

**SGRI 2018 | Sustainable Gas Research and Innovation
TALKS PROGRAMME – PARALLEL SESSIONS**

TUE - 25/SEP – 11:45 – Rooms on the second floor

Parallel session 1.1 Room I	Parallel session 1.2 Room II	Parallel session 1.3 Room III
<i>Law, regulation and policies (I)</i> <i>Chair: Virginia Parente</i>	<i>Decarbonisation (I)</i> <i>Chair: David Daniels</i>	<i>CO2 Capture</i> <i>Chair: Gunther Krieger Filho</i>
1.1.A CO2 abatement by energy management in Oil and Gas industry. <i>T Croso, A Gallo, A Fossa, B Amorim, EM Santos.</i>	1.2.A Decarbonisation pathways for global shipping: the LNG fuel option <i>D Crow, A Hawkes</i>	1.3.A Basic project of a purification system of biogas of vinasse with supersonic separator <i>BA Avancini, BS Carmo, SH Kobashi</i>
1.1.B Analyzing calculation methods for energy performance and CO2 abatement <i>AB Gallo, AJ Fossa, BE Amorim, T Croso, EM Santos</i>	1.2.B MUSE: Overview of a new integrated assessment model <i>S Giarola, J Sachs, S Budinis, D Crow, I Kerdan, A Hawkes</i>	1.3.B Comparison between numerical approaches to simulate a supersonic nozzle <i>PVM Yamabe, ECN Silva, BA Avancini, BS Carmo, D Serson, JR Meneghini, UAS Costa, JPC Filho, EV Volpe, J Restrepo, JRS Moreira, RM Orselli, Marcelo T.</i>
1.1.C The impact of sugarcane expansion on municipal socio-economic development: a case study of Mato Grosso do Sul <i>J Tomej, LL de Oliveira, CO Ribeiro, LL Ho, EE Rego, OLV Costa</i>	1.2.C MUSE Brazil: A multi-region, multi-sectoral integrated assessment model of long-term decarbonisation pathways <i>IG Kerdan, S Giarola, A Hawke</i>	1.3.C Development of an advanced natural gas burner using the oxy-fuel concept <i>VAA Bortolin, GCK Filho</i>
1.1.D Capacity 2030: the roadmap for cleaner energy <i>KL Mascarenhas, OW Serrate, D Peyerl, N Weber, EM Moretto, D Mouette, JR Meneghini</i>	1.2.D Study of Ni-Ga nanoalloys applied in the CO2 hydrogenation to methanol in low pressures. <i>LF Rasteiro, JM Assaf, EM Assaf</i>	1.3.D Different catalytical strategies for CO2 Hydrogenation at low temperature <i>P Vidinha</i>

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TUE - 25/SEP – 14:35 – Rooms on the second floor

Parallel session 2.1 Room I	Parallel session 2.2 Room II	Parallel session 2.3 Room III
<i>Gas & CO2 infrastructure and general learnings</i> <i>Chair: Rafael Gioria</i>	<i>Decarbonisation (II)</i> <i>Chair: Rita Maria Alves</i>	<i>Storage and Monitoring</i> <i>Chair: Emilio Silva</i>
2.1.A Topology Optimization Method (TOM) Applied to the CO2 Compressor Rotor Design <i>CM Okubo Jr, L Garcia, ECN Silva, SFM Almeida</i>	2.2.A PEFC numerical modeling towards simulation of general fuel cell systems <i>I Korkischko</i>	2.3.A Haphazard Intentional Sampling Techniques in Network Design of Monitoring Stations. <i>JM Stern, CO Ribeiro</i>
2.1.B Corrosion resistance of HSLA steels projecting its use in SCCO2 transportation <i>JWC Hernández, H Goldenstein, HG Melo</i>	2.2.B CH4 conversion to syngas by tri-reforming over Ni/ZrO2 catalysts <i>CG Anchieta, EM Assaf, JM Assaf</i>	2.3.B GHG emissions from oil & natural gas industry – An analysis for estimating and measuring CO2e models <i>AJ Fossa, ABA Gallo, BE Amorim, T Croso; EM Santos</i>
2.1.C On the use of the adjoint method to evaluate sensitivities in adsorbed natural gas storage systems <i>EV Volpe, BG Chierigatti, JSB Lima, MT Hayashi</i>	2.2.C Hybrid catalysts for CO2 conversion <i>LM Rossi, JL Fiorio, P Vidinha</i>	2.3.C Design of Adsorption Natural Tanks by Topology Optimisation <i>RCR Amigo, RW Hewson, ECN Silva</i>
2.1.D Hollow Fibres CFD modelling <i>GA Patino, RS Gioria</i>	2.2.D The use of artificial neural networks for the water-gas shift reaction catalyst selection <i>FM Cavalcanti, M Schmal, R Giudici, RMB Alves</i>	2.3.D Methane and Organic Volatiles detection by means of a Laser Remote Sensing System <i>R Guardani, E Landulfo, R Costa, F Macedo</i>

