



“XII LATIN AMERICAN WORKSHOP AND SYMPOSIUM ON  
ANAEROBIC DIGESTION “  
XII DAAL

## **PROGRAMA-PROGRAM**

October, 23<sup>th</sup> to 27<sup>th</sup>, 2016

Cusco - Perú



# INFORMACION GENERAL - GENERAL INFORMATION

## INFORMACION GENERAL SOBRE LA SEDE DEL EVENTO

### SEDE

La sede del evento es el Centro de Convenciones de la Municipalidad del Cusco ubicado en pleno corazón del Centro histórico del Cusco. Es una obra contemporánea que nos da la mágica sensación de atravesar en el tiempo desde un espacio tradicional a otro moderno. Las sesiones de trabajo se realizarán en las salas Ollantaytambo, Písaq y Tipón.

### OFICINA DEL COMITÉ ORGANIZADOR

La oficina del comité organizador se localiza en la Sala Qenqo, ubicada en la planta principal del Centro de Convenciones (cerca a la entrada por la Calle Santa Teresa)

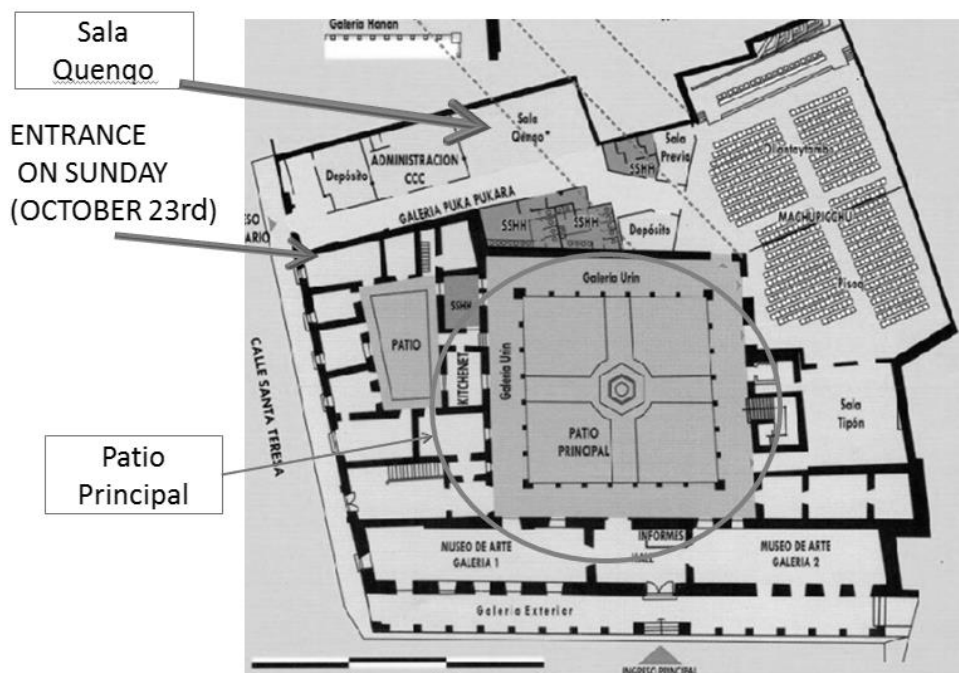
### OFICINA DE RECEPCION E INFORMES

Durante los días del evento funcionará el Centro de Información que se encuentra ubicado en la Sala Qenqo del Centro de Convenciones. Usted podrá solicitar cualquier información a los siguientes teléfonos: Javier (999916011), Litza (995362179), donde Ud..

### REGISTRO

El registro de delegados y participantes se realizará en la sala Qenqo. La entrega de materiales se realizará en forma alfabética.

## Convention Center of Cuzco



PLAZA REGOCIJO (REGOCIJO SQUARE)

# INFORMACION GENERAL - GENERAL INFORMATION

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## CONFERENCIAS

Las conferencias realizarán en las Salas Ollantaytambo y Písaq.

Las conferencias se realizarán en salas paralelas preparadas para tal fin. Dichas salas son Ollantaytambo y Písaq.

## PRESENTACION DE POSTERS

La presentación de posters se realizará en la sala Tipón. En los paneles de posters se indicará el código que corresponde al Título de poster de cada Delegado expositor.

## MEDIOS AUDIOVISUALES

Las salas de conferencias cuentan para las presentaciones de:

- Proyector de Datos
- Computadora

Las presentaciones de Power Point, CD, DVD, memorias USB y otros medios de almacenamiento masivo, que acompañen los trabajos deben ser entregados por los propietarios ponentes en la Oficina de Recepción **(8:00 am – 10:00 am)**. No se aceptarán en las salas de exposición.

## ATENCION MÉDICA

La Atención Médica brinda servicio durante todo el tiempo que sesione el evento, está ubicado en la Sala Qenqo del Centro de Convenciones. En el Anexo A podrá encontrar una relación de los Centros de Salud y clínicas particulares.

Como una recomendación para el mal de altura o soroche se recomienda descansar el día de arribo, comer comida ligera, evitar el esfuerzo físico, tomar mate de coca e hidratarse adecuadamente, sobre todo con agua embotellada o hervida.

## AGENCIAS DE TURISMO

Las agencias de turismo se encuentran ubicadas en diferentes puntos cercanos al centro de la ciudad, en los que se puede solicitar reservaciones para visitar centros turísticos u otros lugares de interés.

## SERVICIOS GASTRONÓMICOS

El Centro Histórico del Cusco cuenta con una variedad de restaurantes los cuales brindan una gran variedad gastronómica nacional e internacional. Las sesiones de trabajo tendrán un servicio de Coffee Break dispuesto según aparece en el programa general. En el Anexo B podrá encontrar una relación de restaurantes turísticos.



