




SCIENTIFIC AND TECHNICAL PROGRAMME

The Scientific Programme includes:

Close to 170 presentations

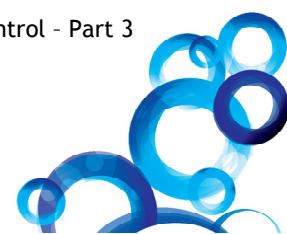
- Long oral presentations (LP)
- Short oral presentation for poster introduction (SP) and Poster exhibition

Organized in 30 sessions arranged in three parallel tracks.

28 June 28	Hour	29 June 29	30 June 30	1 st July	2 July	3 July										
	7h00	Registration / welcoming														
	8h30-9h40	8h30-10h: Opening Exhibition discovery			S10	S11	S12	E	S22	S23	S24	E	C2	C3	T1	T2
	9h40 -10h10	S1	S2	S3	E	Break			Break							
	10h30-11h00					S13	S14	S15	S25	S26	S27					
	10h30-13h00	Lunch			Lunch			Lunch								
14h00 Stand assembling	14h30-16h30	S4	S5	S6	E	C1	E	S16	S17	S18	S28	S29	S30	E		
	16h30-17h	Break						Break			16h15: Awards & Closing					
17h00 Registration Poster panels	17h00-18h30	S7	S8	S9	S19	S20	S21	20h00 Congress Dinner								
19h00 Welcome Reception																

With S: Scientific Session; E: Exhibition; C: Cultural tour; T: Technical tour

S1	Fundamentals - Part 1	S11	Application in Drinking Water	S21	Micropollutants Control: Part 1. At full scale
S2	Ozone for Agrifood	S12	Ozone in Medicine - Part 4	S22	Design and Engineering Aspects - Part 1
S3	Ozone in Medicine - Part 1	S13	Advanced Oxidation: UV and ozone systems	S23	Industrial Waters
S4	Fundamentals - Part 2	S14	Advanced Oxidation: Ozone systems	S24	Micropollutants Control - Part 2
S5	Ozone and Advanced Oxidation for Agrifood	S15	Ozone in Medicine - Part 5	S25	Workshop - Access to ozone mass transfer parameters
S6	Ozone in Medicine - Part 2	S16	Advanced Oxidation: Catalytic ozonation	S26	Workshop - Young Ozone People
S7	Fundamentals - Part 3	S17	Water Reuse Purpose	S27	Workshop - IOA highlights
S8	Applicability in Waters	S18	Water Disinfection Target	S28	Design and Engineering Aspects - Part 2
S9	Ozone in Medicine - Part 3	S19	Advanced Oxidation: Photo-Fenton systems	S29	Applications in Industrial Processes
S10	Advanced Oxidation: Photocatalytic systems	S20	In Relation to Activated Sludge	S30	Micropollutants control - Part 3



Plenary session. Opening

Hour	Presentation	ID
08:30	Opening Addresses, Achim Ried, IOA President and Santiago ESPLUGAS, IOA-EA3G President Congress introduction, Michel ROUSTAN, Renate VIEBAHN, Scientific Committee Introductory conferences : Water, Ozone IOA General Assembly	

09:40 Exhibition opening

Session 1. Fundamentals - Part 1

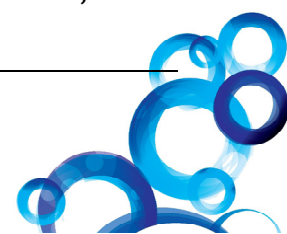
Hour	Presentation	ID
10:10	LP Determination of ozone Henry's constant using different analytical methodologies <i>J. Ferre-Aracil, S. C. Cardona, J. Navarro-Laboulais (Spain)</i>	137
10:30	LP Comparative study of competitive kinetics and stopped flow methods on the determination of rate constants of steroids degradation using ozone <i>R. Vallejo-Rodríguez, V. Flores-Payán, E. León-Becerril, A. López-López (Mexico)</i>	128
10:50	LP Evaluation of N-oxide venlafaxine transformation product kinetics during ozonation <i>I. Zucker, A. Riani, H. Mamane, D. Avisar (Israel)</i>	103
11:10	LP Sulfaquinoxaline degradation and toxicity reduction by photocatalysis <i>V. Ribeiro Urbano, M. Guedes Maniero, J. Roberto Guimarães (Brazil)</i>	155
11:30	LP Evaluation of degradation kinetics of Bisphenol A with ozone using the Stopped-Flow instrumental technique <i>V. Flores-Payán, R. Vallejo-Rodríguez, M. Murillo-Tovar, A. López-López (Mexico)</i>	129
11:50	LP A comparative study: degradation of 2,5-dichlorophenol in a wastewater and distilled water by ozone and ozone-UV <i>J. C. Alexander, C. R. Ramírez-Cortina (Mexico)</i>	158
12:10	LP Comparison of Ozone and Ferrate for Oxidation of Disinfection Byproduct Precursors <i>D. A. Reckhow, Y. Jiang, X. Ma, J. Bliss, J. Gao, J. Goodwill, J. E. Tobiason (USA)</i>	102
12:30	LP Effect of ozonation on THM formation in swimming pool water? laboratory study <i>K. M. S. Hansen, A. Spiliotopoulou, W. Akram Cheema, H. R. Andersen (Denmark)</i>	144

