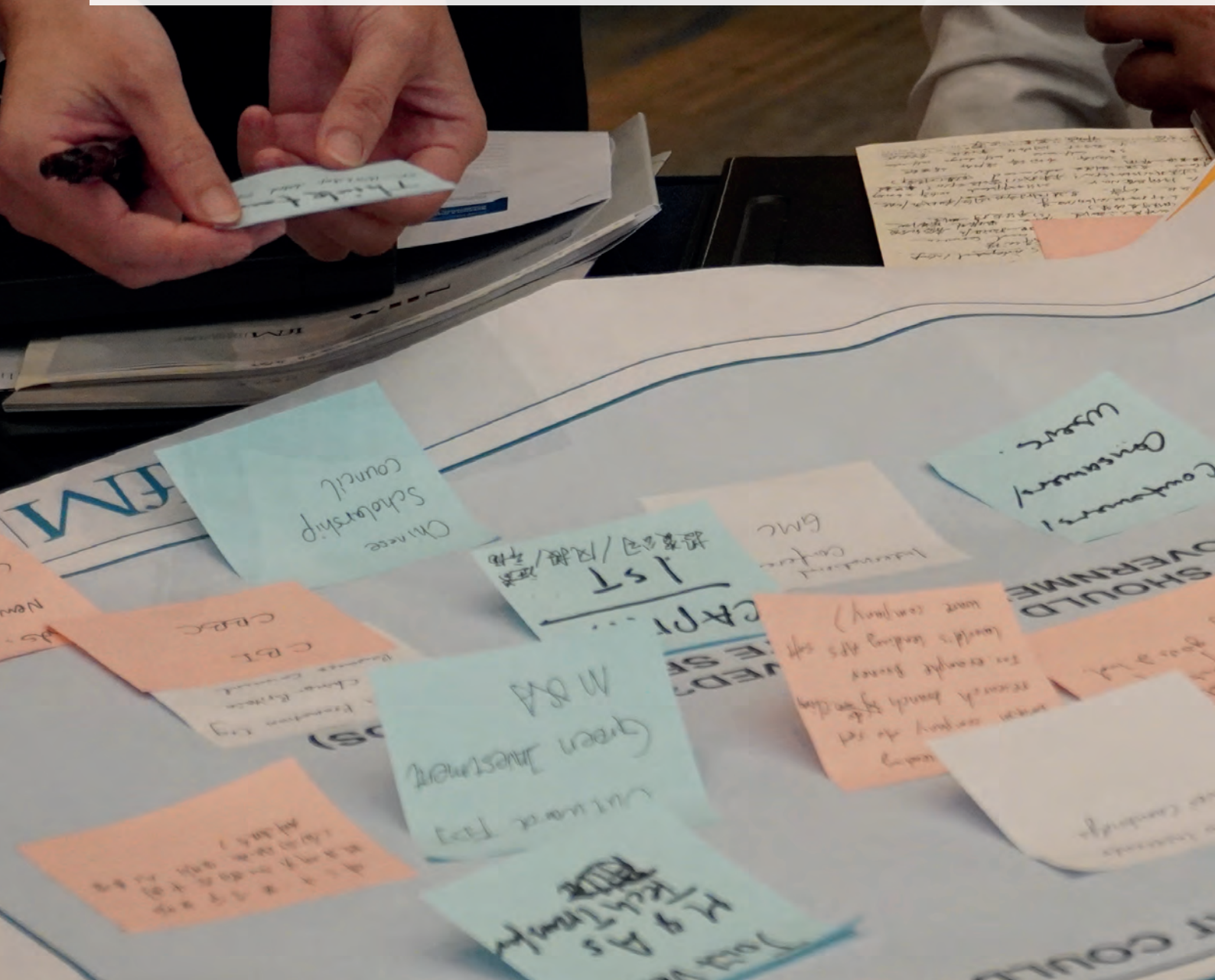


WORKSHOP REPORT

FUTURE MANUFACTURING: SINO-UK COLLABORATION

Monday 9 September | Zhejiang University, Hangzhou, China





WORKSHOP OBJECTIVES

- Share firm and government perspectives about the future of manufacturing from China and the UK: orientation, direction, status, risks, vision.
- Discuss recent policy responses from China and UK, identify key actors and common priorities, and share lessons learned.
- Identify principles and evidence required to establish ‘win-win’ collaborations between China and the UK.
- Establish next steps for future dialogue and identify three or four focus areas to explore further.

ORGANISERS

The workshop was held in Hangzhou, China on Monday 9 September 2019.

It was jointly organised by:

NIIM, Zhejiang University, China (host and secretariat)

SIN, Foreign & Commonwealth Office, UK

IfM, University of Cambridge, UK

FUTURE MANUFACTURING:

SINO-UK COLLABORATION

FOREWORD



PROFESSOR SIR MIKE GREGORY

Former Head of IfM, University of Cambridge, Fellow of Royal Academy of Engineering

Cambridge University's Institute for Manufacturing (IfM) was delighted to partner with Zhejiang University's National Institute for Innovation Management (NIIM) to support this pioneering China-UK dialogue on the Future of Manufacturing. We were privileged to hear contributions from very senior figures from both countries. The presentations and subsequent discussions have laid firm foundations for an ongoing dialogue between the two countries in this vital area for economic growth and global sustainability.



PROFESSOR XIAOBO WU

Chair of the International Workshop on Future Manufacturing: Sino-UK Collaboration

Head of National Institute for Innovation Management (NIIM), Zhejiang University

This workshop set out to become a first step in establishing a productive dialogue between China and the UK on the future manufacturing and related policies. It is anticipated that the findings will inform the ongoing dialogue between MIIT and BEIS and provide a continuing reference community involving government, academia and industry from both countries.

FUTURE MANUFACTURING: SINO UK COLLABORATION

September 9, 2019 | Hangzhou, China

Key Messages

The workshop, held in Hangzhou, analyzed the potential for collaboration between China and the United Kingdom, with an emphasis on the future of manufacturing and sustainability.

This section outlines the key themes and observations emerging from the one-day event. Opinions expressed by participants are in a personal capacity and, therefore, do not necessarily represent the views of their affiliated institutions.

Platforms for Collaboration

Developing a coordinated industrial policy through close collaboration between the United Kingdom and China will help both countries better transition their labor force, support regional economic growth, and transition toward a greener future. MIC 2025 and UK Industry 2050 inherently have the potential for deep synergy between both countries' development paths. A well-coordinated industrial policy can only be realized through continuous dialogue with industry, academia, and think tanks through strategic platforms.

Technological Convergence

Technologies such as the Internet of Things (IoT), Big Data, and Artificial Intelligence have the potential to rapidly alleviate poverty, transform the future of work, deepen economic integration, and reduce greenhouse gas emissions.

Transforming Product Development

The convergence of technologies is quickly evolving traditional manufacturing from batch production to mass customization, from low product mix to high product mix, all while dramatically reducing product development times.

