

2018 年生物质废弃物绿色炼制与环境国际研讨会
(GBBWE2018)

The International Workshop on Green Biorefineries for Biomass
Waste and the Environment 2018



会议网址 website: <http://www.iseh2018.com/GBBWE2018.aspx>

Shanghai, China

December 4-6, 2018

■ 会议简介 Overview of GBBWE2018

2018 年生物质废弃物绿色生物精炼与环境国际研讨会 (GBBWE2018) 将于 2018 年 12 月 4 日至 6 日在中国上海举行。研讨会旨在探讨包括化学和生物技术在内的绿色生物炼制技术在生物质废物资源化利用中的地位和进展以及环境影响。会议将提供一个很好的机会交流和讨论有关生物质利用的新成就和新想法, 并促进该领域研究人员的相互合作。

生物质废弃物富含可生物降解的有机物, 在世界范围内可大量获得。利用生物质废物有助于减少污染, 并且也可以为未来社会提供可再生能源和生物基化学品。因此, 生物质废弃物资源的利用越来越受到科学、工业和政府部门的重视。厌氧消化是广泛用于废弃生物质利用的一种既定技术, 但由该工艺产生的(生物)气体价值低, 预处理成本降低了成本效益; 生物质资源的化学品潜力也丧失了。越来越多的新研究集中于应用不同的技术(包括发酵、水热转化、热解和微波处理)从生物质废物中提取高价值的化学品, 从而提高资源利用率。然而, 这些技术可能会成本高并具有二次污染。另外需要考虑分离过程, 因为分离过程的成本可以占用许多常见化学过程多达 80% 的总成本, 这可能会增加生物质基转化过程的成本。结合并最终整合绿色技术对于充分发挥生物质废弃物作为化学和能源资源的潜力至关重要。本次会议将围绕以上议题进行。

研讨会拟邀请来自世界各地高校、研究单位和公司的专家分享他们在将绿色技术应用于生物质利用方面的最新成果和进展。

The International Workshop on Green Biorefineries for Biomass Waste and the Environment 2018 (GBBWE2018) will be held in **Shanghai, China** on **4-6 December, 2018**. The workshop aims to explore the status and development of green biorefinery technologies including chemical and biological technologies for waste biomass resource utilization, and also the environmental effects. It will provide an excellent opportunity to communicate and discuss about the new achievements and new ideas related with biomass utilization, and promote the collaboration of researchers in this field.

Biomass waste is rich in biodegradable organic matter and available in large quantities worldwide. The utilisation of biomass waste helps reduce pollution but can also provide renewable energy and bio-based chemicals for future society. Therefore, biomass waste resource utilisation has attracted increasing attention in scientific, industrial and government communities. Anaerobic digestion is an established technology widely applied in the utilisation of waste biomass but the (bio) gas produced from this process is of low value and the costs of pre-treatment reduce the cost-effectiveness; the chemical potential of the bio-resource is also

lost. An increasing amount of new research is focused on the application of different technologies (including fermentation, hydrothermal conversion, pyrolysis, and microwave treatment) to make high value chemicals from biomass waste and thus improve resource utilisation. However, these technologies can suffer from high costs and secondary pollution. There is also a concern about separation steps since these can represent up to 80% of the total costs of many common chemical processes and this is likely to increase the cost for bio-biomass based processes. The combination and ultimately integration of green technologies is crucial to realise the full potential of bio-wastes as chemical and energy resources.

The workshop invites experts from universities and companies all over the world to share their recent results and progress on applying green technologies for biomass utilization.

■ 会议组织 Organizations

主办单位：复旦大学

四川大学

同济大学

约克大学

上海污染控制与生态安全研究院

Organizers: Fudan University

Sichuan University

Tongji University

University of York

Shanghai Institute of Pollution Control and Ecological Security

会议组织委员会 Conference Organization Committee

名誉主席 Honorary Chairs	Prof. Buxing Han 韩布兴 (Institute of Chemistry, CAS)
主席 Co-Chairs	Prof. Shicheng Zhang 张士成 (Fudan University)
	Prof. James Clark (University of York)
	Prof. Changwei Hu 胡常伟 (Sichuan University)

	Prof. Pinjing He 何晶晶 (Tongji University)
秘书组 Secretariat	Prof. Gang Luo 罗刚 (Fudan University) Prof. Jiajun Fan (University of York) Prof. Dong An 安东 (Fudan University) Prof. Xiangdong Zhu 朱向东 (Fudan University)

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Prof. Jianmin Chen	Fudan University
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Prof. Ning Yan	National University of Singapore
Prof. Xin Yang	Fudan University
Prof. Shicheng Zhang	Fudan University
Prof. Zhenya Zhang	University of Tsukuba
Prof. Vania Zuin	Federal University of Sao Carlos

主题报告

Keynote Speakers (to update) (listed in alphabetical order):

Prof. James Clark	University of York
Prof. Huu Hao Ngo	University of Technology Sydney

拟邀报告:

Invited Speakers (to update) (listed in alphabetical order):