13:00 Lunch

Session 2. Ozone in Agrifood

Hour	Presentation	ID
10:10	LP Ozone for food applications in Saudi Arabia <i>S. Jasim, S. Al Akooz, E. Booth (Canada, Saudi Arabia, Denmark)</i>	230
10:30	LP Modification of the molecular properties of wheat grain storage proteins by ozonation <i>P. Gozé, L. Rhazi, A. Pauss, T. Aussenac (France)</i>	192
10:50	LP Ozone as degradation agent of bifenthrin residues in stored rice grains <i>M. Ávila, L. Rita Faroni, F. Heleno, M. Eliana Queiroz, L. Philip Costa, R. Almeida, L. Prates (Brazil)</i>	179
11:10	LP Stability and antibacterial activity of ozonized sunflower oils. <i>S. Moureu, F. Violleau, D. Ali Haimoud-Lekhal, A. Calmon (France)</i>	151
11:30	LP Ozonation degree effect on physicochemical evaluation of four ozonated vegetal oils <i>P. Guerra Blanco, T. Poznyak, I. Chairez, M. Brito-Arias (Mexico)</i>	172
11:50	LP Ozone Disinfection/Sanitation Of Turkey Meat For Slaughter-House <i>E. Ioan Popa, I. Popa (Romania)</i>	171
12:10	LP Ozone Effects on Fungal Material <i>M. Pagès, D. Kleiber, F. Violleau (France)</i>	150
12:30	SP Effect of ozone treatments on wine grape microbiota, skin mechanical properties and phenolic compounds extractability <i>V. Englezos, F. Torchio, S. Giacosa, F. Cravero, S. Rio Segade, J. Laureano, K. Rantsiou, C. Carboni, L. Rolle, V. Gerbi, L. Cocolin (Italy, Brazil)</i>	094
12:40	SP Effects of spraying ozonated and electrolyzed water on survival of cultivable fungi, bacteria and yeasts of grape <i>A. Raio, A. Feliciani, V. Ferri, C. Carboni (Italy)</i>	190
12:50	SP Passive refrigeration and ozone-enriched atmosphere to extend the shelf life of baby leaf lettuce, arugula and red chicory <i>T. Yaseen, E. Damara, M. Gallo, C. Carboni, A. Maria D'Onghia (Italy)</i>	247

13:00 Lunch



Session 3. Ozone in Medicine - Part 1

Hour	Presentation	ID
10:10	LP Medical Ozone: Evidenced Based Medicine. Safety and Effectiveness of Ozone-Autohemotherapy MAH. A Metaanalysis. <i>R. Viebahn-Hänsler (Germany)</i>	214
10:30	LP Mechanisms of action of ozone, recent literature, and newly discovered biochemical pathways <i>L. Re, G. Malcangi, N. M. Rampoldi ()</i>	123
10:50	LP Ozone ameliorates the age-related oxidative stress changes in rat liver and kidney: effects of pre- and post-ageing administration <i>M. Safwat, M. El-Sawalhi, N. Mawsouf, A. Shaheen (Egypt)</i>	116
11:10	LP Ozone Therapy versus Newer Modalities. Efficacy in Diabetic Foot Ulcers. Clinical review <i>A. M. Fathi, M. N. Mawsouf, R. Viebahn-Hänsler (Egypt, Germany)</i>	213
11:30	LP Effect of ozone on the course of diabetic wound process <i>B. Aleksandr, A. Rodin, A. Zakhvatov, E. Ivanov (Russia)</i>	084
11:50	LP Ozone therapy in Multiple Sclerosis <i>W. Liboni, F. Molinari, D. Rimini (Italy)</i>	078
12:10	LP Ozone in oncology and preclinical models in lung diseases <i>B. Clavo, N. Santana-Rodríguez, P. Llontop, C. Méndez, K. Zerecero, D. Fiuza (Spain)</i>	238
12:30	Discussion	

13:00 Lunch

Session 4. Fundamentals - Part 2

Hour	Presentation	ID
14:30	LP Evaluation of competitive reactions of high concentration substrates with ozone <i>T. Mizuno, H. Tsuno, M. Sato, A. Hasunuma, S. Kumagai, Y. Suzuki, N. Sakagami (Japan)</i>	136
14:50	LP Impact of ozone application to primary urban wastewaters: micropollutant and organic matter change <i>M. Marce, N. Cortés-Francisco, O. Palacios, A. Bartolomé, J. Caixach, S. Baig, S. Esplugas (Spain, France)</i>	160
15:10	LP Dissolution of nanosilver during ozonation of wastewater <i>V. Yargeau, M. T. K. Nguyen, L. Telgmann, C. Metcalfe (Canada)</i>	135
15:50	LP Effect of monometallic and bimetallic supported catalysts on nitrobenzene ozonation <i>A. Abdedayem, M. Guiza, A. Ouederni (Tunisia)</i>	142
16:10	LP Reaction-reactor modeling and kinetics of anthraquinone dye oxidation using ozone and UV radiation <i>M. E. Lovato, M. L. Fiasconaro, J. P. Torrez, J. C. Andini, C. A. Martín (Argentina)</i>	076