Intelligent Manufacturing

All of these changes will lead to the emergence of new production methods, which are highly customizable. Such methods include the development of intelligent equipment, managing quality more effectively using interconnected vision systems and sensors, and optimizing production planning all run through intuitive cloud-based platforms. Traditional server-based MES software will be a thing of the past in favor of cloud-based industrial operating systems and more specialized applications covering the entire industrial value chain.

Global Value Networking

The seamless acquisition of data and through the development of algorithms enables the reduction of uncertainty and develop the ability to solve complex systems, enhancing efficiency at all ends of the value chain. With the roll-out of 5G technology, anyone from anywhere will have the ability to collaborate, enhancing the utilization of talent from both the UK and China, further enhancing innovation while supporting faster, more accurate decision-making.

Eradicating Poverty: The Shaji Model and Taobao Villages

With such dramatic change also comes new opportunities for value capture by people in the most unlikely of places. The Shaji Model is an example of where farmers use e-commerce trading platforms to develop a robust industrial chain. The multiple layers of relationships, typically familial, create a system of competing and collaboration that further expands the complexity of the business ecosystem contributing to diversification and specialization.

Paving the way toward a sustainable future: Clean Growth

On the backdrop of climate change, the need to create an industrially sustainable future for humanity is becoming ever-pressing. The current rate of industrial development far exceeds the earth's capacity to satisfy the aspirations of billions of people from developing nations looking to achieve the living standards with that of the developed world. An interconnected world means industrial system design will need to become more environmentally sustainable. Therefore achieving an industrial symbiosis with ecology must be an integral part of any industrial policy.

Toward a Low Carbon Future

There is a need to increase collaboration between academia, research, and industry to create new opportunities and achieve a low carbon state.

Both China and the UK need to develop new platforms to share ideas, utilize the talent to drive improvements in renewable energy, and develop finance vehicles for green ventures.

Opportunities through economic and financial dialogue

There are significant challenges that lie ahead for both the UK and China. These include transforming mobility, the exploitation of AI towards a more data-driven economy, managing aging populations, and driving toward clean growth. Some of the key focus areas for cooperation between the UK involve sustainable development, regional economic development, alignment of technical standards and innovation priorities, and preparation the workforce

Building on each other's strengths

With such challenges ahead, efforts must be undertaken to harness the unique strengths inherent within both nations. By adopting shared principles, establishing focus areas, and defining mechanisms that support dialogue and catalyze action, both the UK and China can ensure a shared and prosperous future.

OPENING REMARKS

Guohui ZHOU

China wants further preferential policies to promote industrial growth. GDP has slowed down but the transformation to digital manufacturing is introducing a new mode of growth and a new driver for the economy.

I hope this workshop will provide a forum where we can truly share understanding of manufacturing futures – trends, status quo, risks and outlook. I hope this will be a lively discussion about manufacturing policies where we can share experiences and best practice as well as coming up with a list of future areas and a more integrated system for collaboration.

Tony CLEMSON

This dialogue was established 15 years ago and builds on ongoing discussions with BEIS and MIT. Today will set up the discussion for a visit from a senior BEIS representative.

The UK has great ambitions in manufacturing, set out in the Industrial Strategy and Made Smarter Review. Today we are honoured to have representatives from think tanks, businesses and academia from both the UK and China. This workshop offers a good opportunity to share thoughts about potential areas for collaboration, and to pin down some practical suggestions for working together.

KEY MESSAGES (from various presentations):

- Future Manufacturing has to be data driven, software supported and platform supported.
- We have to consistently put future facing manufacturing as our priority. Manufacturing is the backbone of the economy, and in order to keep pace with customer demand (without importing) we need innovation and green manufacturing to be the key driving forces.
- I4.0 (“Industrial software”) must be software driven. IOT is what we are aiming for but software is how we get there.
- Interpretation and strategic significance of data are the key priority for any company that wishes to transform.
- **Thinking about digitalisation in terms of “CASE”: Connectivity, Automation, Safety and Efficiency (Bombardier example)**
- As a company you need to improve your core capability and stick to it. Then you will survive. You can outsource other things.
- Safety standards are becoming more complex, and data security also needs more attention.
- Different regions have different requirements. We can we satisfy the diversified demands through flexible manufacturing throughout the whole value chain. We have to apply digital tech from the bottom layer of the chain, combining software with hardware to really achieve customisation.
- We have to learn continuously, keep adapting to new technologies, and be open minded. We cannot focus on the technology alone but also the importance of the individual.

Workshop Outputs

UK STRENGTHS:

- Well developed financial markets
- World leader in material sciences
- Strong R&D capability with deep networks
- Rich tacit knowledge and long industrial history
- Well educated population and a pragmatic culture
- High labour engagement in cutting edge industries and technologies
- Mature institutional structures to support innovation
- Well educated populace with notable strength in STEM
- Innovative and practical industrial support mechanisms (The London Approach)

CHINA STRENGTHS:

- Large Market
- Unique approach for fostering rapid industrial development
- Ambitious and well-structured planning and execution mechanisms (5 Year Plan, Made in China 2025)
- High rate of infrastructure investment
- Well-developed supply chains
- Rapid economic growth
- Fast rise in manufacturing productivity
- Friendly environment for entrepreneurship
- Fast growing middle class

AREAS FOR POTENTIAL COLLABORATION:

- Financial capability and long-term planning for companies
- Joint incubators and accelerators (ESP, New tech industrial parks, joint ecosystems or innovation)
- Complementary Industrial Policies between China and the UK
- Harmonized industrial standards
- Providing a safe and secure environment to foster innovation
- Establishing rich educational exchange programs
- Developing more platforms for collaboration between China and the UK through education
- Establishing an aligned IP protocol
- Deepen cooperation in aviation, space, rail, green economy, climate change, health care, smart manufacturing
- UK-China cooperation in third countries
- Collaboration through OBOR (One belt one road)
- Joint government R&D funding
- Supporting digital transformation efforts
- Developing a mutual Visa program for easy movement of talent
- Energy conservation, emissions reduction