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WED - 26/SEP – 11:10 – Rooms on the second floor

Parallel session 3.1 Room I	Parallel session 3.2 Room II	Parallel session 3.3 Room III
<i>Law, regulation and policies (II)</i> <i>Chair: Drielli Peyerl</i>	<i>Decarbonisation (III)</i> <i>Chair: Pedro Vidinha</i>	<i>New uses for gas (I)</i> <i>Chair: Bruno Carmo</i>
3.1.A The land use in the Brazilian biomass production for electricity generation. <i>RM Dutenkefer, L Gomes, CO Ribeiro</i>	3.2.A The use of Nickel N-doped catalysts on CO ₂ hydrogenation <i>BH Arpini, A Braga, LM Rossi</i>	3.3.A Gas in Transport: Heavy Goods and Shipping <i>J Speirs, A Hawkes</i>
3.1.B Portfolio optimization of energy with cycle estimation using Big Data <i>V Parente, J Toro</i>	3.2.B Direct Conversion of CO ₂ and H ₂ to Ethanol Catalyzed by Au/TiO ₂ <i>TN Garcia, P Vidinha, LM Rossi</i>	3.3.B Life cycle environmental impacts of natural gas drivetrains used in road freighting <i>J Cooper</i>
3.1.C Urban planning and management system <i>LAB Venturi, EM Santos, AVF Melo, DS Tsai, FF Machado, GJM Azevedo, GYL Santos, PPF Silva</i>	3.2.C Analysis of a membrane reactor for methane tri-reforming <i>SSQ Jardim, JEA Graciano, RMB Alves</i>	3.3.C Natural Gas as a viable fuel for heavy vehicles: the perspectives of implementation of Blue Corridors in São Paulo State <i>D Mouette, D Peyerl, PG Machado, TLF Brito, RR Borges, L Shimomaebara.</i>
	3.2.D Techno-economic Assessment of the Thermochemical Polygeneration from CO ₂ -rich Natural gas and Microalgae Biomass <i>JEA Graciano, B Chachuat, RMB Alves</i>	3.3.D Synthesis and characterization of shape-controlled ceria based nanoparticles <i>MFS Machado</i>

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WED - 26/SEP – 14:50 – Rooms on the second floor

Parallel session 4.1 Room I	Parallel session 4.2 Room II	Parallel session 4.3 Room III
<i>Law, regulation and policies (III)</i> <i>Chair: Luis Venturi</i>	<i>Methane Emission</i> <i>Chair: David Allen</i>	<i>New uses for gas (II)</i> <i>Chair: Mauricio Salles</i>
4.1.A Robust Least Square Estimate for the Natural Gas Demand in Brazil <i>OLV Costa, CP Ribeiro, LL Ho, EE Rego</i>	4.2.A Environmental and cost assessment of LNG and other shipping fuels <i>P Balcombe, A Hawkes</i>	4.3.A Methane Electrooxidation at Low Temperature Fuel Cells <i>J Nandenha, FC Fonseca, AO Neto</i>
4.1.B Current issues the Environmental Impact Assessment (EIA) of Carbon Capture and Storage (CCS) activities in Brazil <i>EM Moretto, D Peyerl, T Granzinoli, MR Konrad, A Simão, F Machado.</i>	4.2.C Towards Methane Mitigation Through Biopolymer Production <i>LOB Cardoso, B Karolski, LH Gracioso, BB Borrego, CAO Nascimento, EA Perpetuo</i>	4.3.B Synthesis of Dual Layer Ceramic Membrane for CO ₂ /CH ₄ separation <i>JC Mierzwa, TT Marangoni, GN Leocadio, LDB Rodrigues</i>
4.1.C Modelling the response of demand segments for natural gas in Brazil and the perspectives for carbon abatements <i>S Kileber, V Parente</i>	4.2.D Labyrinth Seals Design using Topology Optimization <i>BC Souza, ECN Silva</i>	4.3.C CO ₂ emissions for an hybrid PSV using natural gas generators and battery storage system <i>COP Piernagorda, M Salles</i>
		4.3.D Carbon capture and use (CCUS) from ethanol production process: CO ₂ production costs compared to market prices in Sao Paulo State <i>ST Coelho, JF Escobar, VP Garcilasso, MM Santos, D Perecin, C Joppert, A Djalma</i>