16:30 Break

Session 5. Ozone and Advanced Oxidation in Agrifood

Hour	Presentation	ID
14:30	LP Application of ozone/oxygen in water treatment of shrimp farms <i>D. Leclercq, T. Elzey, J. Capettini, T. Naheiri (France, USA)</i>	180
14:50	LP Employing aqueous ozone for an industrial beef harvesting plant <i>G. Zahedi, R. Hariss (USA)</i>	111
15:10	LP Effects of ozone on live fish logistics <i>C. Tian (Hong Kong)</i>	122
15:30	LP Sulfate radical-based advanced oxidation process (SR-AOP) for winery wastewater treatment <i>J. Rodríguez-Chueca, T. Silva., C. Amor, M.S. Lucas, J.A. Peres (Portugal)</i>	148
15:50	LP Application of UV-LEDs photo-fenton to candied fruit wastewater treatment <i>C. Amor, J. Rodríguez-Chueca, J. Fernandes, M. S. Lucas, P. Tavares, J. A. Peres (Portugal)</i>	149
16:10	LP Degradation of 8 pollutants commonly found in food processing effluents by advanced oxidation proceses: O₃ and O₃/UVA-VIS <i>S. García-Ballesteros, D. López, Sofía Rebagliato, L. Santos-Juanes, A. Arques, A. María Amat (Spain)</i>	233

16:30 Break



Session 6. Ozone in Medicine - Part 2

Hour	Presentation	ID
14:30	LP Paradigm change: "The Ozone a therapeutic mediator in MODIC processes" <i>P. Osvaldo Alberto (Argentina)</i>	232
14:50	LP Ozone therapy in spinal pathologies. Review of 23 years experience. <i>A. Alexandre, L. Coro, S. John, M. De Pretto, M. Brunori, F. Jacob, G. Bertuol, H. Badreddine (Italy)</i>	208
15:10	LP Combined intradiscal and periganglionic injection of medical ozone and periganglionic administration of steroids and anesthetic for the treatment of lumbar disc herniation: effects on disc size and lumbar radiculopathy <i>T. Lehnert, V. Jacobi, T. J. Vogl (Germany)</i>	075
15:30	LP Ozone Therapy in Treating Periodontal Disease and its Oral Systemic Importance <i>M. T. Weiser (USA)</i>	211
15:50	LP Integration of ozone therapy for head and neck infective and chronic disease <i>P. Mollica, K. Rockefeller (USA)</i>	197
16:10	LP Discussion	
16:30	Break	

Session 7. Fundamentals - Part 3

Hour	Presentation	ID
17:00	LP Comparison of ozone and UV based techniques for the removal of metaldehyde <i>D. Vulpe, C. Tizaoui (UK)</i>	229
17:20	SP pH-Sensitivity Effects of Generalized Ozone Decomposition Models <i>J. Ferre-Aracil, V. Flores-Payán, A. López-López, S. C. Cardona, J. Navarro-Laboulais (Mexico)</i>	126
17:30	SP Kinetic Analysis of Ozone Gas Decomposition on Alumina-Supported MnO₂ Catalyst <i>A. Roca, A. Chica, S. C. Cardona, J. Navarro-Laboulais (Spain)</i>	146
17:40	SP Analysis of the effect of the operational variants in a batch ozonation-adsorption process <i>J. Ignacio Lombraña, A. Menéndez, I. Alegría (Spain)</i>	177
17:50	SP Influence of the control regime in ozonation efficiency of the basic cationic dye rhodamine 6G <i>C. Rodriguez, J. Ignacio Lombraña, A. De Luis (Spain)</i>	185
18:00	SP Disinfection Effect of Ballast Water by a Combination of Ozone and Bromine Compound under Low Salinity Water Condition <i>S. Park, S. Yoon, T. Park, (South Korea)</i>	088
18:10	SP Nanoparticles by ozonation and sol-gel from cyanide effluents <i>M. De Jesús Soria-Aguilar, F. R. Carrillo-Pedroza, L. A. Garcia-Cerda, M. A. Sánchez-Castillo, E. F. Flores-Mendiola (Mexico)</i>	187
18:20	SP Removal of pharmaceuticals from water by the ozone/activated carbon coupling <i>P. Nebout, O. Chedeville, S. Delpeux, A. Di Giusto, B. Cagnon (France)</i>	207

Session 8. Applicability in Waters

Hour	Presentation	ID
17:00	LP Ozone consumption efficiency on decolorization of water containing xanthene dyes <i>A. Menéndez, J. Ignacio Lombraña (Spain)</i>	176
17:20	SP Removal of xenobiotics and generation of by-products by ozonation in the context of tertiary treatment: Conception of a database and first results <i>B. Mathon, C. Pelletier, C. Miege, M. Coquery, J.-M. Choubert (France)</i>	070
17:30	SP Ozonation, photolysis and chlorination of flame retardants in water and wastewater treatment <i>R. Salgado, C. Chanfana, S. Martins, D. Galhanas, L. Epifâneo, J. Paulo Noronha, (Portugal)</i>	164
17:40	SP Analysis of microbiological quality of surface waters in Ebro river basin as a first approach to establish the origin of the present contamination <i>A. López, R. Mosteo, M. P. Ormad, J. L. Ovelleiro (Spain)</i>	107
17:50	Exhibition	



