



# SSAGI 2026

XIV SOUTH AMERICAN SYMPOSIUM  
ON ISOTOPE GEOLOGY

Montevideo (Uruguay), 13-16 April

## PROGRAM & INFORMATION





The XIV South American Symposium on Isotope Geology is proudly organized by the Sociedad Uruguaya de Geología (SUG).

In collaboration with: Facultad de Ciencias and Centro Universitario Regional Este (CURE) – Universidad de la República (UdelAR)



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UDELAR

Dear Colleagues and Friends,

On behalf of the Organizing Committee and the Sociedad Uruguaya de Geología (SUG), it is a great honor to welcome you to Montevideo for the XIV South American Symposium on Isotope Geology (SSAGI 2026).

Since its inception, the SSAGI has established itself as the premier forum for discussing the latest advances in isotope geochemistry and geochronology in our region. This year, we gather at the Town Hall Conference Centre to share four days of intense scientific exchange, covering everything from the evolution of the South American Cratons to the newest applications in environmental and magmatic systems.

Our goal is not only to showcase high-impact research but also to foster the collaboration that defines our scientific community. We hope that the technical sessions, the poster discussions, and the field trip to our unique geology provide a fertile ground for new ideas and lasting partnerships.

We are delighted to have you here in Uruguay. Enjoy the symposium, the city, and the shared passion for Earth Sciences.

Welcome to SSAGI 2026!

*The Organizing Committee*



## Venues & Logistics

### Symposium Venues

- ◆ **Pre-Symposium Courses (April 13th):** Facultad de Ciencias Sociales (UdelaR), Room A5. *Address: Constituyente 1502, Montevideo.*
- ◆ **Main Sessions (April 14th – 16th):** Town Hall Conference Centre (Intendencia de Montevideo). *Address: Av. 18 de Julio 1360, Montevideo.*

### Scientific Sessions

- ◆ **Azul Auditorium :** Plenary sessions, Keynote lectures, and thematic blocks.
- ◆ **Dorado Auditorium:** Parallel sessions (Keynote lectures and thematic blocks).
- ◆ **Foyer:** Poster exhibitions, Coffee Breaks, and exhibitor Booths.

### Instructions for Presenters

- ◆ **Oral Presentations:** Please deliver your files to the technical staff at the Speaker Ready Room located in each Auditorium before your scheduled session.
- ◆ **Poster Sessions:** Posters must be mounted in the Foyer at the beginning of each day and removed at the end of the afternoon session. Materials for mounting will be available at the Registration Desk.

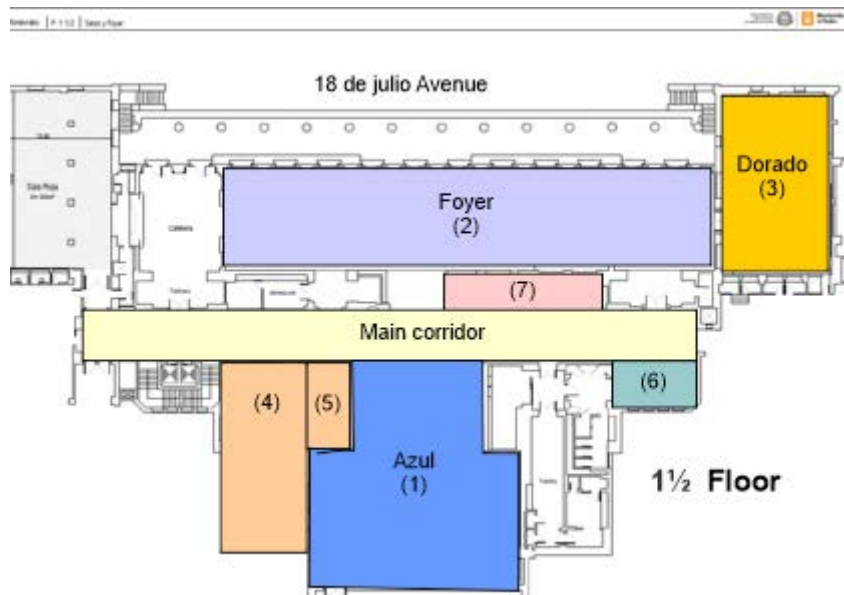
### Social Events

**Icebreaker:** April 13 th, 18:00 hs, Conference Centre.

**SSAGI Dinner:** April 15th, 20:00 hs, Club de Pesca Ramírez. *Address: Rambla Presidente Wilson 426, Montevideo. (Pre-registration required).*



## Floor Plan — Town Hall Conference Centre Layout



### Legend:

**Access:** Enter through the main entrance on 18 de Julio Avenue. To the left of the main hall, take the elevator or stairs to Level 1½.

- (1) Azul Auditorium:** Access via main corridor.
- (2) Foyer Area:** Poster Sessions, Coffee Breaks, Exhibitors Booths.
- (3) Dorado Auditorium:** Access via the Foyer.
- (4) Restrooms:** Located near the main corridor.
- (5) Cloakroom**
- (6) Elevator and stairs**
- (7) Registration Desk:** Check-in and information.

## ORAL PRESENTATIONS - TUESDAY, APRIL 14

### AZUL AUDITORIUM

**Session** **Crustal evolution of Archean blocks and Paleoproterozoic orogens. Conveners: Elton Dantas; Enrique Masquelin; Henrique Bruno; Pedro Oyhantcabal**

**08.30 - 09.00** **Rhyacian Revolutions: Magmatic, Metamorphic, and Tectonic Transitions in the Early Proterozoic (Chris Spencer)**

**09.00 - 09.20** Timing and tectonic evolution of the Rhyacian Mazaruni Greenstone Belt of northern Guyana (Michael Tedeschi et al.)

**09.20 - 09.40** Juvenile and crust-derived Archean leucogranites of the Campos Gerais Complex, SW São Francisco Craton: integration of new and published major/trace elements, Nd-Sr isotopes and LA-ICPMS U-Pb data (Claudio Valeriano et al.)

**09.40 - 10.00** Timing of eclogite to granulite conditions during the West Gondwana assembly, Northeast Brazil: implications for collisional tectonics (Alanielson Ferreira et al.)

**10.00 - 10.20** Neoproterozoic evolution of the northern Amapá Block, southeastern Guiana Shield: insights from geochemistry, U-Pb dating, and Hf-Nd isotopes. (Jean Michel Lafon et al.)

**10.20 - 10.40** The Transamazonian orogeny as a binder of Archean blocks in Amazonian Craton. (Moacir Macambira et al.)

**10.40 - 11.00**

**11.00 - 11.20**

**11.30 - 12.30** **PLENARY LECTURE : The onset of Plate Tectonics, crust generation and tectonics in the Archean (Dr. CHRIS HAWKESWORTH, University of Bristol)**

### 12.30 - 14.00 LUNCH TIME

**Session** **Pre-Andean and Andean crustal evolution. Conveners: Juan Andrés Dalquist; Mauricio Calderón**

**14.00 - 14.30** **The basement of the Chaco-Pampean Plain: Ediacaran Igneous Complex and a large Middle to Late Cambrian epicontinental sea (Carlos Rapela)**

**14.30 - 14.50** Timespan of a dynamic magmatic system forming the Permian El Portillo Batholith in an Andean margin flare-up event (Juan A. Dalquist et al.)

**14.50 - 15.10** Crustal contamination on magmas from U-Pb and Lu-Hf data on zircons: The Pampean Flat Slab segment (~30°S) (Federico Salgado et al.)

