

POSTERS PROGRAM

Posters can be set up by 8:45 am on their programmed day and should be removed by 7 pm. Authors are requested to be available for questions during the following scheduled poster sessions.

Monday 1st, November, 2010	Tuesday, 2nd, November, 2010	Thursday, 3rd, November, 2010
10:15-10:45	10:00-10:45	10:20-10:45
12:25-13:30	12:25-13:30	12:25-13:30
15:20-16:00	15:20-16:00	14:50-15:30
17:40-18:30	17:30-18:30	

Monday, November 1st, 2010 10:00 – 18:30

Industrial wastewater treatment

- P01.01 Effect of the organic Loading rate and ammoniacal loading rate on wastewater treatment of an animal food factory using a sequencing batch reactor (SBR).
Diana Catalina D. Rodríguez, Paula Andrea P. Lara, Gustavo G. Peñuela, (COLOMBIA).
- P01.02 Effect of organic load and fill time on performance and methane production in an ASBR applied to the treatment of biodiesel production effluent.
José Rodrigues, Vivian Selma, Luís Cotrim, Suzana Ratusznei, Marcelo Zaiat, Eugenio Foresti, (BRAZIL).
- P01.03 Effect of organic and shock load on the treatment of metalworking fluid wastewater by AnSBBR.
José Rodrigues, Pedro Carvalhinha, Anderson Flôres, Suzana Ratusznei, Marcelo Zaiat, Eugenio Foresti, (BRAZIL).
- P01.04 Industrial Wastewater Treatment Case Study of ConAgra Foods in Mexico.
José Molina, Scott Christian, Mi Zai Yan, Sergio Razo, José Hernández, Shannon Grant, (México).
- P01.05 Ultrasound Assisted Method to Increase the Anaerobic Treatment of Fibreboard Manufacturing Wastewater in MBR Reactor.



- Ewa Neczaj, January Bién, Dorota Krzemińska, Malgorzata Worwag, (POLAND).
- P01.06 Performance of anaerobic systems with suspended, granular and immobilized biomass for treating wastewater with high fat content after enzymatic hydrolysis.
Daniela R. Rosa, Iolanda C. S. Duarte, Nora K. Saavedra, Maria B. Varesche, Marcelo Zaiat, Magali Christe Cammarota, Denise M. G. Freire, (BRAZIL).
- P01.07 Evaluation of upflow hybrid reactor (HUR), using pall-ring as bacterial support material, in order to purify raw effluents from the dairy industry.
Alonso Enrique Mendoza, (VENEZUELA).
- P01.08 The role of immobilized fulvic acids on alumina particles during the reductive dechlorination of carbon tetrachloride.
Luis H. Álvarez, Laura Jiménez, Virginia Hernández Montoya, Francisco J. Cervantes, (MEXICO).
- P01.09 Distillery Wastewater Treatment by Fixed-bed Anaerobic-Aerobic Ditch (FA₂D) System.
Hisatomo Fukui, Masahiro Tatara, (JAPAN)
- P01.10 Methane Emission from Palm Oil Mill Effluent (POME)-Treating Anaerobic Lagoons and Microbial Community Structures Involved in POME-Degradation.
Kengo Kubota, Daisuke Tanikawa, Makoto Kawauchi, Kazuaki Syutsubo, Yuji Sekiguchi, Mohammed Faisal Mohammed Yunus, Sau Soon Chen, Takashi Yamaguchi, Hideki Harada, (JAPAN).
- P01.11 Distillery Wastewater Treatment by Fixed-bed Anaerobic-Aerobic Ditch (FA₂D) System.
Hisatomo Fukui, Masahiro Tatara, (JAPAN)
- P01.12 Effect of zero-valent iron on the anaerobic bio-transformation and dechlorination of chloronitrobenzene.
Haizhuan Lin, Liang Zhu, Xiangyang Xu, Rong Cao, (CHINA).
- P01.13 Development of Revolutionary Anaerobic Wastewater Treatment System using a novel ER-An-DHS and UASB Reactor Combination.
Miyaoka Yuma, Tagawa Tadashi, Kadono Takuma, Dehama Kazuya, Sasaki Yuta, Takashi Yamaguchi, (JAPAN).
- P01.14 The treatment of leachate combined with domestic sewage in UASB reactor.



- André Felipe de Melo Sales Santos Sales, Mario Takayuki Kato, Lourdinha Florencio, Sávia Gavazza, (BRAZIL).
- P01.15 Anaerobic treatment of tequila wastewater with the IC reactor.
Peter Yspeert, Yolanda Yspeert-Hurtado, Peter Van der Heide, Michel Noordink, Ramiro Zapata Salas, (NETHERLANDS).
- P01.16 Integrated Process for the Production of Lipase and Methane from Olive Mill Wastewaters.
Cristiana Gonçalves, Madalena Alves, Isabel Belo, (PORTUGAL)
- P01.17 Two-stage anaerobic digestion treating wastewater from wet processing of coffee.
Yans Guardia Puebla, Adalberto Noyola Robles, Juan Manuel Morgan Sagastume, (MEXICO)

