

**12<sup>th</sup> International Conference on Tropical Marine Environmental Changes (MEC 2023):  
Tropical Ocean and Its Climatic and Environmental Effects  
November 18-20, 2023 Guangzhou China**

**First Announcement**

**Background**

The interaction between the tropical ocean and atmosphere, as well as the interaction within tropical ocean basins, gives rise to climate phenomena such as El Niño-Southern Oscillation, which can influence weather patterns globally. The tropical ocean, also known as a biodiversity hotspot, hosts an astonishing array of species that are prone to environmental changes induced by climate and ocean dynamical processes. Additionally, geological processes may also shape tropical marine environments and have impacts on marine ecosystems and coastal populations. Therefore, comprehending and addressing tropical marine environmental changes necessitates interdisciplinary research and collaboration, which are pivotal for sustainable management and climate change mitigation.

The State Key Laboratory of Tropical Oceanography has traditionally organized and hosted international conferences on Tropical Marine Environmental Changes (MEC) every other year since 2001. These conferences have provided a communication platform for scientists from around the world engaged in the study of the ocean environment, weather and forecasting, climate variability and change, ocean-atmosphere interaction, ocean dynamics, marine biogeochemistry, marine ecosystems, marine geology, and more.

The theme of the 12<sup>th</sup> MEC conference is "Tropical Ocean and Its Climatic and Environmental Effects". We will invite outstanding scientists in relevant research fields to discuss the influence of the tropical ocean and climate on marine disasters, extreme weather events, ocean ecosystems, and biogeochemistry.

**Theme:** Tropical Ocean and Its Climatic and Environmental Effects

**Tentative Sessions:**

1. Role of the tropical ocean in climate
2. Multi-scale ocean dynamical processes
3. Ocean ecological and biogeochemical processes
4. Marine geological processes and hazards

**Organizers:**

State Key Laboratory of Tropical Oceanography, South China Sea Institute of Oceanology,  
Chinese Academy of Sciences

**Sponsor:**

South China Sea Institute of Oceanology, Chinese Academy of Sciences

**Extended Abstract Collection:**

Oral presentations and posters are selected based on abstracts submitted. Extended abstracts will be published.

The extended abstract should be written in English, using 12-point font (Times New Roman recommended) and no more than four pages (including graphs and tables). The content should include the title, names of the authors and their institutions, mailing addresses, and e-mail, phone and fax numbers of the corresponding author. We suggest you use Microsoft Word or plain text format for the electronic document. The abstract should be submitted online before September 30<sup>th</sup>, 2023.

**Agenda:**

Abstract submission deadline: Sep. 30<sup>th</sup>, 2023.

On-site registration: Nov. 18<sup>th</sup>, 2023

Meeting dates: Nov. 19<sup>th</sup> -20<sup>th</sup>, 2023

**Scientific Committee:****Co-Chairs:**

Chen, Dake (Second Institute of Oceanography, MNR)

Dai, Minhan (Xiamen University)

Li, Chaolun (South China Sea Institute of Oceanology, CAS)

Lin, Jian (South China Sea Institute of Oceanology, CAS)

Wang, Chunzai (State Key Laboratory of Tropical Oceanography, SCSIO, CAS)

**Members:**

Cai, Shuqun (State Key Laboratory of Tropical Oceanography, SCSIO, CAS)

Du, Yan (State Key Laboratory of Tropical Oceanography, SCSIO, CAS)

Feng, Ming (Commonwealth Scientific and Industrial Research Organization, Australia)

Han, Weiqing (University of Colorado, USA)

Jin, Fei-Fei (University of Hawaii, USA)

Keenlyside, Noel (University of Bergen, Norway)

Kug, Jong-Seong (Pohang University of Science and Technology, Korea)

Liu, Zhengyu (Ohio State University, USA)  
Qiu, Bo (University of Hawaii, USA)  
Richter, Ingo (Japan Agency for Marine-Earth Science and Technology, Japan)  
Wang, Weiqiang (State Key Laboratory of Tropical Oceanography, SCSIO, CAS)  
Xie, Shang-Ping (Scripps Institution of Oceanography, USA)  
Yu, Jin-Yi (University of California, Irvine, USA)

**Conveners:**

Chen, Gengxin (State Key Laboratory of Tropical Oceanography, SCSIO, CAS)  
Jing, Zhiyou (State Key Laboratory of Tropical Oceanography, SCSIO, CAS)  
Wang, Xiaoxue (South China Sea Institute of Oceanology, CAS)  
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