

INTERDISCIPLINARY GEOSCIENCE (IG) SECTION

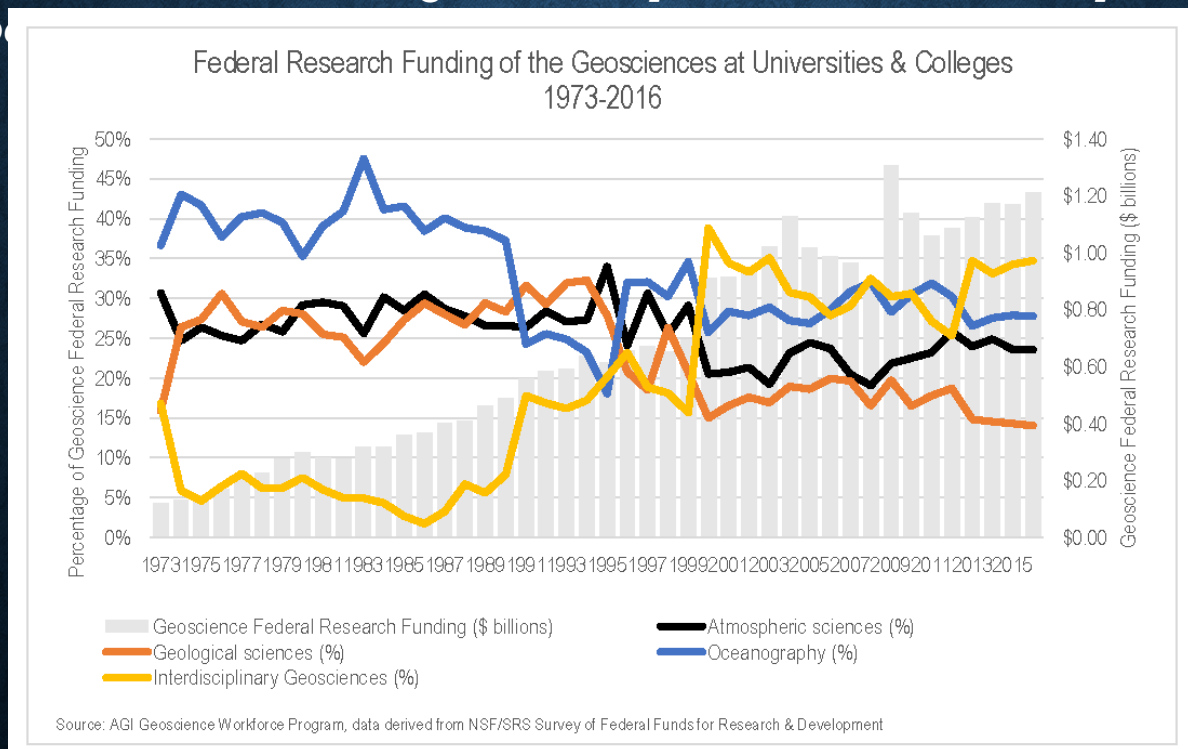
Section President

Ping-Yu Chang

Introduction of Interdisciplinary Geosciences (IG)

- **IG includes all geoscience themes that cross disciplinary boundaries.**

For example: *natural hazards, energy, resources, geoscience education & outreach, earth-atmosphere interaction, global environmental change, coastal processes, catchment processes, geoarchaeology, remote sensing, paleontology*



Section committees (1 president, 1 VP, and 6 secretaries)



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IG Section Distinguished Lectures

- **Distinguished Lecture:**

Sustained (**for at least 10 years**) outstanding performance in academic records (e.g., **publications**) in interdisciplinary geosciences, and better to be **born or work in Asia**.

- **Kamide Lecture:**

<35 years old (or **<7 years after doctoral level degree**), and has **good performance** in his/her academic records.

Section Distinguished Lectures of 2020-2021

DISTINGUISHED LECTURE – IG



Tian-Chyi Jim **YEH**
University of Arizona

- **Lecture title:**
"Principle of Parsimony, Scales, and Fake Sciences"

KAMIDE LECTURE – IG



Jeong-Hyun **LEE**
Chungnam National University

- **Lecture title:**
"Linking the early development of Paleozoic reefs to marine oxygenation"