**15.10 - 15.30** Interpreting the internal structure of zircon: case studies and application to the Mid- to Late Devonian of NW Patagonia (Mark Fanning et al.)

**15.30 - 15.50** Tracing the sources of Devonian detritus in metasedimentary rocks from the eastern Andes Metamorphic Complex (Francisco Hervé et al.)

**15.50 - 16.10** Sources of Mississippian detrital zircons in the metasedimentary basement of southern Chile: insights from oxygen isotopes (Paulo Quezada et al.)

**16.10 - 16.30** New structural and U/Pb zircon geochronologic constraints on the evolution of the Pre-Andean basement of South Perú (Maryi Rodriguez-Cuevas et al.)

**16.30 - 16.50** From plants to sediments to magmas: testing biosphere-arc feedbacks in the southern Andes (Chris Spencer)

### 17.00 - 18.30 COFFEE BREAK AND POSTER SESSIONS

## ORAL PRESENTATIONS - TUESDAY, APRIL 14

### DORADO AUDITORIUM

**Session** **Isotopes in Hydrogeology, Environment and Climate change. Conveners: Marly Babinski; Eleonora Carol**

- 08.30 - 09.00** **Vegetation, Hydrology, and Carbon Isotopes: Long-Term Monitoring Unravels the Controls on Speleothem  $\delta^{13}\text{C}$  in a Cave from Brazilian Cerrado (Nicolas Strikis et al.)**
- 09.00 - 09.20** Disentangling the effect of precipitation and temperature on speleothem isotope records from eastern Brazil since the last Glacial Maximum (Francisco Cruz et al.)
- 09.20 - 09.40** Holocene extreme rainfall events in central Brazil: multiproxy evidence from an undated cave (Melissa Medina et al.)
- 09.40 - 10.00** Tracing groundwater inflow in Andean lacustrine systems using RADON-222: the case of Conguillío, Verde, and Quepe lakes (Luciano Muñoz et al.)
- 10.00 - 10.20** Enhanced rock weathering in tropical mine tailings as a high-integrity and durable carbon dioxide removal strategy (Juan Carlos Silva-Tamayo)
- 10.20 - 10.40**
- 10.40 - 11.00**
- 11.00 - 11.20**

**11.30 - 12.30** **PLENARY LECTURE (Auditorium Azul) : The onset of Plate Tectonics, crust generation and tectonics in the Archean (Dr. CHRIS HAWKESWORTH, University of Bristol)**

### 12.30 - 14.00 LUNCH TIME

- 14.00 - 14.20** Assessing degradation processes of Chlorinated Ethenes in weathered and fractured bedrock aquifer (Luiz Guilherme Fregona et al.)
- 14.20 - 14.40** Groundwater provenance in Precambrian karstic and fractured aquifers using strontium isotopes and rare earth elements: a case study (Claudio Gaucher et al.)
- 14.40 - 15.00** Evaporation-driven  $\delta^{18}\text{O}$  –  $\delta^2\text{H}$  enrichment and localized  $^{222}\text{Rn}$  anomalies reveal coupled processes in the Varjão wetland over the Guarani Aquifer (SE Brazil) (Albert Cardoso et al.)
- 15.00 - 15.20** Insights from the spatial variability of isotopic signatures in the Guarani Aquifer System (Roberto Kirchheim et al.)
- 15.20 - 16.00** A preliminary isotopic assessment of groundwater surrounding a protected wetland: a first step towards understanding the interactions between surface and groundwater (Isadora Kuhn et al.)
- 16.00 - 16.20** Environmental isotopes as tools for groundwater flow compartmentalization and management in the Verde Grande Basin, São Francisco tributary, Brazil (M. Antonieta Mourão et al.)
- 16.20 - 16.40** Soil aquifer treatment as a natural attenuation mechanism for nitrate removal: isotopic evidence from an irrigated system. (Vinicius R. de Oliveira et al.)

### 17.00 - 18.30 COFFEE BREAK AND POSTER SESSION

## POSTER PRESENTATIONS - TUESDAY, APRIL 14

### SESSION ARCHEAN BLOCKS AND PALEOPROTEROZOIC OROGENS

- 1- U–Pb ZIRCON GEOCHRONOLOGY OF MAFIC MAGMATISM FROM THE DOM FELICIANO BELT BASEMENT: A STATHERIAN TAPHROGENIC RECORD IN SOUTHERN BRAZIL (Stephanie Carvalho et al.)
- 2- GEOCHEMICAL AND PETROGRAPHIC CHARACTERIZATION OF THE ORTHOGNEISSES OF THE CAMPOS GERAIS COMPLEX. (Yan Considera et al.)
- 3- NEW U-Pb AND Lu-Hf AGES OF GRANITIC ROCKS OF THE RIBEIRA BELT IN CARANGOLA REGION, MINAS GERAIS, BRAZIL: SOURCE CONSTRAINTS FOR THE PALEOPROTEROZOIC ROCKS. (Mikaele Dias de Araújo et al.)
- 4- TIMING OF GRANULITE-FACIES METAMORPHISM IN THE SUTURE ZONE OF THE MINAS-BAHIA OROGEN (SE-BRAZIL): ZIRCON U-Pb GEOCHRONOLOGY AND Nd ISOTOPIC EVIDENCE FOR EARLY OROSIRIAN COLLISION. (Lauren Fonseca et al.)
- 5- TRACING THE LOMAGUNDI-JATULI ISOTOPIC EXCUSION IN THE RIO DE LA PLATA CRATON: NEW EVIDENCE FROM PUNTA TOTA MARBLE (TANDILIA SYSTEM, ARGENTINA). (Maria Lajoinie et al.)
- 6- ISOTOPIC CONSTRAINTS ON HADEAN PROCESSES IN THE SÃO FRANCISCO CRATON, NE BRAZIL. (Felipe Leitzke et al.)
- 7- EARLY CRUSTAL REWORKING AND TONALITIC MAGMATISM DURING THE RHYACIAN EVOLUTION OF THE TANDILIA BELT BASEMENT: INSIGHTS OF THE SAN MIGUEL AREA (BUENOS AIRES, ARGENTINA). (Belén Marone et al.)
- 8- DETRITAL MONAZITE U–Pb GEOCHRONOLOGY FROM MAJOR RIVER SYSTEMS IN EASTERN BRAZIL AND ITS INSIGHTS INTO THE CRUSTAL EVOLUTION OF THE ARAÇUAÍ–RIBEIRA AND MINAS–BAHIA OROGENIC SYSTEMS. (Guilherme Ribeiro et al.)
- 9- GEOCHEMISTRY AND SR-Nd ISOTOPES OF THE RADO PANTHEON ORTHOGNEIS AND AMPHIBOLITE, ARCHEAN PAVAS BLOCK, TREINTA Y TRES – URUGUAY. (Enrique Maquelin & Yedinet Cortés)
- 10- INSIGHTS INTO THE PALEOPROTEROZOIC EVOLUTION OF THE SÃO FRANCISCO PALEOCONTINENT FROM DETRITAL ZIRCON U–Pb AGES IN MODERN RIVER SEDIMENTS. (Bento Ribeiro et al.)
- 11- U–Pb GEOCHRONOLOGICAL CONSTRAINTS ON THE BOUNDARY BETWEEN THE CEARÁ CENTRAL AND MÉDIO COREAÚ DOMAINS, NORTHERN BORBOREMA PROVINCE. (Antonio Braga et al.)
- 12- U–Pb TITANITE CONSTRAINTS ON PALEOPROTEROZOIC MAGMATISM AND METAMORPHISM IN THE RIO URUBU BELT, GUIANA SHIELD – BRAZIL. (Mayara Teixeira et al.)
- 13- CONTRASTING ZIRCON Hf ISOTOPE SIGNATURES IN THE RÍO DE LA PLATA CRATON: JUVENILE ACCRETION VERSUS CRUSTAL REWORKING. (Elena Peel et al.)
- 14- PALEOPROTEROZOIC MANGANESE DEPOSITION IN HIGH-GRADE METASEDIMENTARY TERRANES OF BRAZIL. (Wagner Amaral et al.)
- 15- U-Pb AND Sm-Nd DATA CONSTRAINS FOR THE NEOARCHEAN VOLCANISM OF THE CARAJÁS MINERAL PROVINCE. (Ana Paula Justo et al.)
- 16- TECTONOTHERMAL INFLUENCE ON THE U-Pb ISOTOPIC SYSTEM OF TITANITE AND APATITE DURING THE PALEOPROTEROZOIC IN THE CARAJÁS PROVINCE. (Marco Aurelio Marques et al.)
- 17- REVISITING THE TECTONIC EVOLUTION OF THE NICO PÉREZ TERRANE (URUGUAY) BASED ON NOVEL ISOTOPIC DATA AND EVIDENCE FROM CRYOGENIAN HIGH-GRADE METAMORPHISM. (Hernán Silva et al.)