# **INFORMACION GENERAL - GENERAL INFORMATION**

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## **CONFERENCES**

The conference will be performed in parallel rooms. These rooms are Ollantaytambo and Písaq. The conference counts with simultaneous translation services for the 12 oral sessions.

## **POSTER PRESENTATION**

The poster presentation will be held in the room Tipón. Posters panels will show the code that corresponds to the title of each poster.

## **MEDIA**

Conference rooms equipped for presentations:

- Data Projector
- Computer

Power Point presentations, CD, DVD, USB drives and other mass storage media, accompanying papers must be delivered by the speakers owners in the Reception Office (**8:00 a.m. to 10:00 a.m.**). They will not be accepted in the showrooms.

## **MEDICAL CARE**

Medical Care provides service throughout the event while in session, is located in the Qenqo Hall Convention Center. In Annex A you will find a list of health centers and private clinics.

As a recommendation for altitude sickness is recommended to rest the day of arrival, eat light food, avoid physical exercises, drink coca tea and being appropriately hydrated, especially with bottled or boiled water.

## **TOURISM AGENCIES**

Tourism agencies are located in different near the center of the city, where you can request reservations to visit resorts and other attractions points.

## **RESTAURANTS AND HOSPITALITY SERVICES**

The Historical Center of Cusco has a variety of restaurants which provide a large national and international gastronomic variety. The working sessions will service Coffee Break arranged as shown in the general program. Annex B Show a list of restaurants.

# **INFORMACION GENERAL - GENERAL INFORMATION**

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## INFORMACION GENERAL - GENERAL INFORMATION

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<b>Day</b>	<b>Sunday, October 23<sup>rd</sup> 2016</b>	
<i>Schedule</i>	<i>Topic</i>	<i>Speaker</i>
16:00 - 18:00	Registration in Centro de Convenciones de la Municipalidad de Cusco	
18:00 - 18:45	Inauguration Ceremony	Organiser Committee
18:45 - 19:45	<b>ROOM OLLANTAYTAMBO Opening Plenary Session</b>	Prof.Dr. Carlos Chernicharo
19:45 - 20:00	Welcome Reception	



## SEGUNDO DIA - SECOND DAY

Day	Monday, October 24 <sup>th</sup> 2016		
Schedule	Topic		
<b>Plenary Session 1:</b>			
8:30 - 9:30	<b>Innovation in anaerobic digestion</b>		Prof.Dr. Jules van Lier
9:30 - 10:15	<i>Poster Session and Coffee-break</i>		
<b>ROOM OLLANTAYTAMBO</b>			
Chair: Andrés Donoso			
<b>Oral Session 1:</b>			<b>Main Autor</b>
<b>Automation and process control of anaerobic digestion</b>			
10:15 - 10:30	T01001 Thermal hydrolysis as foaming controlling tool in anaerobic digesters	Natalia Alfaro	España
10:30 - 10:45	T01002 Effects of dynamic recirculation at a pilot scale double-phase anaerobic digestion process treating food waste	Federico Micolucci	USA
10:45 - 11:00	T01003 Propuesta de una estrategia de control para la aplicación de pulsos en un digester de lodos	Gustavo Vargas	Chile
11:00 - 11:15	T01005 Improve of biogas production from winery wastes by biogas production rate monitoring and a simple on/off control	Cinzia Da Ros	Italia
<b>Anaerobic digestion modelling</b>			
11:15 - 11:30	T09001 Adjustment of hydrogenotrophic methanogenic activity test applied to sludge from anaerobic solid digester	Evangelina Ripoll	Uruguay
11:30 - 12:30	<b>Discussion of session 1</b>		
12:30 - 14:15	<i>Lunch time</i>		
Chair: David Jeison			
<b>Oral Session 3:</b>			<b>Main Autor</b>
<b>Biodegradation of recalcitrant compounds</b>			
14:15 - 14:30	T03001 Evaluation of Antibiotic Sulfamethoxazole Removal in Fixed Packed and Structured Bed Anaerobic Bioreactors	Rodrigo Carneiro	Brasil
14:30 - 14:45	T03002 Effect of methanogenic inhibition on the hydrophobic micropollutant removal during anaerobic sludge digestion	Liliana Delgadillo	Colombia
14:45 - 15:00	T03004 Effects and interactions of factors on the anaerobic degradation of linear alkylbenzene sulfonate	Dayana C. Marinnhol	Brasil
<b>Anaerobic digestion in high Andean zones</b>			
15:00 - 15:15	T11001 Effect of nutrients, inoculum and co-substrates on methane potential of cattle manure	Rosa Cecilia Ruiz Bastidas	Colombia
15:15 - 15:30	T11002 Digesters in cold climate and high altitude: history, state of the art and challenges	Jaime Martí-Herrero	España
15:30 - 16:45	<b>Discussion of session 3</b>		
16:45 - 17:30	<i>Poster Session and Coffee-break</i>		
17:30 - 18:00	<i>Sponsor presentation: NIPPON KOEI LAC</i>		
18:00 - 18:30	<i>Free night</i>		

