




PROGRAM – DAY1, MONDAY 25TH

Day	Start	End	Duration	A-sessions	B-Sessions
SEPTEMBER 25TH: CONFERENCE OPENING AND TECHNICAL SESSIONS					
Monday	9:00 am	10:00 am	1:00	OPENING SESSION	
	9:00 am	9:10 am	0:10	PPXXI WELCOME – Sarah Patterson – U.S.A. (Plastics Pipe Institute (PPI))	
	9:10 am	9:35 am	0:25	• ID264 – DEVELOPING CIRCULAR SOLUTIONS IN THE PETROCHEMICALS INDUSTRY – Jay Chaffin – U.S.A. (Chevron Phillips Chemical)	
	9:35 am	10:00 am	0:25	• ID168 – SUSTAINABILITY AT THE CORE OF STRATEGIES TO ACCELERATE THE JOURNEY TOWARDS CARBON NEUTRALITY – Zoran Davidovski – Austria (Pipelife), Robin Bresser – Germany (Borealis)	
	10:00 am	10:30 am	0:30	COFFEE BREAK SPONSORED BY 	
	10:30 am	11:30 am	1:00	1A – WATER SECURITY Chair: Zoran Davidovski – AUSTRIA (Pipelife)	1B – QUALITY INFRASTRUCTURES Chair: Tony Calton - UNITED KINGDOM (The European Plastic Pipe and Fittings Association – TEPPFA)
	10:30 am	10:50 am	0:20	• ID158 – MICROPLASTICS AND PLASTIC PIPES – Peter Sejersen – BELGIUM (TEPPFA)	• ID113 – ASTM F17 – FIFTY YEARS OF PLASTICS PIPING PROGRESS – Steve Sandstrum – U.S.A. (Borealis Compounds Inc.)
	10:50 am	11:10 pm	0:20	• ID122 – SAFEGUARDING OUR WATER: NSF/ANSI/CAN 61 – Kathryn Foster – U.S.A. (NSF)	• ID152 – HOW TO STRENGTHEN THE DEVELOPMENT OF CHINA'S PLASTIC PIPE INDUSTRY IN THE NEW MARKET ENVIRONMENT – Wang Zhanjie – CHINA (China Plastics Piping Association – CPPA)
	11:10 pm	11:30 pm	0:20	• ID240 – THE FUTURE HARMONIZED CERTIFICATION SCHEME FOR PRODUCTS IN CONTACT WITH DRINKING WATER – Peter Sejersen – BELGIUM (TEPPFA)	• ID205 – COMMITMENT TO SUSTAINABILITY IN STRUCTURED-WALL PVC-U PIPES FOR SEWERAGE. "CIRCULAR CERTIFICATION" FOR "CIRCULAR PRODUCTS" – Ricardo Pascual – SPAIN (AENOR)
Monday	11:30 am	12:30 pm	1:00	LUNCH SPONSORED BY 	
	12:30 pm	2:10 pm	1:40	2A – STRUCTURED DESIGN Chair: John Kurdziel – U.S.A. (Advanced Drainage Systems)	2B – WHOLISTIC APPROACH Chair: Vincent Stone – BELGIUM (PVC4 Pipes/ The European Council of Vinyl Manufacturers – ECVm)
	12:30 pm	12:50 pm	0:20	• ID165 – DESIGN METHODS AND ACTUAL PERFORMANCE OF LARGE DIAMETER STRUCTURED WALL PIPES – Anders Andtbacka – FINLAND (Uponor)	• ID117 – FISHER-TROPSCH HYDROCARBONS AS PROCESSING AIDS IN INJECTION MOLDING & EXTRUSION – Steve Torchia – U.S.A. (Sasol Chemicals LLC)
	12:50 pm	1:10 pm	0:20	• ID236 – A NEW CONCEPT FOR TESTING OF NEW GENERATION OF THERMOPLASTIC STORM-WATER RETENTION TANKS – Shad Sargand – U.S.A. (Ohio University)	• ID187 – FRACTURE MECHANICS AS A TOOL FOR THE ASSESSMENT OF THE DEGREE OF GELATION OF U-PVC PIPES – Antonio Rodolfo Jr. – BRAZIL (Braskem S/A)