Sulfate/sulfide conversion

- P02.01 Removal of Sulfate from Acid Mine Drainage with a Horizontal-Flow Anaerobic Immobilized Biomass Reactor.
Renata Piacentini Rodriguez, Marcelo Zaiat, (BRAZIL)
- P02.02 Enhanced Simultaneous Removal of Sulfur, Nitrogen and Carbon in An EGSB Reactor under Micro-aerobic Condition.
Aijie Wang, Chuan Chen, (CHINA)
- P02.03 Sulfate and organic matter removal in an ANSBBR: effect of temperature and feed strategy.
José Rodrigues, Augusto Costabile, Catarina Canto, Suzana Ratusznei, Marcelo Zaiat, Eugenio Foresti, (BRAZIL)
- P02.04 Sulfate-rich wastewater treatment using a Submerged Anaerobic Membrane Bioreactor (SAMBR).
Marcela Gatti, Nuria Martí, Juan Bautista Giménez, Laura Carretero, María Victoria Ruano, Aurora Seco, (SPAIN)
- P02.05 A thermophile sulfate reducing consortium from hydrothermal vent sediments in Punta de Mita, Nayarit.
Uriel Cid, Sergio Revah, Marcia Guadalupe Morales, (MEXICO)

Recovery of energy from waste materials

- P03.01 Anaerobic treatment of crude glycerol from biodiesel production in lab-scale and full-scale conditions.



- P03.02 Miroslov Hutnan, Nina Kolesarova, Igor Bodik, Viera Spalkova, (SLOVAKIA)
Evaluation of Batch Biohydrogen Production at Different Total Solids Content and Initial pH Using Solid Substrate Fermentation of Organic Waste.
Paula Natalia P. Robledo-Narváez, Graciano G. Calva Calva, María Teresa MPonce-Noyola, Elvira E. Ríos Leal, Juvencio J. Galíndez Mayer, Roxana R. Olvera Ramírez, Carlos C. Estrada Vázquez, Héctor Mario Poggi Varaldo, (MEXICO)
- P03.03 Enhanced hydrogen production by *Thermoanaerobacterium thermosaccharolyticum* W16 immobilized on biological carrier.
Guangli Cao, Ai-Jie Wang, Jing Yao, (CHINA)
- P03.04 The effect of nitrate concentration on simultaneous process of methane fermentation and denitrification in blue mussel treatment.
Shinichi Akizuki, (JAPAN)
- P03.05 Batch Biohydrogen production with glycerol as substrate with hydrogen continuous extraction and non continuous.
Estela Ximena Tapia, Juan Ramírez, Gonzalo Ruiz Filippi, Paola Porrier, Rolando Chamy, (CHILE)
- P03.06 Potential of Bio-hydrogen production from aircrafts wastewaters.
Gloria Moreno, Andrés Martínez, Iván Moreno Andrade, Germán Buitrón, (MEXICO)
- P03.07 Evaluation of the Colonization of two Carriers for Fermentative Hydrogen Production.
Gamaliel Hernández, Germán Buitrón, (MEXICO)
- P03.08 Methane production potentials of oil extracted microalgae.
Viljami Kinnunen, Jukka Rintala, (FINLAND)
- P03.09 Evaluation of Different Support Materials in Anaerobic Fluidized Bed Reactor for Hydrogen and Ethanol Production.
Aruna Rocha Barros, Cristiane Marques Reis, Eduardo Lucena Cavalcante Amorim, Edson Luiz Silva, (BRAZIL)
- P03.10 Possibilities of anaerobic digestion in the Arctic.
Marianne Willemoes Jørgensen, Irini Angelidaki, (DENAMARK)
- P03.11 Methane production by treatment of stillage from hydrated ethanol using a modified UASB.
Elda España, Javier Mijangos, Galdy Hernández, Jorge Domínguez, Liliana Alzate, (SWEDEN)



- P03.12 Parameters affecting degradation rate and bio-methane potential in batch experiment setups.
Lotta Levén, Anna Schnürer, (SWEDEN)
- P03.13 Single phase and two phases of anaerobic codigestion of sludge with organic fraction of municipal solid waste (OFMSW). A comparative study.
María Estela Montes Carmona, Aurelio Hernández Lehmann, Isabel del Castillo González, Luis Antonio López Escobar, Teresa de Jesús Valdés, (MEXICO)
- P03.14 Influence of thermal pre-treatment to increase digestibility of brewers' spent grains.
Günther Bochmann, Markus Ortner, Bernhard Drosch, Martin Schönlieb, Silvia Andres-Lainez, Roland Kirchmayr, Rudolf Braun, (AUSTRIA)
- P03.15 Staged Anaerobic Digestion as a means to Increase Specific Methanogenic Activity.
Ben Bocher, Daniel Zitomer, (UNITED STATES).

