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CIBIQ2023 - II Ibero-American Congress of Chemical Engineering

Buenos Aires - Argentina - June 4-8, 2023

"The global chemical engineering working for a better future world"



GS06-Global Symposium on Emerging Contaminants: Recent Advances on Removal Treatments of Emerging Contaminants from Water and Wastewater

Wednesday, June 7th
Room 4
(Classroom CIBIQ)

PROGRAM

ORAL SESSIONS

SESSION 1. ADSORPTION OF EMERGING CONTAMINANTS ONTO DIFFERENT MATERIALS

Chair: Ana Lea Cukierman, ITAPROQ-CONICET, Argentina

Wednesday, June 7th
Classroom CIBIQ

ID1954 KEYNOTE	9:00-9:30	"Antipyrine adsorption on highly porous lignin-derived activated carbons" Moulefera, I. ^{1,2} ; García-Mateos, F.J. ¹ ; Benyoucef A. ² ; Rosas, J.M. ¹ ; Rodríguez-Mirasol, J. ¹ ; Cordero, T. ¹ ¹ University of Malaga (Spain). ² Mustapha Stambouli University of Mascara (Algeria)
ID2410	9:30-9:45	"Emerging pollutants adsorption under competitive conditions" Pina, A.C. ^{1,2} ; Tancredi, N. ¹ ; Amaya, A. ¹ ; Ania, C.O. ² ¹ Udelar (Uruguay). ² University of Orléans (France)
ID2608	9:45-10:00	"Removal of emerging contaminants from feedlot wastewaters by adsorption onto magnetic activated carbons" Morel, M.R. ¹ ; Murguía, M.C. ² ; Rintoul, I. ¹ ¹ INTEC (UNL-CONICET) (Argentina). ² Universidad Nacional del Litoral (Argentina)
ID3061	10:00-10:15	"Hydrophilic carbon nanofibers supported on graphitic carbon nitride for the efficient adsorptive removal of aqueous methylene blue dye molecules" Bhaduri, B. ¹ ; Verma, N. ² ¹ Indian Institute of Technology Kharagpur (India). ² Indian Institute of Technology Kanpur (India)
ID2736	10:15-10:30	"Optimización del proceso de adsorción de flúor utilizando como adsorbente <i>Nerisyrenia camporum</i> " Moreno Torres, C.S.; Cervantes González, E. Universidad Autónoma de San Luis Potosí (Mexico)

SESSION 2. OTHER TREATMENTS FOR THE EMERGING CONTAMINANTS REMOVAL

Chair: María Teresa Moreira, Universidad de Santiago de Compostela, Spain

Wednesday, June 7th
Classroom CIBIQ

ID2360 KEYNOTE	14:00-14:30	"Evaluation of pilot-scale advanced oxidation treatments on a real secondary effluent for the removal of contaminants of emerging concern and antibiotic resistance genes" Guerra-Rodríguez, S. ¹ ; Abeledo-Lameiro, M.J. ² ; Polo-López, M.I. ² ; Plaza-Bolaños, P. ^{3,4} ; Agüera, A. ^{3,4} ; Rodríguez, E. ¹ , Rodríguez-Chueca, J. ¹ ¹ Universidad Politécnica de Madrid (Spain). ² CIEMAT (Spain). ³ CIESOL (Spain). ⁴ University of Almería (Spain)
ID1453	14:30-14:45	"Supported copper (II) catalysts for the Fenton-like oxidation of contaminants of emerging concern" Battauz, F.D.; Miranda Zoppas, F.; Marchesini, F.A. INCAPE-CCT (Argentina)

ID2509	14:45-15:00	"Bisphenol A degradation by catalytic wet air oxidation in a trickle bed reactor" Serra-Pérez, E.; Álvarez-Torrellas, S.; <u>García, J.</u> <i>Universidad Complutense de Madrid (Spain)</i>
ID2654	15:00-15:15	"Intensification of photo-Fenton process to efficiently treat cytostatic drugs" <u>Carbajo, J.</u> ¹ ; Silveira, J.E. ² ; Zazo, J.A. ² ; Casas, J.A. ² ; Portillo, E. ¹ ; Álvarez-Torrellas, S. ¹ ; Águeda, V.I. ¹ ; García J. ¹ ¹ <i>Universidad Complutense de Madrid (Spain)</i> . ² <i>Universidad Autonoma de Madrid (Spain)</i>
ID1682	15:30-15:45	"Aplicación de electrodiálisis en la remoción de 4-nitrofenol de aguas residuales provenientes de la industria" López, M.; Guerrero Gutierrez, J.D.; Cornaglia, L.M.; Gutierrez, L.B.; <u>Bosko, M.L.</u> <i>INCAPE (FIQ-UNL/CONICET) (Argentina)</i>
ID1254	15:45-16:00	"Optimización de los recursos ambiental-energéticos en el Laboratorio de Físicoquímica utilizando un círculo de producción ecológica (CPE) en el área de Físicoquímica, Facultad de Ingeniería, Universidad de San Carlos de Guatemala" <u>Villela Rodas, C.A.</u> <i>Universidad de San Carlos de Guatemala (Guatemala)</i>

