

联合主办方



香港中文大學(深圳)
The Chinese University of Hong Kong, Shenzhen



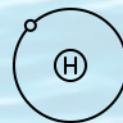
创新创业中心
Center for Innovation, Design & Entrepreneurship

支持单位



45分钟线上公开讲座，随后25分钟座谈会
2021年12月11日（周六）上午 10:00 - 11:30

氢能经济： 技术挑战与增长机遇



摘要

石化能源经济导致气候变化，威胁到人类的生存。基于再生资源的氢能经济，预期带来可持续发展的非碳化循环经济。本研讨会将探讨氢能的生成、储存、运输和使用的技术及经济背景，并强调对发电、化学制造、运输、及建筑物供暖等的潜在影响。另一方面，实现氢能经济仍然面对不少障碍，会上将讨论一些创新与技术的发展，并与此相关的商机与增长潜力。



主讲

吴嘉名教授

香港科技大学化学及生物工程系
荣休教授



客座嘉宾



熊云博士

深圳氢雄燃料电池
有限公司 董事长



钟志良工程师

能源学会（香港分会）
荣誉顾问，科进顾问公
司中国区 董事总经理



胡信诚博士

Oxgrin 联合创办
人兼首席执行官

登记链接

https://us02web.zoom.us/webinar/register/WN_BVCiwei7Re-yPiNdELjRuw

语言

英语、普通话（同声传译）

登记：



关于演讲者



吴嘉名教授现任中南创发技术总监及香港科技大学化学与生物工程系荣休教授。之前，他在麻省大学化学工程系担任教授。于2000年加入香港科技大学，曾担任化学工程系主任，和广州香港科大霍英东研究院院长。在2006年至2013年，担任香港政府纳米先进材料研究所的首席执行官。在2001到2013年，担任日本三菱化学公司的企业技术顾问。吴教授的研究领域集中在纳米材料和各种先进材料的基础应用研究，并进行产品及工艺设计，优化计算和开发。



熊云，同济大学博士，科技部新能源汽车专家库成员，上海市科技进步一等奖获得者，新能源商用车及工程机械联盟理事，武汉新能源汽车协会会长。主持完成国家863计划燃料电池轿车动力系统研发项目、2008北京奥运会燃料电池汽车示范项目，2010上海世博和广州亚运会燃料电池示范运行项目总工程师。任深圳市氢雄燃料电池有限公司董事长。该公司的燃料电池发动机系统已实现大功率全覆盖，核心零部件国产化率超过90%，并已在多种车辆上实现批量化运用，已与多家知名整车厂进行合作，系统配套数量为行业领先。主导深圳氢雄与多家高校就燃料电池前瞻应用开发、上游材料系统及关键材料的联合开发建立深度合作，并共同建立联合实验室。已有武汉理工大学氢喷射器项目和同济大学燃料电池发动机系统项目，进行产学研成果转化。



钟志良工程师任科进顾问中国区董事总经理，亦是英国能源学会-香港分会的荣誉顾问和前主席、香港工程师学会和许多其他本地和国际专业机构的资深会员，在建筑能效、机电系统设计及可持续建筑方面拥有超过三十年的经验。



胡信诚博士毕业于牛津大学本硕博连读，专攻绿色氮能和氢能领域，学术成果在多份国际期刊发表并取得多项发明专利。凭借在低温氨分解技术上的重大突破，胡博士和牛津大学曾适之教授联合创办牛津绿色创能科技有限公司(牛津绿创 OXGRIN)，将技术产业化并推广至商业应用场景，广泛覆盖至能源储存、动力系统、备用能源以及绿色化学品生产等领域。公司以深厚的技术护城河及产品优势，赢得全英最大的清洁能源海洋科技比赛，并与全球领先的海洋无限公司(Ocean Infinity)合作，发展新一代由绿氨驱动的无人水面舰艇。在陆运方面，公司已跟物流公司和客车公司签订战略合作协议，为叉车和小巴提供长续航氨动力系统。胡博士曾于2018年以资深技术顾问的身份参与全球首个风能往返氨储能系统的建设，并与西门子公司展开技术合作。