Nutrient recovery issues related to AD

- P04.01 Analysis and Optimization of Ammonia Stripping using Multi-fluid Model.
Liang Yu, Quanbao Zhao, Anping Jiang, Shulin Chen, (UNITED STATES)
- P04.02 p-Cresol mineralization in a nitrifying sequential batch reactor.
Carlos David Silva Luna, Jorge Gómez, Flor Cuervo López, Anne Claire Texier, (MEXICO)
- P04.03 Nitrite effect on ammonium and nitrite oxidizing processes.
Carlos David Silva-Luna, Eric Houbbron, Flor Cuervo-López, Jorge Gómez, Anne-Claire Texier, (MEXICO)
- P04.04 Biogas residues as agricultural crop fertilizers - effect on soil microbiology. Kajsa Risberg, (SWEDEN)
- P04.05 Anaerobic digestion of *Chlorella vulgaris* microalgae: slow nitrogen mineralization and partial COD removal.
Monique Ras, Laurent Lardon, Eric Latrille, Nicolas Bernet, Bruno Sialve, Jean-Philippe Steyer, (FRANCE)

AD Modeling



- P05.01 Discussion on the Necessity and Rationality of Disintegration Existed in Anaerobic Digestion Stage Theory.
Xiaojian Liu, (CHINA)
- P05.02 New Particulate Organic Matter Mapping in ADM1 for Sludge Digestion.
Alexis Mottet, Ivan Ramírez, Helene Carrere, Julie Jiménez, Stephane Deleris, Fabien Vedrenne, Jean-Philippe Steyer, (FRANCE)
- P05.03 Prediction of COD, pH and VFA/HCO₃⁻ in a Sequential UASBR System with ANFIS for Strong Character Dairy Wastewater Treatment.
Dilek Erdirencelebi, Sukran Arici, (TURKEY)
- P05.04 Research on Mathematical Model for Anaerobic Digestion by Using System Dynamics Model.
Hong Yan, Kaijun Wang, Mingxia Zheng, Guochen Zhang, (CHINA)
- P05.05 Biogas-Organic Load Relationship Model for Predicting the Anaerobic Digestion of Papaya Waste (*Carica papaya*) Influenced by *Bacillus* species and Rumen.
Nelson Caballero-Arzápalo, Cinthia Carolina Gamboa-Loira, Roland Meyer-Pittroff, (MEXICO)
- P05.06 Optimization of Two-Phase Solid-State Anaerobic Digestion - A Model-Based approach.
Marcel Pohl, Jan Mumme, Rainer Tölle, Bernd Linke, (GERMANY)
- P05.07 Quantitative analysis of the cellulolytic population in municipal solid waste under different leachate recycling regimes.
Christian Omar Martínez-Cámara, Juan Manuel Sánchez-Yáñez, Liliana Márquez-Benavides, (MEXICO)
- P05.08 Outcomes and conclusions from the European project Agrobiogas: An integrated approach for biogas production with agricultural waste.
Matthew John Wade, (UNITED KINGDOM)
- P05.09 ADM1-based virtual plant for the anaerobic co-digestion of multiple organic substrates.
Santiago García, Zivko Južnič-Zonta, Juan M. Lema, Jorge Rodrigues, (SPAIN)
- P05.10 Modelling flowsheets for the Anaerobic Treatment of Domestic Wastewater.
David Stuckey, Rachel Fox, Simon Judd, Ana Soares, Bruce Jefferson, Sebastian Zacharias, (UNITED KINGDOM)
- P05.11 Exploring the possibility of using a simple neural network for the prediction of biogas production of a solid waste digester.
Eva Ericson, Eva Thorin, Jinyue Yan, (SWEDEN)



- P05.12 Maximum specific acetate uptake rate and decay kinetics in the ADM1 for soluble substrates in pilot experiments.
Janelcy Alferes, Francisco Molina, Jaime L. García-Heras, (SPAIN)

Automation and control of AD processes

- P06.01 Analytical determination of Chemical Oxygen Demand in samples considered to be difficult to analyze: solid substrates and liquid samples with high suspended solid concentrations.
Francisco Raposo, Victoria Fernández-Cegrí, M.A. de la Rubia, Rafael Borja, Jesús Beltrán, Cristina Cavinato, Mia Clinckspoor, Goksel Demirer, Evan Diamadopoulos, Jean-Claude Frigon, Jana Koubova, Mylene Launay, Ramón Méndez, Glauco Menin, Joan Noguerol, Hinrich Huellendahl, Stephanie West, Vinnie de Wilde, (SPAIN)
- P06.02 Influence of temperature on the methanogenic activity of the anaerobic sludge during long-term storage.
Jana Koubova, Tomas Laska, Pavel Jenicek, (CZECH REPUBLIC)
- P06.03 On the optimal operation conditions for an anaerobic digestions process via bifurcation analysis.
Gerardo Lara-Cisneros, (MEXICO)

Tuesday, November 2nd, 2010 10:00 – 18:30

AD of solid waste

- P07.01 A linear programming tool for optimising anaerobic co-digester feeding.
Juan A. Álvarez, Laura Otero, Juan Lema, (SPAIN)
- P07.02 Methane and biofertilizer production potential from rendering plant and slaughterhouse wastes.
Prasad Kaparaju, Suvi Bayr, Marianne Rantanen, Teija Paavola, Jukka Rintala, (FINLAND)
- P07.03 Enhancement of Sunflower Oil Cakes Anaerobic Digestion by Dilute Acid Pretreatment.
Florian Denis Monlau, Eric Latrille, Aline Carvalho Da Costa, Jean-Philippe Steyer, H. Carrère, (FRANCE)
- P07.04 Anaerobic co-digestion of agro-industrial wastes.
Juan A. Álvarez, Marta Carballa, Leticia Regueiro, Juan M. Lema, (SPAIN)



