

Fortezza da Basso • FLORENCE (Italy)
30th September • 2nd October 2019



37TH INTERNATIONAL
NO-DIG
FLORENCE 2019

JOIN THE INTERNATIONAL
NO-DIG FLORENCE!



PRELIMINARY
PROGRAMME

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Construction Engineering Program Chair, past ISTT Chairman and Arizona State University Professor, USA

Wout Broere

NSTT Board Member and Delf University of Technology Professor (Geo engineering session), Netherlands

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ITU (International Telecommunication Union) Study Group 15 Vice Chairman and Sirti Innovation Director, Italy

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Valeria Mezzanotte

Bicocca University of Milan Researcher and Professor (Department of Earth and Environmental Sciences), Italy

SCIENTIFIC COMMITTEE

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Department of Technological Innovations and Safety of Plants, Products and Anthropic Settlements INAIL, Italy

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DCA-Europe (Drilling Contractor Association) Chairman, Germany

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CTSTT Chairman and National Chung-Hsing University Civil Engineering Professor, Taiwan

Volker Wagner

DWA (German Association for water management, wastewater and waste) and Wismar University Professor (Department of Civil Engineering and Urban Water Management and Waste Management), Germany

Antonino Valenza

University of Palermo Professor (Civil, Environmental, Aerospace, Materials Engineering department), Italy

PROGRAM AT A GLANCE

The scientific program is subject to changes

30th SEPTEMBER 2019

| | Technical Session Room A | Parallel Session Room B | Parallel Session Room C | Parallel Session Room D |
|----------------|---|---|---|--|
| 09.30 | Welcome coffee | | | |
| 10.00 12.00 | Opening Ceremony | | | |
| 12.00 | Exhibition Area | | | |
| 13.00 14.00 | Lunch break | | | |
| 14.00 14.20 | Panel Event 1 Samuel Ariaratnam - Arizona State University | Research & Development 1 | Mapping and Inspection of Underground Utilities 1 | 14.00-15.00 Industry Session EKSO srl |
| 14.20 16.00 | Microtunneling Pipe Jacking Auger Boring 1 | | | 15.00-18.00 Short Course Le tecnologie di risanamento e rinnovamento del sistema idrico integrato |
| 16.00 16.20 | Coffee break | | | |
| 16.20 18.00 | Horizontal Directional Drilling 1 | Trenchless Technology Case Studies 1 | Mapping and Inspection of Underground Utilities 2 | |

1st OCTOBER 2019 - MORNING

| | Technical Session Room A | Parallel Session Room B | Parallel Session Room C | Parallel Session Room D |
|----------------|--|--|-----------------------------|--|
| 09.15 09.40 | Panel Event 2 Standardization by UNI (Italian National Standard Body) | Pipe lining & Coatings 1 | Research & Development 2 | |
| 09.40 11.00 | International Standards | | | 10.00-11.00 Industry Session Anese srl |
| 11.00 11.20 | Coffee break | | | |
| 11.20 11.40 | Trenchless Technology by CIGRE Study Committee B1 | Round Table Water and Wastewater | Research & Development 3 | 11.00-12.00 Industry Session Saint-Gobain PAM Italia |
| 11.40 13.00 | Mapping and Inspection of Underground Utilities 3 | | | 12.00-13.00 Industry Session Danphix spa |
| 13.00 14.00 | Lunch break | | | |

- Technical Sessions will be in English and open only to delegates regularly registered to the congress
- The short courses will be in Italian and have a special registration fee
- Industry Sessions and the Exhibition area are open to anyone and free of charge

PROGRAM AT A GLANCE

The scientific program is subject to changes

1st OCTOBER 2019 - AFTERNOON

| | Technical Session Room A | Parallel Session Room B | Parallel Session Room C | Parallel Session Room D |
|----------------|--|---|--|--|
| 14.00 16.00 | Microtunneling Pipe Jacking Auger Boring 2 | Trenchless Pipe replacement 1 Trenchless Technology Case Studies 2 | 14.00-14.20 Panel Event 3 Risk Assesment in excavation works - INAIL (National institute for occupational accident insurance) 14.20-15.20 Environmental & Sustainability Benefits of Trenchless 1 15.20-16.00 Research & Development 4 | 14.30-15.30 Industry Session EKSO srl |
| 16.00 16.20 | Coffee break | | | |
| 16.20 18.00 | Horizontal Directional Drilling 2 | Pipe lining & Coatings 2 | 16.20-17.20 Environmental & Sustainability Benefits of Trenchless 2 17.20-18.00 Research & Development 5 | 15.30-18.30 Short Course Microtunneling e direct pipe |

