Day	Start	Duration	End	A-sessions	B-Sessions		
Monday, 15 <sup>th</sup> September: PPXXII Opening and Technical Sessions							
	9:00	0:50	9:50	OPENING SESSION			
Monday	9:00	0:10	9:10	PPXXII WELCOME - Zoran Davidovski - AUSTI	RIA (Wienerberger)		
	9:10	0:20	9:30	ID109: Advancing Sustainability in the Plastic and CO2 Reduction - Zoran Davidovski - AUS	Pipe Industry: Strategies for Circular Solutions TRIA (Wienerberger)		
	9:30	0:20	9:50	<b>D121</b> : Preparing the Industry for the Upcoming Harmonised Rules for Products in Contact with Drinking Water - Peter Sejersen - BELGIUM (The European Plastic Pipes and Fittings Association - TEPPFA)			
	9:50	0:30	10:20	TECHNIC	AL BREAK		
	10:20	1:40	12:00	1A - DRINKING WATER Chair: Peter Sejersen - Belgium (The European Plastic Pipes and Fittings Association (TEPPFA))	1B - INNOVATIVE APPLICATIONS Chair: Tony Calton - Belgium (The European Plastic Pipes and Fittings Association (TEPPFA))		
	10:20	0:20	10:40	ID156: Navigating the New EU Regulations: Materials and Products in Contact with Drinking Water - Eric Scharstuhl - BELGIUM (NSF)	ID116: Structural Design of Plastic Manholes - Ricky Selle - GERMANY (Selle Consult GmbH)		
	10:40	0:20	11:00	ID245: Understanding the Impact of the New Drinking Water Directive - Catherine Michel - BELGIUM (Shin-Etsu PVC b.v.)	ID231: The Use of HDPE Corrugated Pipes in Microtunneling - Grigorios Vigellis - U.A.E. (Union Pipes Industry)		
Monday	11:00	0:20	11:20	ID144: Reducing the Level of Arvin Substances in Pipe Applications - Gerd Mannebach - Germany (Basell Polyolefine GmbH)	ID202: New Technology for Improvement of Strength of Extruded Inline Sockets on Double Wall Corrugated Pipes - Kong Lingxiang - CHINA (ZhongyunTech)		
	11:20	0:20	11:40	ID283: Detection of Arvin Substances in Water Samples and Pipe Applications - Przemyslaw Hruszka - BELGIUM (The European Plastic Pipes and Fittings Association - TEPPFA)	ID276: Revolutionising Plastic Pipe Handling: A Reusable System for Safer, Efficient Logistics - Dermot Lindsay, Wade Price - AUSTRALIA (Eartheco)		
	11:40	0:20	12:00	ID133: Paving the Way for the Use of Polymers as Barrier Materials in Drinking Water Pipes - Christoph Losher - GERMANY (FABES Forschungs-GmbH)	ID236: Thermoplastic Boxes: The Evolution of Polypropylene Stormwater Retention and Detention Systems - John M. Kurdziel - U.S.A. (Advanced Drainage Systems, Inc.)		