- P07.05 Influence of type of support on biofilm bioreactors for methane production using an effluent from a hydrolytic/acidogenic reactor designed for urban solid waste treatment.
Marisol Vergara Mendoza, Rodrigo G. Torres Saez, (COLOMBIA)
- P07.06 Two-phase anaerobic accelerated municipal solid wastes digestion. Florina Ramírez, Antonina de Jesús-Rojas, Francisco Javier Martínez-Valdez, Reyna Isabel Rodríguez-Pimentel, Suyen Rodríguez-Pérez, Oscar Monroy-Hermosillo, (MEXICO)
- P07.07 Anaerobic digestion of chemically pretreated slaughterhouse solid waste.
Leticia Montoya, Jesús Cárdenas, Cyntia Flores, Adrián Rodríguez, Leticia Montoya, (MEXICO)
- P07.08 Nitrogen ammonia stripping from source segregated domestic food waste.
Angeles de la Rubia, Mark Walker, Charles J. Banks, Sonia Heaven, Francisco Raposo, (SPAIN)
- P07.09 Berries spent pomace methanization using enzymatic treatment.
Alejandra Patricia Cerda, Maria Eugenia Martínez, Paola Poirrier, María Elvira Zúñiga, Carmen Soto, Julio Berríos, Manuel De la Vega, (CHILE)
- P07.10 Effect of total solids concentration on hydrogen production from kitchen wastes.
Ivan Moreno-Andrade, Rolando Chamy, Germán Buitrón, (MEXICO)
- P07.11 Thermophilic anaerobic co-digestion of pretreated empty fruit bunches with palm oil mill effluent for efficient biogas production.
Sompong O-thong, Cheng Fang, Irini Angelidaki,
- P07.12 Anaerobic co-digestion of Opuntia ficus indica and pig manure.
M. Begoña Ruiz Fuertes, Andrés Pascual Vidal, (SPAIN)
- P07.13 Hydrolysis of Whole Garbage (Plant-based Garbage Bag and MSWOF): pre-treatment of MSWOF for High-Efficiency AD.
Jun Tsubota, Shoujiro Osumi, F. Wang, T. Oishi, Taira Hidaka, Hiroshi Tsuno, (JAPAN)
- P07.14 Differences and shifts in the rheological characteristics of fluids in controlled stirred tank reactors for biogas production.
Annika Björn, Anna Karlsson, Bo H Svensson, Jörgen Ejlerthsson, (SWEDEN)
- P07.15 The Adhesion Property of Thermophilic Methanogens to the Solid Surface.
Toru Matsui, T. Moribe, H. Tanabe, Hisao Morisaki, (JAPAN)



- P07.16 Stability of high-solids anaerobic digestion: pilot-scale experiments under continuous mixing conditions.
Myriam Esteban-Gutierrez, Enrique Aymerich, (SPAIN)
- P07.17 Evaluation of sludge and solid waste anaerobic co-digestion: organic loading and pre-treatment effects.
Maxime Rouez, Patricia Camacho, Lynne Bouchy, Mélanie Lemunier, Samuel Martin, (FRANCE)
- P07.18 Hydrogen production from co-digestion process: characteristics and potential of substrates and preliminary experiments.
Mario Hernández, Manuel Rodríguez, (COLOMBIA)
- P07.19 Influence of pH and temperature on three reactors operated with complex substrates: An approach to hydrogen production.
Mario Hernández, Bertha Peñaranda, Manuel Rodríguez, (COLOMBIA)
- P07.20 Hydrolysis of cellulose-rich substrates in psychrophilic and mesophilic leach-bed reactors.
Ciara Keating, Denise Cysneiros, Anne Thuillier, Romain Villemont, Therese Mahony, Vincent O'Flaherty, (IRELAND)
- P07.21 Hydrogen production through anaerobic digestion of rabbit manure using *Clostridium beijerinckii* NCIMB 8052.
Mario Hernández, Bertha Peñaranda, Manuel Rodríguez, (COLOMBIA)
- P07.22 Anaerobic co-digestion from pig manure, rice straw and industrial clay residues.
Janet Jiménez Hernández, Margarita Elizabeth Cisneros Ortiz, Juan Manuel Morgan Sagastume, Yans Guardia Puebla, Osvaldo Romero Romero, Adalberto Noyola Robles, (MEXICO)

AD of sludge and biosolids production

- P08.01 Effect of moderate heat pre-treatment on the anaerobic activated sludge biodegradability.
Sergio Pérez, Valérie Dossat-Létisse, Etienne Paul, Dominique Lefebvre, Xavier Lefebvre, (FRANCE)
- P08.02 Evaluation of autohydrolysis pretreatment over high concentrated secondary sludge.
Andrea Carvajal, María M. Peña, Sara Perez-Elvira, Fernando Pdz-Polanco, (SPAIN)
- P08.03 Improvement of municipal sludge anaerobic digestion yield by dissociating solid retention time and hydraulic retention time.



