Workshop title: Promoting international collaboration for science of East Asian Marginal Seas in a changing climate: Circulation, biogeochemistry, ecosystem, and socio-economic researches

Acronym: CREAMS - Circulation Research of East Asian Marginal Seas,

CSK - Cooperative Study of the Kuroshio and Adjacent Regions

Date: July 25–26, 2024

Time: 8:30AM to 6:30PM (including lunch time from 12:00PM to 1:30PM)

Place: SNU Hoam Faculty House Mugunghwa Hall, Seoul, Republic of Korea

Recommended Accommodation: SNU Hoam-Hotel (https://hoamstay.com/)

Supported by PICES, KSO, and SNU

Descriptions:

An international program on Circulation Research of East Asian Marginal Seas (CREAMS) started in 1993 and now has celebrated its 30th anniversary. It was the first international program in this region and it significantly promoted collaboration between marine scientists of border countries as well as their colleagues from other parts of the world. Now CREAMS became a part of North Pacific Marine Science Organization (PICES) activity, and is heading for 'Creative' Research of East Asian Marginal Seas to become multidisciplinary science program (https://meetings.pices.int/members/advisory-panels/AP-CREAMS), along with Healthy, Productive and Sustainable Asian Marginal Seas (AMS) program (https://ioc-westpac.org/ams/) of the IOC Sub-Commission for the Western Pacific (WESTPAC).

On the other hand, the Cooperative Study of the Kuroshio and Adjacent Regions (CSK) was active from 1965 to 1979 and played a significant role in advancing the understanding of general oceanography and fisheries in the Kuroshio and adjacent regions by strengthening the research capabilities of many countries in the area. The IOC/WESTPAC newly established the CSK-2 as its regional program in 2021 (https://ioc-westpac.org/csk2/), which was endorsed as one of the UN Decade of Ocean Science for Sustainable Development (2021-2030) Projects in 2022.

The East Asian Marginal Seas, neighboring the Kuroshio, are one of the most affected areas in the global ocean by climate changes and anthropogenic impacts. There have been considerable advances in exploring these seas over a few decades under the CREAMS and CSK programs. Being initially focused on research of water circulation and ventilation, the CREAMS program evolved into biogeochemical and ecosystem research and now is seeking a way to be more socio-economic oriented program. The CSK-2 aims to enable ocean research communities and other relevant ocean stakeholders to co-design and co-implement integrated and multidisciplinary investigations, research, and analysis on the Kuroshio and its adjacent regions, in order to improve regional weather forecasts and climate predictions, and inform fisheries and aquaculture management.

This workshop would summarize and share the knowledge and experience in water dynamics, biogeochemistry, ecosystems, and their variability at multi-scales, and discuss the future directions of research in the area moving toward a multidisciplinary science underlying the Kuroshio and its neighboring marginal seas. It is especially important to identify links between marine sciences and socioeconomic requirements in the area to develop an integrative program for future research in this region to correspond the UN Decade targets in a rapidly changing climate.

Participation of Early Career Ocean Professional (ECOP) is especially welcomed to involve them into the CREAMS and CSK2 activities. The workshop outcome should clarify a vision of international comprehensive marine research in the Kuroshio and its adjacent regions like the East Asian seas that meet the current needs of society.

Important dates:

Internal circular to CREAMS/CSK2 co-chairs and LOCs: November 22, 2023

1st LOC meeting (online/offline): December 11, 2023

1st Circular: December 18, 2023

2nd LOC meeting (online/offline): February 7, 2024

2nd Circular: February 26, 2024

3rd LOC meeting (online/offline): May 16, 2024

3rd Circular: May 17, 2024

Deadline for abstract submission (invitation only): June 3, 2024

Final LOC meeting (online/offline): July 15–19, 2024

Workshop: July 25-26, 2024

Follow-up LOC meeting (online/offline): July 29-August 2, 2024

Program schedule:

July 25, 2024 (08:30–11:00 Registration)

09:00–09:40 Greetings, welcoming remarks, and background/introduction - chaired by **S Nam** (**K Kim, JH Yoon, M Takematsu** (T Senjyu), **V Lobanov** on behalf of **Danchenkov & Volkov** for CREAMS and **K Ando** for CSK-2)

09:40-10:00 Coffee break

10:00–11:40 Overview and history of scientific programs - chaired by **J Hwang**; 1) CREAMS (**K Kim**), 2) CSK and CSK-2 (**K Ando**), 3) AMS (**S Nam**), 4) international collaborations (**SE Kim**)

11:40-13:30 Lunch

13:30–15:00 Scientific session 1 – CREAMS activities - chaired by **JH Lee** (**T Senjyu**, **KI Chang**, **DJ Kang**, **V Lobanov**)

15:00-15:30 Coffee break

15:30–17:00 Scientific session 2 –CREAMS/AMS and CSK-2 activities - chaired by YK Cho (P Tishchenko, G Kim, X Lin, S Kida)

17:00–18:30 Flash talks on on-going studies (**ECOPs**; **JHyoung Park**)

18:30–20:00 Welcoming dinner with summary of Day 1

July 26, 2024 (08:30–09:30 Registration)

09:30–10:30 Scientific session 3 – Ongoing initiatives for Asian marginal seas - chaired by **G Kim** (**T Senjyu, JJ Park, CG Kang/J Hwang**)

10:30–10:50 Coffee break

10:50–12:00 Scientific session 4 – Ongoing initiatives for Kuroshio and its adjacent seas - chaired by **CH Jeon** (**H Na**, **X Lin**, **Yuqi Yin**, **Ran Wang**)

12:00-13:30 Lunch

13:30–15:00 Future plan 1 – Data management - chaired by V Lobanov (YG Kim, M Kim, K Ando, JS Lee)

15:00-15:30 Coffee break

15:30–17:00 Future plan 2 – Integrative/multidisciplinary science - chaired by **DJ Kang** (**T Yoshida**, **JHun Park**, **SE Kim**, **JH Nam**)

17:00–18:30 Panel discussions for better international collaboration with CREAMS/AMS and CSK-II (and other international initiatives like UNDOS) - chaired by **S Nam**; panel members: **JJ Park**, **X Lin**, **K Ando**, **V Lobanov**

18:30–20:00 Farewell dinner with summary of Day 2

Committees:

CREAMS committee co-chairs (SungHyun Nam, Vyacheslav Lobanov, Fei Yu, Jing Zhang; https://meetings.pices.int/members/advisory-panels/AP-CREAMS),

CSK committee co-chairs (Hanna Na, Kentaro Ando, Xiaopei Lin; https://ioc-westpac.org/csk2/) and

Local Organizing Committee (SungHyun Nam, Hanna Na, Guebuem Kim, Yang-Ki Cho, Jeomshik Hwang, Jae-Hak Lee, Young-Gyu Kim, Dong-Jin Kang, Hong Sik Min, Jae-Hun Park, Jae-Hyoung Park, Minkyoung Kim, Ho-Jun Lee, Chanhyung Jeon, Seung-Tae Yoon, Joon-Soo Lee, Kwang-Young Jeong, Gwang Ho Seo, Jung Ho Nam, and Chung Yeon Hwang)

on behalf of Korean Society of Oceanography and Seoul National University