## SEGUNDO DIA - SECOND DAY

Day	Monday, October 24 <sup>th</sup> 2016		
Schedule	Topic		
<b>Plenary Session 1:</b>			
8:30 - 9:30	<b>Innovation in anaerobic digestion</b>		Prof.Dr. Jules van Lier
9:30 - 10:15	<i>Poster Session and Coffee-break</i>		
<b>ROOM PISAQ</b>			
Chair: Liliana Castro			
<b>Oral Session 2:</b>		<b>Main Autor</b>	
<b>Anaerobic Treatment of Industrial Wastewater.</b>			
10:15 - 10:30	T02001 Anaerobic treatment of tequila vinasses in a pilot-scale up-flow packed bed reactor: Effect of the organic loading rate on reactor performance and microbial community	Jorge Arreola-Vargas	Mexico
10:30 - 10:45	T02002 Performance and stability of an expanded granular sludge bed reactor modified with zeolite addition subjected to step increases of organic loading rates (OLR) and to organic shock loads (OSL)	Deny Oliva Merencio	Cuba
10:45 - 11:00	T02003 Unraveling the influence of the COD/sulfate ratio on the organic matter removal and methane production from the biodigestion of sugarcane vinasse	Lucas Fuess	Brasil
11:00 - 11:15	T02004 Integrated treatment of cheese industry wastewater: A two-stage anaerobic digestion process followed by a microbial electrolysis cell	Manuel Alejandro Cuautle-Marín	Mexico
11:15 - 11:30	T02005 Effect of substrate and test temperature on the SMA of a psychrophilic UASB sludge that treats chocolate-industry wastewater	Sergio Alcaraz-Ibarra	Brasil
11:30 - 12:30	<b>Discussion of session 2</b>		
12:30 - 14:15	<i>Lunch time</i>		
Chair: Elías Razo Flores			
<b>Oral Session 4:</b>		<b>Main Autor</b>	
<b>Anaerobic Treatment of Industrial Wastewater.</b>			
14:15 - 14:30	T02006 Dairy effluent treatment by an EGSB reactor at moderate temperatures.	Mauricio Passeggi	Uruguay
14:30 - 14:45	T02007 Design parameters proposal for an UASB reactor treating swine wastewater	Anyi Pacco Loyola	Peru
14:45 - 15:00	T02008 Cheese whey anaerobic digestion in a plug flow reactor (PFR)	Liliana del Pilar Castro	Colombia
<b>Anaerobic treatment of domestic sewage</b>			
15:00 - 15:15	T13001 Behavior of UASB reactor without three-phase separator in the sewage treatment	Bruno Camargo	T13001
15:15 - 15:30	T13002 Use of activated sludge biomass as bioflocculation/bioadsorption agent to improve biogas production in sewage treatment plants	Michael Araneda	Chile
15:30 - 15:45	T13003 Produção de biogás em reator UASB tratando esgoto doméstico em regimes diferentes massas de lodo	Deborah de Freitas Melo	Brasil
15:45 - 16:45	<b>Discussion of session 4</b>		
16:45 - 17:30	<i>Poster Session and Coffee-break</i>		
17:30 - 18:00	<i>Sponsor presentation: NIPPON KOEI LAC</i>		
18:00 - 18:30	<i>Free night</i>		

## TERCER DIA - THIRD DAY

Day	Tuesday, October 25 <sup>th</sup> 2016		
Schedule	Topic		
<b>Plenary Session 2:</b>			
8:30 - 9:30	<b>Anaerobic Digestion Modelling</b>		Prof.Dr. Liliana Borzacconi
9:30 - 10:15	<i>Poster Session and Coffee-break</i>		
<b>ROOM OLLANTAYTAMBO</b>			
Chair: Mario Kato			
<b>Oral Session 5:</b>		<b>Main Autor</b>	
<b>Anaerobic digestion of solid waste</b>			
10:15 - 10:30	T08001 Impact of the biochemical composition on the methane production yield and kinetic	Cyrille Charnier	Francia
10:30 - 10:45	T08002 Anaerobic co-digestion of food waste and pig slurry for renewable energy production	Lina Marcela Cardenas Cleves	Colombia
10:45 - 11:00	T08003 Influence of flocculent and granular inoculum ratio on the anaerobic digestion of food waste for renewable energy production	Bryan Alexis Parra Orobio	Colombia
11:00 - 11:15	T08004 evaluación de los factores que intervienen en los ensayos de potencial metanogénico de la biomasa (BMP)	Valentina Ortega	Chile
11:15 - 11:30	T08005 Start-up of anaerobic cattle manure digesters: success and failure	Martín Benzo	Uruguay
11:30 - 12:30	<b>Discussion of session 5</b>		
12:30 - 14:15	<i>Lunch Time</i>		
Chair: Juliana Calabria de Araújo			
<b>Oral Session 7:</b>		<b>Main Autor</b>	
<b>Post-treatment of anaerobic effluents</b>			
14:15 - 14:30	T10001 Influence of technology and the nitrogen source in the autotrophic denitrification of wastewater	Andrea Barahona	Brasil
14:30 - 14:45	T10002 Nitrogen removal from anaerobically pre-treated municipal wastewater by Anammox process	Cintia Leal	Brasil
14:45 - 15:00	T10003 Biofiltration of CH <sub>4</sub> and H <sub>2</sub> S Desorbed from Effluents of Anaerobic Municipal Wastewater Treatment	Patricia Elizabeth Ruiz Ruiz	Mexico
15:00 - 15:15	T10004 About using effluents from two-phase anaerobic digestion to feed a methane-producing microbial electrolysis	Marco Zeppilli	Italia
15:15 - 15:30	T10005 Biological removal of N, S and C, by optimized autotrophic-heterotrophic denitrification	Clio Peirano	Chile
15:30 - 16:30	<b>Discussion of session 7</b>		
16:30 - 17:15	<i>Poster Session and Coffee-break</i>		
17:15 - 17:45	<i>Sponsor presentation: PAQUES, El reactor Anaerobio ICX</i>		
17:45 - 18:45	<b>Especial Noche Cultural</b>		

