



## SUSTech-HKU Joint Research Symposium 2018

#### SUSTech, Shenzhen

#### 21 November 2018 (Wednesday)

#### SCHEDULE

Time	Details	Location
9:50	HKU delegation arrives at SUSTech	110 Library
10:00-	Opening Ceremony for the Symposium	
10:20		
	Opening addresses by	
	Prof. Andy HOR, Vice-President and Pro-Vice-Chancellor (Research),	
	HKU	
	&	
	Prof. Jinguang TENG, Vice President and Dean of Graduate School,	
	SUSTech	
10:20-	Keynote Lecture	110 Librar
10:50		
	Global Arena for the Development of Engineering Leadership	
	Prof. Yiming RONG	
	Chair Professor and Department Head, Dept. of Mechanical and Energy	
	Engineering, SUSTech	
	&	
	Prof. Guoquan HUANG	
	Chair Professor and Department Head, Dept. of Industrial and	
	Manufacturing Systems Engineering, HKU	
10:50-	Overview of Research Areas of HKU and SUSTech, and the	110 Librar
11:10	HKU-SUSTech Joint Education Program for PhD	
	Prof. Dong-Yan JIN, Associate Dean, Graduate School, HKU	
	&	
	Prof. Shuanghua YANG, Associate Dean, Graduate School, SUSTech	
11:10-	Group Photo Session	
11:20		
11:20-	Tea Break & Poster Session (13 posters)	Atrium,
11:50		Library
11:50-	Parallel Sessions for HKU and SUSTech academics, and	110 &11
12:50	HKU-SUSTech students	Library





	Session themes Parallel Session 1: Environment, Chemistry & Biology	
	Parallel Session 2: Advancing emerging research and innovations	
12:45- 13:50	Lunch Break	Faculty Cafeteria
14:00-	Parallel Sessions for HKU and SUSTech academics, and	110
15:30	HKU-SUSTech students	&111 Library
	Session themes	
	Parallel Session 1: Environment, Chemistry & Biology	
	Parallel Session 2: Advancing emerging research and innovations	
15:30-	Tea Break for Discussion among Participants &	Atrium,
16:00	Poster Session(13 posters)	Library
16:00-	Parallel Sessions for HKU and SUSTech academics, and	110
17:30	HKU-SUSTech students	&111 Library
17:45-	Campus tour and Lab Visit	
18:30	-	
18:30-	Dinner	Guest
20:00	(By invitation only)	House





# Session 1: Environment, Chemistry & Biology

Chair: Prof. Qiongyu GUO & Prof. Yucong XIE Room: 111 Library

11:50	SUSTech	Prof. Tzung-May FU 傅宗政	Environmental Science & Engineering	Volatile Organic Compound Emissions in China: Space-Based Constraints on Emissions and Impacts on Regional Air Quality
12:05	HKU	Dr C.H. LIU	Mechanical Engineering	Large-Eddy Simulation of Pollutant Transport in Urban Environment
12:20	SUSTech	Prof. Yanqing TIAN 田颜清	Materials Science and Engineering	Highly selective fluorescent potassium ion sensors
12:35	HKU	Dr Xiaoyu Ll	Chemistry	DNA-encoded chemical library and its applications in drug discovery
			Lunch	
14:00	SUSTech	Prof. Qiongyu GUO 郭琼玉	Biomedical Engineering	Developing biomimetic collagen-based matrix using cyclodextrin for corneal repair
14:15	HKU	Dr Cheng-han YU	Biomedical Sciences	Matrix-force dependent integrin signaling at the podosome
14:30	SUSTech	Prof. Liang YANG 杨亮	Medicine	Chemical Biology Control of Biofilm Infections
14:45	HKU	Dr Linwei TIAN	Public Health	Environment causes of two cancers: lung cancer in eastern Yunnan and esophageal cancer in the Taihang Mountains
15:00	HKU	Dr Yuanliang ZHAI	Biological Sciences	From CryoEM structures to molecular mechanisms in DNA replication
	Tea Break			
16:00	SUSTech	Prof. Yucong XIE 谢宇聪	Biology	Novel molecular mechanisms of cytokinesis in C. elegans





16:15	SUSTech	Prof. Feng RAO 饶枫	BIDIOW	Inositol Polyphosphates as Signaling Messengers: Mechanisms and Targeting
16:30	HKU	Dr K.W. Y. YUEN	Biological Sciences	Epigenetic regulation of Centromere function in Chromosome Segregation
16:45	HKU	Dr Boon-Leong LIM	Biological Sciences	Monitoring energy changes in living organisms
17:00	SUSToch	Prof. Andrew HUTCHINS	RIUUQA	Transposable elements and epigenetic control
17:15	HKU	Dr Jason WONG		Uncovering mutational and DNA repair processes from cancer genomes