SESSION 3. EMERGING CONTAMINANTS DETECTION/ANALYSIS

Chair: *Silvia Álvarez-Torrellas, Universidad Complutense de Madrid, Spain*

Wednesday, June 7th

Classroom CIBIQ

ID3022 KEYNOTE	16:30-17:00	"Chromatographic determination of selected pesticides and pharmaceuticals in domestic wastewaters" Paredes-Hincapié, M.A.; Hidalgo-Silva, A.F.; Mora-Oviedo, E.C.; García-Mora, A.M.; Hidalgo-Troya, A.; <u>Galeano, L.A.</u> <i>Nariño University (Colombia)</i>
ID1947	17:00-17:15	"RedCoPollutants-Quantification of emerging contaminants" Corpa, C.; Monte, M.C.; <u>Blanco, A.</u> <i>Universidad Complutense de Madrid (Spain)</i>
ID3146	17:15-17:30	"Continuous synthesis of N, S co-coped carbon dots for selective detection of Cd (II) ions" Cheng, Y.; Chen, Z.; Xu, J.; Wang, Y. <i>Tsinghua University (China)</i>

POSTER SESSION

Wednesday, June 7th (COFFEE AREA) 10:30-11:00 h & 16:00 -16:30 h

ID1395	"Catalytic ozonation of pharmaceutical wastewater over 3D printed Mn/ α -Al ₂ O ₃ monoliths" Inchaurondo, N. ¹ ; Fages, F. ¹ ; Hung Hung, Y.M.X. ² ; Fasce, L. ¹ ; Talou, M. ² ; di Luca, C. ¹ ¹ <i>Div. Catalizadores y Superficies, INTEMA-CONICET (Argentina)</i> . ² <i>Div. Cerámicos, INTEMA-CONICET (Argentina)</i>
ID1630	"Influencia de la interacción entre perlas de hidrogel confinadas en su dinámica de crecimiento" Falcioni, S. ¹ ; Roht, Y.L. ¹ ; Bindu, L. ¹ ; Drazer, G. ² ; Ippolito, I. ¹ ¹ <i>Universidad de Buenos Aires (Argentina)</i> . ² <i>Rutgers University (USA)</i>
ID1773	"Comportamiento de carbones activados desarrollados en base a diferentes precursores biomásicos y estrategias de activación en la remoción de un contaminante emergente" Nunell, G.V. ¹ ; Rodríguez Ortiz, H. ¹ ; Gomez Vargas, C. ¹ ; Gomez Delgado, E. ¹ ; Bonelli, P.R. ¹ ; Cukierman, A.L. ^{1,2} ¹ <i>ITAPROQ-CONICET</i> , ² <i>Facultad de Farmacia y Bioquímica-Universidad de Buenos Aires (Argentina)</i>
ID1900	"Towards large scale implementation of magnetically separable catalysts in photo-Fenton processes for micropollutant abatement" Conde, J.J. ¹ ; González-Rodríguez, J. ¹ ; Gundín, R. ¹ ; Vázquez-Vázquez, C. ² ; Feijoo, G. ¹ ; Moreira, M.T. ¹ ¹ <i>CRETUS</i> , ² <i>Laboratory of Magnetism and Nanotechnology-Universidad de Santiago de Compostela (Spain)</i>
ID1919	"Mineralization of Bisphenol A from water by an ozonation process enhanced by Electric Arc Furnace Slag" Inchaurondo, N.S. ¹ ; Bocero, F. ¹ ; Fasce, L.A. ^{1,2} ¹ <i>INTEMA (Argentina)</i> . ² <i>Universidad Nacional de Mar del Plata (Argentina)</i>
ID2020	"Efficient removal of ciprofloxacin by adsorption using carbon xerogels" Alvarez-Torrellas, S.; Hernández-Abreu, A.B.; Águeda, V.I.; Delgado, J.A.; García, J. <i>Universidad Complutense de Madrid (Spain)</i>
ID2029	"Remoción de colorantes de aguas coloreadas con anilinas provenientes del teñido de artesanías de paja toquilla del Cantón Gualaceo a través del proceso Fenton-like con ceniza volcánica" Vázquez, M.A.; Pinos, V.P.; García, J.A. <i>Universidad de Cuenca (Ecuador)</i>
ID2091	"Effect of Hg speciation on the adsorption performance of biomass adsorbents" Román, S. ¹ ; Nabais, J.V. ² ; Laguinhos, C. ³ ; Ledesma, B. ¹ ¹ <i>Universidad de Extremadura (Spain)</i> . ² <i>Comprehensive Health Research Center (Portugal)</i> . ³ <i>Universidade de Évora (Portugal)</i>