	12:00	1:00	13:00	LUNCH SPONSORED BY			

	13:00	1:20	14:20	2A - WATER Chair: Ludo Debever - Belgium (The European Plastic Pipes and Fittings Association (TEPPFA))	2B - PROCESSING INNOVATIONS Chair: Christian Apel - Germany (Radius Group Procurement)
Monday	13:00	0:20	13:20	ID214: Resistance of Polypropylene Raised Crack and Temperature Resistance (PP-RCT) to Chloramine Solutions - Christopher Ziu - U.S.A. (Nupi Americas)	ID123: Research and Practice of Anti-Sag Technology for High Yield Extrusion of PE Large Diameter Thick Wall Plastic Pipe - Richard Lee - CHINA (Ningbo Fangli Technology Co.,Ltd)
	13:20	0:20	13:40	ID220: Application Case of HDPE Siphon Rainwater System on the Roof of Large Industrial Building - Huang Zhuying - CHINA (Hongyue Plastic Group Co., Ltd)	ID244: New Scanning Technology for Multi- Layer and Structed Wall Pipes - Joseph Venegas - THE NETHERLANDS (Rollepaal Pipe Extrusion Technology)
	13:40 0:20 14:00	ID270: Survey of Experience with More than 50 Year Old Water Supply Polyethylene Pipes in Japan - Takashi Kuriyama - JAPAN (Kyushu University)	<b>ID137</b> : ΦΟD 1600 mm PVC-U Pipe: Pioneering New Possibilities in Modern Infrastructure - <b>Chelsea Qin - CHINA</b> (Shanghai Jurry Plastics Machinery)		
	14:00	0:20	14:20	ID282: Industry Insights, Best Practices / Transitioning from Traditional Materials Lessons Learned Transitioning from DI to HDPE Water Main - Casey Haynes - U.S.A. (Haynes Engineering & Excavation, LLC)	ID150: Advancements in Material Savings in PO Pipe Extrusion - Andreas Türk - GERMANY (battenfeld-cincinnati)
	14:20	0:30	14:50	COFFEE BREAK SPONSORED BY Shell Polymers	
	14:50	1:20	16:10	3A - GLOBAL CASE STUDIES Chair: Andy Wedgner - The Netherlands (LyondellBasell)	3B - RENEWABLE ENERGY Chair: Randy Knapp - U.S.A. (Plastics Pipe Institute (PPI))
Monday	14:50	0:20	15:10	ID230: Successful Implementation of Plastic Pipes in Mine Subsidence Areas - Saviz Gharavi - AUSTRALIA (Savon Engineering)	ID184: Thermoplastic Lining System and Life Cycle Costing: A Business and Environmental Perspective - Mohana Murali Adhyatmabhattar - U.A.E. (United Special Technical Services (USTS))
	15:10	0:20	15:30	ID254: Case study of a PE-Pipeline with Manholes DN/ID3500, Jointed by Integrated Electrofusion in the Philippines Bernhard Alexander Krah - GERMANY (Krah GmbH)	ID179: Miami University Turns to Polypropylene (PP) Pipe for Campus-Wide Hydronic Heating Upgrade - Steve Sandstrum - U.S.A. (Borealis Compounds, Inc.)
	15:30	0:20	15:50	ID264: PE100 Material Supports Sea Water Cooling Project in Jazan – Saudi Arabia - Hussein Basha - U.A.E. (Borouge)	ID146: Low CO2 Footprint High Voltage Cable Ducts Based on PE100-RC-HT Compound for Green Electricity Transport in Germany - Herbert Terwyen - GERMANY (Basell Polyolefine GmbH)
	15:50	0:20	16:10	ID235: Using HDPE Pipe to Preserve the Great Salt Lake - Stephen Boros - U.S.A. (Pipeline Plastics)	ID187: Assessing Long-Term Effects and Permeation of Hydrogen Transported in Polyethylene Pipes - Márton Bredács - AUSTRIA (Polymer Competence Center Leoben GmbH)
				COFFEE BREAK SPONSORED BY	

			1	4A - CIRCULAR STRATEGIES	4B - ANALYSIS				
Monday	16:40	1:00	17:40	Chair: Dan Currence - U.S.A. (Plastics Pipe	Chair: Michael Pluimer - U.S.A. (Crossroads				
				Institute (PPI))	Engineering)				
	16:40	0:20	17:00	ID251: Circularity of Plastic Pipes in Australia - Cindy Bray - AUSTRALIA (Plastics Industry Pipe Association of Australia (PIPA))	ID195: Predicting the "1000-hour" Test According EN 1852-1 of Virgin and Post- Consumer Recycled Polypropylene Grades and Corresponding Mixtures - Mario Messiha - AUSTRIA (Polymer Competence Center Leoben GmbH)				