2nd OCTOBER 2019

| | Technical Session Room A | Parallel Session Room B | Short Courses Room C | Parallel Session Room D |
|----------------|---|---|---|---|
| 09.15 11.00 | Panel Event 4 Worldwide Trenchless Market | Trenchless Pipe replacement 2 | 09.30-10.30 Industry Session EKSO srl | 09.30-15.30 Short Course |
| 11.00 11.20 | Coffee break | | 10.30-13.30 Short Course Le tecnologie di indagine conoscitiva e dimostrazione live | Tecnologie di trivellazione orizzontale controllata - TOC Dimostrazione live |
| 11.20 13.00 | Panel Event 4 Worldwide Trenchless Market | Trenchless Technology Case Studies 3 | | |
| 13.00 14.00 | Lunch break | | | |
| 14.00 16.00 | Research & Development 6 | Pipe lining & Coatings 3 | | |
| 16.00 | Mapping and Inspection of Underground Utilities 4 | | | |
| 16.00 | Closing Ceremony | | | |

30th September

| | TECHNICAL SESSION - ROOM A | PARALLEL SESSION - ROOM B | PARALLEL SESSION - ROOM C | PARALLEL SESSION - ROOM D |
|----------------|--|---|--|---|
| 09.30 | Welcome coffee | | | |
| 10.00 12.00 | <p>Opening Ceremony Dario Nardella - Major of Florence Jari Kaukonen - ISTT Chairman Paolo Trombetti - IATT Chairman Piero Petrucco - Vice Chairman ANCE (Builders National Association)</p> | | | |
| 12.00 | Exhibition Area | | | |
| 13.00 14.00 | Lunch break | Lunch break | Lunch break | Lunch break |
| | Microtunnelling/Pipe Jacking/Auger Boring I | Research & Development I | Mapping and Inspection of Underground Utilities I | Industry Session |
| 14.00 16.00 | <p>Panel Event I Samuel Ariaratnam (Arizona State University - USA)</p> <p>E-Power Pipe®: jet pump technology for long-distance drives in small diameters Marc Peters (Herrenknecht AG - Germany)</p> <p>Stability of surrounding soil by using underpinning pipe jacking method Hideki Shimada (Kyushu University, Department of Earth Resources Engineering - Japan)</p> <p>A microtunnel with a very little radius for a big pipeline Ugo Lazzarini (Max Streicher spa - Italy)</p> <p>TUnIS Navigation E-Power Pipe® - Precise guidance of small diameter tunnelling machines Hähnle Torben (VMT GmbH - Germany)</p> <p>Short-segment jacking of water main for realignment under limited space in urban area Wu Shihchi (Taipei Water Department - Taiwan)</p> | <p>Hydrostatic strength of HI-PVC pipe Chiwan Hsieh (National Pingtung University of Science and Technology - Taiwan)</p> <p>FITT bluforce rj is a range of polymer alloy pipes with joint restraint system Francesco Faedda (FITT - Italy)</p> <p>New battery powered drill rig Raffaele Savi (E.G.T. srl - Italy)</p> <p>Sprayed polymer liners for maintenance holes: resistance to external groundwater Ian Moore (Queen's University, Kingston - Canada)</p> <p>The design and application of PE100 pipe in trenchless technologies for new installation and rehabilitation - Aspects of new materials and support via online guide and tool Andrew Wedgner (PE100+ Association - Germany)</p> <p>RedEx® internal sealing collars - Partial repair and liner end sealing for sewage and drinking water pipes Susanne Leddig-Bahls (IQS Engineering AG - Germany)</p> | <p>How can sewer and water companies deal with hundreds of kilometers of plugged interceptors? Sergio Palazzo (ABRATT - Brasil)</p> <p>WRC's use of focused electrode leak location (FELL) to assess gravity sewers in the UK and Germany, before and after rehabilitation Peter Henley (WRC plc - USA)</p> <p>From hades to heaven? Developments in integrated buried asset information systems in the UK Jo Parker (Watershed Associates - United Kingdom)</p> <p>Leak detection using Helium as a tracer gas and the primus line solution for pipe rehabilitation Avishay Schnaidman (D-I Development and Implementation Ltd - Israel)</p> <p>Increased automation and accuracy in sewer and water main inspections Tiia Lampola (WSP Finland Oy - Finland)</p> <p>A novel cyber-monitoring based asset management scheme for water distribution networks using evolutionary optimization and neural networks Kalyan Piratlai (Clemson University, Glenn Department of Civil Engineering - USA)</p> | <p>14.00 - 15.00 EKSO srl</p> <p>15.00 - 18.00 Short course</p> <p>Le tecnologie di risanamento e rinnovamento del sistema idrico integrato</p> <p>La regolamentazione vigente Prof. Francesco Napolitano (Università degli Studi di Roma La Sapienza - Dipartimento di Ingegneria Civile, Edile ed Ambientale)</p> <p>Disciplinare tecnico Ing. Stefano Tani (MM spa - Responsabile Servizi Divisione Servizio Idrico)</p> <p>Progettazione di un intervento senza scavo: ispezioni iniziali, scelta della tecnologie e controllo di qualità cantiere Prof. Stefano Mambretti (Politecnico di Milano Dipartimento di Ingegneria Civile ed Ambientale)</p> <p>Approfondimenti sulle tecnologie trenchless per il risanamento e rinnovamento del Sistema Idrico Integrato e presentazione di case history Ing. Stefano Tani (MM spa - Responsabile Servizi Divisione Servizio Idrico)</p> |
| 16.00 16.20 | Coffee break | Coffee break | Coffee break | |

