

Report on EMECS 13 Conference

■ Conference	13 th International Conference on the Environmental Management of Enclosed Coastal Seas (ECSA58-EMECS13 Joint Conference)
■ Theme	Estuaries and coastal seas in the Anthropocene ~Structure, functions, services and management
■ Dates	6 – 9 September, 2021
■ Format	Online conference ※ EMECS special sessions were held in hybrid at the Kobe Portopia Hotel
■ Organizers	International EMECS Center (EMECS), Estuarine & Coastal Sciences Association (ECSA)

In collaboration with the UK-based Estuarine & Coastal Sciences Association (ECSA), the International EMECS Center (hereinafter “EMECS”) co-hosted the 13th International Conference on the Environmental Management of Enclosed Coastal Seas (EMECS13 Conference) as the “ECSA58-EMECS13 Conference,” which was held online for



four days from Monday, September 6 to Thursday, September 9, 2021. The conference was scheduled to be held at the University of Hull in the United Kingdom in September 2020. However, it was postponed due to the COVID-19 pandemic and was finally held online.

The conference was held under the theme of “Estuaries and coastal seas in the Anthropocene: Structure, functions, services, and management,” attracting 450 participants including researchers and governmental officials from 47 countries. From Japan, 58 people participated, including Prof. Motoyuki Suzuki, President EMECS, Prof. Osamu Matsuda, Vice Chair of the Board of Directors of EMECS, and researchers in the fields of enclosed coastal seas, coastal areas and estuaries.

Unfortunately, all the sessions in the conference were streamed online, but 30 special and regular sessions were held and 10 keynote lectures, 277 oral presentations, and 86 poster presentations were presented live or through recorded videos during the conference. Each day’s presentations started at 3:45 p.m. in Japan and at 7:45 a.m. in the United Kingdom, so there was a time difference for participants in each country, but the entire schedule was completed successfully.

The three special sessions organized by EMECS, “ICM (Integrated Coastal Management) and Satoumi Session,” “Plastics in the Sea Session” and “Students and Schools Partnership Session” (SSP Session) were held in a hybrid format (online and on-site) at Kobe Portopia Hotel. We had presenters in Japan make presentations at the venue, and general participants watched the online streaming.

During the conference, a PR area for the “41st National Convention for the Development of an Abundantly Productive Sea” (to be held in Akashi City, Hyogo Prefecture in November 2022) was established at the special session venue. Moreover, a poster on Hyogo Prefecture’s efforts to conserve

Conference program (Japan time)		
2021	Afternoon	Evening
6 September	Opening session	Parallel sessions, Poster session①
7 September	EMECS special session “ICM & Satoumi①” Parallel sessions	Parallel sessions, Poster session②
8 September	EMECS special sessions “ICM & Satoumi ②” and “Plastics in the sea” Parallel sessions	Parallel sessions, Poster session③
9月9日(木)	EMECS special session “Students & Schools Partnership Session” Parallel sessions	Closing session

the environment of the Seto Inland Sea, which was presented at the poster session, was displayed for visitors to see.

■ Opening ceremony and opening session

The opening ceremony was held from 3:45 p.m. on Monday, September 6. The welcome remarks by ECSA representative Prof. Mike Elliott was followed by the opening remarks by Prof. Motoyuki Suzuki, President of EMECS. Then Prof. Masataka Watanabe, Chair of the EMECS Scientific & Policy Committee, introduced the history of EMECS and the EMECS Conference, and Dr. Sally Little from ECSA introduced the association. This was followed by a eulogy for the late Prof. Victor de Jonge, an ECSA member who passed away in May last year and had been involved in the preparation of this conference, and the keynote lecture “Potential impacts of groundwater-borne nutrients on coastal areas in changing human activities and climate” by Dr. Mitsuyo Saito, Associate Professor of Okayama University.

After the opening session, nine sessions were held, including “From the River Source to the Sea: River-Sea Systems under Global Change” and “Stability, change and ecosystem services in coastal wetlands.” Many presenters and viewers participated.

■ EMECS special session “Integrated Coastal Management (ICM) & Satoumi ①”

From 3:45 p.m. on Tuesday, September 7, the EMECS Special Session “ICM and Satoumi ①,” chaired by Prof. Tetsuo Yanagi (Professor Emeritus, Kyushu University), was held in Room Rainbow, Kobe Portopia Hotel in a hybrid format. Five presentations were made on research and practices in Japan and overseas incorporating the concept of Satoumi, including “Value of relationship in the Japanese



satoumi” by Prof. Yanagi, “Possibilities of Satoumi which promote both EcoDRR (Ecosystem-based Disaster Risk Reduction) and ICM” by Prof. Osamu Matsuda (Professor Emeritus, Hiroshima University; Vice Chair, Board of Directors of EMECS), and “Salmon-safe: Human and salmon relationships, from mountains to oceans” by Mr. Kevin Scribner (Salmon-Safe Certification, the United States).