Interdisciplinary Geosciences(IG) sessions accepted of AOGS2021-IT

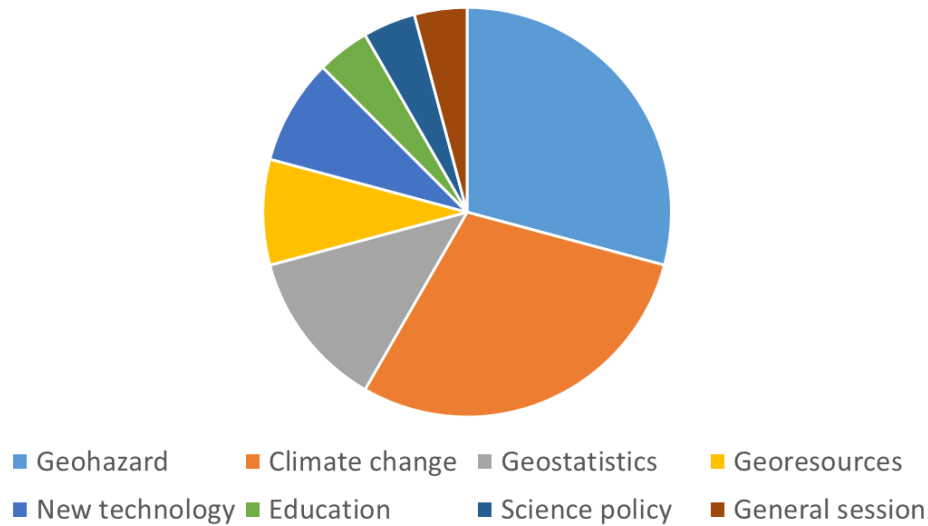
ID	Title	Primary convenor	Category
IG01	Natural Hazards and Disaster Risk	Dr Vena Pearl Bongolan	Geohazard
IG02	Near Surface Investigation and Modeling for Groundwater Resources Assessment	Prof Chuen-Fa Ni	Georesources
IG03	Interdisciplinary Research on Water-related Disasters and Practical Applications for Disaster Risk Reduction	Dr Anawat Suppasri	Geohazard
IG04	General Relativity Theory and Earthquakes	Mr Bakhram Nurtaev	Geohazard
IG05	Identification, Mapping, Monitoring and Forecasting of Landslide and Erosion Processes	Prof Chih-Chung Chung	Geohazard
IG06	Data-driven Modeling in Geoscience	Dr Shunichi Nomura	Geostatistics
IG08	Geoscientific Model Evaluation and Multi-model Probabilistic Projections	Prof Roman Olson	Climate change
IG09	The 2020 Australian and United States Wildfires: Impacts and Relevance to Future Conditions	Dr Jean-François Lamarque	Geohazard
IG10	Sea Level Change: Past, Present, And Future	Dr Timothy Shaw	Climate change
IG11	Meteorological and Climatological Extreme Events and Related Impacts	Prof Gregor C. Leckebusch	Climate change
IG12	Data Science and Machine Learning for Geohazards	Prof Kejie Chen	Geostatistics
IG13	Life Cycle of Mountain Hazards: Initiation, Warning, Migration, and Beyond	Dr Hui Tang	Geohazard
IG14	Evolution and Impacts of the Asian Summer Monsoon	Prof Peter Clift	Climate change
IG15	Earthquakes Related Cascading Hazards Over Multiple Timescales	Dr Shanshan Li	Geohazard
IG16	Processes and Results of Interaction Between Fluids and Rocks from the Surface to Deep Inside the Earth - View from Resources to Hazards	Prof Fuqiong Huang	Georesources

Interdisciplinary Geosciences(IG) sessions accepted of AOGS2021-(II)