- P08.04 Tianlun Li, Patricia Camacho, Irina Mouilleron, Samuel Martin, Pascal Dauthuille, (FRANCE)
The study on Efficient Combination of Various Pretreatments for Sewage Sludge Solubilization.
- P08.05 Si-Kyung Cho, Dong-Hoon Kim, Hang-Sik Shin, (REPUBLIC OF KOREA)
Effects of inoculum/substrate ratio on methane yield of thickened sludge.
- P08.06 Seung Lim, Peter Fox, (UNITED STATES)
Thermolysis of waste sludges to enhance methane production.
- P08.07 lauco Menin, Roberta Salvetti, Elena Ficara, Renato Vismara, Roberto Canziani, Francesca Malpei, (ITALY)
Integration of Technologies: Biogas Production, Fertilizer Production and Biogas Upgrading.
- P08.08 Olev Sokk, Rein Kuusik, Enn Loigu, Anne Menert, (ESTONIA)
Anaerobic digestion of secondary sludge in batch reactors.
- P08.09 Carlos Francisco Moreno, Mariano Gutiérrez, Oscar Monroy, Florina Ramírez, (MEXICO)
Accumulation of Long Chain Fatty Acids during mesophilic and thermophilic co-digestion of Sewage Sludge with Trapped Grease Waste.
- P08.10 Gracia Silvestre, Angela Rodríguez -Abalde, Belen Fernández, August Bonmati, (SPAIN)
Co-digestion of sewage sludge and grease trap sludge.
- P08.11 Ewa Neczaj, January Bien, Malgorzata Worwag, Malgorzata Kacprzak, (POLAND)
Effect of blood concentration in the anaerobic digestion of fish solid wastes for biogas production.
- P08.12 Rafael Germán Campos Montiel, A.D. Hernández Fuentes, G. Aguirre Alvarez, J. García Tolentino, Margarita Elizabeth Cisneros-Ortiz, R Villegas Cardenaz, (MEXICO)
Effect of organic and hydraulic overloads on anaerobic digestion process of mixed sludge.
- Karen Elizabeth Lazo, Yves Lesty, Paola Poirrier, Juan Carlos Ruiz, Rolando Chamy, (CHILE)

Biodegradation of recalcitrant chemicals

- P09.01 Removal of lindane in sequential slurry reactors with addition of silicone oil.



- Hector Mario Poggi-Varaldo, Beni Camacho-Pérez, Elvira Ríos-Leal, Fernando Esparza-García, Josefina Barrera-Cortés, Fabio Fava, (MEXICO)
- P09.02 Effect of sudden increase of PCE concentration on performance of fluidized bed bioreactors operated in simultaneous electron acceptor modes.
Cuauhtémoc Moreno-Medina, Luz de María Breton-Deval, Elvira Ríos-Leal, Juvencio Galíndez- Mayer, Alfredo Ortega-Clemente, Fabio Fava, Noemi Rinderknecht-Seijas, Hector Mario Poggi-Varaldo. (MEXICO)
- P09.03 Feasibility of nitrobenzene reduction in a newly designed up-flow Bioelectrocatalysis reactor (UBER).
Aijie Wang, Dan Cui, Haoyi Cheng, Nanqi Ren, (CHINA)
- P09.04 Surfactant removal from a commercial laundry wastewater using an anaerobic sequential batch reactor.
Eduardo Blanco, Dagoberto Yukio Okada, Maria Bernadete Amâncio Varesche, (BRAZIL)
- P09.05 Phenol and bisphenol A biodegradation during mesophilic and thermophilic municipal solid waste anaerobic digestion.
Laurent Mazeas, Intissar Limam, Mohamed Ridha Driss, Angéline Guenne, Jonathan Epissard, Théodore Bouchez, Cécile Rouillon, Céline Madigou, (FRANCE)
- P09.06 Acidogenic Removal of Monochlorophenols.
Xie Jiang, Yan Zhou, Wun Jern Ng, (SINGAPORE)
- P09.07 Simultaneous removal of ammonium, p-cresol and sulfide under nitrifying conditions: a new alternative.
Dennys Nurit Pérez-González, Gehovana González-Blanco, Ricardo Beristain- Cardoso, Jorge Gómez, (MEXICO)
- P09.08 Influence of anaerobic process stability and diversity of co-substrates in degradation of linear alkylbenzene sulphonate.
Dagoberto Yukio-Okada, Andressa Santos-Esteves, Tiago Palladino-Delforno, Julia Sumiko-Hirasawa, Yolanda Cristina Silveira-Duarte, Maria Bernadete Amancio-Varesche, (BRAZIL)
- P09.09 Removal of anionic surfactant in expanded granular sludge bed reactor.
Tiago Palladino Delforno, Dagoberto Yukio Okada, Juliana Polizel, Maria Bernadete Amâncio Varesche, (BRAZIL)
- P09.10 Effect of the COD/SO₄ ratio in the removal of 2-chlorophenol sulphate reducing biofilms.