	17:00	0:20	17:20	ID241: Sustainable Polyolefin Feedstock for Various Pipeline Projects - Yazgan Mete - GERMANY (Borealis AG)	ID256: Stress Relaxation-Based Lifetime Estimation of Unpressurized Polyethylene Pipes Containing Recycled Material – Revisiting the Janson Strainability Approach - Daniel Zach - AUSTRIA (Montanuniversität Leoben)				
	17:20	0:20	17:40	ID205: Assessing Environmental Impacts of Circular PE-X Pipes - Ilari Aho - FINLAND (GF Building Flow Solutions)	ID257: Advanced Microstructural Insights and Optimization Strategies for Oriented PVC Pipes - Daniel Voces - SPAIN (Molecor)				
	Tuesday, 16 <sup>th</sup> September: Technical Sessions								
				5A - RESILENCE AND SUSTAINABILITY	5B - COMPOSITES				
	9:00	1:20	10:20	Chair: Steve Sandstrum - USA (Borealis Compounds)	Chair: Suleyman Deveci - UAE (Borouge)				
Tuesday	9:00	0:20	9:20	ID265: A Revised NCLS Test Method to Predict Service Life for Structure-Walled Pipes - Michael Pluimer - U.S.A. (University of Minnesota - Duluth)	ID134: Analysis of sGF Orientation of Polyethylene Reinforced with Short Glass Fibers Pipe by Spiral Cross Winding Method - Mitsuaki Tokiyoshi - JAPAN (C.I.TAKIRONCIVIL Corporation)				
	9:20	0:20	9:40	ID260: Are Microplastics a Problem for the Plastic Pipe Industry? - Tina Gruber - U.S.A. (University of Minnesota - Duluth)	ID166: Specialized Multilayer Die-Head Design – New Concepts for New Questions - Robert Weddgie - GERMANY (KraussMaffei Extrusion GmbH)				
	9:40	0:20	10:00	ID211: Influence of Service Laterals on the Seismic Response of HDPE Pipes - Michael O'Rourke - U.S.A. (Rensselaer Polytechnic Institute (RPI))	ID192: Paving the Way for the Use of Reinforced Thermoplastic Pipes for the Transport of Carbon Dioxide - Suzanne van Greuningen - THE NETHERLANDS (Kiwa Technology)				
	10:00	0:20	10:20	ID145: Exploring the Decision-Making Process in Infrastructure Investment - Deanne Dutton Hughes - U.S.A. (McElroy)	ID112: Green Composition - Minimize the multi-layer pipe producing rejection and make it recyclable and sustainable - Li Xing - CHINA (Zhejiang Shuanglin Environment Co., Ltd.)				
	10:20	0:45	11:05	COFFEE	BREAK				

Tuesday	11:05	1:20	12:25	6A- SUSTAINABILITY ASSESSMENTS Chair: Ilari Aho - Finland (GF Building Flow Solutions / Uponor )	6B - CHALLENGING ENVIRONMENTS Chair: Vivek Rohatgi - USA (Chevron Phillips Chemical)
	11:05	0:20	11:25	ID210: New EU Representative Environmental Datasets (LCIs) for Recycled PVC (Flake Micronised Powder) - Jean-Pierre Taverne - BELGIUM (The European Plastic Pipes and Fittings Association - TEPPFA)	ID128: Innovative HDPE Pipes with Superior Abrasion and Crack Resistance for Mining Applications - Pongpol Ekabutr - THAILAND (SCG Chemicals Co.,Ltd.)
	11:25	0:20	11:45	ID250: Comparing the Environmental Impacts of Different Piping Systems - Lucy Croker, Matthew Hynes - AUSTRALIA (Vinidex Pty Ltd, Iplex)	ID157: Investigation of a PP-RCT Pipe After 5 Years Use with 95 °C Hot Water - Olle Persson - AUSTRIA (Borealis AG)
	11:45	0:20	12:05	ID129: The Recycling Commitment of the European Plastic Pipe Industry - Ludo Debever - BELGIUM (The European Plastic Pipes and Fittings Association - TEPPFA)	ID158: Modeling of Brittle Fracture Behaviors of Polyethylene Pipes Under Oxidative Environments - Jung-Wook Wee - REPUBLIC OF KOREA (Kyungpook National University)
	12:05	0:20	12:25	ID266: Reducing Embodied Carbon Through the Use of Plastic Pipe in Infrastructure - Daniel Figola - U.S.A. (Advanced Drainage Systems)	ID248: Mobile Extrusion Technology - A Sustainable Case Study in the Production, Joining, and Installation of Long Lengths of HDPE Pipes in a Mining Application - White G. Jee - U.S.A. (JEE Consulting Services LLC)
	12:25	1:00	13:25	LU	NCH
