



## SECOND CIRCULAR

### INVITATION

The **Earth Sciences Department** of the Faculty of Chemical Sciences of the **University of Concepcion**, along with the **Chilean Geological Society** and the **Chilean School of Geologists** are pleased to invite you to participate in the **XV Chilean Geological Congress "Geoscience toward the Community"** to be held at the Main Campus of the University of Concepcion (Concepcion, Chile) on **18 -23 November, 2018**.

### WEBSITE

As of today the official website of the XV Chilean Geological Congress is available at: [www.congresogeologicochileno.cl](http://www.congresogeologicochileno.cl)

This website contains relevant information on the Congress and also constitutes the digital platform especially designed to support the Organizing Committee during the registration period and the submission of session proposals (please see below). Furthermore, the website will also be the means for the submission of abstracts and editing. The website along with the facebook fanpage at ([www.facebook.com/congresogeologicochileno](https://www.facebook.com/congresogeologicochileno)) will be the official communication channels of the Congress.

### ORGANIZING COMMITTEE

The organization of the XV Chilean Geological Congress has been granted to the Earth Science Department of the University of Concepcion (DCT-UdeC), which shares the responsibility with members of the boards of the Chilean Geological Society (SGCh) and the Chilean School of Geologists (CG), as follows:

XV CGCH





# XV CONGRESO GEOLÓGICO CHILENO

*“Geociencias hacia la comunidad”* CONCEPCIÓN

18-23  
NOV  
2018

President: Andrés Tassara Oddó, Earth Sciences Department,  
Faculty of Chemical Sciences, University of Concepcion

Vice –President: José Cabello Lechuga, Chilean Geological Society

Past –President: Patricia Narvárez Dinamarca, Chilean School of  
Geologists

Secretary: Joaquín Cortés Aranda, Earth Sciences Department,  
Faculty of Chemical Sciences, University of Concepcion

Deputy-Secretary: Verónica Oliveros Clavijo, Earth Sciences  
Department, Faculty of Chemical Sciences, University of  
Concepcion

Treasurer: Fernanda Álvarez Amado, Earth Sciences Department,  
Faculty of Chemical Sciences, University of Concepcion

Deputy-Treasurer: Juan Carlos Marquardt Lechuga, Chilean School  
of Geologists

Editor: Reynaldo Charrier González, Chilean Geological Society

Co-Editor: Millarca Valenzuela Picón, Chilean Geological Society

## IN MEMORIAM

The XV Chilean Geological Congress (CHGC) is dedicated to the memory of Mr. Ernesto Pérez D’Angelo (1932 – 2013), renowned Geologist, Paleontologist and Professor.

## SCIENTIFIC PROGRAM

The structure of the XV Chilean Geological Congress (CHGC) will be based in two main axes that group 11 Thematic Areas (TAs). Axis 1 **Geosciences, Society and Sustainable Development** groups 4 TAs that relate geosciences with the national community, both as a social entity and as subject of the socio-economic

XV CGCH





development of the country. Axis 2 **Basic Research in Geosciences** groups 7 TAs which describe the latest advances in basic scientific research.

Each TA will consist of sessions proposed directly by the members of the geoscientific community. The Editorial Committee will review these proposals and will define the final sessions. These sessions will receive the individual abstracts submitted by Congress participants.

The 11 TAs that will structure the Congress grouped by their corresponding axes are described below ([www.congresogeologicochileno.cl/areas-tematicas](http://www.congresogeologicochileno.cl/areas-tematicas)). These descriptions also include the names of the two coordinators for each Thematic Area. The first coordinator is a national expert of the discipline and the second coordinator is an academic at the University of Concepcion. The group of 22 coordinators, along with Dr. Reynaldo Charrier (Editor of the Organizing Committee) conform the Scientific Committee of the XV Chilean Geological Congress.

## E1 GEOSCIENCES, SOCIETY AND SUSTAINABLE DEVELOPMENT

### E1.1-GEOS Geosciences and Society

**José Cabello** (Chilean Geological Society) and **Cindy Mora-Stock** (Earth Sciences Department, UdeC)

This Thematic Area aims to reflect the main subject of the Congress "Geosciences toward Community" by reflecting the growing interest of the geosciences community in outreach and the direct applications of the discipline in societal issues. We encourage session proposals concerning: geosciences in (pre-) school education; geoheritage characterization and conservation; the involvement of geologists in the design of public policies; history of geosciences; adaptability to





climatic change from geology; geosciences, art and culture; geosciences and gender (in)equalities; work ethics, among other subjects.