12th
**WORLD CONGRESS
ON ANAEROBIC DIGESTION**
OCTOBER 31st – NOVEMBER 4th, 2010
GUADALAJARA, JALISCO – MEXICO



Specialist
Conferences

Ulises García, Lourdes Berenice Celis, Héctor Poggi, Monica Meraz,
(MEXICO)

- P09.11 Anaerobic oxidation of phenol by quinone-reducing consortia.
Claudia Margarita Martinez, Francisco J. Cervantes, (MEXICO)

Microbial fuel cells

- P010.01 Effects of Configuration and Temperature on Internal Resistance and Performance of Microbial Fuel Cells.
Ana Line A. Vázquez-Larios, Elvira E. Ríos-Leal, Gerardo G. Vázquez-Huerta, Omar O. Solorza-Feria, Hector Mario Poggi-Varaldo, (MEXICO)
- P010.02 Biological production of H₂, CH₄ and electricity from microalgal biomass.
Aino-Maija Lakaniemi, Olli H. Tuovinen, Jaakko A. Puhakka, (FINLAND)
- P010.03 Sequential hydrogen and electricity production with a hot spring culture.
Marika E. Nissilä, Dogan Karadag, Jaakko A. Puhakka, (FINLAND)
- P010.04 Electricity Production in a Microbial Fuel Cell with a Floating Cathode.
Carlos Cervantes-Astorga, Germán Buitrón, (MEXICO)

Full-scale experiences

- P011.01 Experiences with continuous high-rate thermophilic dry anaerobic digestion of energy crops.
Bruno Mattheeuws, Luc De Baere, Filip Velghe, (BELGIUM)
- P011.02 Nutritional aspects of anaerobic digestion, a practical point of view.
Noemi Sánchez, Adrián Gebbette, (SPAIN)
- P011.03 New aspects of anaerobic treatment of brewery wastewater
Rita Hilliges, Dieter Schreff, Alvaro Carozzi, (GERMANY)
- P011.04 Methane Fermentation of Coffee and Tea Waste with Excess Activated Sludge.
Kazumasa Kamachi, Yuji Tsukamoto, Goro Onuma, Masaru Murakami, (JAPAN)
- P011.05 Complex System of Methane Fermentation and Biomass Boiler for Dairy Products Factory.
Toru Matsui, Masato Endo, Kazuhito Yaguchi, Tomoko Ishikawa, Toshiji Amano, (JAPAN)

Thursday 4th, November, 2010

10:20 – 18:30



Sewage treatment

- P12.01 Potencial of biogas production and utilisation on the slovak wastewater treatment plants.
Igor Bodík, Stanislav Sedláček, Miroslava Kubaská, (SLOVAKIA)
- P12.02 Role of Anaerobic Digestion in DeSaR concept Applications in Rural areas of Jordan with Cesspol sanitations.
Lina Abu Ghunmi, Grietje Zeeman, Manar Fayyad, Jules B. van Lier, (JORDAN)
- P12.03 Pathogen removal in Upflow Anaerobic Sludge Blanket (UASB) Reactors.
Rosa Elena Yaya, Grietje Zeeman, Marc D'Engremont, Jules van Lier, (PERU)
- P.12.04 Hidraulic Residence Time effect on Anaerobic Hydrolysis for complex substrate under low temperatures and nitrogen deficiency conditions.
Paola Poirrier, Francisca Jaar, Jorge Jara, María Cristina Schiappacasse, (CHILE)
- P12.05 Volatile Acids Removal Potential by Methanogens and Propionate Syntrophs in the Anaerobic Baffled Reactor.
Eunyoung Lee, Luu Thi Thuy Giang, Perry L. McCarty, Jaeho Bae, (REPUBLIC OF KOREA)
- P12.06 The evaluation of an anaerobic filter for domestic waste water at ambient temperatures: kinetic parameters.
Lorna Guerrero, Silvio Montalvo, Einar Coronado, (CHILE)
- P12.07 Nitrification via Nitrite in Fluidized Bed Aerobic Reactor, using Chilean Natural Zeolite.
Gabriela Valdes, Lorna Guerrero, Silvio Montalvo, Gladys Vidal, Andrea Barahona, (CHILE)
- P.12.08 Recovery and biological oxidation of dissolved methane from anaerobic wastewater treatment process.
Norihisa Matsuura, Masashi Hatamoto, Shinya Ono, Haruhiko Sumino, Kazuaki SYUTSUBO, Takashi Yamaguchi, Akiyoshi Ohashi, (JAPAN)
- P12.09 Anaerobic treatment and nitrification of garbage leachates diluted with municipal wastewater in a zeolite packed filter-SBR system.
Joaquín Gan, Guadalupe Montaña, Mónica Meraz, Patricia Castilla
- P12.10 Effect of hydraulic residence time (HRT) on anaerobic treatment of wastewater municipal in reactor EGSB.
Ricardo Cruz Huizache, Oscar Monroy Hermosillo, (MEXICO)



