



XVI ALAGO

- Oral Presentations -



Wednesday 08/09/2023	
09:00 – 09:30	<i>Opening Ceremony</i>
09:30 – 10:00	<i>Talk XIX CBGq</i>
10:00 – 10:30	<i>Knowledge through ultrahigh resolution mass spectrometry in Petroleum E&P</i> Thomas Oldenburg, University of Calgary, Canada
10:30 – 11:00	Coffee Break
Session I - Organic Geochemistry in Latin America - A Reflection on its Past, Present, and Vision for the Future Chair: Débora de Almeida Azevedo, UFRJ, Brazil	
11:00 – 11:30	<i>THE HISTORY OF ORGANIC GEOCHEMISTRY IN LATIN AMERICA</i> Luiz Antônio F. Trindade, UFRJ, Brazil
11:30 – 12:00	<i>50-YEAR JOURNEY OF THE GEOCHEMISTRY PROGRAM (UFF) IN THE NATIONAL AND INTERNATIONAL CONTEXT</i> Marcelo Bernardes, UFF, Brazil
12:00 – 12:30	<i>USING GEOCHEMICAL TECHNOLOGIES TO SUPPORT THE JOURNEY OF ULTRA DEEP WATERS PETROLEUM DISCOVERIES IN SERGIPE BASIN</i> Igor Viegas Alves Fernandes de Souza, Petrobras, Brazil
12:30 – 14:00	Lunch
Session II – Petroleum System & Rock, Oil and Gas Characterization Chair: Luiz Antônio F. Trindade, UFRJ, Brazil	
14:00 – 14:40	<i>POTENTIAL OF THE SOURCE ROCKS IN THE CEARÁ AND POTIGUAR BASINS, ON THE BRAZILIAN EQUATORIAL MARGIN: A NEW EXPLORATORY FRONTIER</i> Narelle Maia de Almeida, UFC, Brazil
14:40 – 15:00	<i>THE IMPORTANCE OF USING LOCAL KINETICS ON MODELLING PETROLEUM SYSTEMS: PARNAIBA BASIN ATYPICAL PETROLEUM SYSTEM CASE STUDY</i> Henrique Araújo Lopes, ENEVA, Brazil
15:00 – 15:20	<i>OCCURRENCE OF IMMATURE CONDENSATE IN BIOGENIC GAS FROM COLOMBIAN CARIBBEAN AND ITS GEOLOGICAL IMPLICATIONS</i> André Luiz Durante Spigolon, Petrobras, Brazil
15:20 - 15:40	<i>FT-ICR-MS CHARACTERIZATION OF NSO COMPOUNDS IN CRUDE OIL AND ITS GEOCHEMICAL IMPLICATIONS</i> Jorge Armando Orrego-Ruiz, Ecopetrol, Colombia
15:40 – 16:00	<i>USE OF THE NITROGEN MARKERS FOR PALEODEPOSITIONAL EVALUATION OF THE CANDEIAS (RECÔNCAVO BASIN) AND BARREIRINHA (AMAZONAS BASIN) FORMATION</i> Diego Nery Do Amaral, UFBA, Brazil
16:00 – 16:30	Coffee Break
16:30 – 17:00	<i>Poster Session I</i> ALA, ALB, ALC, ALD and ALF
17:00 – 17:30	
17:30 – 18:00	
18:00 – 19:00	Cultural Event 01
19:00 – 20:00	



Thursday 08/10/2023

Session III - Isotopic & Reservoir Geochemistry

Chair: Alexandre de Andrade Ferreira, Petrobras, Brazil

09:00 – 09:50	NOVEL ISOTOPIC METHODS TO TRACE THE ORIGIN AND HISTORY OF ORGANIC MOLECULES <i>Alexis Gilbert, Tokyo Tech, Japan</i>
09:50 – 10:10	ELEMENTAL AND ISOTOPIC COMPOSITION OF SEDIMENTARY ORGANIC MATTER FROM ADMIRALTY BAY (KING GEORGE ISLAND, ANTARCTICA) <i>Viviane Korres, UFPR, Brazil</i>
10:10 – 10:30	STABLE ISOTOPE ANALYSIS OF BENZOIC ACID USING ELECTROSPRAY ORBITRAP MASS SPECTROMETRY <i>Gabriel Franco Dos Santos, UFG, Brazil</i>
10:30 – 11:00	Coffee Break
11:00 – 11:30	RESERVOIR GEOCHEMISTRY 4D: THE USE OF FINGERPRINTING AS A WAY TO MONITOR WAG EFFICIENCY <i>Joelma Pimentel Lopes, Petrobras, Brazil</i>
11:30 – 11:50	IDENTIFYING PRE-SALT CRUDE OILS COMPOSITIONAL VARIATIONS IN PRODUCTION MONITORING BY COMPREHENSIVE TWO-DIMENSIONAL GAS CHROMATOGRAPHY <i>Clarisse Lacerda Torres, UFRJ, Brazil</i>
11:50 – 12:10	COMPARATIVE ANALYSIS OF TWO HORIZONTAL WELLS IN THE VACA MUERTA FORMATION USING STABLE ISOTOPES IN HYDROCARBON GASES AND ROCK GEOCHEMICAL DATA <i>Federico Daniel Weibel, INGEIS, Argentina</i>
12:10 – 12:30	GEOCHEMICAL FINGERPRINTING ANALYSIS FOR ALLOCATION OF COMMINGLED OIL PRODUCTION: A CASE STUDY <i>Claudia Juliana Orejuela Parra, Ecopetrol, Colombia</i>
12:30 – 14:00	Lunch