30th September

| | TECHNICAL SESSION - ROOM A | PARALLEL SESSION - ROOM B | PARALLEL SESSION - ROOM C | PARALLEL SESSION - ROOM D |
|----------------|--|--|---|---------------------------|
| | Horizontal Directional Drilling 1 | Trenchless Technology Case Studies 1 | Mapping and Inspection of Underground Utilities 2 | |
| 16.20 18.00 | <p>HDD drilling in hard and hardest rock in Europe - Examples of job sites Hans - Joachim Bayer (TRACTO-TECHNIK - Germany)</p> <p>Marsdiep crossing between Den Helder and Textel, length 4.600 m Ernst Fengler (LMR Drilling GmbH - Germany)</p> <p>The Cornegliano Laudense natural gas storage project: HDD as solution for pipeline installation in urban areas Vincenzo Nisii (SAIPEM Engineering & Construction Onshore Division - Italy)</p> <p>Replacing a penstock pipe using directional drilling :chronicle of a non-standard jobsite Paul Cavillon (FOREXI - France)</p> <p>Steering the HDD Hans Block (Brownline - Netherlands)</p> <p>Smart technologies for the enhancement of productivity, digital integration and safety in HDD projects Jasper Van't Westende (VERMEER EMEA - Netherlands)</p> | <p>Unconventional methods of trenchless pipeline installation and replacement using conventional direct PipeA® and HDD Equipment Jwala Sharma (Mears Group Inc - USA)</p> <p>No-dig renovation of pressure pipelines, re-connection techniques and case studies Firmino Pires Barbosa (Relineurope AG - Germany)</p> <p>Installation of pre-support steel pipes to protect \r\nan historical building by a retractable MTBM Riccardo Miotto (Pato srl - Italy)</p> <p>Unique horizontal drain installation under a building using\r\n pilot tube guided Auger Bore methods Michelle Macauley (Macauley Trenchless - USA)</p> <p>A Large U.S. City Conducts a 30,000LF (9,284m) Legacy CIPP assessment project after not achieving anticipated reductions in infiltration resulting in new testing & acceptance standards Chuck Hansen (Electro Scan Inc. - USA)</p> | <p>The cadastre of underground infrastructure networks: the model of Lombardy Region Chiara Dell'Orto (Lombardy Region - Italy)</p> <p>A pipe detecting project and technical assistance in Bangladesh Kito Kazuki (TEPCO Power Grid - Japan)</p> <p>DEMDY"Deep Electromagnetic Detection"\r\n Jean Francois Maregiano (JFM Conseils - France)</p> <p>Assessing the underworld - a three-infrastructure approach to remote sensing Christopher Rogers (University of Birmingham, Department of Civil Engineering - United Kingdom)</p> <p>An automated leakage detection technique for water pipeline systems Kalyan Piratla (Clemson university, Glenn Department of Civil Engineering - USA)</p> | |