ID2254	"Tuned-porous carbon materials as adsorbents for the removal of paracetamol from contaminated waters" Silva, A.S. ^{1,2} ; Henrique, A. ^{1,2} ; Roman, F.F. ^{1,2} ; Diaz de Tuesta, J.L. ¹ ; Gläsel, J. ³ ; Silva, J.A.C. ¹ ; Etzold, B.J.M. ³ ; Gomes, H.T. ¹ ¹ CIMO, ² SusTEC-Polytechnic Institute of Bragança (Portugal). ³ Technische Universität Darmstadt (Germany)
ID2341	"Removal of phenolic compounds from superficial water and wastewater using a viscous organic phase retained in porous polyethylene" Beiguel, E.P. ¹ ; Hughes, E.A. ¹ ; Montserrat, J.M. ^{1,2} ¹ Universidad Nacional de General Sarmiento (Argentina). ² CONICET (Argentina)
ID2389	"Activated rice husk biochar as an adsorbent of micropollutants in real wastewater" Sales, A.; Llopart, P.; Bayarri, B.; Sans, C. Universidad de Barcelona (Spain)
ID2438	"Competitive adsorption of Ni (II), Cd (II), and Co (II) onto ordered mesoporous silica functionalized with amine groups" Legnoverde, M.S. ¹ ; Giraldo, L. ³ ; Rodríguez-Estupiñán, P. ² ; Moreno-Piraján, J.C. ² ; Basaldella, E.I. ¹ ¹ CINDECA (Argentina). ² Universidad de los Andes (Colombia). ³ Universidad Nacional de Colombia (Colombia)
ID2516	"Efficient integration sequential of advanced oxidation and biological processes: Removal of toxicity from pharmaceutical wastewater" Huaccallo-Aguilar, Y. ^{1,2} ; Álvarez-Torrellas, S. ¹ ; Peres, J.A. ³ ; García, J. ¹ ¹ Universidad Complutense de Madrid (Spain). ² Universidad Señor de Sipán (Perú). ³ Universidade de Trás-os-Montes e Alto Douro (Portugal)
ID2577	"Synthesis of catalysts from sewage sludge for the cytostatic drugs removal from aqueous solution" Húber, D.; Álvarez-Torrellas, S.; Larriba, M.; Martín, M.; García, J. Universidad Complutense de Madrid (Spain)
ID2611	"Valorization of sewage sludge to produce a carbon-based adsorbent for the removal of cytostatic drugs from water" Portillo, E.; Álvarez-Torrellas, S.; Carbajo, J.; Flores, S.; Carrizosa, R.; Águeda, V.I. Universidad Complutense de Madrid (Spain)
ID2640	"Emerging contaminants in the Reconquista basin: comparison of chromatographic techniques (GC-MS and LC-MS/MS)" Fitó Friedrichs, G. ^{1,2} ; Diaz, Y. ¹ ; Montserrat, J.M. ^{1,2} ¹ Universidad Nacional de General Sarmiento (Argentina). ² CONICET (Argentina)
ID2672	"Impresión 3D con caolín comercial y su aplicación a la adsorción de colorantes" Alvarez Serafini, M. ^{1,2} ; Tonetto, G. ^{1,2} ; López E. ² ¹ Universidad Nacional del Sur (Argentina). ² PLAPIQUI (UNS-CONICET) (Argentina)
ID2950	"Aplicação do método IPCC na simulação da produção de metano e biogás a partir dos resíduos sólidos do município de Castanhal" Barbosa de Lima, E.
ID3000	"Potential of Fungi in bioremediation treatment" Le Floch, S. ¹ ; Quemener, M. ² ; Guena, A. ¹ ; Mounier, J. ² ; Le Floch, G. ² ¹ CEDRE (France). ² Université de Brest (France)
ID3023	"Determination of contaminants of emerging concern in surface water and domestic wastewater by Gas Chromatography-Mass Spectrometry (GC-MS)" Paredes-Hincapié, M.A.; Hidalgo-Silva, A.F.; Mora-Oviedo, E.C.; García-Mora, A.M.; Hidalgo-Troya, A.; Galeano, L.A. Nariño University (Colombia)
ID3036	"Removal of paracetamol and ibuprofen by functionalized activated carbon" Palma, C. ¹ ; Carvajal A. ¹ ; Sepúlveda L. ² ¹ Universidad Técnica Federico Santa María (Chile). ² Universidad de Santiago de Chile (Chile)
ID3037	"Development of bioadsorbent of scavenging inorganic anions to enhance efficiency of AOPs in the treatment of emerging contaminants in wastewaters". García-Mora, A.M.; Carrera, W.; Gelpud, M.C.; Hidalgo-Troya, A.; Galeano, L.A. Nariño University (Colombia)
ID3155	"The Preparation of ZnO-Nanocluster-Encapsulating MFI Zeolite as A Recyclable Adsorbent for the Ultradeep Removal of H ₂ S" Yu, T.; Wang, Y.; Xu, J.; Liu, Z. Tsinghua University (China)
ID3159	"Devolatilization of high viscous fluid with high gravity technology" Jibing, Q.; Youzhi, L.; Yandong, L. North University of China (China)



Coordinators

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