### 2018 中英先进材料与结构研讨会 热电材料和清洁能源论坛

# 2018 Sino-UK Symposium on Advanced Materials and Structures & UK-China Partnership Forum in Themoelectrics and Clean Energy

中国 • 西安

#### Xi'an·China

为促进中英两国材料学科与结构优化设计学科的合作与交流,推进先进材料与结构领域研究与应用的深入开展,由西北工业大学、伦敦玛丽女王大学、英国大使馆、西安国家民用航天产业基地主办,西北工业大学材料学院、理学院、机电学院、玛丽女王工程学院、研究生院、国际合作处、NPU-QMUL 先进材料与结构联合研究院承办的"2018 中英先进材料与结构研讨会-热电材料和清洁能源论坛"将于2018年11月5日-7日在古都西安召开。

The 2018 Sino-UK Symposium on Advanced Materials and Structures & UK-China Partnership Forum in Themoelectrics for Clean Energy is jointly hosted by Northwestern Polytechnical University (NPU), Queen Mary University of London (QMUL), British Embassy Beijing, and Xi'an National Civil Aerospace Industrial Base from November 5-7, 2018 in NPU, Xi'an,

China. The meeting is organized by NPU through School of Materials Science

and Engineering, School of Natural and Applied Sciences, School of

Mechanical Engineering, QMUL Engineering School, NPU, Graduate School,

Office of Global Engagement, and NPU-QMUL Joint Research Institute of

Advanced Materials and Structures.

本次会议邀请了中英两国的知名学者,就热电材料、清洁能源材料、

材料结构设计与优化等领域进行学术交流和学科发展研讨,积极推动中

英两国在材料科学与结构优化设计领域的深入交流与合作。

Many prestigious China and UK academics and enterprises in

thermoelectrics and advanced materials are invited to join this event in order

to establish a sustainable network, develop structured and productive sectoral

partnerships, and support technology commercialization of joint R&D

projects.

2018 中英先进材料与结构研讨会-热电材料和清洁能源期待您的参与!

Welcome to the 2018 Sino-UK Symposium on Advanced Materials and

Structures & UK-China Partnership Forum in Themoelectrics for Clean

Energy!

会议时间: 2018年11月5日-7日

**Time:** November  $5^{th} - 7^{th}$ , 2018

地点: 西北工业大学

Location: Northwestern Polytechnical University

二、 会议主办方: 西北工业大学、伦敦玛丽女王大学、英国驻华大 使馆、西安国家民用航天产业基地

**Hosted by:** Northwestern Polytechnical University, Queen Mary University of London, British Embassy, Beijing, and Xi'an National Civil Aerospace Industrial Base

#### 三、 会议议程(英文版)

### **Agenda (English Version)**

	Jie Kong	
8:30-8:40	Opening Remarks	Weihong Zhang
8:40-8:50	UK-China Science &Innovation Policies & Funding Opportunities	Alasdair Hamilton
8:50-9:10	Speech and Introduction to Xi'an National Civil Aerospace Industrial Base	Chi Zhang
9:10-9:20	Appointment Ceremony for Adjunct Professors	Hui Yang
9:20-9:50	Photo-Taking & Tea Break	

### November 6, 2018 (Tuesday)

### Fifth Meeting Room, International Conference Centre, Youyi Campus, NPU

Session 1			
Time	Speaker	Title	Chair
9:50-10:20	Mike Reece	Overview of the thermoelectric technology landscape	
10:20-10:50	Jihong Zhu	Topology optimization for structures achieved by additive manufacturing	Xuanhua Li
10:50-11:20	Vassili Toropov	Recent developments in design optimization techniques for aerospace applications	Li

11:20-11:50	Kaijie Chen	Hybrid ultra-microporous materials for industry-related gas separation	
12:00-14:00		Lunch and rest	

### November 6, 2018 (Tuesday)

### First Meeting Room, International Conference Centre, Youyi Campus,

### NPU

Session 2			
Time	Speaker	Title	Chair
14:00-14:20	Feng Gao	Fabrication and properties of textured high temperature thermoelectric ceramics	
14:20-14:40	Oliver	Hybrid and organic thermoelectric materials	
14.20-14.40	Fenwick	Hybrid and organic thermoelectric materials	Mike Reece
14:40-15:00	Qinghui	Enhanced thermoelectric performance of chalcogenide	Wilke Reece
	Jiang		
15:00-15:20	Christian	New semiconducting materials for organic thermoelectrics	
	Nielsen		
15:20-15:40	Shuangming	Microstructure and properties of directionally solidified	
13.20-13:40	Li	Mg2(Si, Sn) based thermoelectric materials	
15:40-16:00	Tea break		

Session 3			
Time	Speaker	Title	Chair
16:00-16:20	Xuetao Shi	Influence of PLA sterecomplexation on the PLA-based	
		blend and its microcellular foam	
16:20-16:40	Baoli Du	Role of the four Cu-Sb-S compounds in searching for	
		future thermoelectric materials	Feng Gao
16:40-17:00	Petra Agota	Metal-organic frameworks: an emerging class of materials	
	Szilagyi	for atom-precision assembly of nanoclusters'	
17:00-17:20		Free discussion	

### November 7, 2018 (Wednesday)

## Meeting Room 334, School of Materials Science and Engineering, Youyi Campus, NPU

Session 4			
Time	Speaker	Title	Chair
8:30-8:50	Dou Zhang	Ferroelectric polymer-based nanocomposite capacitors for energy storage	
8:50-9:10	Haixue Yan	Phase transitions in lead-free AgNbO3-based ceramics for high power energy storage	
9:10-9:30	Chenglong Jia	Novel functional magnetic nanostructures with sustainable energy consumption	Bin Yang
9:30-9:50	Hongtao Zhang	Processing and microstructural characterization of oxide dispersion strengthened ferritic steels for nuclear applications	
9:50-10:10	Muhammad Idrees	Cobalt-containing silicon/carbon nanocomposite as highly efficient anode materials in lithium-ion batteries	
10:10-10:30	Tea break		

Session 5			
Time	Speaker	Title	Chair
10:30-10:50	Bin Yang	Millimetre-wave and terahertz driven material applications	
10:50-11:10	Steffi	Bioelectrochemical imaging with light-addressable	
10:30-11:10	Krause	potentiometric sensors	
11:10-11:30	Ii C	Design & fabrication, property regulation and intrinsic	
	11:10-11:30	Junwei Gu	mechanism of thermally conductive polymer composites
11:30-11:50	Stoyan	Molecular morphogenesis- towards autonomous materials	
11.30-11.30	Smoukov	robotics	
11:50-12:10	E Cl	Design of functional inorganic/organic hybrid nanomaterial	
	Fang Chen	and its application in fuel cells	