

Symposium on microbial metabolism of carbon cycling in soils

一、会议背景：

会议目的：与 Ralf Conrad 教授交流，回顾土壤碳循环尤其是温室气体微生物代谢的主要成果，展望未来优先发展领域，促进中国温室气体微生物代谢机理过程的研究。

个人简介：Conrad 教授是微生物生态学领域的世界顶尖科学家；曾任欧洲微生物生态学杂志（FEMS Microbiology Ecology）主编；国际全球大气化学组织执委（IGAC）；欧洲环境研究组织科学委员会委员（European Environmental Research Organisation）；欧洲大气对流层痕量物质循环科学委员会委员（EUROTRAC）等；曾获 1997 年“美国微生物学会讲座奖”：2003 年“美国土壤学会 Francis Clark 杰出讲座奖”，2005 年“美国地球物理联合会 AGU 终生成就奖”等。2010 年度中国科学院爱因斯坦讲习教授等国际奖项。

学术成就：上世纪 70 年代，Conrad 教授提出陆地和海洋生态系统作为温室气体源与汇的双重功能；在世界上首先提出并证实微生物在温室气体排放过程的重要作用；在国际上一直引领着土壤氧化大气 H₂ 和稻田甲烷排放微生物生态学的科学前沿；创造性地提出以微生物为基础的稻田生态系统氧化还原序列发生热力学理论；定量描述了陆地生态系统甲烷产生和氧化的微生物过程，阐释了陆地生态系统作为大气甲烷源与汇的机理；发表原创性研究论文 300 余篇，综述 40 余篇，总被引 10000 多次。

Prof. Dr. Ralf Conrad is a leading figure in biogeochemical cycling of atmospheric trace gases. In 1970s he has envisioned that soil and ocean can function as a source, a sink, or both for the cycling of trace gas, which is largely regulated by microorganisms. He has been leading the research areas of atmospheric H₂ consumption by soil and methane emission in rice field. He established the thermodynamic theory of sequential reduction in rice field based on different microbial guilds. He discovered the microorganisms with different affinities to substrate in nature environments, which explained the microbial mechanisms of soil as source or sink for atmospheric CH₄.

二、会议日程：

会议时间：2017年10月20日星期五下午

Symposium on microbial metabolism of carbon cycling in soils	
13:30-13:35	Welcome opening remarks
13:35-14:20	Title: Methanogenic microbial communities in flooded soils, sediments and other terrestrial environments Speaker: Prof. Ralf Conrad, Max-Planck Institute for Terrestrial Microbiology, Germany
14:20-14:45	Title: Acetotrophic sulfate reducer in rice paddy soil as revealed by rRNA SIP Speaker: Dr. Pengfei Liu, Max-Planck Institute for Terrestrial Microbiology, Germany
14:45-15:10	Title: Interplays between PAH and nitrogen cycling in agricultural soils of different pH Speaker: Dr. Yucheng Wu (吴宇澄博士), Institute of soil science, Chinese Academy of Science
15:10-15:25	Break
15:25-15:50	Title: Comparative genomic insights into type II methanotrophs Speaker: Dr. Dongfei Han (韩东飞博士)
15:50-16:15	Title: Functional and structural responses of methanogenic microbial communities in paddy soils to progressing rice straw degradation Speaker: Dr. Yang Ji (纪洋博士), Nanjing University of Information Science & Technology, China
16:15-16:40	Title: The temperature response of microorganisms responsible for CH ₄ production in Namco peat soil Speaker: Dr. Yongcui Deng (邓永翠博士), Nanjing Normal University, China
16:40-17:05	Title: Contribution of acetogenesis to anaerobic degradation in methanogenic rice field soils Speaker: Dr. Bo Fu (符波博士), Jiangnan University, China
17:05-17:15	Closing remarks
17:15-19:00	Dinner

三、会议地点 江南大学环境与土木工程学院 D303 会议室

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