	1:10 pm	1:30 pm	0:20	• ID262 – SANDBOX TESTING FOR STRUCTURAL ASSESSMENT OF PLASTIC MANHOLES – Ricky Selle – GERMANY (Selle Consult)	• ID119 – NEW CYCLIC METHOD FOR PVC FORCE MAINS – Jay Parvez – U.S.A. (Uni-Bell PVC Pipe Association)
	1:30 pm	1:50 pm	0:20	• ID227 – THE CARBON COST OF OUR BURIED INFRASTRUCTURE – IS IT OUT OF SITE AND OUT OF MIND? – PAUL O'REGAN – UNITED KINGDOM (AquaSpira Limited)	• ID258 – PROJECT AND EXECUTION OF WORKS FOR THE EXPANSION AND IMPROVEMENT OF THE POTABLE WATER SUPPLY CAPACITY TO THE METROPOLITAN AREA OF MONTEVIDEO – Ignacio Muñoz – SPAIN (Molecor Tecnologia)
	1:50 pm	2:10 pm	0:20	• ID123 – 3D PRINTING OF FLOW PROFILES FOR INSPECTION CHAMBERS AND MANHOLES – Ton Schoenmaker – THE NETHERLANDS (Pipelife)	• ID199 – THERMOFORMING PROCESS FOR SOCKETS INTEGRATED WITH RIEBER SYSTEM IN MOLECULARY ORIENTED POLYVINYL CHLORIDE (PVCO) PIPES FOR PRESSURIZED WATER DISTRIBUTION – Orlando Martinez, Marco Pagani – ITALY (SICA S.p.A.)




PROGRAM – DAY1, MONDAY 25TH

Day	Start	End	Duration	A-sessions	B-Sessions
Monday	2:10 pm	2:40 pm	0:30	COFFEE BREAK SPONSORED BY PIPELINE PLASTICS	
	2:40 pm	4:20 pm	1:40	3A – APPLICATION OF RECYCLATES Chair: Douglas Keller – U.S.A. (LyondellBasell)	3B – SAVVY TOOLS Chair: Jim Johnston – U.S.A. (McElroy)
	2:40 pm	3:00 pm	0:20	• ID133 – CRITICAL QUALITY CONTROL OF POST CONSUMER RECYCLED PVC – Shane Harton – U.S.A. (C.W. Brabender)	• ID245 – LEVERAGING DATA INSIGHTS TO IMPROVE SAFETY, QUALITY AND ROI – Nayib Joussef – CHILE (McElroy Manufacturing Inc)
	3:00 pm	3:20 pm	0:20	• ID241 – THE BRAZILIAN PVC PIPE ASSOCIATION QUALITY ASSURANCE PROGRAM: 30+ YEARS OF SUCCESS – Antonio Rodolfo Jr. – BRAZIL (Braskem S/A)	• ID225 – ACCELERATING SUSTAINABILITY WITH DIGITAL SOLUTIONS – Joseph Venegas – THE NETHERLANDS (Rollepaal)
	3:20 pm	3:40 pm	0:20	• ID120 – EXAMINING SGF ORIENTATION IN POLYETHYLENE REINFORCED WITH SHORT GLASS FIBERS PIPE – Mitsuaki Tokiyoshi – JAPAN (C.I. TAKIRONCIVIL Corporation)	• ID142 – USING A MULTI FREQUENCY MICROWAVE INSPECTION APPROACH TO ACCURATELY INSPECT AND CATEGORIZE HDPE BUTT FUSIONS – Robert Stakenborghs – U.S.A. (Advanced Microwave Imaging)
	3:40 pm	4:00 pm	0:20	• ID263 – PERFORMANCE EVALUATION OF SUSTAINABLE POLYPROPYLENE BLENDS FOR CORRUGATED DRAINAGE PIPE APPLICATIONS – Michael Pluimer – U.S.A. (University of Minnesota)	• ID260 – APPLICATION FOR GEOLOCATING WATER NETWORKS – Dolores Herran – SPAIN (Molecor)