Common goals and outcomes	<ul style="list-style-type: none"> ▪ Establish common objectives for balancing job creation ▪ Establish stronger links for Innovation between China and the UK for Green Manufacturing and Advanced Manufacturing Initiatives ▪ Establish complementary priority areas in industrial strategy ▪ Coordination in the management of global challenges (Environment, demographics ,health etc.) ▪ Mutual development of SMEs ▪ Mindset of a shared future for mankind ▪ Addressing Climate change ▪ Promoting green manufacturing ▪ Moving quickly toward zero carbon emissions ▪ Promote mutual sustainable development ▪ Continue to support globalization ▪ Promote cultural openness/awareness ▪ Emphasis on Green Funding ▪ Align UK Industry 2050 with Made in China 2025 ▪ Increase competitiveness of both the UK and China ▪ Promote a 'Race to the top' for both countries
Critical Success Factors	<ul style="list-style-type: none"> ▪ Take a long-term view for mutual development ▪ Focus on complementary capability development (Dynamic systems, hardware, software etc.)
Scalable platforms for Green and Advanced Manufacturing	<ul style="list-style-type: none"> ▪ Increased investment in UK for R&D by Chinese companies ▪ Cross border mechanisms for data compliance ▪ Joint invested R&D Labs ▪ Fair competition rules, with a focus on cultural inclusiveness ▪ Establishment of jointly funded industrial parks ▪ Awareness Raising for joint SIN + FCO activities
Policy Coordination	<ul style="list-style-type: none"> ▪ Fair competition rules, with a focus on cultural inclusiveness ▪ Linkage of UK and China incubators ▪ Establishment of a Patent Cooperation Treaty ▪ Harmonization of Standards ▪ Strengthen WTO Framework
What to Avoid	<ul style="list-style-type: none"> ▪ Avoid myopic focus on technology, when a more comprehensive approach to promote business and social development between both countries. ▪ Ensure policies are consistently implemented, with minimal frequency of change. ▪ Ensure continuous funding of projects to ensure mutual goals are met. ▪ Minimize IP infringement ▪ Culture clashes and misunderstandings ▪ Unclear objectives ▪ Protectionism ▪ Poorly coordinated and executed regulatory policy ▪ Lack of economic openness from both sides to foster growth in innovation ▪ Lack of follow through with plans ▪ No open sharing of learning lessons ▪ Excessive divergence of legal systems ▪ Not enough emphasis of waste management and environmental impact ▪ Excessive focus on sensitive political issues ▪ Prohibition of technology exports ▪ Anti-dumping

Annex 1: Workshop Agenda



UK Science
& Innovation
Network



Future Manufacturing: Sino-UK Collaboration

September 9, 2019

Hangzhou, China

Host:

UK Science and Innovation Network, Foreign & Commonwealth Office

National Institute for Innovation Management, Zhejiang University

Institute for Manufacturing (IfM), University of Cambridge



UK Science
& Innovation
Network



Future Manufacturing: Sino-UK Collaboration

Joint Organized by

SIN, Foreign & Commonwealth Office, UK

NIIM, Zhejiang University, China

IfM, University of Cambridge, UK

Workshop Objectives:

- Share firm and government perspectives about the future of manufacturing from China and the UK: orientation, direction, status, risks, vision.
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This workshop aims to become a first step in establishing a productive dialogue between China and the UK on the future manufacturing and related policies. It is anticipated that the findings will inform the ongoing dialogue between MIIT and BEIS and provide a continuing reference community involving government, academia and industry from both countries.

NIIM will be glad to be the secretariat of this activity.

- **Time: Monday, 9th SEP. 2019,**
- **Venue: Jinxi Hotel, 39 Yanggongdi, Hangzhou, China**

**** Simultaneous interpretation service is available in the workshop.**

Meeting Agenda

Time	Activity	Chair
9:00-9:20	Opening Ceremony and Introduction <ul style="list-style-type: none"> • Guohui ZHOU, Vice Chairman of Zhejiang CPPCC • Tony CLEMSON, Deputy Consul General of the British Consulate-general in Shanghai 	Prof. Xiaobo WU , Head of NIIM in Zhejiang University
9:20-9:30	Group Photo	
9:30-10:50	<u>Session 1 Keynote Panel</u> <u>Understanding of Future Manufacturing (20 mins each)</u> (What is the future manufacturing, what is its pillar? e.g. Digital manufacturing, Intelligent manufacturing, Network manufacturing, Shared manufacturing). <ul style="list-style-type: none"> • <i>Future Manufacturing and Digital Twin: Key Technologies and Development Trends</i> Prof. Jianrong TAN (Fellow), Professor of Zhejiang University, the Fellow of Chinese Academy of Engineering • <i>Understanding of Future Manufacturing</i> Prof. Sir Mike GREGORY, Former Head of IfM in University of Cambridge, the Fellow of Royal Academy of Engineering • Prof. Huayong YANG(Fellow), Zhejiang University, the Fellow of Chinese Academy of Engineering • Dr. Yongjiang SHI, Head of the Centre for International Manufacturing in University of Cambridge 	Prof. Xiaobo WU , Head of NIIM in Zhejiang University
10:50-11:10	Tea Break	
11:10-12:25	<u>Session 2 Overview of Manufacturing Policies and existing collaborative mechanisms in UK and China (15 mins each)</u> (Overview of mechanisms in each country. What impact will future manufacturing have on the economy, society and the environment, and what should be the corresponding policies? This session	Prof. Sir Mike GREGORY , Former Head of IfM in University of Cambridge

Time	Activity	Chair
	<p>will cover topics including sustainable development, environment protection, employment, global competitiveness, inclusiveness, data ethics, IPR... / What are the key points of the Intelligent Manufacturing Initiative in China and Made Smarter in the UK?)</p> <ul style="list-style-type: none"> • <i>Rising Potential Issues for Sino-UK Collaboration</i> Prof. Xiaobo WU, Head of NIIM in Zhejiang University • <i>Three Characteristics of Future Manufacturing</i> Dr. Ping XIAO, Vice President of Ali Research Institute. • <i>UK Manufacturing Policies and Strategies</i> Stephen BRENNAN, Consul for Science & Innovation with the FCO in East, South and South-West China • <i>Sino-British Modern Industrial Partnership</i> Yunyun CHEN, Deputy Director, Division of International Cooperation, Center for International Economic and Technological Cooperation, Ministry of Industry and Information Technology of P. R. China • <i>Practice and Prospect of Intelligent Reform of Manufacturing Industry in Zhejiang Province</i> Yun LING, Inspector of Economy and Information Technology Department of Zhejiang 	
12:30-13:30	Buffet Lunch	1st Floor

Time	Activity	Chair
13:30-15:00	<p><u>Session 3 Industrial Panel</u> <u>Insight and Practices (15 mins each)</u></p> <p>Focus on:</p> <ul style="list-style-type: none"> - Smart Manufacturing - Green Manufacturing - New Manufacturing <p>(What are industrial sectors preparing for future manufacturing, what are the best practices? e.g. aviation, automotive, internet company... / What do industrialists see as best practice in terms of international collaborations and how can governments help?)</p> <ul style="list-style-type: none"> • <i>Intelligent Manufacturing Based on Industrial Internet Platform</i> Jian CHU, Founder of SUPCON • <i>Keep Sustainability in Mind as the Core Value at the Changing Age</i> Jianzhong LV, President of Weir Group (China) • <i>A Few Challenges to Chinese OEMs Going Global: An Executive's View</i> Geoff DONG, CFO and Shareholder Representative of Geely UK, Deputy CFO of Zhejiang Geely Holdings • <i>Practice and Consideration on Intelligent Manufacturing and Green Manufacturing</i> Shaorong MAO, General Manager of Hangzhou Hangyang Co., Ltd. • <i>Promoting Market Openness, Deepening Trade Relations and Building a Win-win and Wise Future Through Sino-British Cooperation</i> Tingting LIU, Head of Market Access and Stakeholder Management, Department of International Trade • <i>Intelligent Manufacturing and Fiber Technology</i> Zhaohui GUO, Chief Scientist of Shanghai Youye Information Technology Co., Ltd. 	<p>Ms.Mia ZHENG, British Science & Innovation Network</p>