	13:25	1:20	14:45	7A- LEVERAGED LEARNINGS Chair: David Fink - U.S.A. (Plastics Pipe Institute (PPI))	7B - INNOVATION (RESIN) Chair: Carl Baker - U.S.A. (Shell Polymers)
	13:25	0:20	13:45	ID267: Plastic Pipe Market Development after Economic Change in 1989 in Poland - Piotr Falkowski - POLAND (Polskie Stowarzyszenie Producentów Rur i Kształtek z Tworzyw Sztucznych)	ID136: Reducing Greenhouse Gas Emissions through Innovation in the Plastic Pipe Industry: Pathways to Low-Carbon Polyethylene - Gaelle Pannier - BELGIUM (INEOS Olefins & Polymers Europe)
Tuesday	13:45	0:20	14:05	ID190: Potable Water Disinfection Resistance Classification Methodology for HDPE Pipe Resistance as implemented in North America - Patrick Vibien - U.S.A. (Plastics Pipe Institute (PPI))	ID199: Design Characteristics of High - Density Polyethylene for Large Diameter Pressure Pipe - Umang Agarwal - U.S.A. (Shell Chemical LP)
	14:05	0:20	14:25	ID212: Toward a Comprehensive Understanding of the Grafting & Crosslinking of Polyethylene Using the SIOPLAS System for the Production of PEX Pipe- Robert Samplonius - CANADA (KAFRIT NA)	ID185: High Filled Content OPVC Pipes for Low to Medium Pressure Range Applications - David Trigo Cabañero - SPAIN (Molecor Tecnologia SL)
	14:25	0:20	14:45	ID218: Plastic Pipes in Sustainable Infrastructure: Dispelling Common Misconceptions - Tobias Johnsen - BELGIUM (PVC4Pipes)	ID193: Effect of Initial Morphology on the Drawing Behavior and Final Properties of Biaxially Oriented Polypropylene Pipes - Mark Boerakker - The Netherlands (SABIC)
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	15:15	1:20	16:35	8A - STANDARDIZATION/ BEST PRACTICES Chair: Mitsuaki Tokiyoshi - Japan (C.I. Takironcivil Corporation)	8B - INSTALLATION DESIGN Chair: John Kurdziel - U.S.A. (Advanced Drainage Systems)
Tuesday	15:15	0:20	15:35	ID216: 25 Years of Collaborative Efforts to Support the PE100 Pipe Industry - Suleyman Deveci - U.A.E. (PE100+ Association)	ID107: Effect of Creep in Estimating Deflection of Buried HDPE Pipe - Chris Ampfer - U.S.A. (WL Plastics LLC an INEOS Business)
	15:35	0:20	15:55	ID219: How China's Plastic Pipe Industry is Preparing to be Sustainable - Wang Zhanjie - CHINA (China Plastics Processing Industry Association (CPPIA))	ID194: Pressure Testing of a Long Sections of Large Diameter PE Pipeline - Andrzej Roszkowski - POLAND (KMR s.c.)
	15:55	0:20	16:15	ID152: Standards Development Continues Support of Polypropylene Pipe Market in North America - Steve Sandstrum - U.S.A. (Borealis Compounds, Inc.)	ID217: Determining the Minimum Cover for Twin-Wall Corrugated Plastic Pipes Under Construction Loads - Ian Patterson - AUSTRALIA (Vinidex Pty Ltd)
	16:15	0:20	16:35	ID181: Updated Polyethylene Product Standards doing their part for a Sustainable Future - Ernst van der Stok - THE NETHERLANDS (Kiwa Technology)	ID237: Analysis of Narrow Trench Impacts on Polyethylene Pipelines - Joseph Babcanec - U.S.A. (Advanced Drainage Systems)
١	Wed	nesday	y, 17	<sup>th</sup> September: Technical S	essions & Closing
	9:00	1:20	10:20	9A - VALUE ADDING Chair: Vincent Stone - Belgium (PVC4PIPES)	9B - STRUCTURED WALL Chair: Bruce Hollands - U.S.A. (PVC Pipe Association)
	9:00	0:20	9:20	ID258: Advancing Climate Efficiency in Pipeline Renovation with No-Dig Technology - Claes Wiger - SWEDEN (A-Plast)	ID110: Innovative Approach to Measure Layer Transitions of Corrugated Pipes - Christian Schalich - GERMANY (SIKORA AG)
Wednesday	9:20	0:20	9:40	ID131: Advanced Recycling Options for Legacy Additives-Containing PVC Pipe Waste - Vincent Stone - BELGIUM (VinylPlus)	ID259: 30 Years of Double Wall Corrugated PVC Piping System for Sewage Applications - Pablo Peinado - SPAIN (Molecor Tecnologia S.L.)