Session IV – Environmental Geochemistry & Biogeochemistry

Chair: Marcelo Bernardes, UFF, Brazil

14:00 – 14:20	ORGANIC MATTER IN AMAZONIAN AQUATIC BODIES: CURRENT AND FUTURE SCENARIOS <i>Giovana Anceski Bataglioni, UFAM, Brazil</i>
14:20 – 14:40	ENVIRONMENTAL FORENSICS-THE PAST, PRESENT, AND FUTURE <i>Richard P. Philp, OU, USA</i>
14:40 -15:00	TRANSPORT OF TERRIGENOUS ORGANIC MATTER TO THE OCEAN RELATED TO PRECIPITATION EVENTS DURING THE LAST 18,000 YEARS IN THE AMAZON BASIN. <i>Gabriela Souza Gomes, UFF, Brazil</i>
15:00 – 15:20	EVALUATION OF THE MOLECULAR CHEMICAL PROFILE OF BRAZILIAN OILS FOR FORENSIC STUDIES AND INVESTIGATION OF ENVIRONMENTAL CRIMES <i>Flavia Rodrigues Alvares UFRJ, Brazil</i>
15:20 – 15:40	BIODEGRADATION OF THE SPILLED OIL ON THE BRAZIL'S NORTHEAST COAST OVER TIME (2019-2021) ASSESSED BY HIGH-RESOLUTION TECHNIQUES <i>Laercio Lopes Martins, UENF, Brazil</i>
15:40 – 16:00	GEOCHEMICAL FORENSIC EVALUATION OF RECENTLY APPEARING TAR BALLS ON THE NORTHEAST COAST OF BRAZIL AND THEIR RELATIONSHIP WITH THE MYSTERIOUS 2019 OIL SPILL <i>Marília Gabriela Araújo Pereira, UFRPE, Brazil</i>
16:00 – 16:30	Coffee Break
16:30 – 17:00	Poster Session II
17:00 – 17:30	ALE, ALG, ALH, ALI
17:30 – 18:00	ALE, ALG, ALH, ALI
18:00 – 19:00	ALAGO ASSEMBLY



Friday 08/11/2023

Session IV – Environmental Geochemistry & Biogeochemistry

Chair: Marcelo Bernardes, UFF, Brazil

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| 09:00 – 09:50 | TRADITIONAL MOLECULAR MARKERS AS INDICATORS OF ENVIRONMENTAL CHANGES ON THE SOUTH-SOUTHEAST COAST OF BRAZIL
<i>César C. Martins, USP, Brazil</i> |
| 09:50 – 10:10 | GEOCHEMICAL CHARACTERIZATION OF BIOTIC CRISES FROM EARLY TO MIDDLE DEVONIAN IN PONTA GROSSA FORMATION, PARANÁ BASIN
<i>Eliane Soares De Souza, UENF, Brazil</i> |
| 10:10 – 10:30 | CHARACTERIZATION OF TERRESTRIAL ORGANIC CARBON DURING THE LAST GLACIAL FROM MARINE CORE IN THE WESTERN EQUATORIAL ATLANTIC
<i>Alice Maria Da Silva Rodrigues, UFF, Brazil</i> |