Time	Activity	Chair
15:00-15:30	<p><u>Roundtable Discussion on Session 3</u> (30 mins in total)</p> <p>UK companies:</p> <ul style="list-style-type: none"> • Baochun MEI, Vice President of Government Affairs and Business Development of Smiths Group in China • Jian LIU, Business Representative of Bombardier Belfast in China • Chris LUHMAN, Technical Director of Renishaw (Shanghai) Trading Co., Ltd. <p>Chinese companies:</p> <ul style="list-style-type: none"> • Liedong ZHU, Chairman of Chongqing Runtong Holdings (Group) Co., Ltd. • Wei CHEN, General manager of Jiangsu Hengtong Optical Fiber Technology Co., Ltd. 	
15:30-15:45	Tea Break	
15:45-17:15	<p><u>Session 4 Dialogue</u> <u>Cooperation Opportunities and Challenges</u> <u>(90 mins in total)</u></p> <p>(How to maintain a win-win cooperation by finding the complementarities? How to race to the top? e.g. technology transfer, technology incubating and accelerating, public-private partnership, IPR, data-sharing...)</p> <p>Participants will be divided into groups and aim to identify ways to add value to existing mechanisms and to take this dialogue forward. Each group will give feedback at the end of the session.</p> <p>Working group session and feedback</p>	<p>Prof. Sir Mike GREGORY, Former Head of IfM in University of Cambridge</p> <p>Assistants: Jonathan ROSS, Ella WHELLAMS</p>
17:15-17:30	Wrap-up Discussion	Prof. Sir Mike GREGORY , Former Head of IfM in University of Cambridge
18:00-20:00	Banquet	1st Floor

Organization Committee

Prof. Xiaobo WU, NIIM, Zhejiang University, China

Dr. Dong WU, NIIM, Zhejiang University, China

Ms. Mia ZHENG, British Embassy in China

Ms. Ella WHELLAMS, IfM, University of Cambridge, UK

Secretariat

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“未来制造：中英合作”国际研讨会

英国外交部科技创新网络，英国

浙江大学创新管理与持续竞争力研究中心，中国

剑桥大学制造研究院，英国

面临第四次工业革命蓬勃兴起、全球产业格局大变迁的不确定性时代，中英两国之间应如何通过优势互补与强强协作，正确把握全球产业发展的新趋势？此次研讨会旨在成为促成中英两国政府就未来制造业发展及相关政策建立等议题开展富有成效对话交流的第一步。研讨结果将为中国工信部（MIIT）与英国商业、能源和工业战略部（BEIS）之间正在进行的对话提供有价值的信息，并促成两国政府、学术界和产业界形成一个持续性的合作群体典范。此次论坛的参与者将能够：

- 分享来自中国和英国的企业和政府对未来制造业的看法，包括未来制造的方向、现状、风险、愿景等；
- 探讨和回应中英两国近期的产业政策，确定关键角色和共同优先事项，并分享经验教训；
- 确定建立中英互利合作所需的原则和范例；
- 为今后的双边对话明确下一步步骤，并确定三到四个重点领域，以便后续进一步探讨。

• 时间：2019 年 9 月 9 号 星期一

• 地点：中国杭州杨公堤 39 号金溪山庄

** 会议提供同声传译

会议议程

时间	活动	主席
9:00-9:20	开幕 <ul style="list-style-type: none"> • 周国辉，浙江省政协副主席 • Tony CLEMSON，英国驻上海总领事馆副总领事 	吴晓波教授，浙江大学 NIIM 主任
9:20-9:30	合影	
9:30-10:50	环节 1 主旨发言：理解未来制造（每人 20 分钟） （未来制造是什么？它的支柱是什么？如数码制造、智能制造、网络制造、共享制造） <ul style="list-style-type: none"> • 未来制造与数字孪生：关键技术与发展趋势，谭建荣，浙江大学教授，中国工程院院士 • 理解未来制造 Mike GREGORY 爵士，英国剑桥大学制造研究院(IfM)前院长、教授，皇家工程院院士 • 杨华勇，浙江大学教授，中国工程院院士 • 石涌江，英国剑桥大学制造研究院(IfM)国际制造中心研究主任 	吴晓波教授，浙江大学 NIIM 主任
10:50-11:10	茶歇	
11:10-12:25	环节 2 主旨发言：中英两国制造业政策和现行合作机制概览（每人 15 分钟） (每个国家的机制概述。未来制造业对经济、社会、环境会产生怎样的影响，应该采取什么样的政策？本次会议的主题包括可持续发展、环保、就业、全球竞争力、包容性、数据伦理、知识产权等。/中国智能制造计划和英国智能制造计划的关键点是什么？) <ul style="list-style-type: none"> • 中英合作面临的潜在问题 吴晓波，浙江大学创新管理与持续竞争力研究中心主任 • 未来制造的三个特征 晓坪，阿里研究院副院长 	Mike GREGORY 爵士 ，原剑桥大学 IfM 主任

时间	活动	主席
	<ul style="list-style-type: none"> • 英国制造业政策和策略 Stephen BRENNAN, 驻中国东部、南部和西南部英国外交部科技创新领事 • 中英现代产业合作伙伴关系 陈芸芸, 工业和信息化部国际经济技术合作中心国际合作处副处长 • 浙江省制造业智能化改造的实践与展望 凌云, 浙江省经济和信息化厅巡视员 	
12:30-13:30	自助午餐	金溪山庄一楼
13:30-15:00	<p>环节 3 产业论坛：制造关键领域的洞察与实践（每人 15 分钟） 关注:智能制造、绿色制造、新制造 产业部门正在为未来的制造业做什么准备?最佳实践是什么? 如航空、汽车、互联网公司。/就国际合作而言，实业家认为最好的做法是什么? 政府能提供什么帮助?）</p> <ul style="list-style-type: none"> • 基于工业互联网平台的智能制造思考 褚健, 中控集团创始人 • 持续发展是核心价值观 吕建中, 英国伟尔集团中国总裁 • 中国原始设备制造商走向全球的挑战：高管视角 董浩淳, 吉利英国 CFO 及股东代表、浙江吉利控股集团副 CFO • 关于智能制造、绿色制造的实践与思考 毛绍融, 杭州杭氧股份有限公司总经理 • 促进市场开放深化贸易关系，中英合作共赢 智造未来 刘婷婷, 英国国际贸易部市场准入与利益相关者管理主管 • 智能制造与纤维技术的结合 郭朝晖, 上海优也信息科技有限公司首席科学家 	Mia Zheng , 英国外交部科技创新网络中国未来制造主管