## TERCER DIA - THIRD DAY

Day	Tuesday, October 25 <sup>th</sup> 2016		
Schedule	Topic		
<b>Plenary Session 2:</b>			
8:30 - 9:30	<b>Anaerobic Digestion Modelling</b>	Prof.Dr. Liliana Borzacconi	
9:30 - 10:15	<i>Poster Session and Coffee-break</i>		
<b>ROOM PISAQ</b>			
Chair: Lourdinha Florencio			
<b>Oral Session 6:</b>		<b>Main Autor</b>	
<b>Energy recovery from waste</b>			
10:15 - 10:30	T04002 Design study of an ANSBBR for biohydrogen production by co-digestion of whey with glycerin: interaction effects of organic load, cycle time and feed strategy	Giovanna Lovato	Brasil
10:30 - 10:45	T04003 effects of influent concentration/composition and feed strategy on biohydrogen production by co-digestion of vinasse and molasses in an ANSBBR	Roberta Albanez	Brasil
10:45 - 11:00	T04004 Use of two-stage (acidogenic-methanogenic) anaerobic system to improvement methane production from hemicellulose hydrolysate obtained by autohydrolysis of sugarcane bagasse	Bruno Baêta	Brasil
11:00 - 11:15	T04005 Direct Membrane Filtration of Municipal Wastewater	Thiago Antonio do Nascimento	España
11:15 - 11:30	T04006 Biohydrogen production using acidic cheese whey in an EGSB reactor: Influence of sodium hydroxide or bicarbonate for the pH control	Manuel Alejandro Cuautle-Marín	Mexico
11:30 - 12:30	<b>Discussion of session 6</b>		
12:30 - 14:15	<i>Lunch Time</i>		
Chair: Rolando Chamy			
<b>Oral Session 8:</b>		<b>Main Autor</b>	
<b>Energy recovery from waste</b>			
14:15 - 14:30	T04007 Mesophilic and thermophilic anaerobic digestion of lipid-extracted microalgae n.gaditana for methane production	Gabriel Capson-Tojo	Chile
14:30 - 14:45	T04008 Diversifying technological routes for bioenergy recovery from two-phase anaerobic digestion of sugarcane vinasse in first generation biorefineries	Lucas Fuess	Brasil
14:45 - 15:00	T04010 Biogas production from concentrated municipal sewage by forward osmosis, micro and ultrafiltration	Juan Carlos Ortega-Bravo	Chile
15:00 - 15:15	T04012 Influence of different F/M ratios and organic volumetric load on anaerobic digestion of vinasse	Vanessa Verona Peruzzo	Brasil
15:15 - 16:30	<b>Discussion of session 8</b>		
16:30 - 17:15	<i>Poster Session and Coffee-break</i>		
17:15 - 17:45	<i>Sponsor presentation: PAQUES, El reactor Anaerobio ICX</i>		
17:45 - 18:15	<b>Especial Noche Cultural</b>		

## CUARTO DIA - FOURTH DAY

Day	Wednesday, October 26 <sup>th</sup> 2016		
<i>Schedule</i>	<i>Topic</i>		
8:30 - 9:30	<b>Plenary Session 3: Recovery of resources - energy, water, nutrients and organics- from source separated domestic wastewater.</b>		Prof.Dr. Grietje Zeeman
9:30 - 10:15	<i>Poster Session and Coffee-break</i>		
<b>ROOM OLLANTAYTAMBO</b>			
Chair: Claudia Etchebehere			
<b>Oral Session 9:</b>		<b>Main Autor</b>	
<b>Microbial ecology and molecular biology</b>			
10:15 - 10:30	T06001	Identificación de poblaciones microbianas implicadas en la degradación anaerobia de fenol y p-cresol en lodos de distinto origen	Oscar Franchi Chile
10:30 - 10:45	T06002	microbial dynamics in a real scale UASB reactor treating sugarcane vinasse during start-up	Cecilia Callejas Uruguay
10:45 - 11:00	T06003	Interaction of strains with different metabolic pathways during hydrogen production in batch and continuous reactors using constructed consortiums	Christian Cisneros-Perez Mexico
11:00 - 11:15	T06004	Influence of hydraulic retention time on dark fermentation pathways	Rodolfo Palomo Briones Mexico
11:15 - 11:30	T06006	Do different inocula converge given the same operational conditions in long-term anaerobic digestion?	Miriam Peces Australia
<b>Nutrient recovery systems related to anaerobic digestion processes</b>			
11:30 - 11:45	T14001	Simultaneous recovery of phosphorus and nitrogen from anaerobic digestion effluents in municipal and livestock systems	Matias Vanotti USA
11:45 - 12:45	<b>Discussion of session 9</b>		
12:45 - 14:30	<i>Lunch time</i>		
Chair: Ileana Pereda			
<b>Oral Session 11:</b>		<b>Main Autor</b>	
<b>Experiences in full-scale plants</b>			
14:30 - 14:45	T05001	Evaluation of biogas production and energy recovery potential in a full-scale WWTP with UASB reactors	Carolina Cabral Brasil
14:45 - 15:00	T05004	Start-up and performance of a real scale anaerobic reactor treating vinasse	Iván López Uruguay
15:00 - 15:15	T05003	Assessing the implementation of anaerobic co-digestion in wastewater treatment plants: the usefulness of bmp testing	Sergi Astals España
<b>Post-treatment of anaerobic effluents</b>			
15:15 - 15:30	T10006	Eliminación biológica de CH <sub>4</sub> y H <sub>2</sub> S disueltos en el effluente de un reactor anaerobio que trata aguas residuales municipales.	Alvaro Huete Chevez Mexico
<b>Innovation in anaerobic digestion</b>			
15:30 - 15:45	T07001	The effect of Intermediate Thermal Hydrolysis on sludge digestion process efficiency	Ieva Sapkaite España
15:45 - 16:00	T07003	Influence of recirculation on an acidogenic thermophilic reactor treating sulfate-rich wastewaters	Carolina Garcia Brasil
16:00 - 17:00	<b>Discussion of session 11</b>		
17:00 - 17:45	<i>Poster Session and Coffee-break</i>		
17:45 - 18:30	<b>Closing Plenary Session "Current status and prospects of Anaerobic Digestion in Latin America"</b>		Prof.Dr. Oscar Monroy Hermosillo
18:30 - 19:15	<b>Closing Ceremony</b>		