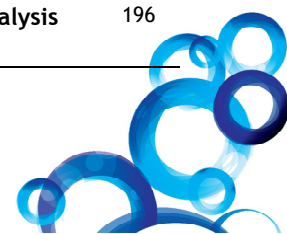
Session 9. Ozone in Medicine - Part 3

Hour	Presentation	ID
17:00	LP Experimental estimation of microcirculation adaptation to systemic injection of the ozonized saline <i>S. P. Peretyagin, A. K. Martusevich, P. V. Peretyagin, O. A. Bitkina (Russia)</i>	091
17:20	LP Characterization of ozone decomposition in different aqueous solutions used in medicine and correlation with their bactericidal effect <i>K.N. Kontorchshikova, A. Pérez, T. Poznyak, I. Chairez, A. A. Sibirkin, L.M. Obukhova (Mexico, Russia)</i>	184
17:40	SP Ozone correction of morphofunctional changes of pancreas in mechanical jaundice <i>S. Kostin, A. Belyaev, S. Kozlov (Russia)</i>	081
17:45	SP Effect of ozone on collagen metabolism in traumatic damage of knee joint <i>A.i Zakhvatov, A. Belyaev, S. Kuznetsov (Russia)</i>	189
17:50	SP The increase of treatment's efficacy of duodenal ulcer in patients aged 40-50 years. <i>A. V. Bulat, V. V. Bulat (Moldovia)</i>	195
17:55	SP Expanding the Usage of Ozonated Plant Extracts with Enhanced Performance against Viruses; 24 Month results with Herpes Virus and HIV <i>J. Holmes (South Africa)</i>	198
18:00	SP Local and systemic actions of ozonids contained cosmetic gels on organism <i>O. Bitkina, S. Peretyagin, A. Solovieva, O. Grechkaneva, A. Martusevich, M. Bugrova, P. Peretyagin, N. Prodanets (Russia)</i>	218
18:05	SP Ozone and the Oralsystemic Connection <i>W. Domb (USA)</i>	201
18:10	SP The lipid metabolism and matrix metalloproteinase-9 in patients with metabolic syndrome <i>J. Tikhomirova, C. Kontorshchikova, E. Koroleva (Russia)</i>	182
18:15	SP Distinctive features of medical ozone generator for ozonated liquids preparing with various densities <i>T. Barkhotkina, R. Tomashevskiy, N. Mahonin (Ukraine)</i>	202
18:20	SP Advanced Quantum Medicine Model: Scalar-Wave Morphogenetic Field Mechanics and Ozone Therapy as a Revolutionary Model for Bio-Energetic Regeneration and Self-Healing <i>J. Rivera-Dugenio (Hawaii)</i>	200
18:25	SP Prospects for combined treatment of chronic nonspecific endometritis with ozone and Bacteriophage therapy <i>G. Grechkanev, T. Motovilova, I. Ponomaryova, N. Nikishov, T. Boychenko (Russia)</i>	219
18:30	SP Comparative study of action of ozone and singlet oxygen on blood oxidative metabolism in vitro <i>A. A. Martusevich, A. K. Martusevich, S. P. Peretyagin (Russia)</i>	092

Tuesday, 30 June

Session 10. Advanced Oxidation: Photocatalytic systems

Hour	Presentation	ID
08:30	LP Cyanide removal from water by photocatalytic treatments with TiO₂ <i>N. Miguel, L. Alonso, N. Pueyo, S. Escuadra, M. P. Ormad (Spain)</i>	082
08:50	LP Removal of acid red 1 by TiO₂ nanoparticles coated polyethersulfone membrane under uv irradiation <i>I. Kovács, S. Kertész, S. Beszédes, C. Hodúr, I. Zita Papp, Á. Kukovecz, Z. László (Hungary)</i>	093
09:10	LP Nano structured N-doped TiO₂ Photo-Catalytic Membranes for Water Treatment <i>I. Horovitz, D. Avisar, R. Grilli, A.-D. Enevoldsen, D. Di Camillo, M. A. Baker, L. Lozzi, H. Mamane (Israel, UK, Denmark, Italy)</i>	101
09:30	LP Optimization of supported-TiO₂ photocatalysis for micropollutant elimination <i>M. Del Mar Micó, T. De La Torre, M. Arnaldos, C. Rodríguez, C. Fernández-Rodríguez, J. M. Doña Rodríguez, J. Juan Malfeito (Spain)</i>	227
09:50	LP New insights into mechanism of enhanced photocatalytic efficiency of metal ion doped TiO₂ <i>Y. Xie, J. Xiao, H. Cao (China)</i>	173
10:10	SP Photoelectrocatalytic degradation of pharmaceutical pollutant in wastewater <i>S. Wohlmuth Da Silva, B. Szortika, D. Mara Walker, M. A. Siqueira Rodrigues, A. Moura Bernardes (Brazil)</i>	071
10:20	SP Coated mesh reactor for the elimination of gaseous pollutants via heterogeneous photocatalysis <i>C. Passalía, E. Nocetti, O. Alfano, R. Brandi (Argentina)</i>	196
10:30	Break	



Session 11. Applications for drinking water

Hour	Presentation	ID
08:30	LP Peroxone in drinking water treatment: Dutch challenge <i>A. Knol, K. Lekkerkerker-Teunissen, C. Houtman, J. Scheideler, A. Ried, H. Van Dijk (The Netherlands, Germany)</i>	109
08:50	LP Seasonal occurrence of micro pollutants in drinking water sources - evaluation of treatment strategies using AOPs and ozonation <i>J. Scheideler, J. Wang (Germany)</i>	205
09:10	LP Rapid bench scale experiments for the selection of a treatment strategy for drinking water production <i>T. Merle, W. Pronk, U. Von Gunten (Switzerland)</i>	130
09:30	LP Production of micropollutants free and biostable drinking water <i>J. Wang, Y. Zhang, E. Wong, A. Ried, C. Qin Wei, R. Xie, Y. Xing, A. Duarah (Germany, Singapore)</i>	085
09:50	LP Determination of optimum ozone dose in drinking water treatment <i>J.-W. Kang, S. Kim, M. Kwon, W.-H. Joe (Republic of Korea)</i>	138
10:10	SP Ozonation of water containing effluent organic matter (EffOM): haloacetic (HAA) acid precursor removal and implications for HAA formation potential <i>P. Bose, N. Rao (India)</i>	125
10:20	SP Water treatment plants using large stainless steel filters: New perspectives for ozone biofiltration process <i>M. Brugger, S. Forberg Liane (Germany, Norway)</i>	234