时间	活动	主席
15:00-15:30	环节 3 产业论坛：圆桌讨论 英方公司： <ul style="list-style-type: none"> • 梅报春，英国史密斯集团中国区政府事务和业务发展副总裁 • 刘健，庞巴迪贝尔法斯特中国业务代表 • Chris LUHMAN，雷尼绍（上海）贸易有限公司技术总监 中方公司： <ul style="list-style-type: none"> • 朱列东，重庆润通控股（集团）有限公司董事长 • 陈伟，江苏亨通光纤科技有限公司总经理 	
15:30-15:45	茶歇时间	
15:45-17:15	环节 4 中英对话：合作机会与挑战 （如何找到优势互补，保持合作共赢？例如，技术转让、技术孵化和加速、公私伙伴关系、知识产权、数据共享.....） 小组讨论，每个小组将在会议结束时给出反馈。	Mike GREGORY 爵士，原剑桥大学 IfM 主任 协助： Ella WHELLAMS Jonathan ROSS
17:15-17:30	总结与讨论	Mike GREGORY 爵士，原剑桥大学 IfM 主任
18:00-20:00	晚宴	

会议组委会

中国浙江大学创新管理与持续竞争力研究中心主任 吴晓波教授

中国浙江大学创新管理与持续竞争力研究中心 吴东博士

英国驻华大使馆 Mia ZHENG

英国剑桥大学制造研究院 Ella WHELLAMS

秘书处

中国浙江大学创新管理与持续竞争力研究中心

联系人

浙江大学创新管理与持续竞争力研究中心

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Brief Introduction of Companies

(According to the Sequence of Speech)

1. ALI RESEARCH



Ali Research

阿里研究院

Relying on the massive data of Alibaba, Ali Research conducts in-depth research on cutting-edge cases of small enterprises and gathers global business wisdom. It is a platform to provide customers with influential new business knowledge.

Ali Research was established in April 2007. Since its inception, Ali Research has worked closely with the industry's top scholars and institutions to focus on e-commerce ecology, industrial upgrading, macroeconomics and other research areas, and jointly launched a number of innovative data products such as aSPI-core, aSPI, aEDI, aCCI, aBAI and data maps, a large number of excellent information economy research reports, and thousands of classic small business cases.

阿里研究院是依托阿里巴巴集团海量数据，深入研究小企业前沿案例，汇集全球商业智慧，为客户提供具有影响力的新商业知识平台。

阿里研究院成立于 2007 年 4 月，自成立以来，阿里研究院与业界顶尖学者、机构紧密合作，聚焦电子商务生态、产业升级、宏观经济等研究领域，共同推出 aSPI-core、aSPI、aEDI、aCCI、aBAI 及数据地图等多个创新性数据产品、大量优秀信息经济领域研究报告，以及数千个经典小企业案例。

2. SUPCON



SUPCON

中控集团

Founded in 1993, Supcon is a leading supplier of automation and information technology, products and solutions in China. Its business covers comprehensive automation of process industry, informatization of public works, automation of equipment industry and other fields. At present, the headquartered of Supcon is in Hangzhou, Zhejiang province. And the company has 8 subsidiaries, 1 research institute, 17 branches and 3 overseas branches. With its own core technology advantages, Supcon has excellently completed a number of national "863" projects and major scientific and technological research projects, presided over the formulation of EPA international standards with

independent intellectual property rights, and participated in the formulation of a number of national standards.

中控集团始创于 1993 年，是中国领先的自动化与信息化技术、产品与解决方案供应商，业务涉及流程工业综合自动化、公用工程信息化、装备工业自动化等领域。目前，中控集团总部位于浙江杭州，设有 8 家子公司、1 家研究院、17 家分公司、3 家海外分支机构。中控集团凭着自身的核心技术优势，出色完成多项国家“863”和科技攻关重大研究课题，主持制定了具有自主知识产权的 EPA 国际标准，参与制定多项国家标准。

3. WEIR



The Weir Group
英国伟尔集团

The Weir Group is a UK-listed engineering company founded in 1871. The group specializes in the manufacture of high quality pumps and provides improved pump solutions for large oil and gas exploration, power generation, water and wastewater treatment, hydrocarbon processing and general industrial projects.

英国伟尔集团是一家在英国上市的工程公司，成立于 1871 年，集团专于优质泵的制造，为大型油气开采、发电、供水和污水处理、烃加工和通用工业项目提供改善的泵解决方案。

4. GEELY



Zhejiang Geely holdings
浙江吉利控股集团

Zhejiang Geely Holdings (ZGH) is a global enterprise with headquarters in Hangzhou, China. The Group was founded in 1986 and entered the automotive industry in 1997. At present, Geely holdings has developed into a global group that integrates the design, research and development, production, sales and service of automotive vehicle, power assembly, key components, and covers travel services, online technological innovation, financial services, education, racing and other businesses.

In October 2006, Geely holdings announced the acquisition of 19.97% of British Manganese Copper Holding Group and established a joint venture named British Emperor. Immediately after the establishment of the new company, production of TX4 taxis for export began. In February 2013, Geely holdings acquired all the shares of London Taxi Company in the hands of Manganese Copper Holding Group for 11.44 million and began to take over the operation rights of the new company.

In 2017, Britain's first car factory focusing on the production of plug-in electric vehicles was officially put into operation in Anstey, Coventry. As a wholly owned subsidiary of Geely, the London

Taxi Company invested more than 300 million pounds in the new plant, which will produce and export a new generation of London taxis to the world. Through this investment and expansion, the London Taxi Company has provided more than 1,000 new jobs, including 200 engineers and 30 apprentices. In 2019, Geely holdings will set up a design center in the UK, which will be located in the city of Coffintry. In addition to Geely passenger cars sold in China, the design center will also be responsible for the design of its brands such as Baoteng (Malaysia), Lotus (UK) and Lynk & Co.

吉利控股集团（ZGH）是一家全球化企业，总部位于中国杭州。集团始建于 1986 年，于 1997 年进入汽车行业。目前，吉利控股集团已发展成为一家集汽车整车、动力总成、关键零部件设计、研发、生产、销售及服务于一体，并涵盖出行服务、线上科技创新、金融服务、教育、赛车运动等业务在内的全球型集团。

2006 年 10 月,吉利控股集团宣布收购英国锰铜控股 19.97%的股份,并与其成立了英伦帝华合资公司。新公司成立后立即开始生产用于出口的 TX4 出租车。2013 年 2 月,吉利控股耗资 1104 万英镑收购了英国锰铜控股公司手中所有伦敦出租车公司的股份,开始接收新公司的运营权。

2017 年,英国首座专注于生产增程式电动车的汽车工厂于考文垂安斯提正式投入运营,作为吉利旗下全资子公司,伦敦出租车公司对这座新工厂投资超过 3 亿英镑,该工厂将生产并向全世界出口新一代伦敦出租车。伦敦出租车公司通过此次投资和拓展提供了 1000 多个新的就业岗位,包括 200 名工程师和 30 名学徒。2019 年,吉利控股集团将在英国成立设计中心,英国设计中心将设在科芬特里市。除了在中国销售的吉利乘用车外,该设计中心还将负责旗下宝腾(马来西亚)、莲花(英国)、领克(Lynk & Co)等品牌的设计。

5. HANGYANG



Hangzhou Hangyang Co., Ltd.