	4:00 pm	4:20 pm	0:20	• ID194 – ESTABLISHING REQUIREMENTS FOR RECYCLED HDPE IN HDPE CONDUIT – Michael Pluimer – U.S.A. (University of Minnesota)	• ID151 – PROGRESS IN INLINE PLASTIC PIPE MEASUREMENT – NEW APPLICATION FIELDS DUE TO ADVANCED RADAR TECHNOLOGY – Jan Hendrik Beckmann – GERMANY (INOEX GmbH)
	4:45 pm	6:00 pm	1:15	WELCOME RECEPTION SPONSORED BY INOEX INSPIRE BEYOND MEASUREMENT	

PROGRAM – DAY2, TUESDAY 26TH

Day	Start	End	Duration	A-sessions	B-Sessions
SEPTEMBER 26TH: TECHNICAL SESSIONS					
Tuesday	9:00 am	10:40 am	1:40	4A – FOOD SECURITY Chair: Robin Bresser – Germany (Borealis)	4B – ENERGY Chair: Randy Knapp – U.S.A. (Plastics Pipe Institute – PPI)
	9:00 am	9:20 am	0:20	• ID213 – INNOVATING FOR SUSTAINABILITY ENHANCEMENTS IN POLYETHYLENE BASED MICROIRRIGATION PRODUCTS – Rachel Anderson – U.S.A. (DOW Inc.)	• ID126 – PUBLISHED HYDROGEN PERMEATION STUDY ON 4 DIFFERENT TYPES OF PE PIPES – Norbert Jansen – GERMANY (Borealis Polymere GmbH)
	9:20 am	9:40 am	0:20	• ID244 – FIELD AND FEM PERFORMANCE OF AGRICULTURAL MAINS – Kevin White – U.S.A. (E. L. Robinson Engineering of Ohio)	• ID145 – DESIGN OF UNPLASTICIZED POLYAMIDE 12 OILFIELD LINE PIPE BASED ON PUBLISHED REGRESSION CURVES AND ASTM F3524 – James F. Mason – U.S.A. (Mason Materials Development LLC)
	9:40 am	10:00 am	0:20	• ID200 – UNDERSTANDING THE SCIENCE IN ESTABLISHING EQUIVALENCY OF VARIOUS CARBON BLACK MASTERBATCHES IN QUALIFICATION APPROVALS – Bill Gauthier – U.S.A. (Baystar)	• ID223 – LEAK TIGHTNESS OF PVC FITTINGS WITH HYDROGEN – Roland Valk – THE NETHERLANDS (Kiwa Technology)
	10:00 am	10:20 am	0:20	• ID252 – HOW PVC PIPES CAN CONTRIBUTE TO FOOD SAFETY IN THE WORLD'S MEGA-CITIES – Tobias Johnsen, Ole Grøndahl Hansen – DENMARK (PVC Information Council Denmark)	• ID257 – FUSION TEST PROGRAM ON POLYAMIDE PIPING SYSTEMS FOR DISTRIBUTION NETWORKS UP TO 16 BAR – Carine Lacroix – FRANCE (GRTgaz RICE)
	10:20 am	10:40 am	0:20	• ID139 – RESULTS OF A 2022 COMPREHENSIVE STUDY OF WATER MAIN PERFORMANCE IN THE USA AND CANADA – Steven L. Barfuss – U.S.A. (Utah State University)	• ID259 – SOLUTIONS FOR REINFORCED THERMOPLASTIC PIPES (RTPS) – Ali M. Alghamdi – SAUDI ARABIA (SABIC)
Tuesday	10:40 am	11:10 am	0:30	COFFEE BREAK SPONSORED BY 	
	11:10 am	12:50 pm	1:40	5A – INSTALLATION DESIGN Chair: André Nijland – THE NETHERLANDS (Wavin Technology and Innovation B.V.)	5B – JOINING TECHNOLOGY Chair: Forest Hampton – U.S.A. (Lubrizol Advanced Materials)