10:30 Break

Session 12. Ozone in Medicine - Part 4

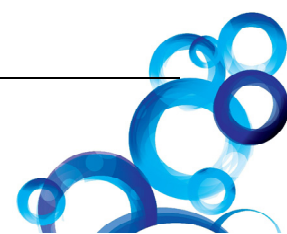
Hour	Presentation	ID
08:30	LP Targets of medical ozone in rheumatoid arthritis. How they impact in the clinical scenery? <i>O. S. León Fernández (Cuba)</i>	209
08:50	LP Ozone infiltration treatment of TMJ pain (temporomandibular joint) <i>F. Pastor (Spain)</i>	212
09:10	LP Knee osteoarthritis. Predictive factors for ozone treatment <i>J. Baeza Noci (Spain)</i>	193
09:30	LP Correlation of plasma Interleukin 1 levels with disease activity in rheumatoid arthritis (RA) with and without ozone. A clinical study <i>Z. Fahmy (Germany)</i>	210
09:50	LP Our model for the treatment of arthritis in primary care with intraarticular ozone, PRGFO3 and sulfate condroitin and glucosamine <i>F. Kirchner, O. Martí, A. Pinar (Spain)</i>	223
10:10	Discussion	

10:30 Break

Session 13. Advanced Oxidation: UV and ozone systems

Hour	Presentation	ID
11:00	SP On the reaction mechanism of DEET removal through visible light assisted photocatalytic ozonation with WO₃ catalyst <i>E. Mena, A. Rey, F. J. Beltrán (Spain)</i>	119
11:10	SP Removal of phenyl urea based herbicides by combination of ozone and photocatalysis under n-doped titania <i>R. R. Solís, F. J. Rivas, O. Gimeno, E. Mena (Spain)</i>	120
11:20	SP TiO₂-photocatalyzed degradation of tetracycline: toxicity assessment <i>S. Bouafia-Chergui, M. Chabani, H. Zemmouri, A. Bensmaili (Algeria)</i>	243
11:30	SP Formulation and assessment of indoor photocatalytic paints active under visible light <i>F. Salvadores, O. M. Alfano, M. De Los Milagros Ballari (Argentina)</i>	110
11:40	SP Caffeine degradation in WWTPS effluents for agricultural reuse by photocatalysis with titanium dioxide <i>S. Escuadra, L. Altabas, N. Miguel, M. P. Ormad (Spain)</i>	086
11:50	SP UVA-visible radiation activation of ozone for the degradation of water pollutants <i>A. M. Chávez, A. Rey, P. M. Álvarez, F. J. Beltrán (Spain)</i>	121
12h00	Exhibition	

13:00 Lunch



Session 14. Advanced oxidation: Ozone systems

Hour	Presentation	ID
11:00	LP Photodegradation of dioxin-like compounds by pulsed xenon lamp irradiation <i>S. Shashkovskiy, A. Seliverstov, I. Zhelaev, B. Ershov, S. Kireev, Y. Goldshteyn (Russia)</i>	217
11:20	SP Surfactant treatment with activated carbon adsorption, oxidation with ozone and peroxone <i>C. Rita Ramirez-Cortina, M. De La Soledad Alonso-Gutiérrez (Mexico)</i>	159
11:30	SP Removal of cyanide in the presence of solids in industrial wastewater by using hydrogen peroxide and ozone <i>N. Pueyo, M. P Ormad, N. Miguel, J. Luis Ovelleiro (Spain)</i>	087
11:40	SP Treatment of municipal primary and secondary wastewater effluents by non catalytic and catalytic ozonation <i>M. Marce, J. Arnal Moreno, R. C. Martins, R. M. Quinta-Ferreira, S. Esplugas (Spain, Portugal)</i>	161
11:50	SP Ozone assisted leaching of zinc and copper sulphides minerals <i>F. R. Carrillo Pedroza, M. De Jesús Soria Aguilar, A. Martínez Luévanos, J. Ramos Cano, G. González Zamarripa, A. C. Peña Arizpe (Mexico)</i>	188
12:00	SP Assessment of AOPs for decolorization and mineralization of pretreated real textile wastewater <i>P. A. Soares, S. M. A. Guelli U. Souza, R.A. R. Boaventura, V. J. P. Vilar (Portugal, Brazil)</i>	147
12:10	SP Floods in Algeria and institutional pulse for master <i>L. Tandjir, A. Tandjir, A.O. Toumi, A.D. Abda, F. Zeghdoudi, R. Chaouch, S. Haddad (Algeria)</i>	215
12:20	SP Evaluation of jet engine fuel emission in atmosphere <i>N. Huseynov, B. Malikov (Azerbaijan)</i>	133
12:30	SP Advanced oxidative treatment for waste water contaminated by pharmaceutical products <i>C. Vreuls, A. Wilmot, M. Cludts, N. Gillard, B. Heinrichs, S. Lambert (Belgium)</i>	251