### **E1.2-PRIN Natural Hazards and Risks**

**Gabriel González** (Department of Geological Sciences, UCN) and **Ignacia Calisto** (Geophysics Department, UdeC)

This Thematic Area aims grouping sessions oriented to the multidisciplinary study of geological (earthquakes, tsunamis, volcanic eruptions, mass wasting processes) and hydrometeorological (torrential rains, floods, droughts and fires) phenomena from a hazard and risk standpoint. Sessions should not address the physical aspects behind these phenomena but those dealing with the characterization, assessment and communication of the related hazard and risk. They may include the presentation of new methods in hazard and risk assessment like numerical modeling, probabilistic simulations, and applications to territorial planning.

### **E1.3-RENE Mineral and Energy Resources for Society**

**Martin Reich** (Geology Department, UCh) and **Oswaldo Rabbia** (GEA, UdeC)

This Thematic Area involves the comprehensive study of the Andean system as a source of mineral and energy resources for society. We expect session proposals describing new advances in the understanding of mineral deposits and ore-forming processes, and topics integrating different methodologies applied to the identification of new mining or energy prospects. Proposals that include new challenges for the extraction of ores and hydrocarbons are also welcomed, including contributions from geostatistics, geometallurgy and geomechanics areas. The study of non-conventional renewable energy sources, in particular in geothermal energy, will have special relevance in this session.

### **E1.4-GIAM Engineering and Environmental Geology**

**Sergio**

XV CGCH





**Sepúlveda** (Geology Department UCh, Facultad of Engineering UOH) and **Ursula Kelm** (GEA, UdeC)

This Thematic Area will receive proposals of sessions in which different disciplines of geosciences converge with other professional areas toward solving applied problems. Proposed sessions should attract abstracts about geotechnics and geology applied to civil works and mining; hydrogeology, characterization of underground water reservoirs, studies about aquifer pollution and remediation; soil geology and its role in agriculture and viticulture; geological studies in the evaluation of environmental impact, among others.

## E2 BASIC RESEARCH IN GEOSCIENCES

### E2.1-GMPE Geomorphology and Exogenic Processes

**Rodrigo Riquelme** (Department of Geological Sciences, UCN) and **María Mardones** (Earth Sciences Department, UdeC)

This Thematic Area will group sessions oriented to discuss exogenous processes taking place at the Andean Margin, including: weathering, erosion, transport and deposit of sediments in active basins both sub-aerial and sub-marine (marine geology); landscape characterization and evolution from the perspective of quantitative and qualitative morphological analysis; acquisition, processing and analysis of digital elevation models and/or drone, plane and satellite data; mountain glaciers and periglacial processes, and their interaction with other geological processes; the study of desert zones, zones with scarce hydric resources; climatic-meteorological constrains in extreme exogenous processes; Late Cenozoic geomorphological evolution of the landscape and its link with Andean tectonic processes.

### E2.2-MAGM Magmatism and Metamorphism

XV CGCH





**Mauricio Calderón** (Geology, UNAB) and **Verónica Oliveros** (Department of Earth Sciences, UdeC)

The construction of the South American continent through amalgamation of cratons and other lithospheric blocks, along with evolution of the Andean margin will be approached from a magmatic and metamorphic perspective in this Thematic Area. Session proposals that integrate petrological, petrophysical, geochemical, geochronological and field data in order to constrain crustal evolution and its interaction with the subcontinental lithospheric and sub-arc mantle will be welcomed. Other aspects that can be covered in this area are the characterization of orogenic cycles and temporal and spatial scales of subduction processes and crustal recycling.

### **E2.3-VOLC Volcanology**

**Luis Lara** (Sernageomin) and **José Palma** (Earth Sciences Department, UdeC)

The Andean volcanic arc is an outstanding natural laboratory for studying the dynamics and structure of active volcanoes at different spatio-temporal scales and from multiple methodological perspectives. Into this context, we encourage session proposals considering topics such as: assessment of modern volcanic processes and products; instrumental monitoring of volcanic systems and characterization of their activity; conceptual and numerical models on the internal dynamics of active systems, among others. Session proposals on multidisciplinary studies of recent eruptive or critical events of Andean volcanoes are also welcome.