18- MESOARCHEAN MAGMATISM OF THE AMAPÁ BLOCK, SOUTHEASTERN GUIANA SHIELD, BRAZIL: GEOCHEMISTRY, ZIRCON U-Pb-Hf GEOCHRONOLOGY AND TECTONIC IMPLICATIONS. (Luisa Dias Barros et al.)

19- ISOTOPIC CONSTRAINTS ON PALEOARCHEAN-PALEOPROTEROZOIC CRUSTAL EVOLUTION AND GRANULITE METAMORPHISM IN THE BACAJÁ DOMAIN, AMAZONIAN CRATON. (Arthur Neri et al.)

20- PROLONGED PALEOPROTEROZOIC OROGENIC REWORKING OF ARCHEAN SANUKITIDS IN THE BACAJÁ DOMAIN, AMAZONIAN CRATON. (Arthur Neri et al.)

21- LATE RHYACIAN HIGH-GRADE METAMORPHISM IN THE CENTRAL REGION OF AMAPÁ, NORTHERN BRAZIL: GEOCHEMICAL AND GEOCHRONOLOGICAL CONSTRAINTS FROM MAFIC ROCKS. (Joao Marinho Milhomem Neto et al.)

22- LITHOSTRATIGRAPHY, STRUCTURE AND SHRIMP U-Pb ZIRCON GEOCHRONOLOGY OF THE NAMIBE REGION (SOUTHWESTERN ANGOLA): A FRAGMENT OF THE SOUTHWESTERN CONGO SHIELD DEFORMED DURING THE EBURNEAN OROGENY. (Javier Escuder et al.)

23- GEOCHEMISTRY AND GEOCHRONOLOGY OF THE ACARÁI DIATEXITE: INSIGHTS INTO HIGH-GRADE CRUSTAL MELTING IN THE SOUTHERN PARANAGUÁ TERRANE. (Rafael Wozniak Lipka)

### **SESSION PRE-ANDEAN AND ANDEAN CRUSTAL EVOLUTION**

24- COMPARISON BETWEEN THE U-Pb LA-ICPMS ZIRCON AGE FROM A TUFF LAYER AND THE BIOSTRATIGRAPHIC AGE OF THE ASSOCIATED ORDOVICIAN ROCKS IN THE WESTERN PUNA, JUJUY, ARGENTINA: STRENGTHS AND LIMITATIONS. (Pamela Aparicio Gonzalez et al.)

25- LATE PALAEOZOIC METASEDIMENTS OF THE SW GONDWANA MARGIN: NEW U-Pb DETRITAL ZIRCON AGES FROM THE SUBSURFACE BASEMENT OF THE AUSTRAL-MAGALLANES BASIN, TIERRA DEL FUEGO. (Hernán de la Cal et al.)

26- COMPARISON BETWEEN THE U-Pb LA-ICPMS ZIRCON AGE FROM A TUFF LAYER AND THE BIOSTRATIGRAPHIC AGE OF THE ASSOCIATED ORDOVICIAN ROCKS IN THE WESTERN PUNA, JUJUY, ARGENTINA: STRENGTHS AND LIMITATIONS. (Gilmar Santos da Cruz et al.)

27- CONSTRAINING DEVONIAN MAGMATISM THROUGH ZIRCON GEOCHRONOLOGY OF THE CARRIZALITO BATHOLITH AND ITS HOST ROCKS (LAGUNITAS FORMATION) (Gabriela Gonzalez Liedke et al.)

### **SESSION HYDROGEOLOGY, ENVIRONMENT AND CLIMATE CHANGE**

28- ISOTOPIC SIGNATURES OF NEODYMIUM AND STRONTIUM IN ATMOSPHERIC PARTICULATE MATTER (PM<sub>10</sub>) FROM DISTRITO FEDERAL, CENTRAL BRAZIL. (Poliana Dutra et al.)

29- NEW STABLE ISOTOPE DATA ( $\delta^{18}\text{O}$  AND  $\delta^2\text{H}$ ) FROM SELECTED LOW-ENTHALPY GROUNDWATER AQUIFER WELLS IN SOUTHERN SAN JUAN PROVINCE, ARGENTINA. (Maximiliano Espósito et al.)

30- SOIL-DERIVED RADON AND NATURAL RADIONUCLIDES IN EASTERN URUGUAY: ISOTOPIC ASSESSMENT OF ENVIRONMENTAL EXPOSURE. (Rodolfo Reboluz et al.)

31- GEOCHEMICAL PARTITIONING OF Sr AND Nd IN AMAZONIAN DARK EARTHS: COUPLING SEQUENTIAL EXTRACTION WITH ISOTOPIC SIGNATURES TO TRACE GEOGENIC AND ANTHROPOGENIC ORIGINS. (Paloma Rego et al.)

32- REGIONAL CLIMATE FORCING OF CHANGES IN FLUVIAL DYNAMICS IN THE CENTRAL AMAZON INFERRED FROM LEAF-WAX ISOTOPES. (Lara Silva et al.)