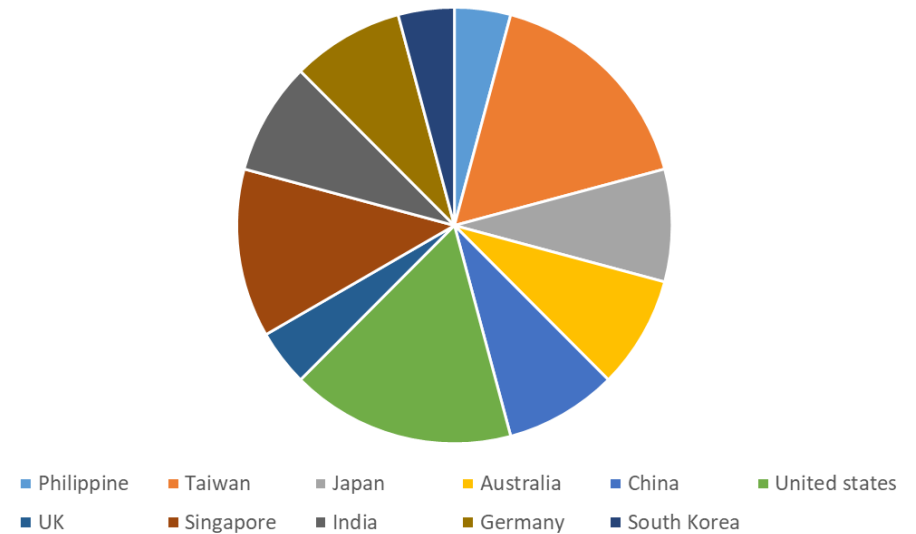
ID	Title	Primary convenor	Category
IG17	Novel Approaches to Constructing Multidisciplinary Geoscientific Models and Understanding Their Uncertainty	Dr Mark Lindsay	Geostatistics
IG18	Data-driven Approaches for Studying the Monsoon Phenomenon	Dr Balaji Devaraju	Climate change
IG19	Regional Climate Risk Assessment: Inter-/multi-disciplinary Approaches	Dr Serena Lee	Climate change
IG20	Tropical Hydroclimate Changes in the Past and Insights for Future	Dr Xianfeng Wang	Climate change
IG21	Virtual - Active Geodynamics, Deformation, Growth and Palaeoclimatic Reconstructions from the Himalayan Region	Dr Debasis D. Mohanty	New technology
IG22	Geo-science Education in the 21st Century	Mr Hoe Teck Tan	Education
IG23	Regional Collaborative Research on Air Pollution Sensing and Health in Asia	Prof Shih-Chun Candice Lung	Science policy
IG24	General Session - Interdisciplinary Geosciences	Dr Ping-Yu Chang	General session
IG25	Earth Observations from a New Generation of Geostationary Satellites	Dr Ramakrishna Nemani	New technology

Interdisciplinary Geosciences(IG) sessions accepted of AOGS2021-(III)

IG proposal by categories



Proposals by P.C.'s Region/Country



Future research challenges for Interdisciplinary geoscience

(From: A Vision for US NSF Earth Sciences 2020-2030: Earth in Time(2020))



- How is Earth's internal magnetic field generated? .



- When, why, and how did plate tectonics start?



- How are critical elements distributed and cycled in the Earth?



- What is an earthquake?



- What drives volcanism?



- What are the causes and consequences of topographic change?



- How does the critical zone influence climate?



- What does Earth's past reveal about the dynamics of the climate system?



- How is Earth's water cycle changing?



- How do biogeochemical cycles evolve?



- How do geological processes influence biodiversity?



- How can Earth science research reduce the risk and toll of geohazards?

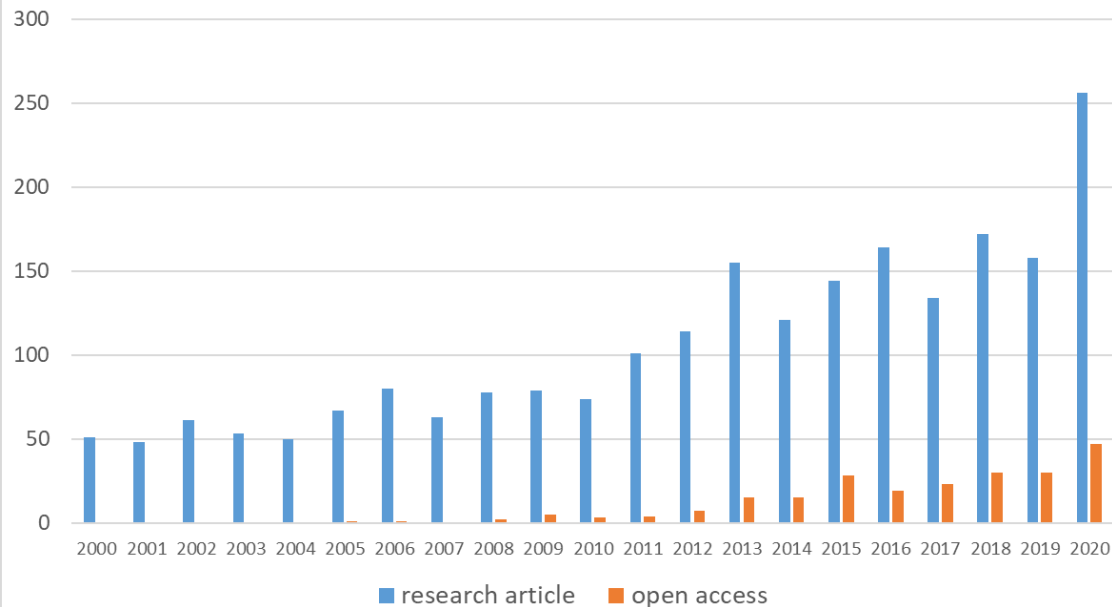
Interdisciplinary geoscience A.P. (After the Pandemic)