### **E2.4-ESEG Structure and Geodynamic Evolution**

**Marcelo Farías** (Geology Department, UCh) and **Andrés Tassara** (Earth Sciences Department, UdeC)

The Andean Cordillera, as an archetype of orogenic belts build on ocean-continent





subduction zones, is the center of sessions proposed to this Thematic Area. These sessions should deal with the internal structure and temporal evolution of the Andean margin from a geodynamic perspective, with emphasis on processes dominating the pre-Andean (pre-Jurassic) and Andean (Jurassic-Recent) orogenic cycles. We expect session proposals integrating geologic and geophysical data to analyze the tectonic force balance behind the present-day Andean belt, as well as the tectono-stratigraphic and structural evolution of the different orogenic cycles and their geodynamic context.

### **E2.5-SINT Seismotectonics, Neotectonics and recent Earthquakes**

**Daniel Melnick** (Earth Sciences Institute, UACH) and **Joaquín Cortés** (Earth Sciences Department, UdeC)

The Chilean Subduction Zone has nested different styles of seismic activity, including some of the largest interplate earthquakes worldwide. This Thematic Area will include sessions relative to multidisciplinary studies (geodesy, seismology, geology) about: the seismogenic segmentation of the megathrust and/or crustal fault systems at different spatial-temporal intervals; paleoseismology and neotectonics of active crustal faults and the assessing of its seismogenic potential; recent large Chilean earthquakes (e.g. the Maule 2010, Iquique 2014, Illapel 2015 and Chiloé 2016 earthquakes).

### **E2.6-ESSP Stratigraphy, Sedimentology and Paleontology**

**Sven Nielsen** (Earth Sciences Institute, UACH) and **Alfonso Encinas** (Earth Sciences Department, UdeC)

Sedimentary basins developed during the evolution of the Andean margin include a unique and particular record of geological processes related to their creation, structuring, burial and exhumation. This Thematic Area will be devoted to sessions that: allow an integral analysis of the stratigraphy, sedimentology,





environments and paleontological record of individual sedimentary basins or that perform comparative analyses between different basins; present new fossiliferous findings and their geological context and/or (re)define stratigraphic units based on new evidence; analyze particular sedimentary environments from a petrographic, petrologic and/or geochronologic perspective. This Thematic Area will accept sessions related to the sedimentological aspects of Marine Geology.

### **E2.7-AEGS Emergent Fields in Geosciences**

**Millarca Valenzuela** (Millennium Institute of Astrophysics, PUC) and **Fernanda Álvarez** (Earth Sciences Department, UdeC)

This Thematic Area is reserved to session proposals that involve new lines of research associated with emergent fields of geosciences or that explore boundaries with other sciences, and therefore are difficult to group into other Thematic Areas. Sessions presenting important methodology innovations within established disciplinary areas will be also welcomed. Some examples of potential sessions are: planetary geology, meteoritics, astro-bio-geology; biogeochemical cycles; geomedicine; information and communication technologies for geology; use of drones in geological mapping, etc.

### **Open call for session proposals**

Each Thematic Area (TA) will consist of **sessions directly proposed by members of the geoscientific community**. Along with the publication of this Circular, the Organizing Committee makes a wide and open call to groups of 2 (minimum) to 5 (maximum) members of the geosciences community to submit their session proposals, using the online platform available at [www.congresogeologicochileno.cl/envio-de-propuesta-de-sesiones](http://www.congresogeologicochileno.cl/envio-de-propuesta-de-sesiones). This platform includes a form that must be filled out with the information of the proponents, the Primary Thematic Area (and –eventually–





secondary) to which the Session is proposed, the title of the session and a description of maximum 150 words. **The deadline for submission of session proposals is September 10, 2017.** The Scientific Committee will review the submitted sessions and define the final sessions which will compose the Congress Program. **On November 19, 2017 –a year before the inauguration of the Congress- the online platform will be available for registration and submission of abstracts. The initial deadline for submission of abstracts is May 18, 2018.** Editorial regulations for abstracts and the editing procedure is being defined by the Scientific Committee. The proponents of the sessions incorporated in the Program will review the submitted abstracts and define, along with the Scientific Committee, the conformation of oral and poster presentations within their corresponding session.