杭州杭氧股份有限公司

Hangzhou Hangyang Co., Ltd. is a company established through the independent restructuring of Hangzhou Oxygen Generator Group Co., Ltd. It is the largest air separation equipment and petrochemical equipment development, design and manufacturing company in China. With the design, manufacture and sale of large and medium-sized air separation equipment, petrochemical equipment and sales of industrial gases as the core business, Hangzhou Hangyang Co., Ltd. is the only national key new product development and manufacturing base in China's air separation equipment industry. The company has state-level enterprise technology centers, the right of foreign trade self-management, and it is China's major technical equipment localization base, Asia's largest air separation equipment design and manufacturing base. Hangyang has become one of the international air separation "top five" enterprises.

杭州杭氧股份有限公司是通过对杭州制氧机集团有限公司分立式改制设立的国内最大的空分设备和石化设备开发、设计、制造成套企业，以设计、制造、销售成套大、中型空分设备、石化设备以及销售工业气体为核心业务，是我国空分设备行业唯一一家国家级重点新产品开发、制造基地，属高新技术企业，拥有国家级企业技术中心，享有外贸自营权，是我国重大技术装备国产化基地，亚洲最大的空分设备设计和制造基地，并已成为国际空分“五强”企业之一。

6. YOUYE



Shanghai Youye Information Technology Co., Ltd.

上海优也信息科技有限公司

Established in 2016, Shanghai Youye Information Technology Co., Ltd. is committed to the digital transformation and intelligent development of service infrastructure industry. Youye also upholds the profound industrial background, integrates excellent operation and management practices, profound industrial knowledge accumulation, advanced industrial Internet technology and leading intelligent manufacturing concepts, and provides industrial data operating system (iDOS) platform for industrial enterprise customers, which is based on industrial intelligent application and operation under the new industrial framework. Integrative products and comprehensive solutions of transformation consultancy services will promote the industrial transformation of enterprises in the era of intelligence, and reshape the industrial future through management and technological innovation.

上海优也信息科技有限公司成立于 2016 年，致力于服务基础工业的数字化转型和智能化发展。优也秉承深厚的工业底蕴，将卓越的运营管理实践、深厚的工业知识积累，先进的工业互联网技术和领先的智能制造理念深度融合，为工业企业客户提供工业数据操作系统（iDOS）平台，基于新工业架构下的工业智能应用和运营转型咨询服务的一体化产品和综合解决方案，推动企业在智能时代的产业变革，通过管理与技术创新与工业企业携手重塑工业未来。

7. SMITHS



Smiths Group
史密斯集团

Smiths Group is a global technology company listed on the London Stock Exchange. Founded in 1851, Smiths Group has a history of 167 years. The Group's products and services have entered more than 200 countries and operated directly in more than 50 countries, with more than 23,000 employees and a market value of more than \$6 billion. Smith Group, a listed company on the London Stock Exchange, is listed in the Financial Times 100 Index and one of the top 100 UK groups.

Smiths Group's main business covers five major areas: health care, energy and petrochemical industry, security threats and contraband detection, telecommunications and aviation and transportation. Through nearly 30 years of investment and development in the Chinese market, Smith Group now has many enterprises and nearly 2000 employees in China. In 2015, Smiths Group established its headquarter in Shanghai, China, and many branches and factories in Beijing, Tianjin, Hangzhou, Suzhou, Changshu and Mianyang.

史密斯(Smiths)集团是一家在伦敦股票交易所上市的全球性技术公司，成立于 1851 年，目前已有 167 年的发展历史。集团的产品和服务进入超过 200 多个国家，并在 50 多个国家开展直营，拥有 23,000 多名员工，市值已超过 60 亿美元。史密斯集团是英国伦敦交易所上市公司，入选金融时报 100 指数，也是英国百强集团之一。

史密斯集团的主要业务主要涉及五大方面：健康医疗、能源与石油化工、安全威胁与违禁品探测、电信以及航空与交通。史密斯集团通过近 30 年在中国市场的投资和发展，目前在中国已有了多家企业和近 2000 名员工，并于 2015 年在中国上海建立了史密斯集团中国区总部，在北京、天津、杭州、苏州、常熟、绵阳等地建立了多家分公司和工厂。

8. BOMBARDIER

BOMBARDIER

Bombardier Belfast

庞巴迪贝尔法斯特

Bombardier is the world's leading manufacturer of both planes and trains. Its vast offering of products includes trains, rail equipment and control solutions for all market segments, as well as category-defining business jets and commercial aircraft.

In 1989, the world's first aircraft manufacturer, Short Brothers plc (Shorts), was acquired by Bombardier from the UK Government. Since then, with Bombardier investment of more than £2.7 billion, it has become an integral part of the world's third largest civil aircraft manufacturer.

From design through manufacture to after-market support, Bombardier Belfast specializes in major aircraft structures and flight control surfaces in metal and advanced composites. With first-class capabilities and a workforce of around 4,000, the Belfast operation plays a pivotal role in all Bombardier's families of commercial and business aircraft. In addition to Bombardier programmers, customers include AECC, Airbus, General Electric, International Aero Engines, Irkut Corporation, Pratt & Whitney, and Rolls-Royce.

Bombardier Belfast is one of the key aerospace companies in the UK. In addition to its headquarters in Belfast, where administration, engineering, fuselage and wing production are based, the company has several other facilities located a short distance from the city. Customer services and composites production, including engine nacelle systems, are based at Newtownabbey and further composites production takes place in Dunmurry. Sheet-metal component production is based at Newtownards.

These sites make up the Bombardier center of excellence for the design and manufacture of aircraft fuselages, engine nacelle systems, wings and flight control surfaces, and for processes such as advanced composites. It holds Investors in People accreditation, ISO 9001 quality assurance approval, the AS9100 international quality standard, ISO 14001 Environmental Management Systems certification, and the OHSAS 18001 accreditation for our health and safety management systems.