## ORAL PRESENTATIONS - WEDNESDAY, APRIL 15

### AZUL AUDITORIUM

**Session** **Isotopes in magmatic systems and mineral resources. Conveners: Anderson Costa; Valderez Ferraz; Valdecir Janasi; Sebastián Oriolo**

- 08.30 - 09.00** **Why your zircon Hf model ages might be wrong and how to fix them (Andreas Petersson)**
- 09.00 - 09.20** Crustal Evolution of the Goiás Magmatic Arc: Ongoing Isotopic Work (Natalia Hauser et al.)
- 09.20 - 09.40** Linking Migmatite Anatexis to Granitic Magmatism in the Poço Redondo Domain (M. Lourdes da Silva Rosa et al.)
- 09.40 - 10.00** In situ Pb-Pb isotope geochemistry in feldspars: an underused tool in the identification of sources and evolutionary processes in Brazilian Neoproterozoic granites (Valdecir Janasi et al.)
- 10.00 - 10.20** Hybrid mantle provenance in the melt generation in the Vitória Trindade Ridge - a study case in the Martín Vaz archipelago (Gabriela Caitano et al.)
- 10.20 - 10.40** Isotopic Features (Sr-Nd) of the Pepe Núñez Alkaline Suite, NW Uruguay (southern extreme of the Paraná Basin). (Lucia Olivera et al.)
- 10.40 - 11.00** Origin of the Passo da Capela Alkaline Suite (Brazil) (Karina Luengo et al.)
- 11.00 - 11.20** Pelotas and Punta del Este Basins Magmatism – New Ar/Ar Ages (Brazil and Uruguay) (Tiago Girelli et al.)
- 11.30 - 12.30** **PLENARY LECTURE - The Permian Triassic mass extinction: testing the volcanism hypothesis (Dr. ALCIDES NÓBREGA SIAL, Federal University of Pernambuco)**

### 12.30 - 14.00 LUNCH TIME

- 14.00 - 14.20** Bimodal magmatism in Angola (252–82 Ma) and stepwise rifting: new  $^{40}\text{Ar}/^{39}\text{Ar}$  constraints and correlations with the South Atlantic conjugate margin (E. Merino)
- 14.20 - 14.40** Zircon U-Pb-O traverse across multiple orogens: Tracing crustal evolution across the evolving Gondwana margin. (Andreas Petersson)
- 14.40 - 15.00** A Two-Stage Model for Andean IOCG Deposits (Rurik Romero)
- 15.00 - 15.20** Tectonomagmatic Insights from Zircon U–Pb, O and Hf Isotopes – Cordillera Frontal (Facundo Scandroglio et al.)
- 15.20 - 16.00** Combined Zircon U/Pb-TE-Hf-O proxies reveal exploration barcode for magmatic orogenic gold in Perú. (Daniel Wiemer et al.)
- 16.00 - 16.20** Geochronology and Petrography of Veins within the SE Central Irish Zn–Pb Ore-field (Fredericks La Donna et al.)
- 16.20 - 16.40** Tracing hydrothermal fluid pathways and sources of the Lajeado Group carbonate-hosted Pb–Zn–Ag–Au vein system using  $\delta^{13}\text{C}$ – $\delta^{18}\text{O}$  systematics (Apiaí Terrane, southern Ribeira Belt - Brazil). (Guilherme Hoerlle et al.)
- 16.40 - 17.00** Decoupling of silicon and triple-oxygen isotope systematics during low-temperature silica precipitation in amethyst-agate geodes from the los Catalanes Gemological District, Uruguay. (Fiorella Ardouin et al.)

### 17.00 - 18.30 COFFEE BREAK AND POSTER SESSION

## ORAL PRESENTATIONS - WEDNESDAY, APRIL 15

### DORADO AUDITORIUM

**Session** **Isotopes in sedimentary sequences: stratigraphy, provenance and petroleum systems. Conveners: Claudio Gaucher; Jorge Spangenberg; Alcides N. Sial.**

**08.30 - 09.00** **Precambrian atmospheric oxygenation: advances and insights from isotope chemostratigraphy (Claudio Gaucher)**

**09.00 - 09.20** Combined U-Pb LA-ICPMS dating of aragonite crystal fans and clumped isotope thermometry of Ediacaran cap carbonates (Fabrizio Caxito et al.)

**09.20 - 09.40** A large in situ U-Pb carbonate geochronology dataset from the Ediacaran-Cambrian Bambuí Basin, Brazil (Paulo Dias et al.)

**09.40 - 10.00** Magmatic contributions and geochemical-isotopic patterns of multistage dolomitization in carbonate reservoirs: implications for pre-salt hydrothermal evolution (Alanielson Ferreira et al.)

**10.00 - 10.20** Nd isotopes and detrital zircon U-Pb ages unfold the tectono-stratigraphic evolution of a subducted Tonian continental margin in the Passos Nappe, SE Brazil (Gabriel Paravidini et al.)

**10.20 - 10.40** New geologic mapping and geochronology in the southern Caribbean plate margin (Camilo Montes et al.)

**10.40 - 11.00** Paleooceanographic Record of the Carboniferous-Permian Boundary Along The Southern Gondwana Margin: A Preliminary Approach From The Tarlton Limestones (Madre de Dios Island, Chilean Patagonia) (Juan Pablo Letelier et al.)

**11.00 - 11.20**  $\delta^{13}\text{C}$  Maastrichtian excursion in lagoonal-coastal marine deposits, El Molino Formation, Sucre, Bolivia. (Daniel Poiré et al.)

**11.30 - 12.30** **PLENARY LECTURE (Auditorium Azul) - The Permian Triassic mass extinction: testing the volcanism hypothesis (Dr. ALCIDES NÓBREGA SIAL, Federal University of Pernambuco)**

### 12.30 - 14.00 LUNCH TIME

**14.00 - 14.20** U-Pb age and SIMS data of Pelotas Basin carbonates, southernmost Brazil (Ileana Lehn et al.)

**14.20 - 14.40** Clumped-Isotope Constraints on Lacustrine Carbonate Formation and Burial Reordering in the Barra Velha Formation, Santos Basin, Brazil (Mariana Leite et al.)

**14.40 - 15.00** Integrated  $\delta^{13}\text{C}$  and Mercury chemostratigraphy of OAE2 across three Colombian basins: insights into the La Luna Epeiric sea and the volcanic trigger of Mid-Cretaceous environmental change (Juan Carlos Silva Tamayo et al.)

**15.00 - 15.20** Identifying organic matter in Brazilian pre-salt carbonates (Ileana Lehn et al.)

**15.20 - 16.00** Carbon isotopic and biomarker analysis in the characterization of oils extracted from pre-salt reservoirs in the Atapu Field, Santos Basin (René Rodrigues et al.)

**16.00 - 16.20** Insights into Hydrothermal Processes and Fluid Origin in the Barra Velha Carbonates (Roberto Ventura Santos et al.)

**16.20 - 16.40** Isotopic fingerprinting of fracture-filling hydrothermal carbonates hosted in Upper Cretaceous deep-marine strata (Paulo Quezada et al.)

**16.40 - 17.00** Carbonate precipitation under extreme high-altitude conditions: isotopic evidence from the Antofalla Graben travertine system, Central Andes (Guido Alonso et al.)