	9:40	0:20	10:00	ID149: A Solution for PVC Pipe Waste Legacy Additives - Eric Romers - BELGIUM (INEOS Inovyn)	ID113: Beyond Hoop: Axisymmetric Stress in PVC Pressure Pipe Joints - Guido Quesada - Costa Rica (HULTEC)
				ID148: Options For Defossilation of PEX	ID147: Design Method for Calculating Load
	10:00	0:20	10:20	Resins and Recycling Solutions For Interior Piping - Holger Bruening - GERMANY (Basell Polyolefine GmbH)	Reduction when Using Plastic Instead of Concrete Pipes - Jan Vaslestad - NORWAY (GeoAnlegg AS)

Wednesday	10:50	1:20	12:10	10A - SUSTAINABLE USE Chair: Andre Nijland - The Netherlands (Orbia Building & Infrastructure (Wavin))	10B - FUSION Chair: Shane Schuessler - U.S.A. (ISCO)
	10:50	0:20	11:10	ID206: Higher Quality Recyclates for Pipe Applications by Improved Mechanical Recycling - Jutta Geier - AUSTRIA (Polymer Competence Center Leoben GmbH)	ID273: A Novel Electrofusion Welding Technique for Large Diameter Pressure Class Pipelines: Mechanical Assessment, and Case Study - El Mehdi Tamasna - GERMANY (Star Engineering Systems)
	11:10	0:20	11:30	ID177: Validation of End-Use Application Conditions for HDPE Conduit with Recyclate - Patrick Vibien - U.S.A. (Plastics Pipe Institute (PPI))	ID221: Evaluation of the Hydro-Axial Stress Rupture Test for PE100 Butt Fusion Joints - Suleyman Deveci - U.A.E. (Borouge Pte. Ltd.)
	11:30	0:20	11:50	ID188: Carbon Blacks in Pressure Pipes – a Successful History with a Sustainable Future - Marc Delvaux - BELGIUM (CABOT Corporation)	ID240: International Round-Robin Testing Of Non-Destructive Test Methods For Polyethylene Butt Fusion Joints - Suleyman Deveci - U.A.E. (Borouge Pte. Ltd.)
	11:50	0:20	12:10	ID141: Evaluation of Tightness Testing for PE Pipes - Daniel Ejdeholm - SWEDEN (GPA Flowsystem AB)	ID249: Improving Electrofusion (EF) Peel Decohesion Weld Test Interpretation Through Collaboration and Education - Matthew Hynes - AUSTRALIA (Plastics Industry Pipe Association of Australia (PIPA))
	12:10	1:00	13:10	LUI	NCH
					11B - DATA AND EDUCATION
	13:10	1:20	14:30	11A - DESIGN (100+) Chair: Robin Bresser - USA (Baystar)	Chair: Cindy Bray - Australia (Plastics Industry Pipe Association of Australia (PIPA))
	<b>13:10</b> 13:10	<b>1:20</b> 0:20	<b>14:30</b> 13:30		
Wednesday				Chair: Robin Bresser - USA (Baystar) ID278: The 100-Year Lifetime of PE100/PE100RC Pipes – An Industry Association's Perspective - Suleyman Deveci	Industry Pipe Association of Australia (PIPA)) ID167: Data Strategy is Key to the Circular Economy – How Gravimetrics, Inline- Measurement Systems and Data Contribute to Sustainability - Markus Hildenbrandt -
Wednesday	13:10	0:20	13:30 13:50	Chair: Robin Bresser - USA (Baystar) ID278: The 100-Year Lifetime of PE100/PE100RC Pipes – An Industry Association's Perspective - Suleyman Deveci U.A.E. (PE100+ Association) ID170: PVC-U Pipes: Optimal Extrusion Conditions for a 100+ year Design Lifetime (Part II) - Joaquin Lahoz Castillo - SPAIN	Industry Pipe Association of Australia (PIPA)) ID167: Data Strategy is Key to the Circular Economy – How Gravimetrics, Inline- Measurement Systems and Data Contribute to Sustainability - Markus Hildenbrandt - GERMANY (INOEX GmbH) ID170: The Impact of Comonomer on High Temperature Performance of Polyethylene of Raised Temperature (PE-RT) Resins - Alex