1st October

| | TECHNICAL SESSION - ROOM A | PARALLEL SESSION - ROOM B | PARALLEL SESSION - ROOM C | PARALLEL SESSION - ROOM D |
|----------------|---|---|--|---|
| | International Standards | Pipe Lining and Coatings I | Research & Development 2 | Industry Sessions |
| 09.15 11.00 | <p>Panel Event 2 Standardization (UNI, Italian National Standard Body - Italy)</p> <hr/> <p>ITU-T standardization activities related to trenchless technologies Edoardo Cottino (ITU Study Committee - Italy)</p> <p>AWWA watermain rehabilitation initiatives Marc Knight (University of Waterloo - Russia)</p> <p>UNI/PdR-guideline on low environmental impact underground infrastructure technology Feliciano Esposto (IATT - Italy)</p> <p>Status and application of international standards for trenchless technology John Gumbel (JG Pipeline Consultancy - United Kingdom)</p> | <p>Advances in CIPP pressure pipe liner testing and design Mark Knight (University of Waterloo - Russia)</p> <p>Design of liners for circular & non-circular shapes according to the new French ASTEE 3R-2014 V2.0 method - Influence of geometrical imperfections of host pipe & liner Olivier Thepot (Eau de Paris - France)</p> <p>Relining of a DN 300 steel water pipe anchored under the ancient Bridge of the Academy in the historic center of Venice Gianluca Paro (Risanamento Fognature spa - Italy)</p> <p>Taking the mystery out of trenchless repair of pressure pipes with carbon FRP Mo Eshani (PipeMedic by QuakeWrap - USA)</p> <p>Design & building contracts as a performing opportunity to CIPP sewers rehabilitation- Brianzacque case study Simone Cellitti, (Brianzacque srl - Department of Engineering and Spatial Planning - Italy)</p> | <p>Numerical analysis of the behavior of pressurized underground pipelines rehabilitated by cure-in-place-pipe method Keh-Jian Albert Shou (National Chung-Hsing University - Taiwan)</p> <p>A novel iot system development of using wearable ppg monitor devices to improve safety management for shield tunnel construction project Josh Huang (Gini Biotech Corporation Limited - Taiwan)</p> <p>Development and use of robots for trenchless work inside pipelines Michael Sedler (St. Peterburg Polytechnic University - Russia)</p> <p>Digitization in the field of sewer rehabilitation Thomas Ludewig (Ludewig Evaluation GmbH - Germany)</p> <p>The DLT-Method: Stress Test for Pressure Pipes Andreas Haacker (Siebert-Knipschild GmbH - Germany)</p> | <p>10.00 - 11.00 ANESE srl</p> <p>11.00-12.00 SAINT GOBAIN PAM Italia</p> <p>12.00-13.00 DANPHIX spa</p> |
| 11.00 11.20 | Coffee break | Coffee break | Coffee break | |

