

Program

SESSION 6: COASTAL BLUE CARBON ECOSYSTEM: CARBON RESOURCES EVALUATION, SOURCES-SINKS PROCESSES AND MANAGEMENT COLLABORATION

Wed. 14 May (UTC+8) 13:30-17:30 [Click to find your local time](#)

Convenors Jinzhou Du and Wen-Chen Chou

Rapporteur Xiaogang Chen and Mariche Bandibas Natividad

13:30 - 13:35 [Welcome and Introduction](#)

Oral presentations

- | | | |
|---------------|---|---------------|
| 13:35 - 13:55 | Xiaogang Chen
Seawater recirculation in seagrass beds releases alkalinity and enhances carbon sequestration | [6-18] |
| 13:55 - 14:15 | Neven Cukrov
Krka River Estuary as a testing ground for the carbon cycle | [6-13] |
| 14:15 - 14:30 | Bing Xu
Global mapping of tidal wetland and adjacent environments using tidal analysis and multi-source earth observations | [6-26] |
| 14:30 - 14:45 | Mohammad Rozaimi (online)
Blue Carbon: Strengthening the fundamentals with shifting sub-disciplines | [6-12] |
| 14:45 - 15:00 | Jinqiu Du
Strategies for the management collaboration of coastal blue carbon ecosystems in countries along the Maritime Silk Road | [6-27] |
| 15:00 - 15:15 | Yusi Wang
Carbon fluxes by SGD in a typical Seagrass meadows ecosystem of northern China - A case study of Swan Lake, Shandong Province | [6-30] |
| 15:15 - 15:35 | Break | |
| 15:35 - 15:55 | Jian-Jhih Chen
Seagrass habitats regulate benthic metabolism and chromophoric dissolved organic matter dynamics in coastal system | [6-14] |
| 15:55 - 16:15 | Wen-Chen Chou
Expanding blue carbon assessments: the overlooked role of alkalinity in seagrass meadows | [6-33] |
| 16:15 - 16:30 | Hongbin Liu
Nitrogen-fixing and sulfide-oxidizing symbiotic bacteria reside in the root system of seagrass <i>Halophila ovalis</i> | [6-4] |
| 16:30 - 16:45 | Mariche Bandibas Natividad
Seagrass drives whole-ecosystem metabolism: seasonal variability in organic metabolism and carbonate dynamics and its implications for carbon sequestration | [6-10] |
| 16:45 - 17:00 | Hon-Kit Lui
Alkalinity and nutrients turn SGD from CO ₂ supersaturation to undersaturation around two tropical coral islands | [6-23] |
| 17:00 - 17:15 | Chen Yu Da
Revealing the superiority of dissolved organic carbon fluxes from submarine groundwater discharge compared to sediment carbon burial process in karst seagrass beds, Morinje Lagoon, Croatia | [6-2] |
| 17:15 - 17:30 | Najamuddin (online) | [6-19] |

Carbon stock and absorption capacity of seagrass in the coastal waters of small islands in North Maluku, Indonesia

Poster Session on 13 May and Virtual poster exhibit on Whova app

- Ken-ichi Hayashiaki** [4-10]
Consumers' perception of the blue carbon initiatives in Japan
- Xilong Wang** [6-1]
Carbon sink driven by porewater exchange in a mangrove wetland of Hainan
- Shiqing Sun** [6-3]
Source and sequestration of sediment organic carbon in coastal area
Novigrad Bay in Split, Croatia
- Tingsuan Lin** [6-5]
Diel variations of oxygen and carbon dioxide in a shallow tropical mangrove lagoon
- Ting-Jui Wang** [6-8]
Quantifying carbon sequestration of macroalgae through net primary production in subtropical regions
- Lea Teresa Ines Angelo** [6-9]
Quantifying carbon sequestration of macroalgae through net primary production (NPP) with the emphasis on photosynthetic quotient (PQ)
- Huayu Chen** [6-11]
Effects of biochar and nitrogen addition on ecosystem carbon sink in a salt marsh in Yangtze River Delta
- Muhammad Yousuf Adnan** [6-15]
From carbon sinks to coastal guardians: The ecological and economic value of Pakistan's mangroves
- Peter Teye Busumprah** [6-22]
West Africa ocean climate innovations hub
- Xiaoyong Duan** [6-25]
Coastal methane cycling: Release mechanisms and flux dynamics
- Fenfen Zhang** [6-28]
Fluxes of DOC and refractory FDOM exported from mangroves through submarine groundwater discharge
- Ying Huang** [6-29]
Understanding and quantifying blue carbon through multi-scale observations: experiences in China's coastal saltmarsh
- Jianan Liu** [6-31]
Groundwater carbon exports dominate dissolved carbon budgets in a seagrass meadow karstic bay (Adriatic Sea, Croatia)
- Wen Cai Yang** [6-32]
Organic carbon burial flux and sources in Maowei Sea mangrove reserve zones, Beibu Gulf
- Yeajin Jung** (online) [6-6]
Carbon allocation dynamics of *Spartina alterniflora* in Georgia saltmarsh, USA
- Mohammad Motahar Hossain** (online) [6-16]
The hidden treasures: Soil organic carbon stock in the mangrove and salt marsh ecosystems along the Cox's bazar coast, Bangladesh