Wednesday	13:10 13:30	0:20	13:30 13:50 14:10	Chair: Robin Bresser - USA (Baystar) ID278: The 100-Year Lifetime of PE100/PE100RC Pipes – An Industry Association's Perspective - Suleyman Deveci U.A.E. (PE100+ Association) ID170: PVC-U Pipes: Optimal Extrusion Conditions for a 100+ year Design Lifetime (Part II) - Joaquin Lahoz Castillo - SPAIN (CEIS, S.L.) ID232: 100 Years Lifetime of Polyethylene Pipes – a Review - Gerald Pinter- AUSTRIA	Industry Pipe Association of Australia (PIPA)) ID167: Data Strategy is Key to the Circular Economy – How Gravimetrics, Inline- Measurement Systems and Data Contribute to Sustainability - Markus Hildenbrandt - GERMANY (INOEX GmbH) ID170: The Impact of Comonomer on High Temperature Performance of Polyethylene of Raised Temperature (PE-RT) Resins - Alex Stolarz - Switzerland (Dow Europe GmbH) ID189: Leveraging Voluntary Data to Improve the Safety of Gas Distribution Systems Through the PPDC - Randall Knapp - U.S.A.

Wednesday	15:00	1:20	16:20	12A - DESIGN CONSIDERATIONS Chair: Camille Rubiez - USA (Plastics Pipe Institute (PPI))	12B - PRESSURE PIPE TESTING Chair: Przemyslaw Hruszka - Belgium (The European Plastic Pipes and Fittings Association (TEPPFA))
	15:00	0:20	15:20	<b>ID172</b> : Determining Accurate Friction Factors for Highly Crystalline, Ultra Smooth, Water Repellent PP-RCT Piping Systems and Equivalent Lengths and K Factors for Molded Long Radius 90° Elbows and Standard Sharp- Turn Molded 90° Elbows By Full Scale Flow Testing - <b>Christopher Ziu - U.S.A. (Nupi</b> <b>Americas)</b>	ID174: Chlorine Resistance Testing of Hot Cold Water Pipes a 30 Year Review and New Challenges - Stefan Dreckoetter - GERMANY (Borealis Polymere GmbH)
	15:20	0:20	15:40	ID132: Research on the Performance of Axial Coefficient of Linear Expansion and Applications for Plastic Pipes - Xiaowei Zhang - CHINA (SINOPEC (Beijing) Research Institute of Chemical Industry Co.,Ltd)	ID124: Permeability Coefficients of Sustainable Gases Through Plastic Pipes - Suzanne van Greuningen - THE NETHERLANDS (Kiwa Technology)
	15:40	0:20	16:00	ID155: Thermal Analysis of Structural Properties for Gravity Flow Corrugated Polypropylene Pipe at Elevated Temperatures - Joseph Babcanec - U.S.A. (Advanced Drainage Systems, Inc.)	ID127: Evaluation of Slow Crack Growth Resistance In PE100RC: Will a Single Test Ever be Possible? - Carlos Dominguez - SPAIN (Polymer Technology Laboratory - Rey Juan Carlos University)
	16:00	0:20	16:20	ID271: Survey of United States Departments of Transportation: Practices to Enhance Resiliency of Existing Roadway and Embankment Culverts - Sara Stone - U.S.A. (Crossroads Engineering Services)	ID208: The Impact of Different Ways of Measuring the Notch Dimensions in CRB test - Nadia Luijsterburg-Vleugels - THE NETHERLANDS (Kiwa Expert B.V. (Kiwa Technology))
	16:20	0:15	16:35	CLOSING - Zoran Davidovski - AUSTRIA (Wienerberge	r)