庞巴迪是世界领先的飞机和火车制造商。它生产的产品包括火车、铁路设备和所有细分市场的控制解决方案，以及类别定义的公务机和商用飞机。

1989 年，庞巴迪从英国政府手中收购了世界上第一家飞机制造商 Short Brothers plc（简称 Short）。此后，庞巴迪投资超过 27 亿英镑，它已成为世界第三大民用飞机制造商不可或缺的一部分。

从设计到制造到售后支持，庞巴迪贝尔法斯特专门从事金属和先进复合材料的主要飞机结构和飞行控制表面。贝尔法斯特拥有一流的能力和大约 4000 名员工，在庞巴迪所有商用和商用飞机系列中发挥着举足轻重的作用。除了庞巴迪的程序员，客户还包括 AECC、空客、通用电气、国际航空发动机、伊尔库特公司、普惠公司和劳斯莱斯。

庞巴迪贝尔法斯特是英国重要的航空航天公司之一。除了总部设在贝尔法斯特（belfast），这里是行政、工程、机身和机翼生产基地，该公司还有其他几处设施位于离城市不远的地方。纽敦艾比负责客户服务和复合材料生产，包括发动机机舱系统，邓默里主要进行进一步的复合材料生产，纽顿负责钣金件生产。

这些地点构成了庞巴迪飞机机身、发动机机舱系统、机翼和飞行控制表面的设计和制造以及先进复合材料等工艺的卓越中心。它拥有人员认证、ISO 9001 质量保证认证、AS9100 国际质量标准、ISO 14001 环境管理体系认证和 OHSAS 18001 健康和安全管理认证的投资者。

9. RENISHAW



Renishaw PLC
雷尼绍

Renishaw is one of the world's leading engineering and technology companies and a world leader in metrology and Raman spectroscopy. In addition, it is a leader in global additive manufacturing (also known as metal 3D printing) and is the only company in the UK that designs and manufactures industrial additive manufacturing equipment ("printing" parts through metal powder).

Renishaw plc is located in Gloucestershire, west of London, England. It currently has more than 80 branches in 36 countries and employs more than 5,000 people. Among them, about 3,000 employees work in the UK to participate in and complete most of their research and development and manufacturing.

雷尼绍是世界领先的工程科技公司之一，在计量学和拉曼光谱仪器领域居世界领先地位。此外，它还在全球增材制造（也称金属 3D 打印）领域居领导地位，是英国唯一一家设计和制造工业用增材制造设备（通过金属粉末“打印”零件）的公司。

雷尼绍总部(Renishaw plc) 位于英国伦敦西部的格劳斯特郡(Gloucestershire)。目前在 36 个国家/地区设有 80 多个分支机构，员工逾 5,000 人。其中，约有 3,000 名员工在英国本土工作，参与并完成其大部分研发和制造。

10. RUNTONG



Chongqing Runtong Holdings (Group) Co., Ltd.
重庆润通控股（集团）有限公司

Chongqing Runtong Holdings (Group) Co., Ltd. was founded in 2007. It is a diversified group company that integrates gasoline power and terminal, motorcycle/ATV vehicle and engine, diesel power, automobile parts, air conditioning parts, intelligent equipment, financial services and other industries. With nearly 10,000 employees, the company operates in more than 80 countries and regions around the world.

重庆润通控股（集团）有限公司成立于 2007 年，是一家集合汽油动力及终端、摩托车/ATV 成车及发动机、柴油动力、汽车零部件、空调零部件、智能装备、金融服务等产业的多元化集团公司。现拥有员工近万人，业务遍布全球 80 多个国家及地区。

11. HENG TONG



Hengtong Group
亨通集团

Hengtong Group, founded in 1991, is a state-owned innovative enterprise serving the fields of optical fiber network, smart grid, big data Internet of things, new energy and new materials. It has more than 70 wholly-owned and holding companies (including 3 listed companies). Its industry covers 13 provinces and it is the largest system integrator and network service provider in the field of optical fiber network and electric power grid in China. It ranks among the top 500 Chinese enterprises, top 100 Chinese private enterprises and top 3 global optical fiber communications.

亨通集团，成立于 1991 年，是服务于光纤光网、智能电网、大数据物联网、新能源新材料等领域的国家创新型企业，拥有全资及控股公司 70 余家（其中 3 家上市公司），产业遍布全国 13 个省，是中国光纤光网、电力电网领域规模最大的系统集成商与网络服务商，跻身中国企业 500 强、中国民企 100 强、全球光纤通信前 3 强。

Brief Biographical Sketches of Speakers

(According to the Sequence of Speech)

1. Guohui ZHOU



Guohui ZHOU

Vice Chairman of Zhejiang CPPCC

周国辉

浙江省政协副主席

Guohui ZHOU is currently Vice Chairman of Zhejiang Chinese People's Political Consultative Conference. He was a worker of Ningbo East Zhejiang Knitting Factory, a cadre of the Secretariat and General Office of the Standing Committee of the Provincial People's Congress, a deputy director and director of the General Office of the Standing Committee of the Provincial People's Congress, a deputy secretary of the Yongkang Municipal Committee, a deputy director and director of the Research Office of the Standing Committee of the Provincial People's Congress, a deputy secretary of Taizhou Municipal Party Committee (retaining the level of head of the main office), a deputy secretary, acting mayor and mayor of Zhoushan Municipal Party Committee, a director of the Provincial Science and Technology Department, a secretary of the Party Leadership Group and director of the Provincial Science and Technology Department, a secretary of the Party Leadership Group and director of the Provincial Intellectual Property Bureau. He was a deputy to the Twelfth National People's Congress.

周国辉先生现任浙江省政协副主席，曾任宁波浙东针织厂职工，省人大常委会办公厅秘书处、综合处干部，省人大常委会办公厅综合处副处长，省人大常委会办公厅综合处处长，省人大常委会办公厅副主任、永康市委副书记（挂职），省人大常委会研究室副主任，省人大常委会研究室主任，台州市委副书记（保留正厅长级），舟山市委副书记、代市长、市长，省科学技术厅厅长、党组书记，省科学技术厅厅长、党组书记、省知识产权局局长等职。十二届全国人大代表。

2. Tony CLEMSON



Tony CLEMSON

**Deputy Consul General of the British Consulate-general
in Shanghai**

英国驻上海总领馆副总领事

Tony Clemson has been the Deputy Consul General in Shanghai since 2016. He is responsible for strengthening UK relations with local governments, businesses and civil society across the whole of East China. In previous diplomatic roles Tony covered international cyber security policy in London, and political and economic issues in South Korea and New Zealand. Before joining the British Foreign and Commonwealth Office in 2004, Tony served as a Warfare Officer in the Royal Navy for eight years, deploying to the Atlantic, Caribbean and Middle East.