## Session 2: Advancing emerging research and innovations

Chair: Prof. Zhen ZHANG Room: 110 Library

11:50	НКИ	Prof. Nancy W.Y. LAW	Education	Education as a design science: engineering e-learning and analytics systems to advance the science of learning
12:05	Student	Ms. Kejin ZHU 朱柯锦	Education	China's Power Strategy and Its Higher Education Internationalization in Southeast Asia
12:15	Student	Mr. Wei CEHN 陈伟		molecular doped inorganic semiconductor for perovskite solar cells
12:25	HKU	Dr. Y. CHEN	Mechanical Engineering	Materials and Energy
			Lunch	
14:00	<b>NIFFOCH</b>	Prof. Hong WANG 汪宏		Novel Dielectric Materials for Passive Integration and Energy Storage
14:15	Student	Mr.Chao SHEN 沈超	Mechanics and Aerospace Engineering	Acoustic Metasurface
14:25	SILLOCH	Prof. Weishu LIU 刘玮书		Flexible thermoelectric materials, devices and its application.
14:40	SUTech	Prof. Zhubing HE 何祝兵	Materials Science and Engineering	Lead-free perovskite materials and devices
14:55	HKU	Prof. Maohai XIE	Physics	Epitaxial 2D crystalline films
15:10	Studont	Mr.Yu ZHANG 张昱	Physics	molecular doped inorganic semiconductor for perovskite solar cells
15:20	нкп	Prof. Aleksandra B. DJURISIC	Physics	Halide perovskite materials and devices
	Tea Break			





16:00	SUSTech	Prof Shianonia yang	Ncionco and	Non-intrusive measuring and remote monitoring for waste water management
16:15	Student			Sky-blue Perovskite Light-emitting Diodes Based on CsPbBr3 Quantum Dots
16:25	Student	Mr. Xiaoyang Ll 李晓阳	Electrical and Electronic Engineering	Wirelessly Powered Over-the-Air Computation for High-Mobility Sensing
16:35	НКО	Dr Philin I H VII	Statistics and Actuarial Science	AI/ML in Medicine, Business and Finance
16:50	Student	Mr.Shuqing CHAI 柴树清		Navier slip model of the moving contact line problem
17:00	HKU	Dr. Guangyue HAN	Mathematics	Information Theory and its applications
17:15	SUSTech	Prof. Chaoyang SONG 宋超阳	HNARGU	Lobster inspired soft robot for underwater manipulation and control
17:30	SUSTech	Prof. Luke GIBSON	Science &	Pitfalls in the Ivory Trade: Missing Hippo Teeth & Mismatched Trade Bans in China and Hong Kong

# **Poster Session**

Posters (11:2011:50) Room: Atrium, Library			
Student Name	Cohort	Poster	
Huan CHEN	2018	Structural Study of Mycoplasmal pneumonia Lipoate-Protein Ligase A	
Peizhong CHEN	2017	The protein interactions of Shc1 changes with different sites phosphorylated	
Juan CUI	2017	Large enhancement of electrical transport properties of SnS in the out-of-plane direction by n-type doping: a combined ARPES and DFT study	
Daqiang GUO	2017	IoT-enabled smart manufacturing platform for fixed-position assembly islands	
Shanfeng HUANG	2016	Online Scheduling for Multi-User Mobile Edge Computing	





Xiaolong LI	2017	Hermite Polynomial Estimation for Signed Gerber-Shiu Function against General Levy Process	
Lei LIU	2016	Integrated Metagenomics and Metatranscriptomics to Study Microbial dynamics in anammox treatment process	
Pengyi LIU	2017	Zero-one-inflated proportion data analysis	
Sihan LIU	2017	Blood-retinal barrier on a Chip	
Meijing YANG	2017	An uncharacterised protein which interacts with mitochondria TA proteins in plant	
Fei MENG	2017	Fundamental work cost for quantum cloning	
Zifeng WANG	2016	Water as an urban heat sink: Blue infrastructure alleviates urban heat island effect in mega-city agglomeration	
Yunxu <b>e</b> XIA	2017	Heavy metals removal and plant-phosphorus recovery from sewage sludge by pyrolysis treatment with organic and inorganic chlorinating agents	
Posters (15:3016:00) Room: Atrium, Library	ý		
Student Name	Cohort	Poster	
Weier LIU	2017	Molecular recognitions by endo-functionalized molecular tubes	
Rong MAO	2016	The variation of storage selection function in hillslope and its relation to time-variant storage and travel time distribution under nonstationary hydrologic condition	
Guanding MEI	2018	Efficient light-emitting diodes based on perovskite quantum dots with formamidine-methylamine hybrid cations	
Yifan SHI	2017	Fourier cosine method for finite time gerber-shiu function	
Rui TANG	2017	Synthesis, characterisation and luminescence properties of copper(I) complexes bearing NHC ligand	
Hao TIAN	2016	Intrinsic Role of Excess Electrons in Surface Reactions on Rutile TiO2(110): Using Water and Oxygen as Probes	
Jian WANG	2016		
Pengchao WANG	2017	Using genetically expanded unnatural amino acids to probe signal transduction dynamics in Gram-negative bacteria	
Xiaorui WANG	2017	Observation of self-focusing and refocusing of femtosecond laser propagated in ZnO crystal by two-photon luminescence	
Zhengyu WANG	2017	Selective conversion of gaseous CO2 by g-C3N4 photocatalysts decorated with Pd–Ag bimetallic nanoparticles	
Wei YE	2017	China's Education Aid to Africa: Motivations for the Changing Practice	
Jiawei ZHANG	2017	Accumulation and translocation of heavy metals from rhizophere soil to parts of <i>Lycium barbarum</i> grown on a traditional planting area	
Zezhong ZHANG	2017	Enabling Vehicular Microwave Imaging: A Mirror Vehicle Approach	