Prof. Guanyi Chen	Tianjin University
Prof. Jiajun Fan	University of York
Prof. Pinjing He	Tongji University
Prof. Changwei Hu	Sichuan University
Prof. Carol Lin	City University of Hong Kong
Prof. Xindong Mu	Qingdao Institute of Bioenergy and Processing, CAS
Dr. James Sherwood	University of York
Prof. Daniel C.W. Tsang	The Hong Kong Polytechnic University
Prof. Hualong Xu	Fudan University

会议语言: 英文

Language: English

■ 会议注册及摘要提交 Registration & Abstract Submission

在线注册及摘要提交网址: <http://www.iseh2018.com>, 截止日期为: 11月15日

在线注册的参会人员可以选择提交或不提交摘要, 如提交摘要, 请在线提交1页A4纸大小的Word文件, 内容文字需全英文, 详细要求见下:

Conference delegates may present abstract, or attend the conference without presenting the abstract. All abstracts must be written in English (1 page A4 in Word format, Times 12 pt, 1.5-spaced) and consist of the following sections:

1. Title of the abstract: ALL CAPITALS
2. Authors: e.g., AB Surname
3. Organization(s): e.g., Fudan University, Shanghai, China
4. Body: includes introduction, methods, results and discussion

To submit your Abstract, please visit the web-site: <http://www.iseh2018.com> and submit your Abstract online. Revisions of the abstracts by their authors (for clarity, style and language) may be requested by the organizing committee.

Deadline for submission of abstracts is November 15, 2018.

Authors of accepted abstracts will be notified by the organizing committee before **Nov. 15, 2018.**

■ 会议地点和注册费 Venue and Registration Fee

会议地点: 上海富悦大酒店, 上海市松江区茸悦路208弄(近松江大学城, 万达广场东侧)

Address: Rongyue Road 208, Fuyue Hotel, Songjiang District, Shanghai, China

电话 Tel: 021-37688888

注册费: 2000元人民币(正式代表)、1800元人民币(学生代表)

2018年11月30日之前注册正式代表和学生代表均减100元人民币。

Registration Fee:

Early-bird registration (before November 30, 2018): 1700 Yuan for student and 1900 Yuan for non-student

Later registration fee (after November 30, 2018): 1800 Yuan for student and 2000 Yuan for non-student

注册缴费: 上海富悦大酒店代收

Payment for the fee: registration fee will be collected by Fuyue Hotel

本次会议的收款账户 Information for payment:

户名 Name	富悦（上海）酒店管理有限公司 Fuyue (shanghai) Hotel Management Limited Corporation
开户行 Bank name	工行上海新松江路支行 Industrial and Commercial Bank of China Limited (ICBC), Branch of New Songjiang road
帐号 Account	1001 8065 0900 0005 678
税号 Tax number	9131 0117 0729 8111 9F
联系人 Contact	吴文斌 Wenbin Wu 021-37688888

■ 住宿 Accommodation

上海富悦大酒店，上海市松江区茸悦路 208 弄（近松江大学城，万达广场东侧）

Fuyue Hotel (Rongyue Road 208, Songjiang District, Shanghai, China)

住宿协议价（双人间或大床间）：参会人员 600 元/间/晚，参展人员 650 元/间/晚

Price of double/king bedroom: 600 yuan per room per night for participators; 650 yuan per room per night for exhibitors

房间预订方式：电话 021-37688888

Please direct book the room by calling +86 021-37688888 (please say that you are booking room for the ISEH 2018 conference on Dec 4-6, 2018)

■ 联系方式 Contact

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Department of Environmental Science and Engineering, Fudan University

Shanghai Key Laboratory of Atmospheric Particle Pollution and Prevention (LAP³)

Shanghai Institute of Pollution Control and Ecological Security

附录 提交摘要模板

Template for the Abstract

**Response of marine productivity to anthropogenic deposition of
nitrogen, phosphorus and iron**

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Abstract

Phytoplankton productivity in the oceans, amounting to 50 petagram of carbon per year, plays an important role in sustaining the habitability of Earth. The variability of phytoplankton is always attributed to climate-related factors. Impact of deposition of anthropogenic nutrients (DAN), in particular for nitrogen (N), iron (Fe) and phosphorus (P), on open-ocean biogeochemistry has been realized. However, due to a large variability in climate-related factors, identification of the single signals of DAN in phytoplankton remains a major challenge. In this study, we use a state-of-the-art ocean biogeochemical model by considering the variation of DAN over the industrial era. When comparing against available observations in the oceans, the modelled concentrations of nutrients (N, P and Fe) and chlorophyll can be improved by considering DAN. In addition, by controlling the climate-related factors, a positive signal in observed chlorophyll concentrations to increasing DAN can be successfully identified across 182,552 measurements, which can be captured in the model. It implies the change of DAN should be considered when modelling the carbon cycle in the Earth system.

Keywords: Nutrient deposition; Ocean productivity; Ocean biogeochemical model; Chlorophyll; Earth systemⁱ

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