## CUARTO DIA - FOURTH DAY

20:30	-	23:59	<b>Gala dinner</b>	
<b>Day</b>	<b>Wednesday, October 26<sup>th</sup> 2016</b>			
<i>Schedule</i>	<i>Topic</i>			
8:30	-	9:30	<b>Plenary Session 3: Recovery of resources - energy, water, nutrients and organics- from source separated domestic wastewater.</b>	Prof.Dr. Grietje Zeeman
<b>ROOM PISAQ</b>				
Chair: Jules Van Lier				
			<b>Oral Session 10: Energy recovery from waste</b>	<b>Main Autor</b>
10:15	-	10:30	T04013 Selection of purple bacterial consortia from anaerobic sludge for hydrogen production	Sean Smith Chile
10:30	-	10:45	T04014 Performance of a high rate UASB reactor for sugarcane vinasse degradation and energy generation	Valéria Del Nery Brasil
10:45	-	11:00	T04015 Comparison of scenarios combining thermal hydrolysis and digestion of sludge. Economic global balance	Leva Sapkaite España
<b>Microbial ecology and molecular biology</b>				
11:15	-	11:30	T06007 Actividad y comunidades de suelos y sedimentos Antárticos con potencial metanogénico son influenciados por cambios de temperatura.	Polette Aguilar Brasil
11:30	-	11:45	T06008 Methanosaeta population resilience and syntrophism induced by OLR disturbances in a CSTR-type digester treating tequila vinasses	Raúl Snell-Castro Mexico
11:45	-	12:45	<b>Discussion of session 10</b>	
12:45	-	14:30	<i>Lunch time</i>	
Chair: Germán Buitrón				
			<b>Oral Session 12: Production and use of biofuels</b>	<b>Main Autor</b>
14:30	-	14:45	T12001 Design and optimization of hydrogen production from sugarcane bagasse hydrothermally pretreated using response surface methodology	Laís Américo Soares Rusia
14:45	-	15:00	T12002 Does photosynthetic biogas upgrading have an opportunity?	Leslie Meier Chile
15:00	-	15:15	T12003 Hydrogen and methane production from the sugarcane industry by-product by anaerobic bioreactors with fixed-structured bed (ABFSB) two-stage process operated under thermophilic condition	Rogério Vilela Brasil
15:15	-	15:30	T12004 Evaluation of biogas production by microbial consortium and Clostridium cellulolyticum from sugarcane bagasse pre-treated by liquid hot water	Camila Rabelo Brasil
15:30	-	15:45	T12006 Application of membrane technology to improve mass transfer for the bioconversion of H <sub>2</sub> and CO <sub>2</sub> /biogas to bioCH <sub>4</sub>	Natalia Alfaro España
15:45	-	16:00	T12005 Effects of operational conditions on the production of 1,3-propanediol from glycerol in anaerobic granular sludge reactor	Mitsue Maia Nakazawa Brasil
16:00	-	17:00	<b>Discussion of session 12</b>	
17:00		17:45	<i>Poster Session and Coffee-break</i>	
17:45	-	18:30	<b>Closing Session Plenary "Current status and prospects of Anaerobic Digestion in Latin America"</b>	Prof.Dr. Oscar Monroy Hermosillo
18:30	-	19:15	<b>Closing Ceremony</b>	
20:30	-	23:59	<b>Gala dinner</b>	

## QUINTO DIA - FIFTH DAY

<b>Day</b>	<b>Sunday, October 27<sup>TH</sup> 2016</b>	
<i>Schedule</i>	<i>Topic</i>	
08:00 - 13:00	Visita a la Planta de Tratamiento en la localidad de San Jerónimo de Cusco	



## PRESENTACION DE POSTERS

**October 24th, 2016**

<b>Code</b>	<b>Topic</b>	<b>Title</b>	<b>Country</b>
P04002	4	Effect of 2-bromoethanesulfonate on anaerobic mixed culture to enhance biohydrogen production utilizing sugarcane bagasse as substrate	Brasil
P10006	10	Autotrophic denitrification of the poultry slaughterhouse wastewater using fixed bed reactor with elemental sulfur and dolomitic limestone	Brasil
P02018	2	Biosorption of Cr (VI) in hybrid system: anaerobic consortium and chitosan cross-linking beads	Mexico
P03005	2	Organic matter removal efficiency, biogas composition and hydrodynamics characteristics comparison of UASB and Anaerobic Filter	Brasil
P03007	3	LAS loading rate effect on its removal efficiency and on microbial community in a pilot scale EGSB reactor with co-digestion of commercial laundry wastewater and domestic sewage	Brasil
P04005	2	Use of fly ash for sludge anaerobic digestion: effect of particle size	Chile
P04006	4	Evaluation of anaerobic co-digestion of a ternary mixture composed by chicken manure, sugarcane molasses and cheesy whey in a stirred tank reactor	Colombia
P04012	4	Energy balance of coupled processes in bioenergy production from glycerol	Chile
P06002	6	Potential biohydrogen production with crude glycerol by mixed cultures and Enterobacter sp.	Brasil
P06004	6	How much microbial genetic expression profile, depending ammonia stress, of anaerobic digesters change?	España
P06005	6	Evaluation of chicken manure and dairy manure as inocula for anaerobic digestion of kitchen waste	Colombia
P08003	8	Study of a biological pretreatment using Trametes versicolor on wheat straw for enhancing biogas production	Chile
P08007	8	Chemical speciation and bioavailability of metals in anaerobic reactor with mineral addition	Cuba
P06003	6	Microbial community characterization of granulated sludge from UASB reactors (full-scale) used in poultry slaughterhouse wastewater treatment systems by Illumina Miseq sequencing	Brasil
P08008	8	Application of a biological pretreatment of corn stover by two white rot fungi	Chile
P08013	8	improving the anaerobic digestion of press mud with vinasse co-digestion under semi-continuous regimen	Cuba
P09001	9	Solid waste BMP assays. Can it be done in less time? New sampling strategy shored up sensitivity functions.	Chile
P10009	10	Granular biomass floatation: A simple kinetic/stoichiometric explanation	Chile
P12001	12	Efecto del inóculo en el pretratamiento biológico de la paja de sorgo para la producción de biogas a partir de gallinaza	Mexico
P12004	12	Syngas Obtained From Methane Dry Reforming: An Alternative to Biogas	Brasil