10:30 – 11:00 Coffee Break

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| 11:00 -11:30 | FROM ATOMS TO LANDSCAPES THROUGH TIME: BIOGEOCHEMICAL CYCLES AND THE CHEMICAL CONTROLS ON CARBONATE PRECIPITATION IN ALKALINE LAKES
<i>Raphael Pietzsch, Petrobras, Brazil</i> |
| 11:30 – 11:50 | QUANTITATIVE ESTIMATIONS OF PRESERVATION OF ORGANIC CARBON DURING CRETACEOUS OCEANIC ANOXIC EVENTS IN THE ESPÍRITO SANTO BASIN
<i>Igor Martins Venancio Padilha De Oliveira, UFF, Brazil</i> |
| 11:50 – 12:10 | APPLICATION OF PENTACYCLIC TRITERPENOL METHYL ETHERS IN RECENT SEDIMENTS: A NEW PALEOENVIRONMENTAL INDEX?
<i>Vinicius Barreto Pereira, UFRJ, Brazil</i> |
| 12:10 – 12:30 | IRON AND TRACE METALS GEOCHEMISTRY IN MARINE SEDIMENTS FROM CONTINENTAL SHELF OF DOCE AND JEQUITINHONHA RIVERS, BRAZIL
<i>Javier Marcelino Salazar Rodriguez UFF, Brazil</i> |

12:30 – 14:00 Lunch

Session V – Data Mining & Analytical Techniques

Chair: Alberto Wisniewski Júnior, UFS, Brazil

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| 14:00 – 14:40 | PETROLEOMICS: FROM CRUDE OIL TO ASPHALTENES
<i>Matthias Witt, Bruker, Germany</i> |
| 14:40 – 15:00 | ASSESSMENT OF A POTENTIAL BIOMARKER FOR THERMAL EVOLUTION OF OILS FROM POLAR COMPOUNDS ANALYSIS BY ULTRAHIGH-RESOLUTION MASS SPECTROMETRY
<i>Arquimedes Moraes Souza Coutinho, UFPB, Brazil</i> |
| 15:00 – 15:20 | GC-MS/MS APPLIED FOR THE IDENTIFICATION OF NOVEL DIAROMATIC COMPOUNDS
<i>Bruno Quirino Araújo, UFES, Brazil</i> |
| 15:20 – 15:40 | STOCHASTIC TOC MODELING FOR EAST AFRICAN RIFT SYSTEM LAKES, A POSSIBLE PRE-SALT ANALOGOUS.
<i>Victor Ribeiro Carreira, UFF, Brazil</i> |
| 15:40 – 16:00 | WHEN THE NEW FRONTIERS ARE MEANT TO BE MORE THAN NEW PROSPECTS
<i>Érica Tavares de Moraes, Petrobras, Brazil</i> |

16:00 – 16:30 Coffee Break

Session VI - Acolhimento e Diversidade: Equidade no Cenário de Geociências

Chair: Darlly Erika Silva dos Reis, UFRJ, Brazil

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| 16:30 – 16:50 | CENSUS OF GEOSCIENCES AND THE QUALITATIVE AND QUANTITATIVE ANALYSIS OF PROFESSIONAL INEQUALITIES
<i>Jéssica De Souza Gabi Barcellos UFF, Brazil</i> |
| 16:50 – 17:10 | INICIATIVAS A FAVOR DA DIVERSIDADE NA PETROBRAS
<i>Caroline Marchon Caetano, Petrobras, Brazil</i> |
| 17:10 – 17:30 | DIVERSITY AND WELCOMING IN WORKING SPACES: WHAT DO BRAZILIAN GEOSCIENTISTS NEED?
<i>Laisa De Assis Batista, USP, Brazil</i> |
| 17:30 – 19:00 | <i>End Remarks and Farewell</i> |



Oral Presentations – XVI ALAGO

Petroleum System & Rock, Oil and Gas Characterization
<p>THE IMPORTANCE OF USING LOCAL KINETICS ON MODELLING PETROLEUM SYSTEMS: PARNAIBA BASIN ATYPICAL PETROLEUM SYSTEM CASE STUDY <i>Henrique Araújo Lopes, Eduardo de Mio</i></p>
<p>OCCURRENCE OF IMMATURE CONDENSATE IN BIOGENIC GAS FROM COLOMBIAN CARIBBEAN AND ITS GEOLOGICAL IMPLICATIONS <i>André Luiz Durante Spigolon, Jarbas Vicente Poley Guzzo, Igor Viegas A. F. de Souza</i></p>
<p>FT-ICR-MS CHARACTERIZATION OF NSO COMPOUNDS IN CRUDE OIL AND ITS GEOCHEMICAL IMPLICATIONS <i>Jorge Armando Orrego-Ruiz, Sílvia A. Pedraza-Rodríguez, Jael Y. Pacheco-Mendoza, Fernando A. Rojas-Ruiz, Miguel F. Jimenez-jácome, Claudia J. Orejuela-Parra, María Del Rosario Sánchez-Fuentes</i></p>
<p>USE OF THE NITROGEN MARKERS FOR PALEODEPOSITIONAL EVALUATION OF THE CANDEIAS (RECÔNCAVO BASIN) AND BARREIRINHA (AMAZONAS BASIN) FORMATION <i>Diego Nery do Amaral, Flávia Lima e Cima Miranda, Antonio Fernando Queiroz, Karina Santos Garcia, Maria Elisabete Machado, Sergio Luis Costa Ferreira</i></p>