### 17.00 - 18.30 COFFEE BREAK AND POSTER SESSION

## POSTER PRESENTATIONS - WEDNESDAY, DAY APRIL 15

### SESSION ISOTOPES IN MAGMATIC SYSTEMS AND MINERAL RESOURCES

- 1- CHARACTERIZATION OF REFERENCE MATERIAL FOR APPLICATION IN U-Pb GEOCHRONOLOGY. (Fernanda Alves Cerqueira et al.)
- 2- LASER ABLATION IN ZIRCON AND IMPLICATIONS FOR FRACTIONATION IN U-Pb ANALYSES USING LA-ICP-MC-MS. (Marco Coelho et al.)
- 3- NEW Lu-Hf ISOTOPES APPLIED TO ANOROGENIC MAGMATISM IN RONDÔNIA: MANTLE VERSUS CRUSTAL SOURCE AND IMPLICATIONS TO RODINIA AMALGAMATION. (Romero Silva et al.)
- 4- NEW U-Pb AGES IN ZIRCON AND MONAZITE FROM THE PASSA QUATRO INTRUSION (SE BRAZIL): IMPLICATIONS FOR ALKALINE MAGMA SOURCE. (Marco da Silva Machado et al.)
- 5- NEW INSIGHTS ON GONDWANA ASSEMBLY: AGE, PROVENANCE, AND TECTONIC SETTING OF THE NORTHEAST PATAGONIA BASEMENT BY DETRITAL ZIRCON U-Pb-Hf ISOTOPES. (Pablo D. Gonzalez et al.)
- 6- MAGMATISM OF NORTHEASTERN PATAGONIA REVISITED: NEW INSIGHTS FROM U-Pb ISOTOPIC ANALYSES WITH REGIONAL IMPLICATIONS. (Pablo D. Gonzalez et al.)
- 7- TRACING SUBDUCTION RECYCLING IN THE CENTRAL AMERICAN ARC USING MOLYBDENUM ISOTOPES. (Stephan Konig et al.)
- 8- K-Ar AGE AND PETROLOGY OF THE MESOZOIC OLIVINE GABBRO DIKE AT MANSAVILLAGRA, FLORIDA, URUGUAY. (Enrique Masquelin et al.)
- 9- SILICON ISOTOPES IN HYDROTHERMAL SYSTEMS: METHODOLOGY AND APPLICATIONS AT THE EL TATIO GEYSER FIELD, CHILE. (Rurik Romero et al.)
- 10- ISOTOPIC HOMOGENEIZATION BALANCE OF  $^{87}\text{Sr}/^{86}\text{Sr}$  RATIO FROM APTIAN TO ALBIAN: SANTOS AND NAMIBE BASINS. (Bernardo Kahter et al.)
- 11- SEDIMENT RECYCLING AND LITHOSPHERIC MANTLE METASOMATISM AS DRIVERS OF MAFIC MAGMATISM IN THE SOUTHERN BORBOREMA PROVINCE. (Fabio Pereira et al.)
- 12- REVISITING K-Ar GEOCHRONOLOGY USING MODERN NOBLE GAS MASS SPECTROMETRY: METHOD EVALUATION AND DATING SAMPLES FROM THE JACUPIRANGA ALKALINE COMPLEX, BRAZIL. (Leandro Figueiredo et al.)
- 13- CRUSTAL AND MANTLE SOURCES OF THE PICADAS GRANITIC ASSOCIATION: INFERENCES FROM WHOLE ROCK ND, ZIRCON Hf ISOTOPIC AND PETROGRAPHY. (Ana Clara Jardim Ferreira et al.)
- 14- QUARTZ CHEMISTRY OF GRANITIC PEGMATITES FROM THE BORBOREMA AND ARAÇUAI PEGMATITE PROVINCES: IMPLICATIONS FOR PEGMATITE FERTILITY AND LITHIUM EXPLORATION. (Carolina Moreto et al.)
- 15- TIMS TECHNIQUES FOR MEASURING STRONTIUM ISOTOPE RATIOS IN APATITE GRAINS AND APPLICATION TO IGNEOUS ROCK PETROLOGY. (Carla Neto et al.)
- 16- INSIGHTS INTO STABLE ISOTOPES C-O OF THE NEOPROTEROZOIC METACARBONATITES IN PASSO FEIO COMPLEX, DOM FELICIANO BELT, SOUTHERNMOST BRAZIL. (Luisa Caon et al.)
- 17- Si AND O ISOTOPE ANALYSIS OF  $\text{SiO}_2$  PHASES VIA SIMS: IMPLICATIONS FOR AN EPIGENETIC ORIGIN OF GEODES IN THE PARANÁ VOLCANIC PROVINCE. (Felipe Leitzke et al.)
- 18- U-Pb ZIRCON GEOCHRONOLOGY AND Sr-Nd ISOTOPE SIGNATURES OF POST-COLLISIONAL, CRYOGENIAN TONALITES AND GRANODIORITES FROM THE SÃO GABRIEL BLOCK, WESTERN DOM FELICIANO BELT, SOUTHERNMOST BRAZIL. (Felipe Manfredini Peruchi et al.)

## SESSION ISOTOPES IN SEDIMENTARY SEQUENCES

- 19- U-Pb DETRITAL ZIRCON DATING AND Nd ISOTOPES OF THE MINAS DE CORRALES FORMATION, ISLA CRISTALINA DE RIVERA (URUGUAY). (Paulina Abre & Gonzalo Blanco)
- 20- Nd ISOTOPES AND WHOLE ROCK GEOCHEMISTRY OF THE PAYSANDÚ GROUP (UPPER CRETACEOUS, URUGUAY) (Gonzalo Blanco et al.)
- 21- ALBIAN OCEANIC ANOXIC EVENTS (OAEs) IN THE SOUTH ATLANTIC: INSIGHTS FROM STABLE CARBON ISOTOPE DATA. (Mauro Rodrigues et al.)
- 22- ISOTOPIC CONSTRAINTS ON THE INTERACTION AMONG BASINAL BRINES, HYDROCARBONS, AND MAGMATIC HEAT: INSIGHTS FROM THE COLIPILLI BARITE SYSTEM (NEUQUÉN BASIN, ARGENTINA). (Melisa Salvioi et al.)
- 23- APPLICATION OF DZ MIX MODELLING TO CONSTRAIN SEDIMENT SOURCES DURING THE EARLY CRETACEOUS OF THE NEUQUÉN BASIN, ARGENTINA. (Francisco Lugo et al.)
- 24- MINERALOGICAL AND GEOCHEMICAL CHARACTERIZATION OF CLAY MINERALS IN AN ALKALINE-EVAPORITIC ENVIRONMENT AT LAGUNA TIMONE, PALI-AIKE VOLCANIC FIELD, CHILEAN PATAGONIA. (Liv Gabrielle Ferreira Salerno et al.)
- 25- UNRAVELING THE PROVENANCE HISTORY OF THE FIRST SHORT-LIVED GLACIATION IN THE WESTERN GONDWANA. (Camila Vilar de Oliveira et al.)
- 26- PALEOTHERMOMETRIC SIGNATURES IN BRAZILIAN CARBONATES: MICROTHERMOMETRY WITH CLUMPED ISOTOPES FRACTIONATION. (Adelita Rodrigues et al.)
- 27- WC1 REFERENCE MATERIAL FOR U-Pb CARBONATE DATING BY LA-ICP-MS: ADVANCES IN LABORATORY PROCEDURES AND MATRIX EFFECT ISSUES. (Abril Sarrido et al.)
- 28- METAL CHEMOSTRATIGRAPHY AND ISOTOPES AT THREE CLASSICAL P–TR TRANSITION SECTIONS LINK THE LARGEST PHANEROZOIC MASS EXTINCTION TO VOLCANISM (Alcides Sial et al.)
- 29- TRACING CARBONATE WEATHERING USING STABLE CARBON AND OXYGEN ISOTOPES IN THE JANDAÍRA FORMATION, POTIGUAR BASIN, NORTHEAST BRAZIL. (Maria Daniela Traslaviña et al.)
- 30- MID-OLIGOCENE BRAARUDOSPHAERA ACMES FROM SOUTH ATLANTIC OCEAN: NEW CONTRIBUTIONS FROM GEOCHEMICAL ASPECTS. (Franciele Trenton et al.)
- 31- LITHOLOGICAL AND DIAGENETIC CONTROLS ON CARBONATE CARBON AND OXYGEN ISOTOPES IN THE VACA MUERTA FORMATION (NEUQUÉN BASIN, ARGENTINA). (Tobías Muñoz et al.)
- 32- VOLCANIC ASH AS AN ACTIVE CONTROL ON THE IRATI OIL-SHALE SYSTEM IN THE UPPER ASSISTÊNCIA MEMBER, PARANÁ BASIN: BENTONITE-DRIVEN NUTRIENT PULSES, SEALING, AND CARBONATE–SILICA DIAGENESIS. (Guilherme de Souza Amaral et al.)
- 33- TOO YOUNG TO BE TRUE: LOW-TEMPERATURE HYDROTHERMAL Pb-LOSS IN DETRITAL ZIRCONS AND ITS IMPACT ON PERMIAN MAXIMUM DEPOSITIONAL AGES IN THE PARANÁ BASIN. (Guilherme de Souza Amaral et al.)
- 34- CARBONATE U-Pb GEOCHRONOLOGY AT THE UNIVERSITY OF BRASÍLIA: PITFALLS AND FUTURE PERSPECTIVES. (Guilherme Goncalves et al.)
- 35- WATER-COLUMN STRATIFICATION AND HYDROGRAPHIC RESTRICTION IN THE IRATI-WHITEHILL SEA, PARANÁ BASIN: ISOTOPIC AND GEOCHEMICAL EVIDENCE. (Jehniifer da Silva Paim et al.)
- 36- CONTRASTING SENSITIVITIES OF DETRITAL ZIRCON GEOCHRONOLOGY AND HEAVY MINERAL ASSEMBLAGES IN RECONSTRUCTING PROVENANCE EVOLUTION: THE PENNSYLVANIAN–PERMIAN PARNAÍBA BASIN, NE BRAZIL. (João Miguel Maraschin et al.)

