

***Latest Progress in the Understanding of Ocean Carbon
Sequestration and Climate Change***

Meeting Place: Room Kujaku, WORKPIA 2nd Floor

Meeting Time: 14:00-17:00, October 28, 2018

WG#33 Information

Title:	PICES-ICES joint Working Group on <i>Climate Change and Biologically-driven Ocean Carbon Sequestration</i>
Term:	October 2015 to October 2018
Co-Chairs:	Nianzhi Jiao (PICES, China), Richard B. Rivkin (PICES, Canada) and Louis Legendre (ICES, France)

Carbon sequestration is among the important earth-ecosystem services provided by the oceans. Atmospheric CO₂ is taken up by phytoplankton and the resulting organic matter can be transformed by the pelagic food webs into various organic materials, some of which are exported from surface waters and sequestered in coastal shelf sediments and the deep ocean, or partly transformed into long-lived dissolved organic compounds. This PICES-ICES Working Group (WG) has promoted interdisciplinary exchanges among different research communities by bringing together experts in observational, experimental and modeling approaches, to characterize and assess one or more of the biologically-driven ocean carbon pumps and their environmental and climate consequences. The WG has successfully completed its Terms of Reference. This business meeting will be the final meeting of the WG, during which it will report its accomplishments to PICES and participants in the 2018 Annual Meeting.

Meeting Agenda

14:00 – 14:10	Welcome by the WG 33 Co-Chairs
14:10 – 14:30	Ya-Wei Luo (WG secretariat): Summary of WG 33 activities



14:30 – 14:50	Nianzhi Jiao: Unveiling the enigma of refractory carbon in the ocean
14:50 – 15:10	Louis Legendre: Advanced experimental approaches to marine water-column biogeochemical processes
15:10 – 15:30	Nianzhi Jiao: Blue carbon: Coastal vs oceanic
15:30 – 15:50	Chuanlun Zhang: Evolving paradigms in biological carbon cycling in the ocean
15:50 – 16:10	Jung-Ho Hyun: A hypothesis on the microbial carbon pump (MCP) associated with benthic organic carbon oxidation in the Ulleung Basin, East Sea
16:10 – 16:30	Ya-Wei Luo: Modelling marine DOC degradation time scales
16:30 – 17:00	Discussion (led by the co-Chairs) and closing remarks

*All participants in the PICES Annual Meeting are most **welcome** to attend the WG#33 business meeting!*