

24 May 2025



CONFERENCE OF THE PARTIES TO THE INTER-AMERICAN INSTITUTE FOR GLOBAL CHANGE RESEARCH Thirty-Third meeting Asunción, Paraguay 29-30 May 2025 Agenda item 9c

Article XI Associates of the Institute of the Agreement establishing the inter-American institute for Global Change Research

Venezuelan Institute for Scientific Research (IVIC)

1. This document has been prepared by the permanent representative of Venezuela.

Background

2. Article XI, paragraph 1 of the Agreement establishing the inter-American Institute for Global Change Research states:

The Conference of the Parties may invite States outside the region, regional or international intergovernmental organizations, and industries and other nongovernmental and private organizations interested in supporting the Scientific Agenda and programmatic activities of the Institute, to become Associates of the Institute.

- 3. At the time of writing, twelve organizations have been invited by the Conference of the Parties to become Associates of the IAI. These organizations are the:
 - Alexander von Humboldt Research Institute of Biological Resources
 - American Association for the Advancement of Science (AAAS)
 - Center for Climate and Resilience Research (CR2)

- Center for Global Change Research (CICAG)
- Center for International Earth Science Information Network (CIESIN)
- Fundação Amparo Pesquisa Inovação do Estado de Santa Catarina
- Fundação de Amparo à Pesquisa do Estado de São Paulo
- Future Earth
- Mitacs Canada
- Rede Clima
- Universite of West Indies (UWI)
- Water Center for the Humid Tropics of Latin America (CATHALAC)
- 4. In accordance with Article XI of the *Agreement*, Associates may participate as observers to meetings of the Conference of the Parties; and collectively nominate one members of the Scientific Advisory Committee on the basis of a procedure to be agreed among them.

Venezuelan Institute for Scientific Research (IVIC)

5. In light of the above, and of the selected reasons below, Venezuela invites Parties to consider extending an invitation to the Venezuelan Institute for Scientific Research (IVIC) in Caracas, Venezuela, to become an Associate of the IAI.

IVIC - Historical and regional reference in scientific research

Founded in 1959, the Venezuelan Institute for Scientific Research (IVIC) focuses its efforts on promoting the application of science to serve society through the collaborative and interactive work of its 18 research centers and 2 departments. It also has the support of service, administrative, and departmental units created to facilitate the interface between science and society.

Yearly, IVIC executes more than 400 research projects. Through an interdisciplinary and interinstitutional effort, the 300 IVIC's researchers annually generate an important of concrete scientific products, including, primarily, specialized articles in high-impact international journals, as well as numerous books and book chapters, consolidating its leadership and international recognition, not only as the main research institution of Venezuela, but as one with very high regional influence.

In addition to research, IVIC promotes teaching and human resource training in science and technology at the doctoral and master's levels through the Center for Advanced Studies. Likewise, IVIC supports the development of scientific and technological talent, encouraging the incorporation of new researchers and training young professionals in the use of new techniques, scientific equipment, and research methodologies, in accordance with national and regional priorities.

Recently, IVIC's capabilities in global change research were expanded with the inauguration of the Center for Studies of the Global Environmental Crisis, the Center for Oceanology and Antarctic Studies, and the Center for Atmospheric Sciences and Biogeochemistry.

IVIC – Its commitment to the study of regional and global issues generated by a new climate reality

Taking advantage of its existing human, academic, and physical capabilities, IVIC has made and continues to make constant efforts to guarantee the necessary conditions for the study of a new climate reality, a topic of extreme relevance, related to a problem that has emerged abruptly and has the potential to generate significant impacts at different time and space scales, in highly strategic aspects, both nationally and regionally, such as food security, health security, environmental security, and/or energy security.

As a result of this effort, IVIC has become a reliable provider of climate services aimed at providing decision-makers, the scientific community, and society at large with timely and sufficient information with direct application in identifying the most appropriate adaptation and/or mitigation practices, as well as the identification of potential risk and vulnerability situations and areas, based on solid evidence on the current and future dynamics of extreme weather events and their potential direct and indirect impacts on food security, health security, environmental security, and/or energy security in Venezuela and/or the region.

Nowadays, IVIC houses the CLIMATE CHANGE SERVICES SYSTEM (S2C2-IVIC). S2C2 is an interdisciplinary scientific system for generating reliable climate services for forecasting, monitoring, and predicting the impacts of the new national, regional, and global climate reality. Research led by S2C2-IVIC has enabled the generation of reliable predictive models based on monitoring sea surface temperatures and the concomitant occurrence and persistence of marine heat waves in different oceanic regions, and the identification of correlations at different temporal and spatial scales with precipitation dynamics in terrestrial systems. Its applicability has already been demonstrated in various biomes, macro-basins, and geographic regions in South America, not only in describing the dynamics of extreme events, but also in two fundamental aspects: identifying their origin and formulating a forecast.

For example, S2C2-IVIC models made it possible to predict, more than a year in advance, the megadrought that began in 2019 and currently persists in vast regions of South America, specifically in the Paraná River basin, severely affecting not only the ecosystem functioning of important natural regions (e.g., Pantanal, Cerrado, Chaco, Atlantic Forest, Pampa, etc.), but also the sustainability of important anthropogenic activities in the region related to the production of food and goods, as well as river transport and international trade. The impact of this megadrought on the economies of Brazil, Argentina, Paraguay, and Uruguay is very evident and has been described as even more severe than that generated in the region by the COVID-19 pandemic.

As a complement to the generation of timely and reliable climate services, S2C2-IVIC's current efforts are focused on generating a near-real-time prediction system for infectious disease outbreaks in response to the most recent oceanic and climate trends.

Recommendation

6. Venezuela invites the Conference of the Parties to consider that the Venezuelan Institute for Scientific Research (IVIC) meets the requirements under Article XI of the *Agreement* to become an Associate organization of the IAI.

7.	The Conference of the Parties is invited to consider adopting the draft decisions contained in the Annex to the present document.

Annex

Draft decisions of the Conference of the Parties

Invitation to become an Associate of the Institute

Directed to Parties

XXXIII/xx. The Conference of the Parties is encouraged to invite the Venezuelan Institute for Scientific Research (IVIC) to become an Associate of the Institute.

Directed to the IAI Directorate

XXXIII/xx On behalf of the Conference of the Parties, the IAI Directorate is tasked with drafting an invitation to Instituto Venezolano de Investigaciones Científicas (IVIC) to become an Associate of the Institute and preparing an Agreement of Association which shall specify the areas of the Scientific Agenda and / or programmatic activities that will be supported by the Associate, and the modalities of such support.