	11:10 am	11:30 am	0:20	• ID108 – BENDING & DEFLECTION LIMITS OF PE PIPE – EXISTING & PROPOSED – Chris Ampfer – U.S.A. (WL Plastics)	• ID132 – PVC-U PIPES: OPTIMAL EXTRUSION CONDITIONS FOR A 100+ YEAR DESIGN LIFETIME – Joaquin Lahoz – SPAIN (Centro de Ensayos, Innovación y Servicios – CEIS)
	11:30 am	11:50 am	0:20	• ID229 – CUT-AND-COVER PIPELINES WITH POOR TRENCH WALLS – Amster Howard – U.S.A. (Civil Engineering Consultant)	• ID243 – SELECTION AND EVALUATION OF ORGANOTIN STABILIZER CHEMISTRIES FOR PVC AND CPVC PIPE AND FITTING SYSTEMS – Robert Smith – U.S.A. (PMC Organometallics)
	11:50 am	12:10 pm	0:20	• ID228 – MYRIAD OF CHOICES FOR BURIED PIPE INSTALLATION – Amster Howard – U.S.A. (Civil Engineering Consultant)	• ID146 – SUSTAINABLE RESTRAINT JOINT FOR PE PIPES AS AN ALTERNATIVE TECHNOLOGY FOR SUEZ – Jennifer Ravereau, Catherine Giorni – FRANCE (SUEZ – CIRSEE)
	12:10 pm	12:30 pm	0:20	• ID242 – NEW APPROACH TO HDPE PIPE FUSION PROVIDES THE ABILITY TO “MEET THE PIPE WHERE IT LAYS” – Chris Greggs – U.S.A. (McElroy Manufacturing)	• ID251 – SUSTAINABILITY & THE RETURN OF THE PRR GASKET – Guido Quesada – COSTA RICA (Simulation Driven Engineering)
	12:30 pm	12:50 pm	0:20	• ID211 – AN INVESTIGATION OF THE EFFECT OF BACKFILL TYPE ON THE PERFORMANCE OF LARGE DIAMETER POLYOLEFIN PIPE UNDER HIGHWAY LOADINGS AT MINIMUM COVER – Joseph Babcanec – U.S.A. (Advanced Drainage Systems)	• ID217 – STRUCTURAL HEALTH MONITORING OF PLASTIC PIPELINES BY SHORT CARBON FIBER REINFORCED ELECTROFUSION JOINT – Riwu Yao – CHINA (Zhejiang University)


PROGRAM – DAY2, TUESDAY 26TH

Day	Start	End	Duration	A-sessions	B-Sessions
Tuesday	12:50 pm	1:50 pm	1:00	LUNCH SPONSORED BY 	
	1:50 pm	3:10 pm	1:20	6A – MANUFACTURING TECHNOLOGY Chair: Christian Apel – GERMANY (Radius Group Procurement Company)	6B – NEW LEARNINGS Chair: Carl Baker – U.S.A. (Shell Polymers)
	1:50 pm	2:10 pm	0:20	• ID249 – 2.7 METERS AND GROWING – Henning Stieglitz – GERMANY (BC Extrusion Holding GmbH)	• ID207 – LONG-TERM PERFORMANCE IN PE100 AND PE100RC RESINS: DOES THE COMONOMER LENGTH MATTER? – Carlos Domínguez – SPAIN (LATEP – Rey Juan Carlos University)
	2:10 pm	2:30 pm	0:20	• ID156 – “IF” (INTERFERENCE) – SCREW TECHNOLOGY – Rainer Viessmann – GERMANY (Hans Weber Maschinenfabrik)	• ID215 – DEVELOPMENT OF A NEW QUALITY CONTROL TEST METHOD TO ASSESS THE STRESS CRACK RESISTANCE OF HDPE WITH RECYCLED CONTENT – Michael Pluimer, Sara Stone – U.S.A. (University of Minnesota)
	2:30 pm	2:50 pm	0:20	• ID112 – RHEOLOGICAL CHARACTERIZATION AND FLOW MODELING OF SAG IN HDPE PRESSURE PIPE – Harry Mavridis – U.S.A. (LyondellBasell)	• ID214 – A NEW GENERATION OF HIGH PERFORMANCE BIAXIALLY ORIENTED POLYETHYLENE AND POLYPROPYLENE PRESSURE PIPES – AN UPDATE – Ajay Tariya – THE NETHERLANDS (SABIC)