P13001	13	Response of upflow anaerobic hybrid reactor (UAHB) treating sanitary sewage	Brasil
P13002	13	Determinación del tiempo de retención hidráulico óptimo en un reactor UASB con una altura del 46% al 54% (60-70cm) de manto de lodos	Peru
P02009	2	Preliminary studies of granulation of scattered anaerobic sludge fed with citrus industry effluent	Argentina
P03008	3	Biogas production from soluble coffee wastewater under a recalcitrant tannin concentration	Cuba
P05002	5	Anaerobic reactor start-up operated at full-scale in sanitary effluent treatment	Brasil
P09002	9	A critical analysis of the methanogenic activity test using the ADM1	Uruguay
P09004	9	Modeling of Waste Activated Sludge Anaerobic Digestion Process by Anaerobic Digestion Model 1 (ADM1)	Turquia
P10005	10	Eliminación de nitrógeno desde efluentes anaeróbicos	Brasil
P10008	10	Removal of nutrients from Anaerobic-Aerobic Fixed Bed Reactor (AFBR) treating sanitary sewage	Brasil
P02001	2	Effect of glycerol concentration on kinetics of hydrogen production of two <i>Enterobacter</i> sp. strains	Brasil
P06007	6	Methane potential and microbial community associated to the anaerobic co-digestion of cassava peels and pig manure	Colombia
P08011	8	Renewable energy production from anaerobic digestion of food waste	Colombia

## October 25th, 2016

Code	Topic	Title	Country
P02005	2	Partial nitrification and Anammox for the treatment of nitrogen-rich effluent: Effect of aeration mode on process performance	Brasil
P02006	2	Thermophilic anaerobic digestion of vinasse and filter cake in UASB reactors	Brasil
P02011	2	Kinetics of sugarcane vinasse anaerobic conversion	Brasil
P02013	2	Anaerobic digestion of sugarcane bagasse hemicellulose after hydrothermal pretreatment in a UASB reactor	Brasil
P02014	2	Anaerobic treatment of dairy wastewaters in an anaerobic hybrid baffled reactor	Brasil
P03006	3	Anaerobic biodegradation of pharmaceuticals and personal care products through the application of batch tests	Colombia
P04011	4	Co-digestion of glycerol and sugarcane vinasse for hydrogen production: the influence of substrate ratio	Brasil
P08002	8	Anaerobic digestion of solid waste from wet processing of coffee in semicontinuous system	Cuba
P09003	9	Propagación de la incertidumbre de ensayos de potencial metanogénico a reactores continuos. Aplicación del ADM1	Colombia
P10001	10	Real-time control system based on the values of derivative of the redox potential aiming nitrogen removal in a sequencing batch reactor applied in the treating dairy wastewater	Brasil
P14001	14	A thermochemical model approach for struvite precipitation in anaerobically digested sludge dewatering liquid	Uruguay

P14002	14	Modeling phosphorus recovery and struvite purity by response surface considering the effect of pH and Mg <sup>2+</sup> /PO <sub>4</sub> <sup>3-</sup> ratio.	Chile
P01001	1	Sulfide alkalinity as a monitoring parameter for anaerobic reactors treating sulfate-rich wastewaters: calculations and a case study	Brasil
P02019	2	Mesophilic anaerobic digestion of vinasse and filter cake in uasb reactors, in series.	Brasil
P04007	4	Mesophilic and thermophilic anaerobic digestion of microalgae-bacteria flocs from HRAP treating wastewater: energy balance	Mexico
P04008	4	Biological hydrogen production from raw glycerol and wastewater	Brasil
P04014	4	A hybrid fermentative/microbial electrolysis cell system to enhance hydrogen production from sugarcane vinasse	Brasil
P06008	6	Influence of support materials on methanogenic biofilm formation in ammonia rich environments	España
P06009	4	Effect of linoleic acid pulses on the microbial community in stable anaerobic digester	Chile
P07001	7	Down-flow fixed-structured bed reactor: a novel reactor configuration for acid mine drainage treatment and metal precipitation	Brasil
P10003	10	Post-treatment of UASB effluent by phototrophic reactors for sulphide and organic matter removal	Brasil
P10007	10	Swine digestate hygienization during natural storage	Brasil
P04003	4	Biohydrogen production from cassava wastewater in an AnSBBR	Brasil
P07002	7	Effect of pretreatment micro-aerobic in the biochemical potential of methane.	Chile
P08001	8	Influence of cationic polyacrilamide flocculant on high-solids anaerobic digestion of sewage sludge under thermophilic condition	Rusia
P04016	4	Macrophytes as a digestion substrate. Assessment of a sonication pretreatment	Brasil
P04017	4	Performance and feasibility of thermophilic anaerobic process to treat waste activated sludge: influence of hrt and mixing conditions	Brasil
P01002	1	Granulometry and biological analysis of granules from a pilot scale UASB treating vinasse	Brasil
P05004	5	Comparative reliability analysis for effluent quality of centralized and decentralized wastewater treatment plants	Brasil

