



**The 22nd Annual CSCST-SCI
conference**

**Renewable Energy and Novel
Materials for a Sustainable
Future**



Aston University

Birmingham

19th September 2015



旅英中国学人化学科学与技术学会



Foreword

Dear Colleagues,

We are pleased to invite you to the Chinese Society of Chemical Science and Technology (CSCST) and the Society of Chemical Industry (SCI)'s 22nd Joint CSCST-SCI conference which will be held at Aston University in Birmingham on Saturday 19th September 2015.

This year's annual conference will feature the theme "Renewable Energy and Novel Materials for a Sustainable Future". Energy and environmental issues, including climate change, are among the most challenges facing the world. It is important for the scientists, engineers and policy-makers to come together, sharing our knowledge and solutions for the challenges. The conference will highlight the current development in renewable energy and novel materials in the UK. Meanwhile, research work on any other topics relevant to chemical science and technology are also highly welcome.

With all our events, you can expect to network with researchers and scholars from all over the UK and be presented with the most up-to-date works in the multi-disciplinary areas of chemical science and engineering.

I look forward to welcoming you to Birmingham

Yours sincerely,

Jiawei Wang

Chair, CSCST-UK

Conference Committee

Scientific Committee:

Prof George Chen, University of Nottingham

Prof Zhanfeng Cui, Oxford University

Prof Yulong Ding, University of Birmingham

Dr Chuang Peng, University of Nottingham

Dr Tiancun Xiao, Oxford University

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Dr Hongliang Zhang, Cambridge University

Dr Xingguang Zhang, Aston University

Website Team

Dr Chun Liu, Syngenta

Dr Chunlei Pei, Cambridge University

Mr Qifeng Qian, University of Nottingham

Conference Programme

08:30-9:45	Registration/Posters setup (Main Building MB404)	
	Opening Session (Main Building MB517) Chair: TBD	
09:45-09:50	Welcome Speech , Dr Jiawei Wang, Aston University	
09:50-10:00	SCI Speech , Delegate from SCI	
10:00-10:10	RSC Speech , Dr Kathleen Too, RSC	
10:10-10:20	Beijing Institute of Technology , Dr Ke Chen	
10:20-10:30	Beijing Institute of Technology , Prof Changwen Hu	
	Plenary Session (Main Building MB517) Chair: TBD	
10:30-11:00	P1: Designing heterogeneous catalysts for biorefining Prof Karen Wilson, Aston University	
11:00-11:30	P2: Efficient H₂ and O₂ production from water by visible-driven photocatalysis Dr Junwang Tang, University College London	
11:30-11:45	Coffee Break	
	Session 1A (MB517) Chair: TBD	Session 1B (MB518) Chair: TBD
11:45-12:10	K1: The catalytic conversion of CO₂ Prof Changwen Hu, Beijing Institute of Technology	K2: Exploitation of novel nanoscience in superfluid helium droplets Dr Shengfu Yang, University of Leicester
12:10-12:25	O1: Plasma-catalysis for the conversion of greenhouse gas into value-added fuels and chemicals Dr Xin Tu, University of Liverpool	O4: Controlled surface morphology formation of drying polymer based droplet Ben Xu, Northumbria University
12:25-12:40	O2: Hydrodeoxygenation of P-cresol Catalysed by Nickel and Cobalt Supported on Alumina: Effect of Temperature and Sulphur Kai Liu, Imperial College London	O5: A cost-effective approach to the synthesis of zeolitic imidazolate framework-8 (ZIF-8) materials and anion effect on its formation Binling Chen, University of Exeter
12:40-12:55	O3: Switchable Synthesis Between homoallylic Organoboronates Bearing a Z-Geometry enone and allylic Organoboronates by Copper catalyzed 1,6-borylation	O6: Thermal and kinetic behaviors of energy grass and lignite in co-pyrolysis Dr Yanjun Guan, North China Electric Power University

	Yuefei Luo, University of Nottingham	
12:55-14:00	Photograph (In front of the main building) Lunch and Post Presentation (MB404)	
	Session 2A (MB517) Chair: TBD	Session 2B (MB518) Chair: TBD
14:00-14:25	K3: Porous ZnO/N-doped carbon composites via steam-assisted carbonization of ZIF with enhanced CO₂ uptake and organic pollutants removal Dr Yongde Xia, University of Exeter	K4: Hybrid thermoelectrics of Si Nanoparticles with conductive ligands Dr Yimin Chao, University of East Anglia
14:25-14:40	O7: Understanding the defect (doping) chemistry of metal oxides for electronics and clean-energy applications Dr Hongliang Zhang, University of Cambridge	O10: Label Free Detection of Human Prostate-Specific Antigen (PSA) Using Film Bulk Acoustic Resonators (FBARs) Xiubo Zhao, University of Sheffield
14:40-14:55	O8: Effect of Gold Doping on Photothermal Conversion Behaviour of TiO₂ for Direct Absorption Solar Collection Muhammad Amjad, University of Leeds	O11: One-Step Molten Salt Mediated Preparation and Luminescent Properties of Ultra-long SiC/SiO₂ Core-Shell Nanowires Quanli Jia, Zhengzhou University
14:55-15:10	O9: Characterization of bundles tungsten oxide nanowire doping alkali composite Kunyarat Thummavichai, University of Exeter	O12: Synthesis and characterization of novel nanoparticles coated with carbon Nannan Wang, University of Exeter
15:10-15:30	Coffee Break	
	Session 3A (MB517) Chair: TBD	Session 3B (MB518) Chair: TBD
15:30-15:55	K5: Nanaoporous Inorganic and/or Organic Hybrid Polymers for Gas Adsorption Dr Bo Xiao, Queen's University of Belfast	K6: Metal-organic frameworks for CO₂ adsorption: understanding the hydrothermal stability and structural defects – a case study of Cu₃(BTC)₂ framework Dr Xiaolei Fan, University of Manchester
15:55-16:10	O13: Rheology Of Nanoparticle Modified Polymer And Its Application In Enhanced Oil Recovery Maje Alhaji Haruna, University of Leeds	O16: Facile and cost-effective strategy for anti-(bio)corrosive protection of energy storage and harvest facilities Zhaoliang Zheng, University of Liverpool
16:10-16:25	O14: Diffusion driven layer-by-layer assembly of graphene oxide into porous three-dimensional	O17: Simulation and Experimental Study of the Specific Heat Capacity of Molten Salt based

	macrostructures Dr Jianli Zou, University of Liverpool	Nanofluids Geng Qiao, University of Birmingham
16:25-16:40	O15: In Vivo tototoxicity and biodistribution of Water Soluble Self-passivated Graphene Quantum Dots Tanveer Ahmad Tabish, University of Exeter	O18: The discussion of descriptors for the QSAR model and molecular dynamics simulation of benzimidazole derivatives as corrosion inhibitors Dr Xiuhui Zhang, Beijing Institute of Technology
16:40-17:00	Awards Announcement and Closing Session (MB517)	

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