13:00 Lunch

Session 15. Ozone in Medicine - Part 5

Hour	Presentation	ID
11:00	LP AHT (Major ozone autohaemotherapy) in neurosurgical patients <i>J. Stephen, F. Jacob, A. Alexandre (Italy)</i>	242
11:20	LP Three patients successfully treated for chronic complaints with the large ozone autologous blood therapy <i>K. Kuestermann (Germany)</i>	194
11:40	Medical Workshop <i>Dr. Aziz, Dr. Habig</i>	

13:00 Lunch

Session 16. Advanced Oxidation: Catalytic ozonation

Hour	Presentation	ID
14:30	LP Development of novel catalytic materials for removal of emerging organic pollutants by catalytic ozonation <i>S. S. Sable, P. P. Ghute, F. Medina, S. Contreras (Spain)</i>	134
14:50	LP Urban wastewater treatment by catalytic ozonation <i>C. Crousier, J.S. Pic, J. Albet, S. Baig, M. Roustan (France)</i>	249
15:10	LP The decomposition of Humic Acid in catalytic ozonation <i>L.-W. Lu, C.-N. Chang (Taiwan)</i>	220
15:30	LP Catalytic ozonation with γ-Al₂O₃ to enhance the degradation of refractory organics in water <i>J. Vittenet, W. Aboussaoud, J. Mendret, J.-S. Pic, H. Debellefontaine, N. Lesage, K. Faucher, M.-H. Manero, F. Thibault-Starzyk, H. Leclerc, A. Galarneau, S. Brosillon (France)</i>	240
15:50	LP Assessment of a non-woven fiber paper coated with ruthenium nanoparticles for catalytic ozonation <i>R. Orhand, P.-F. Biard, A. Couvert, A. Denicourt, A. Roucoux (France)</i>	112
16:10	LP Use of a trickle bed reactor for heterogeneous catalytic ozonation of phenol <i>L. Briceño, E. Duran (Costa Rica)</i>	169

16:30 Break



Session 17. Water Reuse Purpose

Hour	Presentation	ID
14:30	LP A hybrid process of ozonation and short aquifer treatment for water reuse <i>I. Zucker, H. Mamane, H. Cikurel, M. Jekel, U. Hübner, D. Avisar (Israel, Germany)</i>	095
14:50	LP Study of the influence of Advance Oxidation Processes as a pretreatment of a Reverse Osmosis from an ultrafiltered water reclamation <i>C.Mesa, I.Martin, B. Lefevre, O.Gibert, X. Bernat (Spain)</i>	117
15:10	LP Treatment of nanofiltration concentrates by ozonation for wastewater reuse: optimization of operational parameters <i>A. Azais, J. Mendret, S. Brosillon (France)</i>	118
15:30	LP Combining Adsorption with Advanced Oxidation - Case Studies <i>M. G. Conti-Ramsden, N. W. Brown (UK)</i>	186
15:50	LP Wastewater disinfection by ozone: water reuse <i>J. A. Perdigón-Melón, A. Luminita Petre, J. Benito Carbajo, R. Rosal, E. Garcia-Calvo, (Spain)</i>	157
16:10	Discussion	
16:30	Break	

Session 18. Water Disinfection Target

Hour	Presentation	ID
14:30	LP The effects of water ozonation on disinfection by-product formation <i>A. Mahmoudi, H. Shafahee, A. Roudbari (Iran)</i>	065
14:50	LP Inactivation of bacillus subtilis spores by combination of ozone and UV for swimming pool water disinfection <i>Y. Ekowati, G. Ferrero, Y. M. Slokar, J. Van De Vossenberg, J. C. Kruithof, M. D. Kennedy (The Netherlands)</i>	077
15:10	LP Evaluation of pulsed xenon ultraviolet irradiation of continuous spectrum for efficacy against multidrug-resistant nosocomial strains <i>S. Shashkovskiy, S. Kireev, Y. Goldshteyn, I. Goncharenko, T. Grenkova, E. Selkova (Russia)</i>	216
15:30	LP Wastewater matrix effect on disinfection with LP/UV and MP/UV radiation <i>R. Salgado, C. Hipólito, D. Galhanas, L. Epifâneo, J.P. Noronha (Portugal)</i>	163
15:50	SP Water disinfection with advanced oxidation processes: reaction kinetics and modeling <i>M. Flores, R. J. Brandi, M. D. Labas (Argentina)</i>	166
16:00	SP Disinfection of simulated municipal wastewater effluent by ozonation at laboratory and pilot scale <i>P. Valero, R. Mosteo, R. M. De Castro, M. J. Quero-Pastor, M. Hinojosa, A. Acevedo, M. P. Ormad (Spain)</i>	074
16:10	Discussion	
16:30	Break	

Session 19. Advanced Oxidation : Photo-Fenton systems

Hour	Presentation	ID
17:00	LP Application of multivariate experimental design strategies for the optimized decolorization of acid orange 52 in a raceway pond reactor <i>A. Belálcazar-Saldarriaga, D. Prato-Garcia (Colombia)</i>	167
17:20	LP Photo-Fenton degradation of a herbicide with simulated solar radiation. Kinetic model using the ferrioxalate complex <i>L. Conte, A. Schenone, E. Albizzati, O. Alfano (Argentina)</i>	108
17:40	LP Assessment of Fe(III)-NTA use in photo-Fenton at neutral pH <i>R. F. Dantas, A. De Luca, S. Esplugas (Spain)</i>	236
18:00	LP Solar photo-fenton oxidation of levofloxacin antibiotic at near neutral pH with ferrioxalate complexes <i>A. A. Nogueira, M. Dezotti, R. A.R. Boaventura, V. J. P. Vilar (Portugal, Brazil)</i>	252
18:20	Discussion	