## SESSION ISOTOPES IN SEDIMENTARY SEQUENCES (cont.)

37- STABLE AND RADIOGENIC ISOTOPE CONSTRAINTS ( $\delta^{13}\text{C}$ ,  $\delta^{18}\text{O}$ , AND  $^{87}\text{Sr}/^{86}\text{Sr}$ ) ON CARBONATE LENSES SOUTH OF THE PASSOS NAPPE, SOUTHERN BRASÍLIA BELT, BRAZIL. (Winicius Silva et al.)

38- EOCENE TO MIOCENE U–Pb GEOCHRONOLOGY OF CARBONATES AND PHOSPHATES FROM THE RIO GRANDE RISE (SOUTH ATLANTIC): IMPLICATIONS FOR SEDIMENTARY AND PALEOCEANOGRAPHIC EVOLUTION. (Giovanna Orletti et al.)

39- U-Pb AGES IN DETRITAL ZIRCON FROM INDEPENDENCIA GROUP, WESTERN PARANA BASIN, PARAGUAY. (Yennifer Sarubbi et al.)

40- EARLY PERMIAN ASH-FALL DEPOSIT IN THE RIO BONITO FORMATION CONSTRAINED BY LA-MC-ICP-MS U–Pb ZIRCON AGES, PARANÁ SEDIMENTARY BASIN, SANTA CATARINA, BRAZIL. (Neivaldo Araujo de Castro et al.)

41- TRACING MICRITE ORIGINS IN FLUVIAL CARBONATES OF THE SERRA DA BODOQUENA, MATO GROSSO DO SUL, BRAZIL: A MULTI-ISOTOPE APPROACH ( $\delta^{13}\text{C}$ ,  $\delta^{18}\text{O}$ ,  $\delta^{15}\text{N}$ ,  $\delta^2\text{H}$ ) TO DISTINGUISH METABOLIC AND KINETIC FRACTIONATION. (Ingrid Geraldino et al.)

42– EVALUATION OF THE POTENTIAL OF ZIRCON RAMAN DATING AS A NOVEL THERMOCHRONOLOGICAL TOOL (Airton Coelho et al.)

43 – SYSTEMATIC COMBINATORIAL FRAMEWORK FOR ZIRCON RAMAN SPECTROSCOPY OPTIMIZATION. (Antonio Said Webbe et al.)

44 - MONAZITE FISSION TRACK: A METHODOLOGICAL ADVANCE TO DATING RECENT GEOLOGICAL PROCESSES. (Airton Dias et al.)

## ORAL PRESENTATIONS - THURSDAY, APRIL 16

### AZUL AUDITORIUM

**Session** **Meso- and Neoproterozoic crustal evolution. Conveners: Mónica Heilbron; Miguel A. S. Basei.**

- 08.30 - 09.00** **Two billion years of recurrent deformation recorded on the northern tectonic front of the Dom Feliciano Belt. Dr. Mathias Hueck**
- 09.00 - 09.20** From Arc to Collision orogenic transition recorded by ortho and paragneisses from Vila Nova do Sul, Southernmost Brazil (de Toni et al)
- 09.20 - 09.40** Geophysical and Geochronological constraints on the Architecture and Evolution of Dom Feliciano Belt, South Brazil and Uruguay (Teixeira et al)
- 09.40 - 10.00** Dolerites of the Piedras de Afilar Formation (Uruguay): U-Pb age inheritance and insights for the Tandilia Terrane (Gaucher et al)
- 10.00 - 10.20** Assessing how deformation affects trace elements and U-Pb systematics in titanite and epidote (Agostinelli et al.)
- 10.20 - 10.40** Geology of the Ogden Rocks Formation: Tonian Successions at the Kaoko-Damara Orogenic Junction, Northwest Namibia (Rienti et al.)
- 10.40 - 11.00** Magma diversification during subduction to collision transition in a cordilleran magmatic arc (Neoproterozoic Araçuaí-Ribeira orogenic system, SE Brazil) (Mauri et al.)
- 11.00 - 11 -20** Isotopic Constraints on Tonian Rifting and Mantle sources in the Macaúbas Basin, San Francisco - Congo Paleococontinents (Souza et al.)
- 11.20 - 11.40** Tectonometamorphic Evolution of the Dom Silverio Complex, Southern Araçuaí orogen: Insights from lithochemical, isotopic and petrochronological data (Serrano et al.)

### 12.30 - 14.00 LUNCH TIME

- 14.00 - 14.20** Detrital zircon ages of the metasedimentary rocks of the Araguaia Belt, Brazil (Moura et al.)
- 14.20 - 14.40** A growth of the Neoproterozoic composite granitic batholiths and tectonic evolution of the southern Borborema, Brazil: insights from Nd isotopes and U-Pb dating (Ferreira et al.)
- 14.40 - 15.00** Isotopic data on sedimentary provenance of Statherian sequences from San Ignacio Schist Group, Precambrian Shield of Bolivia, SW of Amazonian Craton (Matos et al.)
- 15.00 - 15.20** Apatite U-Pb Geochronology as a powerful tool for tracing thermal overprints: evidence in the NW Amazonian Craton (Bonilla Perez et al.)
- 15.20 - 15.40** Mesoproterozoic magmatism of Pre-Brasiliano units in the Dom Feliciano Belt (Uruguay): geochemical, U-Pb and Sm-Nd constraints (de Armas Arriero et al.)
- 15.40 - 16.00** On the origin of Arroio Mudador Formation pillow lavas, RS, south Brazil (De Toni et al)
- 16.00 - 16.20** Hf isotopes of zircons from the outer arc system of the Neoproterozoic Araçuaí-Ribeira Orogenic System, Brazil: Sources and Tectonic Model (Miguel Tupinambá et al.)