Joint organizers:



Co-organizer:



Supporting organization:



香港中文大學(深圳)
The Chinese University of Hong Kong, Shenzhen



创新创业中心
Center for Innovation, Design & Entrepreneurship

A 45 min public lecture followed by a 25 min panel discussion

Time: 10:00-11:30 am, December 11, 2021, Saturday

The Hydrogen Economy



Technological Challenges And Growth Opportunities

Abstract

The fossil fuel economy at present has led to climate change that threatens the very existence of humankind. The hydrogen economy that is based on renewable energy is expected to enable a sustainable, de-carbonized, and circular economy. In this webinar, the technical and economic background on the generation, storage, transportation, and use of hydrogen is presented. The potential impact on power generation, chemical production, transportation, and heating for buildings is highlighted. However, there are numerous hurdles in realizing the hydrogen economy. Some of the innovations and technical developments in progress, and thus the related business opportunities and growth, are discussed. The webinar is followed by a panel discussion of selected technologies/issues in more detail.



Keynote Speaker:

Prof Ka Ming NG

Professor Emeritus, Department of Chemical and Biological Engineering, HKUST



Panel:



Dr Yun XIONG

Chairman, Shenzhen HydraV Fuel Cell Co Ltd



Ir Colin CHUNG

Managing Director, China Region of WSP



Dr Simson WU

Co-founder & CEO, Oxgrin

Registration Link:

https://us02web.zoom.us/webinar/register/WN_BVCiwei7Re-yPiNdELjRuw

Language:

English and Chinese (with simultaneous interpretation)

Register:



About the speakers:



Prof Ka Ming Ng is currently CTO of CN Innovations, and Professor Emeritus at The Hong Kong University of Science and Technology. From 1980-2000, he served as Professor of Chemical Engineering at the University of Massachusetts, Amherst. He joined HKUST Chemical and Biological Engineering Department in 2000 and served as Head and General Director at Fok Ying Tung Research Institute in Nansha. He was CEO of Nano and Advanced Materials Institute (NAMI) from 2006-2013. He served as Corporate Science and Technology Advisor for Mitsubishi Chemical, Japan, from 2001 to 2013. His research focuses on the synthesis and applications of nanomaterials and various advanced materials, as well as product and process design, optimization, and development.



Dr Xiong got his PhD degree from the Tongji University. Listed in the New Energy Vehicle Experts Pool of the Ministry of Science and Technology, he has won numerous awards and accolades. He is Chairman of Shenzhen HydraV Fuel Cell Co Ltd (“HydraV”). Covering the full high-power range and with over 90% domestic contents in key parts and components, the company’s fuel cell engines have begun mass production, and have been installed in various well-known automotive OEM’s. Dr Xiong has been driving cooperation between HydraV and various universities in joint developments of and building joint labs in future fuel cell applications, upstream materials, systems and key components. A hydrogen injector project of Wuhan University of Technology and a fuel cell engine system project of Tongji University are ready for commercialization.



Ir Colin Chung is the Managing Director of the China Region of WSP and he is the Honourable Advisor and Past Chairman of Energy Institute – HK Branch. He is also the fellow member of HKIE and many other local and international professional institutions. He has over three decades of experience in energy efficiency, electrical and mechanical engineering systems and sustainable building design.



With master’s and PhD degrees from the University of Oxford, **Dr Simson Wu** has numerous patents and publications in the field of green ammonia utilization. He co-founded Oxford Green Innotech (OXGRIN) with Prof Edman Tsang, based on their patented technology on the revolutionary low-temperature ammonia cracking process. The proprietary catalytic solutions translate world-class research into industrial applications that can be adopted in green chemical production, energy storage, on-board transportation and back-up power. Having won the UK’s largest clean maritime demonstration competition, the company is partnering with Ocean Infinity to develop the next generation unmanned autonomous vessels powered by a novel green ammonia propulsion system. In 2018 Dr Wu took part as a technical advisor in the IUK-Siemens project to build the world’s first round-trip green ammonia plant.