	2:50 pm	3:10 pm	0:20	• ID265 – RE-DISTRIBUTION OF RESIDUAL STRESS IN PLASTIC PIPES AND ITS EFFECTS ON HYDROSTATIC PRESSURE TEST RESULTS – Suleyman Deveci – U.A.E. (Borouge PTE Limited)	• ID148 – A NEW HIGH PERFORMANCE BIMODAL POLYETHYLENE RESIN FOR POWER AND TELECOMMUNICATION APPLICATIONS – Olivera Bilic – U.S.A. (Chevron Phillips Chemical Company)
	3:10 pm	3:40 pm	0:30	COFFEE BREAK SPONSORED BY  Shell Polymers	
Tuesday	3:40 pm	5:00 pm	1:20	7A – RESILIENCE AND SUSTAINABILITY Chair: Dean Jenne – U.S.A. (SACO AEI Polymers)	7B – RECYCLING LONG-TERM Chair: Monica De La Cruz – SPAIN (Spanish Plastic Pipes and Fittings Manufacturers Group – AseTUB/ANAIP)
	3:40 pm	4:00 pm	0:20	• ID237 – INNOVATIVE ADDITIVE TECHNOLOGY FOR IMPROVING THE CHLORINE RESISTANCE OF POTABLE HDPE PIPES WITH LOW NIAs (NON-INTENTIONALLY ADDED SUBSTANCES) – Gregor Huber – SWITZERLAND, Tobias Eltze – USA (BASF)	• ID166 – RECYCLING COMMITMENT OF THE EUROPEAN PLASTIC PIPE INDUSTRY – Ludo Debever – BELGIUM (TEPPFA aisbl)
	4:00 pm	4:20 pm	0:20	• ID233 – DIFFERENT THERMO-OXYDATIVE TESTS IN COMPARISON FOR ONE INDUSTRIAL PE PIPE COMPOUND – Norbert Jansen – GERMANY (Borealis Polymere)	• ID220 – FROM FISHING NETS TO PLASTIC PIPES: NEW CHALLENGES FOR RECYCLED POLYETHYLENE FLOWS IN A CIRCULAR ECONOMY – Rafael A. García-Muñoz – SPAIN (King Juan Carlos University)
	4:20 pm	4:40 pm	0:20	• ID164 – CLOSING THE LOOP FOR PEX PIPE IN PRACTICE THROUGH ADVANCED RECYCLING – Robin Bresser – GERMANY (Borealis)	• ID221 – EFFECT OF POLYPROPYLENE (PP) POST-CONSUMER RECYCLATE ON THE SLOW CRACK GROWTH RESISTANCE OF A VIRGIN PP PIPE MATERIAL – Jessica Hinczica – AUSTRIA (Polymer Competence Center Leoben GmbH)
	4:40 pm	5:00 pm	0:20	• ID234 – DRIVING TOWARDS A CIRCULAR ECONOMY-EVALUATION OF PEX RECYCLING – Jacob John – U.S.A. (Uponor Inc)	• ID196 – WHAT NEEDS TO BE UNDERSTOOD TO USE RECYCLATES IN PLASTIC PIPES: THE INFLUENCE OF IMPURITIES ON LONG-TERM PROPERTIES – Mario Messiha – AUSTRIA (Polymer Competence Center Leoben GmbH)
	7:45 pm	11:00 pm	3:15	GALA DINNER SPONSORED BY 	

PROGRAM – DAY3, WEDNESDAY 27TH

Day	Start	End	Duration	A-sessions	B-Sessions
27TH SEPTEMBER: TECHNICAL SESSIONS AND CLOSING					
Wednesday	9:00 am	10:40 am	1:40	8A – TEST METHODS Chair: Peter Sejersen – BELGIUM (The European Plastic Pipe and Fittings Association – TEPPFA)	8B – RESOURCING SUSTAINABILITY Chair: Steve Sandstrum – U.S.A. (Borealis Compounds Inc.)