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Conferences

Gas production and utilization

- P13.01 Influence of the Microbial Inoculum on Biohydrogen Production by Dark-Fermentation in Continuous Reactors.
Yan Rafrafi, Eric Trably, Eric Latrille, Jean-Philippe Steyer, (FRANCE)
- P13.02 Effect of ultrasound energy input on the hydrolysis and methane production of cattle slurry and animal by-products (ABP) from meat-processing industry.
Sami Luste, Sari Luostarinen, (FINLAND)
- P13.03 Fermentative hydrogen production on membrane bioreactors: A mini-review.
Christian Hernández, Germán Buitrón Méndez, (MEXICO)
- P13.04 Fermentative hydrogen production in anaerobic fluidized bed reactor: influence of alkalinity and glucose concentration.
Eduardo Lucena Cavalcante de Amorim, Aruana Rocha Barros, Cristiane Marques Reis, Engenheira Edson Luiz Silva, (BRAZIL)
- P13.05 Evaluation of Biogas Production Dynamics in a Submerged Anaerobic Membrane Bioreactor (SAMBR) for Domestic Wastewater Treatment.
Freddy Durán, Angel Robles, Maria Victoria Ruano, Josep Ribes, José Ferrer, (SPAIN)
- P13.06 Short time degradation capacity for 22 full scale biogas processes when adding acetate, propionate, phenyl acetate or oleic acid.
Madeleine Larsson, Carina Sundberg, Anna Karlsson, Bo H. Svensson, (SWEDEN)
- P13.07 Microalgae Used as a Substrate in Co-Fermentation Processes with Energy Crops.
Sebastian Schwede, Alexandra Kowalczyk, Mandy Gerber, Roland Span, (GERMANY)
- P13.08 Effects of fibrous diets on the ultimate methane potentials (B₀) of pig effluents.
Guillaume Jarret, Jean-Yves Dourmad, José Martínez, (FRANCE)
- P13.09 Removal of H₂S from biogas using the chemical-biological iron cycle: kinetic characterization and pilot plant experiences.
Luis Arellano-García; Héctor Treto, César Sánchez, Guillermo Baquerizo, Armando González- Sánchez, Sergio Revah, (MEXICO)

Growth modes (e.g. granulation, biofilms)



- P14.01 Comparison of UASB and AF Reactor Performance: a Double approach, Pilot- and Full-scale Studies.
Dores G. Cirne, Thierry Arnaud, Magali Farenc; Luis Castillo, Stephane Deleris, (FRANCE)
- P14.02 Enhancement of biogas production by addition of hemicellulolytic bacteria immobilised on activated zeolite.
Stefan Weiß, Michael Tauber, Walter Somitsch, Remo Meincke, Henry Müller, Gabriele Berg, Georg M Guebitz, (AUSTRIA)
- P14.03 Granulation of flocculent sludge in a UASB reactor using food waste leachate.
Yuichi Ezawa; Norio Nagao; Chiaki Niwa; Tatsuki Toda, (JAPAN)
- P14.04 Rapid start-up of a sulfidogenic biofilm reactor: overcoming acetate accumulation.
Marisol Gallegos-García, Lourdes Berenice Celis, Elias Razo-Flores, (MEXICO)
- P14.05 The influence of external factors in the Extracellular Polymeric Substances produced by anaerobic granular sludge.
Diana Carolina Calvo Martínez, Manuel Salvador Rodríguez, (COLOMBIA)

New developments on AD

- P15.01 Characterizing the EfOM of a psychrophilic UASB reactor with 3-D EEMs fluorescence spectroscopy and PARAFAC.
Mario Esparza-Soto, Juan J. Hernández-Torres, Fall Cheikh, (MEXICO)
- P15.02 Advanced Interpretation of Anaerobic Batch Test and Sources of Potential Errors.
Selin Yüceer, Linda Hinken, Sebastian Meier, Dirk Weichgrebe, Karl Heinz Rosenwinkel, (GERMANY)
- P15.03 Culture conditions and cryoprotectant addition influences methanogenic activity after freeze-drying in air.
Ujwal H. Bhattad, James S. Maki, Craig A. Struble, Anne E. Schauer-Gimenez, Daniel H. Zitomer, (UNITED STATES)
- P15.04 Membrane assisted bioreactors for anaerobic treatment of saline wastewaters.
Alberto Hemmelmann, Alvaro Torres, Christian Vergara, David Jeison, (CHILE)



- P15.05 Increasing the biogas yield of manure by wet explosion of the digested fiber fraction.
Rajib Biswas, Hinrich Uellendahl, Birgitte Kiær Ahring, (DENMARK)
- P15.06 A compact high-rate anaerobic reactor configuration for the treatment of effluents with high lipid content.
Madalena Aves, (PORTUGAL)
- P15.07 Critical flux in a submerged membrane into the upper zone of an UASB reactor.
Alexandra Cerón Vivas, Juan Manuel Morgan, Adalberto Noyola, (MEXICO).
- P15.08 Fast prediction of the hydrogen potential of solid waste by Near Infrared Spectroscopy.
Mathieu Lesteur, Xin Mei Guo, Eric Latrille; Eric Trably, Jean-Michel Roger, Véronique Bellon-Maurel, Catherine Gonzalez, Guillaume Junqua, Jean-Philippe Steyer, (FRANCE)
- P15.09 A retrofitted activated-sludge plant with sequential nitrification and anammox obtains dischargeable effluent.
Willy Verstraete; Henri Spanjers, (BELGIUM)