Session 20. In relation to Activated Sludge

Hour	Presentation	ID
17:00	LP The reduction of the production of activated sludge with Ultrasound and electromagnetism waves treatment <i>M. Hayssam Izazy, G. Merlin, E. Gonze (Turkey, France)</i>	066
17:20	LP Effects of persulfate and peroxide treatment on components and dewaterability of waste urban sludge <i>N. Bilgin Öncü, N. Mercan, D. Aydın, I. Akmehmet Balcioğlu (Turkey)</i>	206
17:40	LP Evaluation of excess sludge reduction and bacterial inactivation using ozone ultra-fine bubble (nanobubbles) <i>K. Hashimoto, T. Okuda, W. Nishijima, K. Sawai, N. Sumida (Japan)</i>	131
18:00	LP Behavior of trace materials in ozone-added activated sludge process <i>F. Nishimura, Y. Okada, Y. Nakagawa, M. Masuda, H. Tsuno (Japan)</i>	174
18:20	Discussion	

Session 21. Micropollutants control - Part 1. At full scale

Hour	Presentation	ID
17:00	LP First full-scale application of ozonation for wastewater treatment in Switzerland: elimination of micropollutants and formation of oxidation products <i>M. Bourgin, M. Boehler, E. Borowska, J. Fleiner, J. Hollender, C. Kienle, R. Teichler, A. Wittmer, H. Siegrist, M. Schachtler, M. Thomann, M. Blunschi, C. S. Mcardell (Switzerland)</i>	113
17:40	LP Optimisation of full-scale ozonation tertiary treatment for micropollutants removal <i>Y. Penru, C. Miège, A. Roussel-Galle, L. Dherret, A. Guillon, M. Esperanza, S. Martin Ruel, M. Coquery, J. M. Choubert (France)</i>	226
18:00	LP Application of ultraviolet absorption measurement for closed-loop control of tertiary ozonation <i>M. Stapf, U. Miehe (Germany)</i>	153
18:20	SP Determination of estrogen activity at a waste water treatment plant with full scale ozonation using arxula adenivorans yeast cell systems <i>F. Itzel, L. Gehrman, C. Portner, H. Herbst, G. Kunze, T. C. Schmidt, J. Tuerk (Germany)</i>	154

Wednesday, 1st July

Session 22. Design and Engineering aspects - Part 1

Hour	Presentation	ID
08:30	LP Absorption kinetics of ozone with ultrasonic radiation in gas-liquid-solid three phase loop-lift reactor <i>Y. Xu, X. Zhong, H. Zhang (China)</i>	068
08:50	LP Effects of cavitating water jets on advanced oxidation processes in an annular photolytic reactor <i>M. Čehovin, J. Scheideler, A. Ried, J. Mielcke, H. Stapel, A. Žgajnar Gotvajn, A. Medic, B. Kompare (Slovenia, Germany)</i>	191
09:10	LP Implementation of ozonated water pulverization: Characterization of the ozone desorption <i>M. Tournois, M. Pages, M. Roustan, D. Kleiber, F. Violleau, G. Hébrard (France)</i>	143
09:30	LP Retrofit of Ozone Contact Basins With Sidestream Venturi Gas Injection <i>J. R Jackson, S. S. Pathapati (USA)</i>	178
09:50	LP Ozone concentrations exceeding 15wt% on an industrial scale? <i>N. Brüggemann, M. Salvermoser, T. Pühmeier, R. Fiekens, R. Fietzek (Germany)</i>	221
10:10	LP The influence of sample tubing material on the accuracy of low ozone concentration measurement <i>A. Scholz (Germany)</i>	069
10:30	Break	



Session 23. Industrial waters

Hour	Presentation	ID
08:30	LP Removal of Hard COD in industrial wastewater - comparison of different treatment solutions based on Chemical Coagulation, DAF, Ozone and Bio Filter <i>A. Ried, I. Zhu, T. Getting (Germany, USA)</i>	204
08:50	LP Comparison between coagulation, fenton and combined ozonation as effective treatments to treat high refractory industrial wastewater <i>N. Amaral-Silva, R. C. Martins, S. Castro-Silva, C. Paiva, R. M. Quinta-Ferreira (Portugal)</i>	152
09:10	LP Ozonation of landfill leachate: cost effectiveness and insights on conversions of organic matter <i>M. Chys, W. T.M. Audenaert, V. Oloibiri, K. Demeestere, S. W.H. Van Hulle (Belgium)</i>	099
09:30	LP Evaluation of UV, UV/H₂O₂ and UV/Na₂S₂O₈ systems for the treatment of industrial waters - organics degradation and disinfection <i>Š. Bártoová, P. Kûs, V. Šmejdoová, J. Říhová Ambrožová, H. Šveda (Czech Republic)</i>	124
09:50	LP The new concept of catalytic ozonation process, OCS: example of an industrial waste water treatment in the energy sector <i>F. Pontlevoy, E. Azokpota, F. Leroux (France)</i>	228
10:10	LP Ozonation and UV radiation as alternatives to chemical biocides for cooling water <i>S. Chéret, A. Muller, S. Baig, C. Bertrand (France)</i>	260