	9:00 am	9:20 am	0:20	• ID141 – INFLUENCING FACTORS OF CRACKED ROUND BAR TEST – Yanlei Hu – CHINA (National Test Center of Polymer and Building Materials (NTC), SINOPEC (Beijing) Research Institute of Chemical Industry Co., Ltd.)	• ID153 – A HOLISTIC ENVIRONMENTAL FOOTPRINT ASSESSMENT OF THE EUROPEAN PLASTIC PIPE BUSINESS – Ludo Debever – BELGIUM (TEPPFA aisbl)
	9:20 am	9:40 am	0:20	• ID161 – THE EFFECT OF THE NOTCH RADIUS ON THE NOTCHED PIPE TEST RESULTS – Suleyman Deveci – U.A.E. (Borouge Pte.)	• ID253 – IMPROVING MECHANICAL SORTING OF POST-CONSUMER PLASTIC WASTE TO ACHIEVE CIRCULAR USE OF PLASTIC PIPES – Márton Bredács – AUSTRIA (Polymer Competence Center Leoben GmbH)
	9:40 am	10:00 am	0:20	• ID163 – FATIGUE CRACK GROWTH RESISTANCE OF POLYPROPYLENE PIPE COMPOUNDS CONTAINING POST-CONSUMER PACKAGING RECYCLATES – Paul J. Freudenthaler – AUSTRIA (Johannes Kepler University Linz)	• ID201 – ONE SMALL STEP FOR EDUCATION – ONE GIANT LEAP FOR THE SUSTAINABLE FUTURE OF OUR INDUSTRY'S WORKFORCE – White G. Jee – U.S.A. (JEE Consulting Services LLC)
	10:00 am	10:20 am	0:20	• ID193 – ALTERNATIVE SLOW CRACK GROWTH TEST FOR THE HDPE CONDUIT INDUSTRY: CORRELATION BETWEEN ESCR AND NCLS – Patrick Vibien – U.S.A. (Plastics Pipe Institute)	• ID182 – THE ALLIANCE FOR PE PIPE LAUNCHES INAUGURAL YEAR OF CERTIFIED PROFESSIONALS PROGRAM – Edward Alan Ambler – U.S.A. (Alliance for PE Pipe)
	10:20 am	10:40 am	0:20	• ID261 – HOW TO CONTROL CRACKS IN PIPES TO GUARANTEE A SAFE OPERATION – Gerald Pinter – AUSTRIA (Montanuniversitaet Leoben)	• ID129 – HOW AN INDUSTRY LEAD PVC PLASTIC PIPES RECYCLING SCHEME CAN CHANGE PERCEPTIONS, EDUCATE, AND PROVIDE VALUABLE INSIGHTS FOR A MORE SUSTAINABLE SOLUTION – Cindy Bray – AUSTRALIA (Plastics Industry Pipe Association of Australia)
Wednesday	10:40 am	11:10 am	0:30	COFFEE BREAK	
	11:10 am	12:30 pm	1:20	9A – CASE STUDIES Chair: Lance MacNevin – U.S.A. (Plastics Pipe Institute – PPI)	9B – NEW TEST METHODS Chair: Suleyman Deveci – U.A.E. (Borouge Pte.)