■ Open Access publications

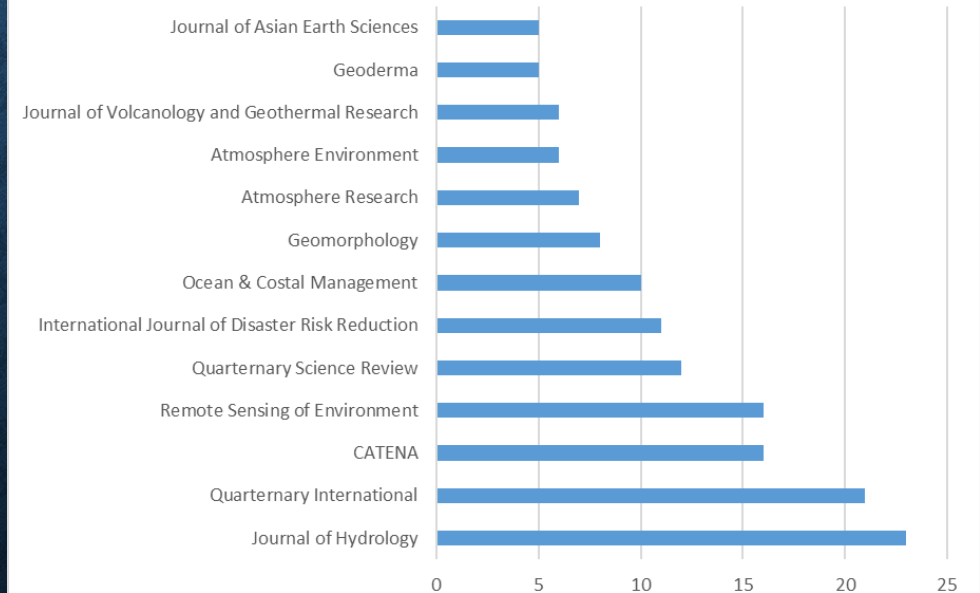


*With effect from 2021, all scholarly publications on the results from research funded by public or private grants provided by national, regional and international research councils and funding bodies, must be published in **Open Access Journals**, on **Open Access Platforms**, or made immediately available through **Open Access Repositories without embargo**.*

publication (Earth and Planetary Sciences)



2020 published IG papers in journals





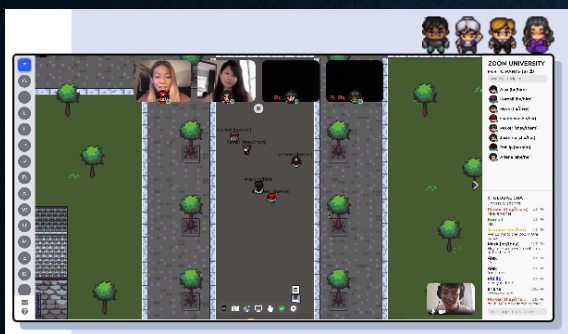
■ Open data/paper/scientific-code repositories

Ex. European Space Agency(<https://www.esa.int/>); NOAA(<https://www.ncdc.noaa.gov/data-access/satellite-data/satellite-data-access-datasets>); Ever-est(<https://ever-est.eu/>); Researchgate (<https://www.researchgate.net/>) ; Github.....etc.



■ Virtual workshops/meetings (for limited interest members)

Ex. Zoom; Webex; Google Meet; Skype; Microsoft teams; VooV meeting(騰訊會議).....