1st October

| | TECHNICAL SESSION - ROOM A | PARALLEL SESSION - ROOM B | PARALLEL SESSION - ROOM C | PARALLEL SESSION - ROOM D |
|--------------------------------------|--|--|--|---------------------------|
| | | | Research & Development 3 | |
| | <p>11.20-11.40 Trenchless Technology Sergio Chinosi (CIGRE - Study Committee B1 (International Council on Large electric system)</p> | <p>Round Table - Water and Wastewater</p> | <p>Innovative monitoring of railway tracks during trenchless crossings Jack Butterworth (Lynx+ - France)</p> <p>Investigation of cracks found in the circumferential direction on jacking pipes Yuki Kaneshiro (TEPCO Power Grid-Japan)</p> <p>Increased efficiency in renovation planning Sari Pietilä (WSP Finland Oy - Finland)</p> <p>Contact mechanics and its normalized indices for trenchless cutting associated with machine learning Li-Hsien Chen (National Taipei University of Technology-Taiwan)</p> <p>New performance of a NO-DIG technology Christian Noll (Pipetronics GmbH & Co. KG - Germany)</p> | |
| | <p>Mapping and Inspection of Underground Utilities 3</p> <p>The Italian solution on the Cadastre of technological infrastructures Fulvio Ananasso (Associazione Stati Generali dell'Innovazione - Italy)</p> <p>Osaka gas' GPR and cable & pipe locator Takaharu Nakauchi (Osaka Gas Co - Japan)</p> <p>Condition monitoring of excavated CIPP-liners to ensure lifespan Love Pallon (RISE Research Institutes of Sweden - Sweden)</p> <p>Safety measures for reducing asset strikes Scott Landes (Infrastructure Resources Rhino Marking and Protection Systems - USA)</p> | | | |
| <p>11.20 13.00</p> | | | | |
| <p>13.00 14.00</p> | Lunch break | Lunch break | Lunch break | |

1st October

| | TECHNICAL SESSION - ROOM A | PARALLEL SESSION - ROOM B | PARALLEL SESSION - ROOM C | PARALLEL SESSION - ROOM D |
|----------------|--|---|---|--|
| | Microtunnelling/Pipe Jacking/Auger Boring 2 | Trenchless Pipe Replacement 1 | Environmental and Sustainability Benefits of Trenchless 1 | Industry session |
| 14.00 16.00 | How to choose the best technology for laying an underground pipeline Enzo Rizzi (ICOP spa - Italy) | The path forward for pipe bursting asbestos cement pipe in the United States while meeting existing US regulations Edward Alan Ambler (AM Trenchless - USA) | Panel Event 3 Risk assessment in excavation works Luca Rossi INAIL (National institute for occupational accident insurance) | 14.30-15.30 EKSO srl |
| | Microtunneling projects for power-transmission pipes-sharp curves at alignment changes and steep slope Shinjiro Nakamura (TEPCO Power Grid Inc. - Japan) | The use of new condition assessment technologies for selecting trenchless rehabilitation of wastewater networks in Ras al Khaimah, UAE Abdul Qadir Malik (Ras Al Khaimah Wastewater Agency - UAE) | New technical solutions for the burial of distribution networks: benefits and reasons why Luca Venturi (Langmatz GmbH - Germany) | 15.30-18.30 Short course |
| | Selection criteria of tunneling boring machines (TBM) for hard and soft grounds Niyazi Bilim (Konya Technical University - Turkey) | Design and installation of water pipeline renewals Houming Ni (Asoe Hose Manufacturing Inc - USA) | Trenchless solutions for the installation of gas distribution networks Thorsten Schulte (Tracto-Technik - Germany) | Microtunnelling e direct pipe La normativa vigente: UNI/PdR 26.2:2017 Tecnologia di realizzazione delle infrastrutture interrate a basso impatto ambientale - Posa di tubazioni a spinta mediante perforazioni orizzontali La fattibilità dei Microtunnel, indagini preventive geognostiche ed indagini sui sottoservizi esistenti Prof. Quintilio Napoleoni (Università degli Studi di Roma La Sapienza - Ingegneria Civile, Edile ed Ambientale) |
| | Tight curved microtunnel in Auckland; New Zealand Yann Rouillard (Bessac - France) | | Criteria to evaluate environmental sustainability and applicability of no-dig technologies for the installation of new pipes and the in situ rehabilitation of existing pipes Martina Ferrini (University of Milan, Bicocca, DISAT - Italy) | Elementi di progettazione, materiali e modalità di esecuzione del microtunnelling rettilineo e curvilineo Ing. Ugo Lazzarini (Consultant) |
| | Study on rectangular pipe jacking and pipe shield Trisha Minmin Sun (SGSTT - Syngapore) | Trenchless Technology Case Studies 2 | Research & Development 4 | Elementi di progettazione e modalità di esecuzione del direct pipe Prof. Quintilio Napoleoni (Università degli Studi di Roma La Sapienza - Ingegneria Civile, Edile ed Ambientale) |
| | Successful challenge for the construction by microtunning of a sub-river utility tunnel! Rémi Subra (SADE - France) | A New FRP Solution for Reconstruction of Deteriorated Pipes and Culverts Mo Eshani (PipeMedic by QuakeWrap - Usa) | Recent advances to understanding of cured in place pipe liner performance within water pipes Ian Moore (Queen's University, Kingston - Canada) | I fanghi di perforazione Presentazione di case history Ing. Ugo Lazzarini (Consultant) |
| | | Utilisation of microtunneling technology for construction of the new gas pipeline between Azerbaijan and Europe Yann Rouillard (Bessac - France) | Evaluating hydraulic fracture risk in layered soil systems Andrew Sparks (Laney Group Inc - USA) | |
| | | Palermo renovates water main to cope with seismic activity Arnold Cerkodhima (Danphix spa - Italy) | | |
| 16.00 16.20 | Coffee break | Coffee break | Coffee break | |

