The 20th International Symposium on Polar Sciences

Our Collective Journey to Connect the Past and Future from the Antarctic

May 27-29, 2014 Korea Polar Research Institute Incheon, Republic of Korea

Registration Feb. 1 - Apr. 18, 2014 http://symposium.kopri.re.kr Abstract Submission Feb. 1 - Mar. 21, 2014 http://symposium.kopri.re.kr

Photo: Courtesy of Han Jin Choe (24th King Sejong Overwinter Party)



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The 20th International Symposium on Polar Sciences:

Our Collective Journey to Connect the Past and Future from the Antarctic

May 27-29, 2014 Korea Polar Research Institute, Songdo, Incheon Republic of Korea

Second Circular

We are pleased to announce that Korea Polar Research Institute will hold the 20th International Symposium on Polar Sciences in Songdo, Incheon, Republic of Korea on May 27-29, 2014.

THEME

KOPRI's International Symposium on Polar Sciences, born with the launch of Korea's Antarctic research program, provided opportunities to stay abreast with the current trend of polar research, and plan for future efforts among international collegues.

Celebrating its 20th anniversary conjoined with KOPRI's 10 year anniversary as an independent institute, this year's symposium is appropriately titled "Our Collective Journey to Connect the Past and Future from the Antarctic" to frame a pivotal perspective on the road we have paved for ourselves as well as on the future outlook of Antarctic research.

SESSIONS (TOPICS)

The symposium is organized into four major sessions to embrace a range of research foci pursued in KOPRI's major research locations in the Antarctic:

Antarctic Climate Records: Late Quaternary Ice Core and Geological Records

In this session, we invite oral and poster presentations related to the reconstruction of Late Quaternary environmental changes in Antarctica using ice core and geological archives. We also welcome papers focusing on paleoclimate proxies and dating methods that are applicable to the reconstruction of Antarctic paleoclimate, as well as contributions dealing with simulations to investigate the cause and effect of climate changes in Antarctica.

Life of King George Island in the Changing Environment

Lives on King George Island are faced with rapidly changing environments. Understanding on how the ecosystems are composed and how they respond to changing environments will provide clues to understand the future of the ecosystems in King George Island. Themes in this session include studies on biodiversity, evolution, and ecological roles of microorganisms, lichens, plants, and animals to share information and promote international collaborations.

<u>The Amundsen Sea as a Window to View the Future of the Antarctic in a</u> <u>Changing Global Climate</u>

Rapid oceanic melting of the ice shelf as well as highly productive polynyas make the Amundsen Sea an ideal environmental setting for investigation of the impacts of climate change in the western Antarctic. Strong sensitivity of this melting to climate variability in a much larger scale has been recently reported. Nonetheless, the Amundsen Sea remains difficult to access and thus poorly sampled due to the remoteness and harsh ice conditions. International collaborations are therefore pivotal to sustain the observations required to capture the dynamics of the system and to model its responses. The focus of the session is to discuss our recent findings on the physical and biochemical processes in the Amundsen Sea, and to further develop an international network to design and drive our future efforts.

Interactions between the Solid Earth, the Oceans and the Cryosphere in the Victoria Land-Ross Sea, Antarctica

Changes to the cryosphere are expected to have a large impact on future climate over the globe. It has been recently reported that the melting rate of ice sheets and glaciers in the West Antarctic has been rapidly increased, which may result in significant contributions to global sea level rise. Solid Earth dynamics and ice sheet dynamics in the Victoria Land-Ross Sea remain poorly constrained due to a dearth of observation data compared to other Antarctic regions. The second Korean Antarctic base, Jang Bogo station, which sits in the Terra Nova Bay facing the Ross Sea, would give us an unprecedented opportunity to understand interactions between the Solid Earth, the Oceans and the Cryosphere in the region. This session will explore recent findings on physical processes bearing on the interactions and discuss our future international collaboration.

TENTATIVE SYMPOSIUM SCHEDULE

	May 26	May 27		May 28		May 29
Morning	Associated Meetings: To be Arranged	Registration		Registration		-
		Opening Ceremony & History and Outlook of the Korean Antarctic Program		Plenary Lecture		
		Plenary Lecture		The Amundsen Sea as a Window to View the Future of the Antarctic in a Changing Global Climate	Interactions between the Solid Earth, the Oceans and the Cryosphere in the Victoria Land-Ross Sea, Antarctica	
After- noon		Lunch		Lunch		Associated Meetings: To be
		Plenary Lecture		Plenary Lecture		
		Antarctic Climate	Life of King George Island in the Changing Environment			Arranged
		Records: Late Quaternary Ice Core and Geological Records		Poster Session		
		Coffee Break				
		The Amundsen Sea as a Window to View the Future of the Antarctic in a Changing Global Climate	Interact-ions between the Solid Earth, the Oceans and the Cryosphere in the Victoria Land-Ross Sea, Antarctica	Antarctic Climate Records: Late Quaternary Ice Core and Geological Records	Life of King George Island in the Changing Environm-ent	
Evening	Icebreaker			Banquet		

REGISTRATION AND ABSTRACT

Abstract Submission

Please submit the abstract at the symposium website (<u>http://symposium</u>. <u>kopri.re.kr</u>) no later than <u>March 21st, 2014</u>.

Registration

Please register at the symposium website (<u>http://symposium.kopri.re.kr</u>) no later than <u>April 18th, 2014</u>.

If you have any problem or difficulty, please do not hesitate to contact the symposium secretariat (<u>symposium@polar.re.kr</u>).

FOR POLAR EARLY CAREER SCIENTISTS

KOPRI wished encourage the participation of early career scientists at this symposium. Awards will be presented to the outstanding contributions by young scientists. Further information will be available at the symposium website (<u>http://symposium.kopri.re.kr</u>) soon.

SOCIAL EVENTS

All participants are kindly invited to the social events hosted by KOPRI. Please mark it when you make a registration at the symposium website (<u>http://symposium.kopri.re.kr</u>).

Icebreaker

<u>Banquet</u> 18:00 - 20:00, May 28 KOPRI Hall

18:00 - 20:00, May 26 Orakai Songdo Park Hotel

ACCOMMODATION & TRANSPORTATION

Accommodation at the Orakai Songdo Park Hotel (<u>www.orakaihotels.com</u>) has been arranged with special rates for symposium participants. Further information regarding hotel reservation is available at the symposium website (<u>http://symposium.kopri.re.kr</u>).

Symposium venue is close to the hotel: only about 10-minute car ride. Transportation will be arranged between the Hotel and Symposium venue through May 27 - 28. If you need any help or have questions, please do not hesitate to contact us.

Dr. Yeadong KIM President Korea Polar Research Institute (KOPRI)

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