

**XIII International Symposium on Antarctic Earth Sciences
Incheon, Korea, 22-26 July 2019**

SUMMARY REPORT OF ISAES 2019

Prepared by ISAES 2019 Secretariat

Summary

The XIII International Symposium on Antarctic Earth Sciences was held from July 22 to July 26 at Incheon, Republic of Korea. This year, in addition to usual themes of ISAES, ISAES 2019 have expand its scopes to include new areas of research. For example, sessions such as “Antarctic volcanism”, “Remote sensing” and “Climate science” have been set up. ISAES 2019 also supported over 90 students from Korea and abroad by financial sponsorship. During the symposium, more than 450 participants from 32 countries have attended and presented nearly 430 presentations of their research findings and achievements under 24 different sessions.

General Information

1. Title: XIII International Symposium on Antarctic Earth Sciences(ISAES 2019)
2. Date and Venue: July 22-26, 2019 / Sondo Convensia, Incheon, Korea
3. Participants: 451 participants from 32 countries
* Please refer to appendix 1. for the detail
4. Organizer: Korea Polar Research Institute(KOPRI)
5. Committee

International Science Committee	Local Organizing Committee
<p><u>Chair</u> Yeadong Kim, Korea</p> <p><u>Members</u> Doug Wiens, US Jesus Galindo-Zaldivar, Spain Joachim Jacobs, Norway John Smellie, UK Karsten Gohl, Germany Laura De Santis, Italy Marcelo Leppe, Chile Mauro Guglielmin, Italy Naresh Pant, India Simon Cox, New Zealand</p>	<p><u>Chair</u> Ho Il Yoon, KOPRI</p> <p><u>Members</u> Jongkuk Hong, KOPRI Hyoung Chul Shin, KOPRI Jae Il Lee, KOPRI Mi Jung Lee, KOPRI Moon Young Choe, KOPRI Seong Joong Kim, KOPRI Soon Do Hur, KOPRI Wonsang Lee, KOPRI Ok Sun Kim, KOPRI Joo Han Lee, KOPRI Boo Keun Kim, Pusan Nat'l Univ. Hyun Soo Lim, Pusa, Nat'l Univ. Hyung Rae Kim, Kongju Nat'l Univ. Jin Ho Ahn, Seoul Nat'l Univ. Kyung Hoon Shin, Hanyang Univ. Sung Min Hong, Inha Univ. Yoon Sub Kim, Chungbuk Nat'l Univ.</p>

Overview

1. Session

- Plenary Lecture: 10 plenary lectures
* Please refer to appendix 2. for the symposium program
- Oral Sessions: 222 presentations
* Please refer to appendix 2. for the symposium program
- Poster Sessions: 195 presentations

2. Side Meeting

- 12 side meetings
* Please refer to appendix 3. for the list of side meetings

3. Field Trip

- Gyeonggi Prefecture: 9 participants
- Jeju Island: 12 participants

4. Social Events

- Welcome reception: 251 participants
- Banquet: 225 participants

5. Financial Support Program for Early Career Scientists

- Provide registration fee and/or accommodation to 39 International Students and 52 Korean Students

Group Photo

- Group photo of ISAES 2019 participants



Appendix 1.	Statistics of participants
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- Participants: 450 participants from 32 countries

No.	Continent	Country	Participants
1	Asia	Republic of Korea	178
2		China	36
3		Japan	16
4		India	5
5		Malaysia	2
6	Oceania	New Zealand	28
7		Australia	17
8	Africa	South Africa	4
9	Middle East	Turkey	4
10		UAE	2
11		Israel	1
12	North America	USA	61
13		Canada	1
14	South America	Chile	5
15		Brazil	2
16		Argentina	1
17		Mexico	1
18		Peru	1
19		Uruguay	1
20	Europe	Italy	22
21		Germany	16
22		UK	16
23		Spain	10
24		Russia	9
25		Romania	3
26		Norway	2
27		Bulgaria	2
28		France	1
29		Poland	1
30		Sweden	1
31		Switzerland	1
32		Portugal	1
Total			451

Appendix 2. Symposium Program

• Program at a glance

Venue: ■ 2F, GrandBallroom A ■ Room #302 ■ Room #306 ■ Room #305

July 19-20	July 21 (SUN)	Time	July 22 (MON)	Time	July 23 (TUE)	July 24 (WED)	July 25 (THU)	July 26 (FRI)	July 27-29												
Pre-Field Trip (Gyeonggi-do)	Pre-Field Trip (Gyeonggi-do)	08:00-	Onsite Registration							Post-Field Trip (Jeju Island)											
		09:00-09:30	Opening Ceremony	09:00-09:40	Plenary Lecture 03	Plenary Lecture 05	Plenary Lecture 07	Plenary Lecture 09													
		09:30-10:10	Plenary Lecture 01	09:40-10:20	Plenary Lecture 04	Plenary Lecture 06	Plenary Lecture 08	Plenary Lecture 10													
		10:10-10:50	Plenary Lecture 02	10:20-10:30	Coffee Break																
		10:50-11:00	Coffee Break	10:30-12:30	S05-I	S09	S04-I	-	S17-I		S02-I	S20	-	S14-I	S02-III	S23	-	S11	S15	S26	S21
		11:00-13:00	S01-I S12-I S19-I -	12:30-13:30	Lunch																
		13:00-13:45	Lunch	13:30-15:00	Poster Session 2F Lobby																
		13:45-15:00	Poster Session 2F Lobby	15:00-17:30	S05-II	S18	S04-II	S07	S17-II		S02-II	S06	S22	S14-II	S02-IV	S08	S10	S24			
		15:00-17:30	S01-II S12-II S19-II S16	17:30-18:30	Post-Field Trip (Jeju Island)																
		17:30-19:00		18:30-20:30	Banquet Dinner Sheraton Grand Incheon Hotel, 3F GrandBallroom																
		19:00-21:00	Welcome Reception KOPRI, 1FLobby																		