In addition, eight people, including Dr. Keita Furukawa (Director, NPO Association for Shore Environment Creation), made a presentation on the “Coast Card” project, which is carried out in coastal locations both in Japan and overseas with the support of the Belmont Forum.

Four of the presenters in Japan made presentations at the venue.

■ EMECS special sessions “Plastics in the sea” and “ICM & Satoumi ②”

From 3:45 p.m. on Wednesday, September 8, the EMECS Special Sessions “Plastics in the Sea” and “ICM and Satoumi ②” were held at two venues in Kobe Portopia Hotel in a hybrid format.

At the “ICM and Satoumi ②” session chaired by Prof. Yanagi as on the previous day, three presentations were made, including “Review of Japan’s activities in pursuit of balancing water

quality management and bio-productivity in the Seto Inland Sea” by Ms. Mimi Nameki (Director, Office of Environmental Management of Enclosed Coastal Seas, Ministry of the Environment). At the “Plastics in the Sea” session co-chaired by Prof. Hirofumi Hinata (Professor, Ehime University) and Dr. Shuhei Tanaka (Associate Professor, Kyoto University), 10 presentations on marine plastic pollution, which is a major global issue, were made. The presentations included “Monitoring and modeling of ocean pelagic microplastics” by Prof. Atsuhiko Isobe (Professor, Kyushu University) and “Seasonal variation of microplastics pollution in Sishili Bay of the North Yellow Sea” by Dr. Yanfang Li (Yantai Institute of Coastal Zone Research, CAS, China).

■ Students and Schools Partnership (SSP) session

On Thursday, September 9, the final day of the conference, the SSP Session for high school students was held. The International EMECS Center has hosted the SSP Session every time since the 6th EMECS Conference (held in Bangkok, Thailand in 2003) with the aim of promoting the development of next-generation leaders for marine environmental conservation.



This time, a total of 15 high school students (six from Japan, five from the United Kingdom, and four from Germany) participated.

The session was co-chaired by Prof. Hiroshi Kawai (Professor, Kobe University), Prof. Mike Elliott (Professor, University of Hull, the United Kingdom), and Dr. Tim Jennerjahn (Working



Group Leader, Leibniz Centre for Tropical Marine Research, Germany). Research presentations covered various topics, such as marine waste, microplastics, and crude oil spills. After the presentation, there was a discussion between the chairpersons and the presenters, including questions regarding the reasons for the choice of research topics.

The high level of research by the high school students was well received by the viewers, and the participating students also commented on how glad they were to have participated.

Details of the SSP Session and presentation videos are available on our website.

(<https://www.emecs.or.jp/en/topics/emecs13ssp>)

■ Parallel sessions and poster sessions

During the conference, 30 parallel sessions including special sessions and three poster sessions were held. The Hyogo Prefectural Government made a poster presentation titled “Restoring the Rich and Beautiful Seto Inland Sea - Hyogo Prefecture.” Due to the time difference with the United Kingdom, where the co-sponsor ECSA is based, the conference was held in Japan from 3:45 p.m. to 4:00 a.m. the next morning every day.

The sessions covered a wide range of topics, such as environmental conservation, restoration, challenges and management in the world’s watersheds, estuaries, coastal areas, and oceans. In addition to live presentations, pre-recorded presentations were also made in consideration of the time difference and the Internet connection environment.

■ Closing session

The closing session was held from 9:30 p.m. on Thursday, September 9. After ECSA announced the Excellent Presentation Award for SSP presenters, EMECS announced three Excellent Poster Presenters for general presenters from Dr. David Nemazie (Chief of Staff, University of Maryland Center for Environmental Science, the United States) on behalf of the EMECS best poster award selection committee. Following this, ECSA made an announcement regarding the next ECSA Conference (ECSA59) and Dr. George Gogoberidze (Director, International Information and Analysis Center for Interdisciplinary Research of Russian Arctic Development, Murmansk Arctic State University, Russia), who will serve as the local secretariat for the next EMECS Conference (EMECS14), announced that EMECS14 will be held in Murmansk, Russia in September 2024. Finally, Prof. Masataka Watanabe (Professor, Chuo University; Chair, EMECS Scientific & Policy Committee) summarized the conference on special/regular sessions, the SSP Session, and other sessions, and then brought the 13th EMECS Conference to a close.

Due to the impact of the COVID-19 pandemic, it was the first EMECS Conference held online, with EMECS Special Sessions held in a hybrid format. Although there were some difficulties due to the online conference platform, which was being used for the first time, and the time differences, we were able to hold a meaningful conference with the cooperation of many people from the preparation stage through to the conference period.

Abstracts of presentations

<https://www.emecs.or.jp/en/world/presentationtext>

Presentation videos by Japanese senior high school students

<https://www.emecs.or.jp/topics/emecs13ssp>