	11:10 am	11:30 am	0:20	• ID180 – PE100 MATERIAL SUPPORTS WORLD'S LARGEST WASTEWATER TREATMENT PLANT – BAH EL BAQAR, EGYPT – Sultan Alkendi – U.A.E. (Borouge)	• ID209 – DEVELOPMENT OF HYDRO-AXIAL TENSION METHOD FOR WHOLE PIPE TENSILE TEST – Robert Stakenborghs – U.S.A. (Advanced Microwave Imaging)
	11:30 am	11:50 am	0:20	• ID138 – THE USE OF PE100+ MATERIALS IN TRENCHLESS TECHNOLOGY APPLICATIONS – Robin Bresser – THE NETHERLANDS (PE100+ Association)	• ID137 – A SUCCESS STORY: NEW TESTING ALTERNATIVES FOR SPANISH AND LATAM PE100RC PIPE MANUFACTURERS – Federico Muñoz – SPAIN (Centro de Ensayos, Innovación y Servicios – CEIS)
	11:50 am	12:10 pm	0:20	• ID232 – HIGH DENSITY POLYETHYLENE (HDPE) PIPE BRINGS SAFE SHORES AND RELIABLE ELECTRICITY TO RWANDA – Richard Coombs – U.S.A. (ISCO Industries)	• ID222 – THE QUALITY OF OLD AND NEW PE PIPES USING THE PENT AND CPENT TEST – Roland Valk – THE NETHERLANDS (Kiwa Technology)
	12:10 pm	12:30 pm	0:20	• ID204 – ADVANTAGES OF PE-RT II PIPES IN DISTRICT HEATING APPLICATION SYSTEM – Abdullah Saber – U.A.E. (Borouge)	• ID219 – MAKING THE ACCELERATED NOTCH PIPE TEST (ANPT) FUTURE-PROOF – Ernst van der Stok – THE NETHERLANDS (Kiwa Technology)

PROGRAM – DAY3, WEDNESDAY 27TH

Day	Start	End	Duration	A-sessions	B-Sessions
Wednesday	12:30 pm	1:30 pm	1:00	LUNCH SPONSORED BY 	
	1:30 pm	3:10 pm	1:40	10A – DESIGN CONSIDERATIONS Chair: Bruce Hollands – U.S.A. (Uni-Bell PVC Pipe Association – PVCPA)	10B – ENVIRONMENTAL CONSIDERATIONS Chair: Cindy Bray – Australia (Plastics Industry Pipe Association of Australia – PIPA)
	1:30 pm	1:50 pm	0:20	<ul style="list-style-type: none"> ID159 – SIMULATION DRIVEN OPTIMIZATION OF SPIGOT BEVELS – Guido Quesada – COSTA RICA (Simulation Driven Engineering) 	<ul style="list-style-type: none"> ID175 – LIFECYCLE COST BENEFITS OF PVC-U PIPES IN EUROPE – Vincent Stone – BELGIUM (Europe Council of Vinyl Manufacturers)
	1:50 pm	2:10 pm	0:20	<ul style="list-style-type: none"> ID121 – RE-ROUNDING OF DEFLECTED HIGH-DENSITY POLYETHYLENE PIPE – Kevin White – U.S.A. (E. L. Robinson Engineering of Ohio) 	<ul style="list-style-type: none"> ID118 – UPDATED ENVIRONMENTAL PRODUCT DECLARATION FOR PVC AND PVCO PRESSURE PIPE AND PVC NONPRESSURE PIPE – Richard Nichols – U.S.A. (Uni-Bell PVC Pipe Association)
	2:10 pm	2:30 pm	0:20	<ul style="list-style-type: none"> ID216 – MICROWAVE INSPECTION DEVELOPMENT AND EVALUATION FOR SPOOLABLE REINFORCED THERMOPLASTIC PIPE – Chantz Denowh – U.S.A. (ADV Integrity Inc) 	<ul style="list-style-type: none"> ID256 – INSIGHTS GAINED IN DEVELOPING ENVIRONMENTAL PRODUCT DECLARATIONS FOR PLASTIC PIPES IN AUSTRALIA – Matthew Hynes, Lucy Croker – AUSTRALIA (Iplex Pty Limited, Vinindex Pty Limited)
	2:30 pm	2:50 pm	0:20	<ul style="list-style-type: none"> ID171 – DESIGN OF HDPE WATER MAINS FOR THE LATERAL SPREAD SEISMIC HAZARD – Michael O'Rourke – U.S.A. (Rensselaer Polytechnic Institute) 	<ul style="list-style-type: none"> ID116 – POLYPROPYLENE (PP) – A CARBON FOOTPRINT ASSESSMENT – Steve Sandstrum – U.S.A. (Borealis Compounds)
	2:50 pm	3:10 pm	0:20	<ul style="list-style-type: none"> ID246 – BUILDING PIPELINES THROUGH EMBANKMENTS TO LAST – Shawn R. Coombs – U.S.A. (Advanced Drainage Systems) 	<ul style="list-style-type: none"> ID177 – NEW CRADLE-TO-GATE DATA FOR THE PRODUCTION OF FOSSIL PVC IN EUROPE – Vincent Stone – BELGIUM (Europe Council of Vinyl Manufacturers)
	3:10 pm	3:40 pm	0:30	CLOSING – Sarah Patterson – U.S.A. (Plastics Pipe Institute – PPI)	