10:30 Break

Session 24. Micropollutants control - Part 2

Hour	Presentation	ID
08:30	LP The contribution of analytical and chemometric tools for the performance assessment of several wastewater treatment technologies including ozonation <i>A. Kiss, A. Gonzalez Ospina, S. Baig, E. Vulliet (France)</i>	235
08:50	LP Kinetics of hydroxyl radicals and selected pharmaceuticals and personal care products for the performance evaluation of ozonation and aop reactors in drinking water treatment <i>S. Echigo, Y. Kawabata, S. Ikemoto, S. Itoh (Japan)</i>	165
09:10	LP Determination of transformation products from the ozonation of pharmaceuticals and their detection in treated wastewaters <i>M. Bourgin, E. Borowska, J. Hollender, C. S. Mcardell, U. Von Gunten, (Switzerland)</i>	140
09:30	LP Ozonation for degradation of pharmaceutical of hospital wastewater <i>K. M. S. Hansen, A. Spiliotopoulou, R. Kumar Chhetri, M. Escolà Casas, K. Bester, H. R. Andersen (Denmark)</i>	145
09:50	LP Pharmaceuticals removal in wastewater by biological treatment and tertiary ozonation <i>B. Domenjoud, A. Gonzalez Ospina, E. Vulliet, S. Baig (France)</i>	248
10:10	Discussion	

10:30 Break

Session 25. Workshop -Access to ozone mass transfer parameters

Hour		ID
11:00	Overview of mass transfer modelling Review and discussions on experimental methods	

13:00 Lunch

Session 26. Workshop - Young Ozone People

Hour		ID
11:00	Spot presentations by Young Ozone People, by experienced Ozone People Discussion	

13:00 Lunch

Session 27. Workshop - IOA highlights

Hour		ID
11:00	Ozone as active substance under the Biocidal Products Regulation <i>B. Paolini, T. Pühmeier, J. Mielcke, M. Rothe, M. Hoffmann, J. Ryckeboer (Switzerland, Germany)</i> Review of industry and technical news <i>IOA Ozone engineering group</i>	224

13:00 Lunch



Session 28. Design and Engineering aspects - Part 2

Hour	Presentation	ID
14:30	LP Ozone Generation System Performance Testing Considerations <i>K. L. Rakness (USA)</i>	067
14:50	LP Upgrading an Older Ozone System to Achieve Optimal Treatment Performance <i>C. Schulz, M. Bayan (USA)</i>	241
15:10	LP The synergistic effects of designing ozone with a biologically active filter <i>I. Zhu, T. Getting, A. Ried (USA, Germany)</i>	203
15:30	LP Research and development, implementation and operation of industrial experience systems for ventilation and decomposition of ozone <i>I. Tkachenko, S. Tkachenko, V. Lunin (Russia)</i>	156
15:50	LP Control Strategies for Wastewater Applications of Ozone <i>M. Oneby, M. Priest (USA)</i>	261

Session 29. Applications in Industrial Processes

Hour	Presentation	ID
14:30	LP Ozone as an interesting oxidizer for green chemistry processes: pre-industrial pilot experimentations on various samples <i>L. V. Hoang, C. Coste, C. Druon, J.-P. Bonhoure, T. Aussenac (France)</i>	199
14:50	LP Ozone delignification of lignocellulosic waste for sugar availability <i>P. Arenas-Cárdenas, A. López-López, E. León-Becerril (Mexico)</i>	127
15:10	LP Advanced oxidation processes for the regeneration of siloxane-exhausted adsorbents <i>A. Cabrera-Codony, R. Gonzalez-Olmos, M. J. Martín (Spain)</i>	114
15:30	LP Purification of industrial gas emissions with a combination of UV and ozone <i>F. Montecchio, J. Delin, P. Kaijser, J. Mills, K. Engvall, R. Lanza (Sweden, UK)</i>	139
15:50	LP Preparation and characterization of modified PVDF membrane by gamma-ray irradiation for water reuse <i>S. J. Lim, T.-H. Kim, I. H. Shin (Republic of Korea)</i>	225

Session 30. Micropollutants control - Part 3

Hour	Presentation	ID
14:30	LP Removal of a recalcitrant anticancer drug from water with ozone based technologies <i>R. Gonzalez-Olmos, L. Ferrando-Climent, A. Anfruns, S. Rodriguez-Mozaz, D. Barceló (Spain)</i>	080
14:50	LP Investigation of ozone based processes for removal of benzothiazoles <i>J. Derco, M. Melicher, J. Dudas, J. Kecskes (Slovakia)</i>	231
15:10	LP Robust fluorescence and UV-vis correlation models for real-time control and assessment of micropollutant removal from secondary effluent using ozonation <i>M. Chys, S. W.H. Van Hulle, E. Deniere, L. Vergeynst, H. Van Langenhove, I. Nopens, K. Demeestere, W. T.M. Audenaert (Belgium)</i>	097
15:30	LP UV and UV/H₂O₂ photolysis processes for estrogens removal in water <i>B. Cédât, C. De Brauer, H. Métivier, M.-E. Bouchard (France)</i>	141
15:50	LP Ecotoxicological evaluation of wastewater treated by conventional biological and ozonation processes <i>A. Wigh, S. Bony, A. Devaux, A. Gonzalez-Ospina, B. Domenjoud, S. Aït-Aïssa, N. Creusot, C. Bazin (France)</i>	250

Plenary session

16h15 **Awards Ceremony**
Synthesis and Conclusions
Announcements

17h30 **Adjourn**