| | TECHNICAL SESSION - ROOM A | PARALLEL SESSION - ROOM B | PARALLEL SESSION - ROOM C | PARALLEL SESSION - ROOM D |
|----------------|--|---|---|---------------------------|
| | Horizontal Directional Drilling 2 | Pipe Lining and Coatings 2 | Environmental and Sustainability Benefits of Trenchless 2 | |
| 16.20 18.00 | <p>The Drilling Contractors Association (DCA-Europe). A European organisation for quality and education in HDD John Stoelinga (Drilling Contractors Association, DCA-Germany)</p> <p>The development of real-time detection and wireless transmission system of drilling parameters in HDD reaming hole Xuming Zhu (China University of Geosciences - China)</p> <p>Experimental study on pullback loads for steel pipelines installed by horizontal directional drilling Ashkan Faghih (University of Alberta - Canada)</p> <p>HDD for connection in gas storage field - Annulus filling Marcello Viti (Anese srl - Italy)</p> <p>Horizontal directional drilling, pipeline installation by pulling or pushing Henk Kruse (Deltares - Netherlands)</p> <p>The role of torque in the reaming process in HDD applications Renzo Chirulli (Vermeer EMEA - Netherlands)</p> | <p>Renovation of sewerage networks under pressure with cured-in-place pipes; RSV leaflet 1.2 Susanne Leddig-Bahls (IQS EngineeringAG - Germany)</p> <p>CIPP Advantages, risks and potentials of LED curing Niklas Ernst (Bluelight GmbH-Germany)</p> <p>Pipe rehabilitation systems - How do you ensure that the system will withstand the rigors of day to day operation and maintenance Richard David Swan (Picote Solutions OY Ltd - United Kingdom)</p> <p>A renewed approach to internal reinstatement of services in CIPP lined water mains Ian Andrew Lancaster (Aegion Corporation - USA)</p> <p>Quality control factors of CIPP Construction Management On Water Main Rehabilitation Wei Cheng Cheng (Taipei Water Department - Taiwan)</p> | <p>Novel business models in support of trenchless cities Christopher Rogers (University of Birmingham-United Kingdom)</p> <p>Innovation for the environment: the experience of Marche Multiservizi s.p.a Nikro Bruni (Marche Multiservizi spa - Italy)</p> <p>Business and the SDG's Per Holm (BlueKoldings - Denmark)</p> | |
| | | | Research & Development 5 | |
| | | | <p>Pipe-filling method for stabilizing empty ducts from the manhole Kenjii Hiyoshi (Nippon Telegraph and Telephone Corporation - Japan)</p> <p>Application of solubilizing surfactant in trenchless drilling fluid Lanbo Xu (China University of Geosciences - China)</p> | |