## October 26th, 2016

Code	Topic	Title	Country
P03002	3	Microbial reduction of arsenate and sulfate in sediments from a contaminated aquifer	Mexico
P02008	2	Effect of addition of cellulosic materials in anaerobic digestion of hydrothermal liquefaction wastewater	Brasil
P03003	3	Evaluation of anaerobic biodegradability of chemical toilets effluent	Brasil
P04010	4	VFA profile and Biohydrogen production during glucose fermentation by different Enterobacteriaceae strains.	Brasil
P06001	6	Hydrogen production from enzymatic hydrolysates of Agave tequilana bagasse: A microbial ecology study	Brasil
P07003	7	Enrichment of anammox bacteria from marine sediments in a novel reactor configuration for biomass retention	Mexico

P08009	8	High-rate anaerobic co-fermentation of sewage sludge and simulated organic fraction of municipal solid waste under thermophilic condition	Rusia
P02010	2	Inhibition of anaerobic digestion of swine wastewater by disinfectants and detergents applied in acidogenesis phase	Brasil
P02015	2	Anaerobic co-digestion of vegetable waste and swine wastewater in high-rate horizontal reactors with fixed bed	Brasil
P03010	3	Microbial diversity and the implications of surfactant loading rate in a pilot scale anaerobic reactor	Brasil
P05003	5	Comprehensive evaluation and optimization of anaerobic ponds in the municipality of La Ceja, Antioquia, Colombia	Colombia
P13007	13	Influence of organic load and mixing ratio on response and stability of food waste and cattle manure anaerobic digestion.	Colombia
P04004	4	Influence of organic loading rate on hydrogen production and metabolic pathways during dark fermentation	Mexico
P08012	8	Biodegradability of municipal solid waste manure and various crop: A second feeding in batch assays	Cuba
P02016	2	Swine wastewater treatment in high rate horizontal anaerobic reactor.	Brasil
P02004	2	Estudio de caso del tratamiento de vinazas cubanas por digestión anaerobia en un sistema de reactores	Cuba
P10002	10	Pós-Tratamento do Efluente de Reator UASB Compartmentado em Reator Aeróbio de Leito Fluidizado com Circulação Tratando Esgotos Sanitários	Brasil
P12003	12	Protocol to evaluate biohydrogen production by dark fermentation in batch test: an international interlaboratory study	Mexico
P02007	2	Evaluation of inoculum for biohydrogen production aiming glycerol utilization	Brasil
P03001	3	Tetracycline compounds interference and persistence in co-digestion of animal manure and cellulosic wastes	Brasil
P03009	3	Increase of the anaerobic biodegradability of aqueous phase from hydrothermal liquefaction of Spirulina using hydrogen peroxide	Brasil
P05001	5	State of the art of biogas in Europe	España
P08005	8	Evaluación de la producción de metano del purín de vaca de lechería pre-tratado térmicamente	Chile
P08006	8	Effect of the addition of pre-treated sugarcane bagasse in the methane production arising from the anaerobic digestion of milk fats	Brasil
P13004	13	UASB reactor as an alternative to treat wastewater of the Lerma River in Mexico	Mexico
P14003	14	Agricultural crop residue for bioenergy production in anaerobic digestion system: a tool for strategic spatial assessment	Colombia
P04009	4	Restart-up of a pilot scale UASB reactor treating sugarcane vinasse after the off-season period	Brasil
P02003	2	Anaerobic digestion of aqueous fraction from hydrothermal carbonisation of sewage sludge. Effect of inoculum source	España
P02025	2	Investigation of the inhibitory effect of salts in the anaerobic digestion of sugar beet distillery wastewater through electro dialysis and bench scale experiments	Francia

## POSTERS

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P08010	8	Optimización de la producción de metano a partir de residuos orgánicos de restaurantes	Colombia
P04015	4	Biomethane production in an ANSBBR treating wastewater from biohydrogen production process from vinasse	Brasil
P06006	6	Detection and quantification of homoacetogenic bacteria in hydrogen producing reactors using real time PCR	Uruguay

**ANEXO A****CENTROS DE SALUD EN CUSCO****Hospital regional Antonio Lorena**

Dirección: Plazoleta Belén 1358- Santiago - Cusco - Cusco.

TEL: (084) 226511.

**Hospital regional Cusco**

Dirección: Avenida de la Cultura Nro. S/n.

TEL: (084) 231640 / 231131.

**Clínica Pardo**

Dirección: Avenida De la Cultura, 710 - Wanchaq - Cusco - Cusco.

TEL: (084) 240387 / 223242 / 249999.

CEL: 984 708270 / 984 708269.

**Clínica San José**

Dirección: Avenida Los Incas, 1408 - Cusco - Cusco.

TEL: (084) 243367 / 253295 / 315445.

CEL: 984 708270 / 984 708269.

**Clínica Macsalud**

Dirección: Avenida de la Cultura N° 1410 - Avenida los Incas N° 1415.

CEL: 984 569449.

RPM: #637779.

**Clínica Peruano Suiza**

Dirección: Avenida Oswaldo Baca - Mz. J - 8 Urb. Magisterio 1 Etapa - Cusco - Cusco.

TEL: (084) 242114 / 237009 / 237168.

CEL: 984 703970 / 984 859647.