■ On-line conferences

*Ex. **Gather.town** ; (or Nintendo Switch “Animal Crossing”!)*

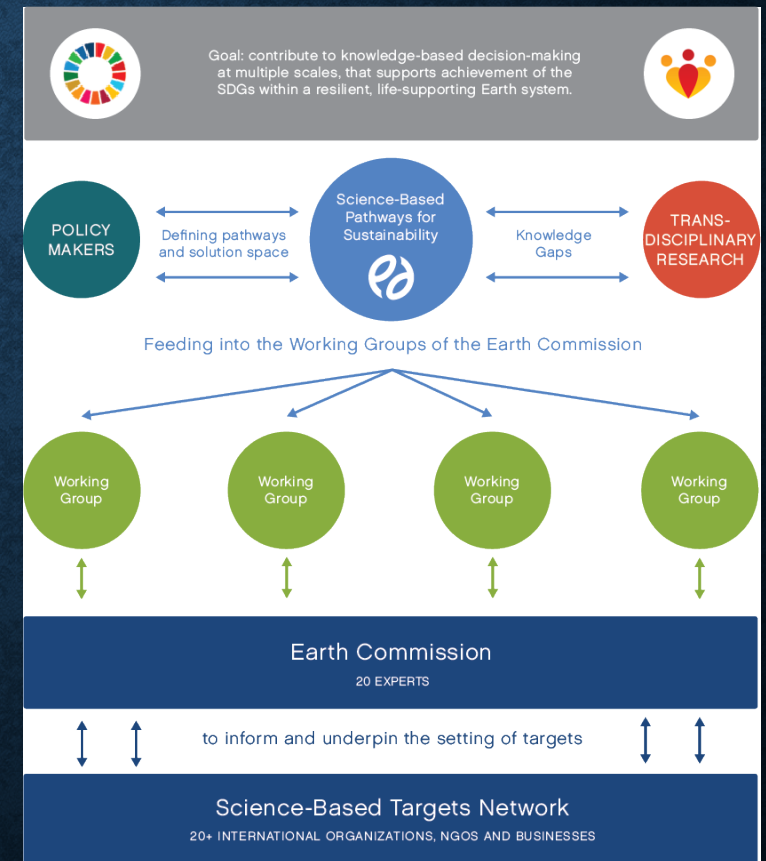
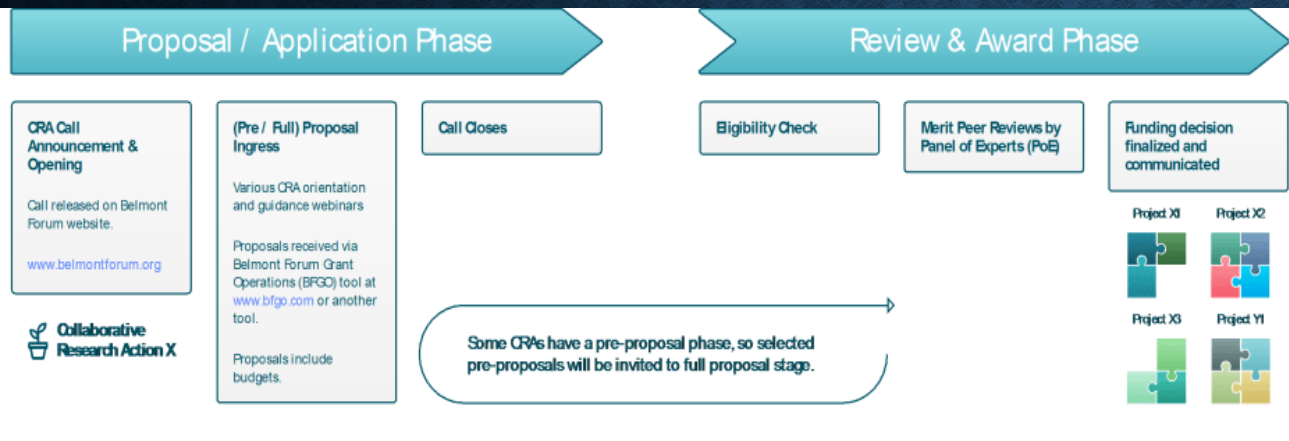
International funding/cooperation opportunities for Interdisciplinary Geosciences



<https://www.belmontforum.org>

futureearth

<https://futureearth.org/>



How do we prepare for the Interdisciplinary geoscience A.P.?

- Submit your paper to Open Access journals(ex. “Geoscience letters” by AOGS)
- Use the SNS media (e.g., FB, Tweeter, Weibo....) to promote your research & papers
- Attend the virtual workshop to reach the interest professional groups
- Take advantage of the open data/codes repositories
- Keep good research records on the social networking sites, such as ResearchGate or Academia.edu....
- Try to locate the regional issues that are concerned by the local society
- Reachout to the stakeholders, fellow scientists, or funding institutions
- Try to serve for the academic organization management or to organize a regional event
- Do good and honest science!

Important Notice and Deadlines

AOGS2021 VIRTUAL

18TH ANNUAL MEETING

Asia Oceania Geosciences Society

01 – 06 August 2021



- **Award Nomination Closes 19 Jan 2021 (extended for another week)**
Recognize Contribution, Nominate Someone for an AOGS Award
 - Axford Medal
 - Honorary Member
 - Wing IP Medal
- **Submit Abstracts Closes 23 Feb 2021 (right after the Chinese new year!)**
- **AOGS Constitution Quiz starts from 20 Feb 2021**
- **Submit news/ job vacancy/ meeting event to the IG newsletter (We hope to initiate after the CNY)**



THANK YOU

FOR YOUR ATTENTION

And.....Questions?

memegenerator.net