

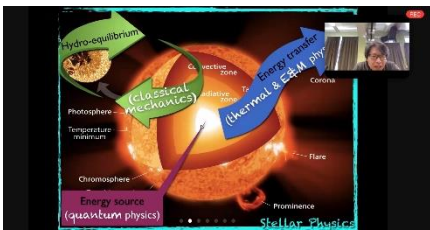
YASHK NEWSLETTER

November 2020 Issue

HIGHLIGHTS IN PICTURE



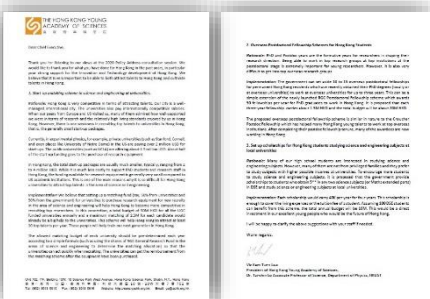
Industry Workshop with HKYIC



Fifth Session of Joint Talk Series with HKAGE



YASHK Members adjudicated at Oral Defenses of YHSA(Asia) 2020



Letter to the CE

SECOND INDUSTRY WORKSHOP

YASHK co-organised the second industry workshop on the topic of Latest Development of AI and Robotics with the Hong Kong Young Industrialists Council (HKYIC) on 25 September 2020. Professors Pascale FUNG, Ronald LUI, Kai CHEN and Kam Tim WOO spoke on information management during COVID-19, industrial applications and advances of geometry, federated learning and privacy-preserving AI computing, and robotics training respectively. Chaired by Prof. Xuhui HUANG, the workshop served to foster dialogues between YASHK scientists and HKYIC industrialists for knowledge exchange in technological inventions.

JOINT TALK SERIES WITH HKAGE

Led by the Outreach Committee Chair Prof. Stephanie MA, the fifth session of the Talk Series on Emerging Technologies: Science, Opportunities and Challenges, co-organised with The Hong Kong Academy for Gifted Education (HKAGE), was held on 26 September 2020. The theme of the session was *Cosmology*. The talk was given by YASHK member Prof. Hua-Bai LI and Prof. Yi WANG of HKUST which attracted an audience of nearly 300 high school students and about 100 teachers attended the talk.

S.T. YAU HIGH SCHOOL SCIENCE AWARD (ASIA)

The oral defenses of S.T. Yau High School Science Award (Asia) were held in October 2020, under the leadership of Prof. Henry N C WONG, the Regional Director. To highlight, YASHK Members served as Assessment Panel Chairs, including Prof. Edwin CHAN for Biology, Prof. Wang YAO for Physics, Prof. Cong WANG for Computer Science, and Prof. Xuhui HUANG as the interim Chair for Chemistry. Other YASHK Members also served as Assessment Panel members and adjudicated at the oral defenses via Zoom.

2020 Policy Address Consultation

At the 2020 Policy Address online consultation hosted by the Chief Executive (CE) on 9 September 2020, Prof. Vic LAW suggested setting up a start-up matching fund for local universities to recruit faculties in science and engineering. The CE showed interest in the idea and Prof. Vic LAW, Prof. Xuhui HUANG, Prof. Anderson SHUM and Prof. Stephanie MA were then invited to have a private meeting with the Chief Secretary and the Secretary for ITB to elaborate more on the suggestions. The suggestions include: setting up a start-up matching scheme in science and engineering for local universities; setting up overseas postdoctoral fellowships for Hong Kong students; and providing scholarships for Hong Kong students studying science and engineering subjects at local universities.

MORE ABOUT YASHK NEW MEMBERS

The following new members have become an integral part of YASHK for nearly a year. Their expertise lies in different areas of science and technology as follows.



Yang CHAI

[More](#)

Associate Professor
Department of Applied Physics, PolyU
Research interest:
• Carbon-based electronics
• Light emitting devices
• Emerging memories

Shengwang DU

Professor
Department of Physics, HKUST
Research interest:
• Fundamental atomic, molecular, and optical (AMO) physics
• Applied optical microscopy

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Mingxin HUANG

[More](#)

Professor
Department of Mechanical Engineering, HKU
Research interest:
• Fundamentals of microstructure-property relationship and phase transformation of advanced steels and alloys
• Development of lightweight materials for automotive applications

Zhifeng HUANG

Associate Professor
Department of Physics, HKBU
Research interest:
• Molecular electronics; Current-induced local heating in molecular devices
• Mechanic stability and reliability of molecular devices
• Fabrication and characterization of nanomaterials and nanostructures
• Bulk heterojunction solar cells; Hydrogen storage; Atomic force spectroscopy (AFM)

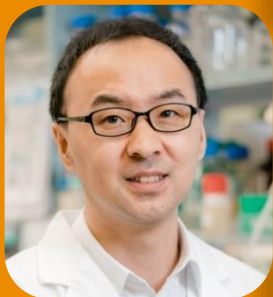
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Fuk Yee KWONG

[More](#)

Professor
Department of Chemistry, CUHK
Research interest:
• Synthetic organic chemistry and organometallics chemistry
- Design, preparation, and application of new phosphine ligands
- Development of new transition metal-catalyzed C-H bond functionalization for carbon-carbon and carbon-heteroatom bond formation
- Organocatalysis / Cross-Dehydrogenative-Coupling Methodologies
- Enantioselective reactions



Xuechen LI

[More](#)

Professor

Department of Chemistry, HKU

Research interest:

- Protein chemical synthesis, Protein chemistry, Chemical glycobiology, Protein bioconjugation, Drugs, Antibiotics, Antibody-drug conjugates antiviral agents, Peptide, Carbohydrate, Natural product, Total synthesis, Peptide modification

Kai LIU

Associate Professor

Division of Life Science, HKUST

Research interest:

- Intrinsic mechanisms regulating axonal regeneration and functional repair after central nervous system injuries

[More](#)



Jianwei SUN

[More](#)

Professor

Department of Chemistry, HKUST

Research interest:

- Enantioselective reactions, heterocyclic scaffolds, homogeneous catalysis, new chemical reactivity discovery, and synthetic organic chemistry

Carmen Chak-Lui WONG

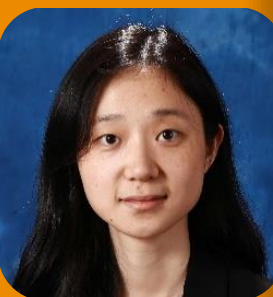
Assistant Professor

Department of Pathology, HKU

Research interest:

- Tumor microenvironment formation
- Cancer metabolism
- Roles of hypoxia in cancer development

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Ni ZHAO

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Professor

Department of Electronic Engineering, CUHK

Research interest:

- Optoelectronic, electronic and electrochemical devices based on organic and nanostructured materials; spectroscopic characterization of the physical processes in nanostructured thin films, structures, and devices

Chunyi ZHI

Professor

Department of Materials Science & Engineering, CityU

Research interest:

- Wearable energy harvesting & storage devices
- Aqueous electrolyte battery

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OTHER MAJOR ACTIVITY

Jul – Oct 2020

Prof. Lap-Chee TSUI met with the three Chairpersons of Hong Kong Subsidized Secondary Schools Council, Hong Kong Direct Subsidy Scheme Schools Council and Association of Principals of Government Secondary Schools to discuss detailed planning for the upcoming mentorship programme in 2021.

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