### 16.30 - 18.00 COFFEE BREAK AND POSTER SESSION

## ORAL PRESENTATIONS - THURSDAY, APRIL 16

<b>DORADO AUDITORIUM</b>	
<b>Session</b>	<b>New frontiers in isotopic studies: Medical geology, Forensics, energy transition and analytical developments. Conveners. Anelize Bahniuk, Katja Deckart; Erich Moreira Lima</b>
<b>8.30 - 9.00</b>	<b>Latest test innovations in ICP-MS and MC-ICP-MS technology for accurate and precise elemental and isotope analysis in geological applications and beyond (Claudia Bouman)</b>
<b>9.00 - 9.20</b>	Determination of Mg isotope ratios by MC-ICP-MS: single-step purification protocol and analytical validation at CPGEO-USP (Carolina Bedoya-Rueda et al.)
<b>9.20 - 9.40</b>	High-Precision Fe Stable Isotope Analysis at the University of Chile: Analytical Implementation and Interlaboratory Validation (Maria Varas-Reus et al.)
<b>9.40 - 10.00</b>	Analysis of dissolved nitrate stable isotopes using the one-step Ti(III) reduction method and Elementar envirovisION System (Sam Barker)
<b>10.00 - 10.20</b>	Developments of a proficiency testing scheme for carbon and hydrogen isotopes ( $\delta^{13}\text{C}$ and $\delta^2\text{H}$ ) in natural gas matrices (Filipe de Medeiros et al.)
<b>10.20 - 10.40</b>	Selenium isotopes in carbonates as a potential paleoredox proxy (Benjamin Eickmann et al.)
<b>10.40 - 11.00</b>	Analysis of carbon, nitrogen, and sulfur isotopes by 3×EA/IRMS: a strategy to save energy and helium while reducing analytical time and costs (Jorge Spangenberg)
<b>11.00 - 11.20</b>	Position-specific isotope analysis as a tool to unravel the biological origin of fatty acids (Christian Hallmann)
<b>11.20 - 11.40</b>	Using plutonium isotopes ( $^{239}\text{Pu}$ , $^{240}\text{Pu}$ ) to better constrain the history of nuclear atmospheric fallout: Additional time markers for South America (Marcos Tassano)
<b>12.30 - 14.00 LUNCH TIME</b>	
<b>Session</b>	<b>Low temperature Geochronology. Conveners: Mauricio Parra; Mathias Hueck</b>
<b>14.00 - 14.30</b>	<b>Out-of-equilibrium behavior of in-situ (U-Th)/He geochronology due to intracrystalline redistribution of radiogenic He – modelling and experimental evidence (Mathias Hueck et al.)</b>
<b>14.30 - 14.50</b>	Thermal peaks in intracratonic basins: applications of zircon (U–Th)/He thermochronology in the Parnaíba Basin, northeastern Brazil (Samuel Lima et al.)
<b>14.50 -15.10</b>	U–Pb Dating of syngenetic dolostone: constraints of fluid-mafic rocks interactions and primary dolomite formation in the Brazilian pre-salt (Joao Pedro Santos de Brito et al.)
<b>15.10 - 15.30</b>	Neogene sedimentary provenance and tectonic evolution of the southern margin of the Caribbean plate: Detrital apatite fission track, U-Pb, and trace element analysis (Juan Atencio Gomez et al.)
<b>15.30 - 15.50</b>	Cenozoic Andean exhumation recorded in the Acre Basin, western Amazon: detrital apatite thermochronology and geochemistry (Julieth de los Reyes et al.)
<b>15.50 - 16.10</b>	Constraining the mineralization process of the world-class amethyst-agate geodes from Los Catalanes, Northern Uruguay: K-Ar and U-Pb geochronology. (Fiorella Ardouin et al.)
<b>16.10 - 16.30</b>	Timing and evolution of a shear zone: from granitoid emplacement to pseudotachylite formation (Leonardo Lopes et al.)
<b>16.30 - 18.00 COFFEE BREAK AND POSTER SESSIONS</b>	
<b>18:00 CLOSING AND FAREWELL CEREMONY</b>	

## POSTER PRESENTATIONS - THURSDAY, APRIL 16

### SESSION MESO- AND NEOPROTEROZOIC CRUSTAL EVOLUTION

- 1- NEW SHRIMP U-Pb ZIRCON AGES OF ORTHOGNEISSES AND GRANITES FROM EXTREME NW OF RONDÔNIA, SW AMAZONIAN CRATON, BRAZIL (Washington Barbosa Leite et al.)
- 2- TIMING OF STRIKE-SLIP SHEARING FROM U-Pb DATING OF SYNKINEMATIC MELTS AND PLUTONS: IMPLICATIONS FOR THE NEOPROTEROZOIC CRUSTAL EVOLUTION OF THE BORBOREMA PROVINCE (NE BRAZIL) (Sergio Neves)
- 3- THE NOVA MAMORÉ COMPLEX SEDIMENTARY PROTOLITHS (1480-1370 Ma) AND RIO BRANCO HILL SEDIMENTARY SEQUENCE (1480-1440 MA), SW AMAZONIAN CRATON: WERE THEY DEPOSITED IN THE SAME INTRACONTINENTAL RIFT BASIN SETTING? (Bruno Payolla et al.)
- 4- DETRITAL AGES IN THE OLDEST METASEDIMENTARY BASEMENT IN THE SANTANDER MASSIF-COLOMBIAN ANDES (Mauro Gerales et al.)
- 5- CRUSTAL EVOLUTION OF THE ARAÇUAÍ-RIBEIRA OROGENIC SYSTEM (AROS) REVEALED BY U-Pb AND Lu-Hf SYSTEMATICS OF INHERITED ZIRCON CRYSTALS FROM MAFIC DYKE SWARMS. (Raissa Santiago et al.)
- 6- U-Pb ZIRCON GEOCHRONOLOGY OF THE PASSOS NAPPE, SOUTHERN BRASÍLIA BELT: EVIDENCE FOR AN EOARCHEAN BASEMENT INLIER. (Elis Miguele Sá & Claudia Passarelli)
- 7- POLYMETAMORPHISM IN THE CENTRAL RIBEIRA BELT, SE BRAZIL: NEW CONSTRAINTS ON THE P-T-T-D EVOLUTION OF THE OUTER MAGMATIC ARC SYSTEM AND CABO FRIO TERRANE FROM PHASE EQUILIBRIA MODELLING AND MONAZITE-TITANITE GEOCHRONOLOGY. (Natalia Freitas et al.)
- 8- SEDIMENT PATHWAYS IN AN ANCIENT COLLISIONAL OROGEN: A PALEOGEO-MORPHOLOGICAL MODEL FOR THE SOUTHERN RIBEIRA BELT. (Larissa Santos et al.)
- 9- GOIÁS MAGMATIC ARC: ARE THE SANCLERLÂNDIA AND RIBEIRÃO SANTO AN-TÔNIO GNEISSES THE SAME UNIT? (Matheus Melo et al.)
- 10- FROM THE TONIAN TO THE EDIACARAN: SEDIMENTARY PROVENANCE AND RE-CONSTRUCTION OF THE EXTERNAL MAGMATIC ARC SYSTEM (OMAS) IN THE RIBEIRA OROGEN, SOUTHEASTERN BRAZIL. (Caroline Peixoto et al.)
- 11- TERRANE COLLAGE IN THE CENTRAL BORBOREMA PROVINCE, WEST GONDWANA DEDUCED BY ISOTOPIC AND GEOPHYSICAL DATA. (Lauro Santos et al.)
- 12- LITHIUM ISOTOPIC ( ${}^7\text{Li}$ ) SIGNATURE OF UHP RETROGRADE ECLOGITES FROM BORBOREMA PROVINCE, NORTHEASTERN BRAZIL. (Jeandro Vitorio et al.)
- 13- PRE- AND SYN-OROGENIC SEDIMENTATION AND VOLCANIC ACTIVITY IN THE INTERNAL DOMAIN OF THE SOUTHERN KAOKO-DOM FELICIANO- GARIEP OROGENIC SYSTEM (Jiri Konapasek et al.)
- 14- POLYPHASIC MAGMATISM AND HIGH-GRADE DEFORMATION IN THE SOUTHERN RIBEIRA OROGEN: INSIGHTS FROM THE CAMA DE ANCHIETA COASTAL OUTCROP (Claudia Passarelli & Miguel Basei)
- 15- DECIPHERING THE CRUSTAL GROWTH AND REWORKING HISTORY OF WESTERN GONDWANA: THE U-Pb AND Lu-Hf RECORD FROM THE SOUTHERN BORBOREMA PROVINCE (NE BRAZIL) (Fabio Pereira et al.)
- 16- RETROGRADE ECLOGITES OF THE NORTHEAST BRAZIL: IMPLICATION FOR THE ASSEMBLY OF WESTERN GONDWANA. (Ticiano Saraiva Santos et al.)
- 17- U-Pb DETRITAL ZIRCON AGES FROM THE SUNSÁS GROUP IN BOLIVIA: IMPLICATIONS FOR EVOLUTION OF SW OF AMAZONIAN CRATON. (Amarildo Ruiz et al.)