• List of plenary lectures

No.	Lecturer	Title
P01	Gary Wilson & Catherine Ritz	Ensuring SCAR Science Groups, Research Programmes and Committees Are Fit-for-purpose Over the Next Decade
P02	Yeadong Kim	Development of Korean Earth Science Program in The Antarctic Over the Last 30 Years
P03	Steven David Boger	The Tectonic Structure of Antarctica
P04	Karsten Gohl	Where Tectonics Meets Ice-sheet Dynamics: Roots of West Antarctica's Next Ice-sheet Collapse
P05	Pippa Whitehouse	Ice Sheet – Solid Earth Interactions
P06	Ian Goodwin	Linking Macroweather and Climate Evolution with the Antarctic Record of Glacial History
P07	Mauro Guglielmin	Permafrost Distribution and Evolution in Antarctica
P08	Robert Mckay	Antarctic Ice Sheet History in the Ross Sea During the Late Cenozoic from Geological Drill Core Studies
P09	Paul Morin	An Embarrassment of Riches; We Now Have Better Topography for the Ice on Earth than the Land
P10	Fausto Ferraccioli	A Precambrian Odyssey in East Antarctica: More Pieces, More Tectonic Stages and Less Puzzle?

- List of parallel sessions

No.	Title
S01	Geological History of Victoria Land: Reviews and New Findings
S02	Structure, evolution, and heterogeneity of Antarctica's continental lithosphere
S04	Antarctic Volcanism and Magmatism: Past, Present and Future
S05	The Neoproterozoic to Cambrian Orogenies and their precursors in Antarctica and adjacent continental blocks
S06	Antarctic geothermal heat flux
S07	Circum-Antarctic Gateways: formation, evolution and global implications
S08	Evolution of Antarctic topography and bathymetry: understanding links between erosion, deposition, isostasy and ice sheet behaviour
S09	Permafrost and Periglacial ice free areas in Antarctica
S10	Modern landscape change in Antarctic ice-free areas
S11	Applied bathymetry for understanding Quaternary history and change
S12	Geological records of ocean and ice sheet change from the Ross Sea
S13	Past Climate Variability of the Southern Ocean and its Global Teleconnections
S14	Marine sedimentary records of Antarctic ice-sheet dynamics and Southern Ocean history during the Late Cainozoic
S15	Ice core sciences and Ice chemistry
S16	Significance of Antarctic Inland Freshwater Bodies - Revealing Past Processes and Projecting Responses to Change
S17	Paleoenvironmental changes in Antarctica and Southern Oceans since the last Glacial Maximum
S18	Antarctic sea ice variability and ice shelf processes
S19	Tropical-Polar teleconnection and Antarctic climate change
S20	Evolution of the biota of West Antarctica: a Gondwana perspective
S21	Geomicrobiology of Antarctica and Patagonia
S22	Emerging Frontiers in Satellite Remote Sensing and Geoinformation in Antarctic Earth Sciences: Cross-disciplinary Advances
S23	Advanced Technologies for Research and Operations in Polar Regions
S24	Earth science informing environmental management and policy
S26	General Topics

Appendix 3. Side meetings

- Program at a glance

Venue: ■ Room #305 ■ Room #306 ■ Room #205 ■ Room #206 ■ Room #207

Time	July 20(Sat)	July 21(Sun)	July 22(Mon)	July 23(Tue)	July 24(Wed)	July 25(Thu)	July 26(Fri)
11:00-13:00	WM01-I	WM01-II		M04	M07	M09	
		WM02					
13:00-15:00	WM01-I	WM01-II	M01	M05	M07		M10
		WM02	M02-I	M02-II	M08		
				M06			
15:00-17:00	WM01-I	WM01-II			M07		
		WM02					
18:00-20:00			M03				

- List of side meetings

No.	Title
WM01	PAIS-PRAMSO-AISSL Workshop
WM02	Ross Sea Region Collaboration and Coordination Workshop
M01	Onshore to Offshore glacial reconstruction of Terra Nova Bay, Western Ross Sea
M02	Ross Sea Region Collaboration and Coordination Workshop
M03	APECS event
M04	Bedmap3 Core group meeting
M05	IBCSO V2
M06	ADMMap-CGG
M07	General Topics
M08	Integration and Joint Inversion of Geophysical Data
M09	How to use GeoMAP (v.201907): SCAR GeoMAP Action Group
M10	Geothermal heat flux