

THE FOURTH INTERNATIONAL JELLYFISH BLOOM SYMPOSIUM

5-7 June, 2013, Hiroshima, Japan



Group photo of participants at 4th International Jellyfish Bloom Symposium, Hiroshima (Japan)

Following an initial meeting in Alabama (U.S.A.) in 2000, and subsequent meetings in Gold Coast (Australia) in 2008 and Mar del Plata (Argentina) in 2010, the 4th International Jellyfish Bloom Symposium (IJBS) was held June 5–7, 2013, in Hiroshima (Japan), the peace city revived from the ruins after the infamous atomic bomb 68 years ago. At this symposium, there were approximately 140 delegates from 29 countries and more than 130 presentations, which may constitute the largest meeting of the jellyfish research community ever. This is a reflection of the fact that the ecological importance of large gelatinous zooplankton, such as cnidarians, ctenophores and salps, has been recognized due to the increased frequency of unusual aggregations and large swarms or “blooms”, which have been reported in many parts of the world’s oceans in recent decades.

Following opening remarks by the symposium organizer, Dr. Shin-ichi Uye (Hiroshima University, Japan), Dr. Larry Madin (Woods Hole Oceanographic Institute, U.S.A.) presented a comprehensive overview of the major taxonomic groups of gelatinous zooplankton, along with a history of the sampling and utilization of jellyfish over time. He noted the importance of understanding the beneficial services that jellyfish provide to humans that are often overlooked in the media.

A second keynote talk given by Dr. Rob Condon (Dauphin Island Sea Laboratory, University of South Alabama, U.S.A.) described some of the progress achieved by the international Global Jellyfish Group sponsored by the National Center for Ecological Synthesis (NCEAS, U.S.A.). A key product of this working group was the establishment of the Jellyfish Data Initiative (JEDI), which provides a repository for most of the historical abundance of jellyfish as well as distribution time series worldwide. Using this database, Rob led studies exam-

ining the long-term trends in jellyfish blooms around the globe, which indicate some recent increases in many regions, but also an underlying multi-decadal oscillation which inhibits drawing firm conclusions until the time series are suitably extended.

A final talk was offered by Dr. José Acuna (Oveido University, Spain) on the adaptations that jellyfish have evolved to make them efficient consumers in the marine environment on a similar scale as fishes, despite their greater than 95 % body water content. He also stressed the diversity of feeding modes in gelatinous zooplankton that have allowed them to be so successful over time.

The symposium also consisted of 9 oral sessions and 2 evening poster sessions dealing with diverse topics such as jellyfish blooms on various spatiotemporal scales, physiology and ecology, and feeding dynamics (<http://home.hiroshima-u.ac.jp/~ijfs/>). The symposium culminated in a series of presentations highlighting the impact that jellyfish blooms have on human enterprises including the negative aspects of preying on or competing with fish of ecological or commercial importance, but also stressing their beneficial aspects including their role in sequestering CO₂ to the deep ocean and providing food resources to humans.

There were 6 Slovenian delegates (Drs. Alenka Malej, Valentina Turk, Vesna Flander-Putrlje, Tjaša Kogovšek, Lucija Raspor Dall’Olio, and Maja Kos Kramar, National Institute of Biology-Marine Biology Station, Piran), who presented topics on jellyfish and the ecosystem in the northern Adriatic. As the Slovenia-Japan Bilateral Project on Jellyfish Blooms is currently going on, this opportunity facilitated the exchange of our updated research achievements and, of course, a strengthening of our friendship.

In addition to the scientific accomplishments of the symposium, the participants were able to enjoy the many cultural and culinary delights of the Hiroshima region, including a post-meeting excursion to Miyajima, a World Heritage site located nearby.



Lifetime Achievement Award Ceremony to Mary Arai

The meeting was a complete success and the participants are already looking forward to the 5th International Jellyfish Bloom Symposium slated to be held in 2016, in Barcelona, Spain.

Shin-ichi Uye

Dr. Shin-ichi Uye (suye@hiroshima-u.ac.jp) is a Professor of biological oceanography at Hiroshima University. He has been involved in two Japanese jellyfish research projects: Studies on Prediction and Control of Jellyfish Outbreaks (STOPJELLY) and

the China-Japan-Korea International Project on the Giant Jellyfish Bloom. He was former President of the Plankton Society of Japan (2001–2004) and former President of the World Association of Copepodologists (2005–2008). Prof. Uye was awarded the Oceanographic Society of Japan Prize in 2010 for his advancement of zooplankton research, particularly on their functional roles in coastal marine ecosystems. He was chairing the Local Organizing Committee of the 4th International Jellyfish Bloom Symposium, and serves as a Japanese PI of the Slovenia-Japan Bilateral Project on Jellyfish Blooms.