASCE, Portland, OR, August 3-6, pp. 62-70.
 14. Ellison, D., J. Leung, **S. Ariaratnam**, A. Romer, and Roy Brander (2014). “Optimizing Small Water Main Renewal Using Non-Destructive Examinations,” *Proceedings of Pipelines 2014 Conference*, ASCE, Portland, OR, August 3-6, pp. 25-38.
 15. Carlin, M., **S.T. Ariaratnam**, X. Yan, and B. Ma (2014). “HDD Installation Practices for Buried Pipeline Energy Infrastructure in China,” *Proceedings of Pipelines 2014 Conference*, ASCE, Portland, OR, August 3-6, pp. 425-436.
 16. Francom, T. **S.T. Ariaratnam**, and M. El Asmar (2014). “Industry Perceptions of Trenchless Pipelines Project Performance when Using Alternative Delivery Systems,” *Proceedings of Pipelines 2014 Conference*, ASCE, Portland, OR, August 3-6, pp. 405-436.
 17. Cho, J., J.S. Lueke and **S.T. Ariaratnam** (2014). “Numerical Analysis of Submerged Soil Behavior in Pipeline Installations Crossing Rivers,” *Proceedings of Pipelines 2014 Conference*, ASCE, Portland, OR, August 3-6, pp. 887-898.
 18. Tang, P., M.P. Olson, Z. Shen, and **S.T. Ariaratnam** (2013). “Automated Monitoring of Pilot Tube Microtunneling Installations through Pattern Recognition in Time-Series Data of Hydraulic Pressure”, *Proceedings of Pipelines 2013 Conference*, ASCE, Fort Worth, TX, June 23-26, on CD Paper 121.
 19. Piratla, K.R., and **S.T. Ariaratnam** (2013). “Performance Evaluation of Resilience Metrics for Water Distribution Pipeline Networks”, *Proceedings of Pipelines 2013 Conference*, ASCE, Fort Worth, TX, June 23-26, on CD Paper 40.
 20. **Ariaratnam, S.T.**, K. Piratla, and A. Cohen (2012). “Field Comparison of the Axis Microtunneling Technology vs. Open Cut Excavation in Glenview, Illinois”, *Proceedings of Pipelines 2012 Conference*, ASCE, Miami, FL, August 19-22, on CD.
 21. Piratla, K. and **S.T. Ariaratnam** (2011). “Pipe Criticality Analysis for Water Distribution Systems”, *Proceedings of Pipelines 2011 Conference*, ASCE, Seattle, WA, July 23-27, on CD.
 22. **Ariaratnam, S.T.**, and R. Botteicher (2009). “Field Validation of Installation Loads on Horizontal Directionally Drilled Fusible PVC Pipe”, *Proceedings of Pipelines 2009 Conference*, ASCE, San Diego, August 16-19, on CD.
 23. Chua, K., **S.T. Ariaratnam**, H. Ng, and A. El-Assaly (2008). “Wasterwater Asset Management at the City of Edmonton, Alberta”, *Proceedings of Pipelines 2008 Conference*, ASCE, Atlanta, GA, July 22-25, on CD.
 24. **Ariaratnam, S.T.**, R. Bonds, and D. Crabtree (2008). “A Field Study of HDD Installed Ductile Iron Pipe”, *Proceedings of Pipelines 2008 Conference*, ASCE, Atlanta, GA, July 22-25, on CD.
 25. Woodroffe, N.J.A. and **S.T. Ariaratnam** (2007). “Planning Methodology for Small Diameter Pipelines in an Urban Environment”, *Proceedings of Pipelines 2007 Conference*, ASCE, Boston, MA, July 8-11, on CD.
 26. **Ariaratnam, S.T.**, W. Chan, and D. Choi (2006). “Experiences in Adopting Trenchless Methods in China”, *Proceedings of Pipelines 2006*, ASCE, Chicago, Illinois, July 30-August 2, on CD Paper 15345.

27. **Ariaratnam, S.T.**, M. Kemper, and D. Weaklend (2006). “Minimizing Public Exposure to Cross-Bores in Unmarked Sewer Service Laterals”, *Proceedings of Pipelines 2006*, ASCE, Chicago, Illinois, July 30-August 2, on CD Paper 15344.
28. Lueke, J.S. and **S.T. Ariaratnam** (2004), “Prediction of Surface Heave Associated with Horizontal Drilling Using Neural Networks”, *Proceedings of the ASCE Conference on Pipeline Engineering and Construction*, San Diego, California, August 1-4, on CD.
29. **Ariaratnam, S.T.**, R.M. Stauber, J. Bell, B. Harbin, and F. Canon (2003), “Predicting and Controlling Hydraulic Fracturing During Horizontal Directional Drilling,” *Proceedings of the ASCE International Conference on Pipeline Engineering and Construction*, Baltimore, Maryland, July 13-16, pp. 1334-1345.
30. Hahn, U.H. and **S.T. Ariaratnam** (2003), “Parameters for Designing Static Pipe Bursting Operations”, *Proceedings of the ASCE International Conference on Pipeline Engineering and Construction*, Baltimore, Maryland, July 13-16, pp. 1184-1193.
31. **Ariaratnam, S.T.**, A. El-Assaly, H. Ng, S. Lodewyk, and K. Chua (2002). “Sewer Infrastructure Management: The City of Edmonton Experience”, *Proceedings of the ASCE Pipelines 2002 Conference*, Cleveland, Ohio, August 4-7, on CD.
32. **Ariaratnam, S.T.** and D.A.F. Colwell (2002). “Monitoring of HDPE Pipe During Horizontal Directional Drilling Installations”, *Proceedings of the ASCE Pipelines 2002 Conference*, Cleveland, Ohio, August 4-7, on CD.
33. Allouche, E.N. and **S.T. Ariaratnam** (2002). “State-of-the-Art Review of No-Dig Technologies for New Installations”, *Proceedings of the ASCE Pipelines 2002 Conference*, Cleveland, Ohio, August 4-7, on CD.

SELECT CONSULTING ACTIVITIES

- Ameren Gas, Springfield, Illinois
- Arizona Department of Homeland Security, Phoenix, Arizona
- Caterpillar, Inc., Peoria, Illinois
- Central Hudson Gas & Electric Corp., Poughkeepsie, New York
- CDM, Inc., Phoenix, Arizona
- City of Austin, Texas
- City of Edmonton, Alberta, Canada
- City of Encinitas, California
- City of Glendale, Arizona
- City of Phoenix, Arizona
- City of San Bruno, California
- City of Tampa, Florida
- City of Yuma, Arizona
- Comgas, Sao Paulo, Brazil
- Digital Control, Inc., Kent, Washington
- Dominion Energy, Richmond, Virginia
- Energy Transfer Partners-Sunoco Pipeline, L.P., , Dallas, Texas
- Florida Communication Concepts, Fort Lauderdale, Florida
- Haydon Building Corporation, Phoenix, Arizona
- Hawaii Gas, Honolulu, Hawaii
- Kleinfelder, Inc., Denver, Colorado
- Mountaineer Gas, Charleston, West Virginia
- Missouri Gas and Energy, Kansas City, Missouri
- Mountaineer Gas, Charleston, West Virginia
- NPL Construction Company, Phoenix, Arizona
- People’s Gas Corporation, Tampa, Florida
- Quanta Energy Services, Houston, Texas