### REGISTRATION FEES

Registration process will begin on November 19, 2017 through the website. There are 3 registration periods with increasing fees until the beginning of the Congress, as follows:

#### I. EARLY BIRD REGISTRATION: FROM NOVEMBER 19, 2017 UNTIL MAY 18, 2018

Category	CLP
Members	200.000
Non Members	260.000
Undergraduate Students	80.000
Graduate Students	90.000
Accompanying Person	90.000

#### II. FIRST LATE REGISTRATION: FROM MAY 19, 2018 UNTIL AUGUST 17, 2018

XV CGCH





Category	CLP
Members	230.000
Non Members	300.000
Undergraduate Students	120.000
Graduate Students	130.000
Accompanying Person	130.000

**III. SECOND LATE REGISTRATION: FROM AUGUST 18, 2018 UNTIL THE BEGINNING AND DURING THE CONGRESS**

Category	CLP
Members	270.000
Non Members	350.000
Undergraduate Students	140.000
Graduate Students	140.000
Accompanying Person	140.000

- Registration fee includes the attendance to all scientific events, opening reception, coffee breaks, congress material and digital certificate. The opening and closing ceremonies are included. Registration fee does not include pre and post Congress courses and excursions.
- Annulments must be presented in writing to the Organizing Committee until August 17, 2018. The reimbursement will correspond to the amount of the registration fee minus 15%. After that date the annulment cost will be 50% of the registration fee.
- No annulments will be accepted and no reimbursements will be made after October 18, 2018.





Each participant will belong to a specific category, as follows:

**Members:** Active members (whose social contributions are paid as of May 10, 2018) of the Chilean Geological Society, Chilean School of Geologists or Argentinian Geological Association (in accordance with the agreement with the SGCh). We urge colleagues who are not yet active members of these institutions to update their membership before May 10, 2018, with the double purpose of contributing to the financing of these institutions and saving money in their registration fee.

**Students:** Undergraduate and Graduate students must submit a valid certificate issued by the corresponding academic institution. There is a limited number of attending quotas for undergraduate students who do not submit an abstract. The Organizing Committee, along with student's associations and the Heads of the corresponding Undergraduate Careers, will define a strategy in order to ensure a fair and equitable attendance of undergraduate students. It is relevant to point out the Organizing Committee will arrange streaming transmission of oral presentations and invited lectures. This will be a channel towards the community, particularly towards undergraduate students who will not be able to attend.

**Accompanying person:** Registration fee includes only participation in social activities.

### Invited Lectures

A renowned expert of international recognition will participate as an invited speaker for each Thematic Area (TA). The 2 coordinators of each Thematic Area

XV CGCH





(TA) will propose the names of the invited speakers for their AT to the Organizing Committee. The Organizing Committee will extend the corresponding invitation. The coordination for the designation of invited speakers is a work in progress and the information will be available via our website.

### Excursions and Courses

The activities of the Chilean Geological Congress (CHGC) include Pre and Post Congress excursions and courses. The Organizing Committee will receive proposals for these activities. Members of the geosciences community interested in proposing excursions or courses may approach the Organizing Committee via the website or via email [congresogeologico2018@gmail.com](mailto:congresogeologico2018@gmail.com). Information on excursions and courses will be available through the website.

**The website of the Chilean Geological Congress will be periodically updated:**

**[www.congresogeologicochileno.cl](http://www.congresogeologicochileno.cl)**

### Contact

Organizing Committee XV Chilean Geological Congress.  
Earth Sciences Department, Faculty of Chemical Sciences, University of  
Concepcion  
Address: Víctor Lamas 1290, Casilla 160-C, Concepción, Chile.

XV CGCH





# XV CONGRESO GEOLÓGICO CHILENO

*“Geociencias hacia la comunidad”* CONCEPCIÓN

18-23  
NOV  
2018

Chilean School of Geologists A.G.

Address: Valentín Letelier 20, of 401, Casilla 13667, Correo 21, Santiago,  
Chile.

Email: [congresogeologico2018@gmail.com](mailto:congresogeologico2018@gmail.com)

XV CGCH