Sucursal De:

Dirección: Calle Meson De La Estrella Nro. S/n - Cusco – Cusco.

Sucursal De Machupicchu

Dirección: Calle Wiracocha cuadra 20 lote 6 - Machupicchu – Cusco.

**Hampi Land S.A.C.**

Dirección: Avenida Collasuyo, A-8B - Cusco - Cusco.

TEL: (084) 224575.

CEL: 984 398150 / 984 740310 / 984 937501.

**Clínica Cima SAC**

Dirección: Avenida Pardo, 978 - Cusco - Cusco.

TEL: (084) 255550 / 231390.

CEL: 984 705312.

Sucursal De:

Dirección: La Kantuta, B-1 - Fte. Al Hotel Maizal - Urubamba - Cusco.

TEL: (084) 201413.

**Clínica DR. Victor Paredes E.I.R.L.**

Dirección: Calle Lechugal, 405 - Cercado - Cusco - Cusco.

CEL: (084) 225265 / 221813.

### **Assistance Medyhelp Cusco**

Dirección: Plazoleta Belén, 1082 - A, Santiago - Cusco - Cusco.

CEL: 984 818313 / 984 780530.

Centro médico Salas

Dirección: Calle Camino Real, 106 - San Sebastián - Cusco - Cusco.

TEL: (084) 635006.

CEL: 974 794152.

### **Vanguardia médica S.R.L.**

Dirección: Avenida Grau, 444 - 4to Piso Santa Ana - La Convención - Cusco - Cusco.

TEL: (084) 771354.

CEL: 974 989988 / 984 157021.

### **Clínica Cusco SRL**

Dirección: Avenida Micaela Bastidas, 625 - Wanchaq - Cusco - Cusco.

TEL: (084) 240645.

### **Centro de salud Clas Ttio**

Dirección: Avenida 28 de Julio S/n - Cusco - Cusco.

TEL: (084) 239673.

### **Urgencias médicas**

Dirección: Avenida Pardo, 545 - Cusco - Cusco.

TEL: (084) 246346.

### **Clínica pediátrica Cusco Kids**

Dirección: Avenida Oswaldo Baca 215. Magisterio. Primera Etapa. - Cusco - Cusco.

TEL: (084) 227744.

### **Centro de salud Class-Independencia**

Dirección: Avenida Venezuela S/n PP. JJ. Independencia - Cusco - Cusco.

TEL: (084) 260812.

**ANEXO B**

**RESTAURANTES EN CUSCO**

**LE SOLEIL**

COMIDA GOURMET FRANCESA  
DIRECCIÓN: CALLE SAN AGUSTIN 275, CUSCO  
CONTACTO: (084) 240543

**MORENA PERUVIAN KITCHEN**

COMIDA PERUANA  
CALLE PLATEROS 348B, CUSCO  
CONTACTO: (084) 437832

**PIRQA – RESTAURANTE DEL JW MARRIOT**

COMIDA PERUANA  
ESQUINA DE LA CALLE RUINAS 432 Y SAN AGUSTIN  
CONTACTO: +51-84-582200

**INKA GRILL**

COMIDA PERUANA Y NOVOANDINA  
PORTAL DE PANES 115, CUSCO  
CONTACTO: (084) 262992

**INCANTO**

COMIDA ITALO PERUANA  
SANTA CATALINA ANGOSTA 135, PISO 1, PLAZA DE ARMAS  
CONTACTO: +51 084 254753

**DIVINA COMEDIA RESTAURANT**

COMIDA PERUANA, ITALIANA Y MEDITERRANEA  
CALLE PUMACURCO 406 - A UNA CUADRA DEL HOTEL MONASTERIO, CUSCO  
CONTACTO: 51-84-437640

**MARCELO BATATA RESTAURANT**

COMIDA CONTEMPORÁNEA - FUSIÓN PERUANA  
CALLE PALACIO 121, CUZCO  
CONTACTO: +51 84 222424

**LIMO**

COMIDA PERUANO JAPONESA  
PORTAL DE CARNES 236, PISO 2, PLAZA DE ARMAS  
CONTACTO: +51 084 240668

**NUNA RAYMI**

COMIDA PERUANA  
CALLE TRIUNFO 356 2NDO PISO - AL COSTADO DE LA CATEDRAL, CUSCO  
CONTACTO: +51 84 224644

**KION**

COMIDA JAPONESA Y NIKEI  
CALLE TRIUNFO 370 – CUSCO  
CONTACTO: +51 84 431862

### **CHICHA**

COMIDA PERUANA  
CALLE PLAZA REGOCIJO 261 - 2 PISO, CUSCO  
CONTACTO: +51 84 240520

### **GREENS ORGANIC**

COMIDA ORGÁNICA SALUDABLE  
SANTA CATALINA ANGOSTA 135, PISO 2, PLAZA DE ARMAS  
CONTACTO: +51 084 243379

### **MAP CAFÉ**

COMIDA PERUANA  
PLAZOLETA NAZARENAS, MUSEO DE ARTE PRECOLOMBINO  
CONTACTO: +51 084 242476

### **PACHAPAPA**

COMIDA ANDINA  
PLAZA SAN BLAS 120, SAN BLAS  
CONTACTO: +51 084 241318

### **SUMAQCHA**

COMIDA PERUANA Y OTRAS OPCIONES  
SUECIA 339, CUSCO  
CONTACTO: +51 84 506345

### **KUSIKUY RESTAURANTE**

RESTAURANTE PICANTERÍA  
CALLE SUECIA 339, CUSCO  
CONTACTO: (084)26 2870

### **UCHU PERUVIAN STEAKHOUSE**

CHURRASQUERÍA  
CALLE PALACIO 135. CUSCO  
CONTACTO: 51 84 246598