2nd October

| | TECHNICAL SESSION - ROOM A | PARALLEL SESSION - ROOM B | PARALLEL SESSION - ROOM C | PARALLEL SESSION - ROOM D |
|------------------------------|---------------------------------------|---|--|---|
| | Panel 4 - Worldwide Trenchless Market | Trenchless Pipe Replacement 2 | Industry Session | Short Course |
| | Presentation by: ISTT Societies | <p>Geopolymer lining system used for difficult deep manhole and brick sewer rehabilitation Karl Bissinger (Vortex Europe AG - Germany)</p> <p>Water main rehabilitation with inserted hoses: considerations on design and installation Andreas Gross (Raedlinger primus line GmbH - Germany)</p> <p>Sharing perspective - How bid items effect the cost and construction for a pipe bursting project Edward Alan Ambler (AM Trenchless, Sanford - USA)</p> <p>Experiences with rehabilitation of potable water pipes in Norway Hendrik Panman (Kjeldaas AS - Norway)</p> <p>Critical analysis of pipe ramming behavior and factors that impact predictive models Kimberlie Staheli (Staheli Trenchless Consultants, Inc - USA)</p> | <p>09.30-10.30 EKSO srl</p> <p>10.30-13.30 Short Course</p> <p>Le tecnologie di indagine conoscitiva</p> <p>La normativa vigente: -UNI/PdR 26.1:2017 - Tecnologia di realizzazione delle infrastrutture interrato a basso impatto ambientale - sistemi per la localizzazione e mappatura delle infrastrutture nel sottosuolo -UNI/PdR 38:2018 - Marcatura elettronica di reti interrato e infrastrutture nel sottosuolo</p> <p>Le tecniche di investigazione non distruttive: telecamere e video ispezioni, ricerca perdite e localizzatori elettromagnetici. Dott. Geol. Paolo Papeschi (IDS Georadar, GEO Business Unit director)</p> <p>Le indagini geognostiche Dott. Geol. Riccardo Martelli (Presidente Ordine dei Geologi della Toscana)</p> <p>Metodo GPR (Ground Probing Radar): un aiuto per la progettazione degli interventi Il Radar Interferometrico Terrestre per il monitoraggio statico e dinamico di versanti, frane e strutture Dott. Geol. Paolo Papeschi (IDS Georadar, GEO Business Unit director)</p> <p>Dimostrazione live</p> | <p>09.30-15.30</p> <p>Tecnologie di trivellazione orizzontale controllata - TOC</p> <p>La normativa vigente: UNI/PdR 26.3:2017 - Tecnologia di realizzazione delle infrastrutture interrato a basso impatto ambientale - Sistemi di perforazione guidata: Trivellazione Orizzontale Controllata (TOC)</p> <p>La fattibilità TOC, indagini preventive geognostiche ed indagini sui sottoservizi esistenti. Dott. Geol. Alessandro Olcese Direttore Scientifico IATT</p> <p>La TOC: elementi di progettazione e modalità di esecuzione in ambito urbano ed extraurbano</p> <p>Tipologia di tubazioni e materiali utilizzati nella posa tramite TOC Prof. Quintilio Napoleoni (Università degli Studi di Roma La Sapienza - Ingegneria Civile, Edile ed Ambientale)</p> <p>Dimostrazione live (trasferimento A/R da Fortezza da Basso)</p> |
| 09.15 11.00 | | | | |
| 11.00 11.20 | Coffee break | Coffee break | | |

| | TECHNICAL SESSION - ROOM A | PARALLEL SESSION - ROOM B | PARALLEL SESSION - ROOM C | PARALLEL SESSION - ROOM D |
|----------------|--|--|---------------------------|---------------------------|
| | Panel 4 - Worldwide Trenchless Market | Trenchless Technology Case Studies 3 | | |
| 11.20 13.00 | Presentation by: ISTT Societies | <p>Rehabilitation in Spain of a 10 km long asbestos cement drinking water main with flexible relining technology Jorge Lamazares (Sinzatec Canalizaciones - Spain)</p> <p>Recent developments of GRP solutions in the booming transportation market Laurent Hesters (Amiblu France - France)</p> <p>A case study in successful sewer network rehabilitation with uv cured cipp & traditional/ non-traditional survey technologies Jan Börje Persson (BKP Berolina Polyester GmbH & Co - Germany)</p> <p>Consideration in planning successful trenchless utility installations Karina Buus (Department of Water and Nature Aalborg Cowi - Denmark)</p> <p>Successful Installation of CFRP and GFRP on Pipe Bridges in Scotland, UK Amber Jasmine Wagner (Aegion Corporation - USA)</p> | | |
| 13.00 14.00 | Lunch break | Lunch break | | |