Microbial ecology and molecular biology

- P16.01 Assessment of sediment from Yarayó River as inoculum for anaerobic treatment of biodegradable.
Adis I. Terry, Eloisa Pozzi, Marcelo Zaiat, Bernadete Varesche, Suyén Rodríguez, Eduardo Cleto Pires, (BRAZIL)
- P16.02 Changes of the acetogenic population in a mesophilic anaerobic digester in response to increasing levels of ammonia.
Maria Westerholm, Bettina Müller, Veronica Arthurson, Anna Schnürer, (SWEDEN)
- P16.03 Population Dynamics of Methanogenic Archaea and Bacteria as Consequence of Changing Temperatures in a Thermophilic Fermenter fed with Energy Crops.
Paul Scherer, Niclas Krakat, (GERMANY)
- P16.04 Microbial community structure in anaerobic digesters for the co-digestion of switchgrass and cow manure.
Caroline Roy, Jean-Claude Frigon, Serge R. Guiot, (CANADA)
- P16.05 Degradation of volatile fatty acids, phenyl acetate and oleic acid under anaerobic methanogenic conditions -effects of Fe, Co and Ni.



- P16.06 Anna Karlsson, (BRAZIL)
Molecular evaluation of anaerobic systems with suspended, granular and immobilized biomass for treating wastewater with high fat content after enzymatic hydrolysis.
Daniela R. Rosa, ZIolanda C. S. Duarte, Nora K. Saavedra, Maria B. Varesche, Marcelo Zaiat, Magali Christe Cammarota, Denise M. G. Freire, (BRAZIL)
- P16.07 Microorganisms in batch reactors related to nitrogen removal using different sizes of natural zeolite.
Camila Mery, Lorna Guerrero, Jorge Alonso-Gutierrez, Monica Figueroa, Juan Lema, Silvio Montalvo, Gladys Vidal, (CHILE)
- P16.08 Ecological engineering of microbial communities through substrate adaptation: consequences on anaerobic digestion of cellulose in municipal solid waste.
Olivier Chapleur, Laurent Mazeas, Théodore Bouchez, (FRANCE)
- P16.09 Deciphering microbial functions in granular sludge by two-pass TSA-FISH targeting functional genes.
Takuya Hasegawa, Shuji Kawakami, Kengo Kubota, Hiroyuki Imachi, Akiyoshi Ohashi, Hideki Harada, (JAPAN)
- P16.10 Hydrogenotrophic methane producing microorganisms predominate in full-scale biogas reactors supplied with renewable substrates.
Edith Nettmann, Ingo Bergmann, Stefanie Pramschüfer, Kerstin Mundt, Vincent Plogsties, Christiane Herrmann, Michael Klocke, (GERMANY)
- P16.11 Quantitative analysis of syntrophic acetate oxidizing bacteria in large-scale biogas digesters.
Bettina Muller, (SWEDEN)
- P16.12 Improved methods for membrane phospholipid analysis in sludge from the biogas process.
Jenny Gustavsson, (SWEDEN)
- P16.13 Granulation in the Anaerobic Treatment of Pulp Mill Effluents.
Minqing Ivy Yang, Elizabeth A. Edwards, D. Grant Allen, (CANADA)
- P16.14 Microbial Population Dynamics during the Start-up of a Submerged Anaerobic Membrane Bioreactor (SAMBR) for Domestic Wastewater Treatment.
Laura Carretero; Juan Bautista Giménez; Maria Victoria Ruano, Luis Borrás; Aurora Seco, (SPAIN)



- P16.15 Establishing the true low temperature limits for Anaerobic Digestion of Wastewater: Methane Production from 'Cold-Adapted' Soils and Sediments as Potential Reactor Seed.
Emma Jane Bowen, (UNITED KINGDOM)
- P16.16 Following bioaugmentation of a biogas fermenter fed with renewable biomass by Fluorescence in Situ Hybridization.
Paul Scherer, Lukas Neumann, (CHILE).

Process inhibition

- P17.01 Inhibition of hydrolysis of lignocellulosic waste; the role of ammonia, humic acids and fulvic acids.
Tania Vasconcelos Fernandes, Grietje Zeeman, Jules B. van Lier, (NETHERLANDS).
- P17.02 Basic conditions for the anaerobic treatment of chicken manure.
Jan Liebetrau, Katrin Strach, Christian Krebs, (GERMANY).
- P17.03 Systematic investigation of the effect of feedstock composition, and filamentous bacteria cells on foaming in manure anaerobic digestion systems.
Sompong O-thong, Irini Angelidaki, F. Pacheco, Kanowan Boe, (DENMARK).
- P17.04 Impact of ammonia nitrogen in overloaded anaerobic digestion.
Jindřich Procházka, Josef Máca, Petr Dolejš, Pavel Jeníček, Michal Dohányos, (CZECH REPUBLIC)
- P17.05 Evaluation of the impact of silver nanoparticles on acidogenic fermentation in two-phase anaerobic digestion system.
Emma Jeong, So-Ryong Chae, Hang-Sik Shin, (REPUBLIC OF KOREA)
- P17.06 Anaerobic Digestion of Brewery Spent Grain: Inhibition by Phenolic Degradation Products.
Mija Sežun, Gregor D. Zupančič, Romana Marinšek Logar, Viktor Grilc, (SLOVENIA)