## SESSION MESO- AND NEOPROTEROZOIC CRUSTAL EVOLUTION (cont.)

- 18– A REVIEW OF NEOPROTEROZOIC PAN-AFRICAN MAGMATISM IN THE PARANAGUÁ TERRANE (RIBEIRA BELT, SOUTHERN BRAZIL) AND THE KAOKO BELT (NORTHWESTERN NAMIBIA) (Luiz Felipe da Costa et al.)
- 19– CHARACTERIZING THE NEOPROTEROZOIC MAGMATIC RESERVOIR BETWEEN THE SARANDÍ DEL YÍ AND SIERRA BALLENA SHEAR ZONES, URUGUAY: A REGIONAL Sr-Nd ISOTOPIC APPROACH. (Santiago Fort et al.)
- 20– NEW ZIRCON U-Pb AGES AND Hf ISOTOPE SIGNATURES FOR THE WESTERN CAÇAPAVA SHEAR ZONE (Matheus Simoes et al.)
- 21– ON THE ORIGIN OF ARROIO MUDADOR FORMATION PILLOW LAVAS, CAÇAPAVA DO SUL - RS, BRAZIL: REVIEW OF PREVIOUS ISOTOPIC ANALYSIS AND NEW SR-ND DATA. (Giusseppe de Toni et al.)
- 22– TIMING OF WHITE MICA GROWTH IN CRUSTAL-SCALE SHEAR ZONES IN THE NORTHERN CUCHILLA DIONISIO TERRANE, URUGUAY: EVIDENCE FROM Ar-Ar GEOCHRONOLOGY. (Thomas Will et al.)
- 23- NEW U-Pb AGES CONSTRAINTS AND Lu-Hf ISOTOPE DATA ON THE EVOLUTION OF THE SARANDÍ DEL YÍ SHEAR ZONE, URUGUAY. (Bruno Osta et al.)

## SESSION NEW FRONTIERS

- 24– GEOCHEMICAL AND ISOTOPIC EVOLUTION OF SUPERCRITICAL CO<sub>2</sub>-BASALT REACTIONS: IMPLICATIONS FOR CARBON STORAGE IN SOUTHERN CHILEAN PATAGONIA (Carolina Henriquez et al.)
- 25– LIMESTONES FROM THE JANDÁIRA AND CRATO FORMATIONS (NE BRAZIL) AS POTENTIALS CANDIDATES FOR  $\delta^{13}\text{C}$ ,  $\delta^{18}\text{O}$  AND  $^{87}\text{Sr}/^{86}\text{Sr}$  CERTIFIED REFERENCE MATERIALS (CRM). (Anderson Maraschin et al.)
- 26– U–Pb APATITE DATING BY LA-ICP-MS: IMPLEMENTATION AT CPGEO-IGC-USP, STANDARD DEVELOPMENT, AND INSIGHTS FROM THE RIBEIRA BELT. (Pinesky et al.)
- 27– METHOD VALIDATION FOR THE DETERMINATION OF HYDROGEN ISOTOPE RATIO IN LIGHT HYDROCARBONS (C1-C3) ACCORDING TO ISO/IEC 17025. (Naira Poerner Rodrigues et al.)
- 28– LITHIUM IS A POTENTIAL TRANSITION ENERGY SOURCE IN THE NEXT FEW YEARS: FIRST  $\delta^7\text{Li}$  ANALYZED IN THE LEPIDOLITE BY SHRIMP AT GEOLAB-IG-USP, BRAZIL. (Kei Sato et al.)
- 29– A NEW BASALTIC CERTIFIED REFERENCE MATERIAL FOR ANALYTICAL QUALITY ASSURANCE OF  $^{87}\text{Sr}/^{86}\text{Sr}$  ISOTOPIC ANALYSIS IN SOLUTION. (Déborah Coelho de Andrade et al.)
- 30– IMPROVED ZIRCON SEPARATION WORKFLOW FOR ENHANCING THE EFFICIENCY IN PROVENANCE STUDIES. (CAMILA ZUNINO ET AL.)
- 31– METHOD DEVELOPMENT FOR Sr ISOTOPES DETERMINATION IN SOYBEAN: PROSPECTS FOR GEOCHEMICAL TRACERS IN AGRICULTURE. (Artur Moraes et al.)
- 32 – CHARACTERIZING WINE TERROIRS IN SOUTHERN BRAZIL THROUGH MULTI-PROXY ISOTOPIC AND GEOCHEMICAL TRACERS. (Julia Correa et al.)

### **SESSION LOW TEMPERATURE GEOCHRONOLOGY (cont.)**

33- REASSESSING EXHUMATION MECHANISMS OF EARLY ANDEAN GROWTH: INSIGHTS FROM LOW-TEMPERATURE THERMOCHRONOLOGY AND TECTONO-STRATIGRAPHIC ANALYSIS ALONG THE MEJILLONES PENINSULA AND COASTAL CORDILLERA, NORTHERN CHILE. (Renato Cisternas et al.)

34- STANDARDLESS LA-ICP-MS FISSION-TRACK DATING AND THE COMPARISON WITH LA-IC-MS Z-CALIBRATION. (Cleber Soares et al.)

35- AGE OF THE TOPOGRAPHY IN THE SOUTHEASTERN BRAZILIAN ATLANTIC MARGIN: APATITE (U-Th)/He THERMOCHRONOLOGY IN THE SERRA DOS ORGÃOS, RIO DE JANEIRO (Samuel Lima et al.)

36- LOW TEMPERATURE THERMOCHRONOLOGY AND REE GEOCHEMISTRY IN DETRITAL APATITE: INSIGHTS FROM THE EOCENE FORELAND BASIN AT 28°S AND THE GEOMETRY OF THE INCAIC OROGEN, NW ARGENTINA. (Sara Thomas)

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