2nd October

| | TECHNICAL SESSION - ROOM A | PARALLEL SESSION - ROOM B | PARALLEL SESSION - ROOM C | PARALLEL SESSION - ROOM D |
|------------------------------|--|---|---------------------------|---------------------------|
| | Research & Development 6 | Pipe Lining & Coatings 3 | | |
| 14.00 16.00 | <p>Experimental characterization of micro-trenches on road pavements Alessandro Corradini (University of Perugia - Department of Civil and Environmental Engineering - Italy)</p> <p>A numerical study for the analysis of micro-trenching performance Diana Salciarini (University of Perugia - Department of Civil and Environmental Engineering - Italy)</p> <p>A novel monitoring procedure for assess the correct road pavement restoration after the One-Day-Dig micro-trenching installation Evelina Volpe (University of Molise, Department of Biosciences and Territory - Italy)</p> | <p>New UV Felt CIPP for the Rehabilitation of Underground Pipelines Ian Andrew Lancaster (Aegion Corporation - USA)</p> <p>Pipe Preservation during Trenchless Installations: No Need to Take Unnecessary Risks Cristian Grecco (TDC International AG - Switzerland)</p> <p>A unique example of close fit lining technology for the renewal of water pipes along the bridge "Ponte Punta Penna" in Taranto Gianluca Casamassima (Acquedotto Pugliese - Italy)</p> <p>Joining methods for CIPP products in pressure pipe systems Jens Wahr (D&S - Germany)</p> | | |
| | Mapping and Inspection of Underground Utilities 4 | Hydroelectric pipeline rehabilitation, BlueLine - uv liner system Matteo Vicentini (ENEL - Italy) | | |
| | <p>No-dig investigation around Palazzo Vecchio, Florence Massimo Coli (University of Florence, DST-Italy)</p> <p>Damage Prevention: OneCall solutions to protect underground utilities Jan-Willem Nijman (PelicanCorp / BeforeUDig - Italy)</p> <p>Small or Big - we don't mind! Piero Salvo (GAME Consultants - Canada)</p> | <p>Hoselining pipe rehabilitation, Acqualatina SpA experience Daniele Verde (Acqualatina spa - Italy)</p> <p>Sensors monitoring and trenchless technologies: two essential keystones toward a deep innovation of smart pipes backbones Costantino Giaconia (University of Palermo-Dept of Engineering Italy)</p> | | |
| 16.00 16.45 | Closing Ceremony | | | |
| 18.00 | Exhibition Closing | | | |

GENERAL INFORMATION

Congress Venue

Fortezza da Basso
Viale Filippo Strozzi, 1 - 50129 Florence (Italy)

Organizing Committee



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Organizing Secretariat



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For information on sponsorship please contact industrynodig@oic.it
For information on registrations and hotel reservation please contact registrationnodig2019@oic.it

Registrations and Hotel Reservations

Registration fees to attend the Scientific sessions are in Euro (VAT 22% included) and will be adjusted according to VAT charge alignment.

| | Within July 5 th , 2019 | From July 6 th , 2019 |
|---------------------------|------------------------------------|----------------------------------|
| DELEGATE ISTT Members | € 450,00 | € 530,00 |
| DELEGATE Non ISTT Members | € 550,00 | € 650,00 |
| STUDENT * | € 50,00 | € 50,00 |
| SHORT COURSES | € 200 | |
| GALA DINNER | € 100,00 | |

*Application as Student should be certified by a valid student ID to be up-loaded in the on-line platform directly (pdf format is required)

GENERAL INFORMATION

Delegate and student registration fee includes:

- Attendance to all Scientific sessions
- Conference kit
- Free entrance to exhibition
- Certificate of attendance
- Catering service as per programme
- Welcome ceremony

Short courses registration fee includes:

- Attendance to the Short Course selected
- Conference kit
- Free entrance to exhibition
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