iFAST: The International Forum on Advanced Environmental Sciences and Technology

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11 a.m. CDT, Noon EDT, 4 p.m. GMT, Thursday, May 2, 2024 Midnight China, Friday, May 3, 2024



FENGPING WANG, SHANGHAI JIAOTONG UNIVERSITY https://soo.sjtu.edu.cn/en/sz jyry/4029.html

Fengping Wang is currently a Distinguished Professor at the School of Oceanography, Shanghai JiaoTong University. Wang is a world-renowned marine geomicrobiologist and one of the leading scientists in deep-life investigation utilizing cutting-edge interdisciplinary technologies in molecular biology, microbiology, geochemistry and geology. Her major research interests focus on marine deep biosphere, life-Earth coevolution. She has published over 120 high-quality peer-reviewed papers (citations >7000, Google Scholar), granted numerous awards including the "Jizhong Zhou" Outstanding Scientist Award by the Chinese Association of Microbial Ecology, the National Science Fund for Distinguished Young Scholars by the Natural Science Foundation of China, and a Nomination Award for Outstanding Young Woman Scientist in China. She co-founded the International Center of Deep Life Investigation and has served in numerous committees of international scientific communities including International Board of International Society for Microbial Ecology (ISME) and Advisory Board of Deep Ocean Stewardship Initiative (DOSI).

Deep Biosphere and the dark carbon cycling

Abstract: Life flourishes and persists in the deep dark, where the major energy source is cut off from sunlight. The discovery of the deep biosphere has not only revolutionized our understanding on life and its limits, but also, on the habitability and functioning of the Earth. In this talk, I will introduce the major findings of deep life investigation, particularly focusing on marine deep biosphere. I'll also highlight the findings from our group on sedimentary archaea, their roles in carbon fixation and carbon cycling, emphasizing the roles of microbes in driving carbon transformation in marine sediments. In the end, I'll introduce research progress and challenges in marine crustal biosphere, which is potentially the largest biosphere on this planet.





Zoom webinar ID: 934 8142 2012 (zoom.us/j/93481422012)

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