Isotopic & Reservoir Geochemistry
<p>ELEMENTAL AND ISOTOPIC COMPOSITION OF SEDIMENTARY ORGANIC MATTER FROM ADMIRALTY BAY (KING GEORGE ISLAND, ANTARCTICA) <i>Viviane Korres Bisch, Satie Taniguchi, Marcia Caruso Bicego, Rafael André Lourenço, Amanda Câmara de Souza, César de Castro Martins</i></p>
<p>STABLE ISOTOPE ANALYSIS OF BENZOIC ACID USING ELECTROSPRAY ORBITRAP MASS SPECTROMETRY <i>Gabriel Franco dos Santos, Gesiane da Silva Lima, Giovanni B. Bevilaqua, Nerilson M. Lima, Rodrigo C. da Silva, Alexandre A. Ferreira, Boniek G. Vaz</i></p>
<p>RESERVOIR GEOCHEMISTRY 4D: THE USE OF FINGERPRINTING AS A WAY TO MONITOR WAG EFFICIENCY <i>Joelma Pimentel Lopes, Igor Vegas Alves Fernandes de Souza, Daniel Silva Dubois, Jarbas Vicente Poley Guzzo, Alexandre Jaime Mello Vieira, Alexandre de Andrade Ferreira, Marcia Ida de Oliveira Silva, Jose Sérgio de Araujo Cavalcante Filho, Victor de Souza Rios</i></p>
<p>IDENTIFYING PRE-SALT CRUDE OILS COMPOSITIONAL VARIATIONS IN PRODUCTION MONITORING BY COMPREHENSIVE TWO DIMENSIONAL GAS CHROMATOGRAPHY <i>Clarisse Lacerda Torres, Dayane Magalhães Coutinho, Vinicius Barreto Pereira, Mônica Cardoso Santos, Luiz Antonio Freitas Trindade, Daniel Silva Dubois, Joelma Pimentel Lopes, Gabriela Vanini, Francisco Radler de Aquino Neto, Débora de Almeida Azevedo</i></p>
<p>COMPARATIVE ANALYSIS OF TWO HORIZONTAL WELLS IN THE VACA MUERTA FORMATION USING STABLE ISOTOPES IN HYDROCARBON GASES AND ROCK GEOCHEMICAL DATA <i>Frederico Daniel Weibel, Martin Eugenio Fasola</i></p>
<p>GEOCHEMICAL FINGERPRINTING ANALYSIS FOR ALLOCATION OF COMMINGLED OIL PRODUCTION: A CASE STUDY <i>Claudia Juliana Orejuela Parra, Jael Yanine Pacheco, Claudia Juliana Quintero, David Cañas</i></p>



<i>Environmental Geochemistry & Biogeochemistry</i>
<p>TRANSPORT OF TERRIGENOUS ORGANIC MATTER TO THE OCEAN RELATED TO PRECIPITATION EVENTS DURING THE LAST 18,000 YEARS IN THE AMAZON BASIN <i>Gabriela Souza Gomes, Alice Maria da Silva Rodrigues, Igor Martins Venancio Padilha de Oliveira, Marcelo Corrêa Bernardes</i></p>
<p>EVALUATION OF THE MOLECULAR CHEMICAL PROFILE OF BRAZILIAN OILS FOR FORENSIC STUDIES AND INVESTIGATION OF ENVIRONMENTAL CRIMES <i>Flavia Rodrigues Alvares, Vinícius Barreto Pereira, Ana Luiza Barboza S. Silva, Luiz Augusto de Oliveira Costa, Débora de Almeida Azevedo, Francisco Radler de Aquino Neto, Gabriela Vanini Costa</i></p>
<p>BIODEGRADATION OF THE SPILLED OIL ON THE BRAZIL'S NORTHEAST COAST OVER TIME (2019-2021) ASSESSED BY HIGH-RESOLUTION TECHNIQUES <i>Laercio Lopes Martins, Bárbara Diniz Lima, Vinícius Barreto Pereira, Danielle Mitze Muller Franco, Igenes R. dos Santos, Jandyson Machado Santos, Boniek Gontijo Vaz, Débora de Almeida Azevedo, Georgiana Feitosa da Cruz</i></p>
<p>GEOCHEMICAL FORENSIC EVALUATION OF RECENTLY APPEARING TAR BALLS ON THE NORTHEAST COAST OF BRAZIL AND THEIR RELATIONSHIP WITH THE MYSTERIOUS 2019 OIL SPILL <i>Marília Gabriela Araújo Pereira, Igenes R. dos Santos, Isabelle F. S. de Lima, Jhonattas C. Carregosa, Alberto Wisniewski Jr, Jandysson Machado Santos</i></p>
<p>GEOCHEMICAL CHARACTERIZATION OF BIOTIC CRISES FROM EARLY TO MIDDLE DEVONIAN IN PONTA GROSSA FORMATION, PARANÁ BASIN <i>Eliane Soares de Souza, Luiza Rodrigues Rocha, Hélio Jorge Portugal Severiano Ribeiro, Luiz Carlos Bertolino, Georgiana Feitosa da Cruz</i></p>
<p>CHARACTERIZATION OF TERRESTRIAL ORGANIC CARBON DURING THE LAST GLACIAL FROM MARINE CORE IN THE WESTERN EQUATORIAL ATLANTIC <i>Alice Maria da Silva Rodrigues, Rodrigo de Lima Sobrinho, Patrícia Piacsek, Ioanna Bouloubassi, Arnaud Huguet, Ana Luiza Spadano Albuquerque, Igor Martins Venancio, Mercedes Mendez, Joana Ferreira da Cruz, Marcelo C. Bernardes</i></p>
<p>FROM ATOMS TO LANDSCAPES THROUGH TIME: BIOGEOCHEMICAL CYCLES AND THE CHEMICAL CONTROLS ON CARBONATE PRECIPITATION IN ALKALINE LAKES <i>Raphael Pietzsch</i></p>
<p>QUANTITATIVE ESTIMATIONS OF PRESERVATION OF ORGANIC CARBON DURING CRETACEOUS OCEANIC ANOXIC EVENTS IN THE ESPÍRITO SANTO BASIN <i>Igor Martins Venancio Padilha de Oliveira, Thiago Pereira dos Santos, Andre Luiz Belem, Marcelo Correa Bernardes, Rut Amelia Diaz, Victor Ribeiro Carreira, Manuel antonio moreira ramirez, Andre luiz durante spigolon, Igor viegas a.f. de souza, Ana Luiza Spadano Albuquerque</i></p>
<p>APPLICATION OF PENTACYCLIC TRITERPENOL METHYL ETHERS IN RECENT SEDIMENTS: A NEW PALEOENVIRONMENTAL INDEX? <i>Vinicius Barreto Pereira, Karen T. Stelzer, Rafael S. Xavier, Raquel V. S. Silva, Débora A. Azevedo</i></p>
<p>IRON AND TRACE METALS GEOCHEMISTRY IN MARINE SEDIMENTS FROM CONTINENTAL SHELF OF DOCE AND JEQUITINHONHA RIVERS, BRAZIL <i>Javier Marcelino Salazar Rodriguez, Grace Alejandra Navas Rivas, Manuel Moreira Ramirez, Gabriel Nuto Nobrega, Ana Luiza Albuquerque, André Bahr, Rut Amelia Díaz Ramos</i></p>



Data Mining & Analytical Techniques

ASSESSMENT OF A POTENTIAL BIOMARKER FOR THERMAL EVOLUTION OF OILS FROM POLAR COMPOUNDS ANALYSIS BY ULTRAHIGH-RESOLUTION MASS SPECTROMETRY

Arquimedes Moraes Souza Coutinho, Jhonnatas de Carvalho Carregosa, Wenes Ramos da Silva, Boniek Gontijo Vaz, Taynara Rodrigues Covas, Alberto Wisniewski Junior, Jandyson Machado Santos

GC-MS/MS APPLIED FOR THE IDENTIFICATION OF NOVEL DIAROMATIC COMPOUNDS
Bruno Quirino Araújo, Arkellau Kenned Silva Moura, Vinícius Barreto Pereira, Débora de Almeida Azevedo, Antônia Maria das Graças Lopes Cító

STOCHASTIC TOC MODELING FOR EAST AFRICAN RIFT SYSTEM LAKES, A POSSIBLE PRE-SALT ANALOGOUS.

Victor Ribeiro Carreira, Victor Ribeiro Carreira, Igor Martins Venancio, André Luiz Belém, Rodrigo Azevedo Nascimento, Igor Viegas Alves Fernandes de Souza, André Luiz Durante Spigolon, Ana Luiza Spadano Albuquerque