Tony Clemson 自 2016 年以来一直担任中国驻上海总领馆副总领事。他负责加强英国与中国华东地区的地方政府、企业和公民社会的关系。在之前的外交工作中，Tony 负责伦敦的国际网络安全政策，以及韩国和新西兰的政治和经济问题。在 2004 年加入英国外交和联邦事务部之前，Tony 在皇家海军担任了 8 年的作战军官，曾部署到大西洋、加勒比和中东地区。

3. Prof. Jianrong TAN



Prof. Jianrong TAN

Fellow of the Chinese Academy of Engineering

**Head of Department of Design Engineering and Automation in
Zhejiang University**

谭建荣

中国工程院院士

浙江大学设计工程及自动化系主任

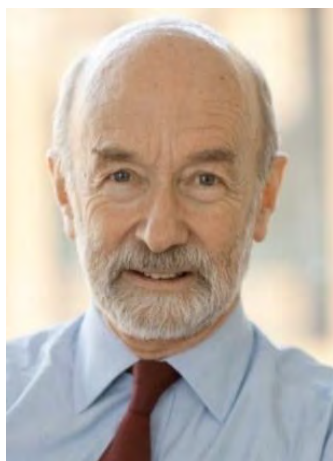
Jianrong TAN graduated from Huazhong University of Science and Technology in 1987 and Zhejiang University in 1992. He has received Master of Engineering and Doctor of Science successively. He is a specially appointed Qishi professor, doctoral supervisor of Zhejiang University and the head of the Department of Design Engineering and Automation, School of Mechanical Engineering in Zhejiang University. In 2007, he was elected academician of the Chinese Academy of Engineering.

Professor Tan Jianrong has published 185 high-level papers in important academic journals at home and abroad in recent years. Among them, 142 papers were retrieved by SCI/EI, more than 1600 citations were cited, and 9 academic monographs were published. His research results have been listed as one of the nine major advances in machinery industry science and technology in 2004 by the Ministry of Engineering and Materials Science of the National Natural Science Foundation of China and the Chinese Society of Mechanical Engineering. It has been successfully applied in many influential manufacturing enterprises, including a number of large-scale backbone enterprises in the equipment industry. It effectively supports the design and innovation of important domestic equipment, and promotes the technological progress of equipment manufacturing enterprises and the development of digital design and manufacturing technologies

谭建荣教授，1987 年研究生毕业于华中科技大学，1992 年博士研究生毕业于浙江大学，先后获工学硕士、理学博士学位，浙江大学求是特聘教授、博士生导师，担任浙江大学机械工程学院设计工程及自动化系系主任，2007 年当选中国工程院院士。

谭建荣教授近年来在国内外重要学术期刊发表的高水平论文 185 篇，其中 SCI/EI 检索 142 篇，引用 1600 多次，出版学术专著 9 本。研究成果被国家自然科学基金委员会工程与材料科学部和中国机械工程学会列为 2004 年机械工业科学技术 9 项重大进展之一，在包括一批装备行业大型骨干企业在内的多家有影响的制造企业得到成功的应用，有效地支撑和支持了国产重要装备的设计与创新，推进了装备制造企业的技术进步和数字化设计与制造技术的发展。

4. Prof. Sir Mike GREGORY



Prof. Sir Mike GREGORY

Former Head of the Institute for Manufacturing (IfM)

Fellow of the Royal Academy of Engineering

University of Cambridge, U.K.

Mike GREGORY 爵士

制造研究院(IfM)前院长

皇家工程院院士

英国剑桥大学

Following an early career in industry Mike Gregory was the founder member of the team which established the IfM in 1998. He retired as Head of the Manufacturing and Management Division of the University of Cambridge's Department of Engineering and of the Institute for Manufacturing (IfM) in 2015.

Mike Gregory's work is closely linked with industry and government and he has published in the areas of manufacturing strategy, technology management, international manufacturing and manufacturing policy.

External activities have included membership of various government and institutional committees. He served as Executive Head of the Cambridge MIT Institute from 2005-2008, Springer Visiting Professor at UC Berkeley in 2008/9, Acting Head of the Institute for Continuing Education in 2015/16 and has been a Senior Advisor to the Cambridge Institute for Sustainability Leadership (CISL) since 2017. He chairs the Babbage International Policy Forum and is President of the Cambridge Society for the Application of Research (CSAR). He is a Fellow of Churchill College, Cambridge and of the Royal Academy of Engineering, where he was a trustee.

Mike Gregory 是剑桥大学工程系的制造研究 IfM 创始人之一。2015 年，他于制造研究院(IfM)退休。Mike Gregory 的著作涉及产业和政府的发展，在制造业战略、技术管理、国际制造业

和制造业政策等领域发表过著作。

Mike Gregory 是各政府和机构委员会的成员。2005-2008 年任剑桥麻省理工学院执行院长，2008/9 任加州大学伯克利分校客座教授，2015 -2016 年任继续教育学院代理院长，2017 年起任剑桥可持续发展领导力学院高级顾问。Mike Gregory 是巴贝奇国际政策论坛的主席，也是剑桥研究应用学会(CSAR)的主席。他是剑桥丘吉尔学院和皇家工程学院的院士，也是该学院的受托人。

5. Prof. Huayong YANG



Prof. Huayong YANG

Fellow of the Chinese Academy of Engineering

Dean of School of Mechanical Engineering Zhejiang University

杨华勇

中国工程院院士

浙江大学机械工程学院院长

Huayong YANG is an expert in the field of fluid transmission and control and was elected academician of Chinese Academy of Engineering in 2013. He is currently a professor of Zhejiang University, Dean of the School of Mechanical Engineering of Zhejiang University, head of the State Key Laboratory of Hydrodynamic and Mechanical Systems (Zhejiang University), and head of the National Electro-hydraulic Control Engineering Technology Center.

He has been engaged in theoretical research, basic components and system development, key technology research and engineering of shield and hydraulic elevator for a long time. He has broken through the basic theory and key technology of pressure stability control, load compliance design and attitude predictive rectification of shield. He has overcome three international problems of instability, failure and misalignment in the excavation process, and has developed three series of shield products, i.e. earth pressure, mud and water, and composite, so that China can enter the ranks of advanced countries in shield technology. In addition, he has overcome the key technical problems of accurate control of speed and position of hydraulic elevator and efficient recovery of potential energy, and formed the core technology of international leading independent hydraulic elevator. What's more, he put forward a new design method of balancing valve, developed a prototype and realized the engineering application.

杨华勇教授，流体传动与控制领域专家，2013 年当选中国工程院院士，现任浙江大学教授、浙江大学机械工程学院院长、流体动力与机电系统国家重点实验室（浙江大学）主任、国家电液控制工程技术中心主任。

他长期从事电液控制方面的理论研究、基础元件和系统开发、盾构与液压电梯关键技术研发以及工程化等工作，突破了盾构压力稳定性控制、载荷顺应性设计和姿态预测性纠偏基础理

论与关键技术，攻克了掘进过程失稳、失效、失准三大国际难题，研发出土压、泥水和复合三大类盾构系列产品，使我国进入盾构技术先进国家行列；攻克液压电梯速度与位置精确控制、势能高效回收关键技术难题，形成国际领先的自主液压电梯核心技术；提出新型平衡阀设计新方法，研制了样机并实现了工程应用。

6. Dr. Yongjiang SHI



Dr. Yongjiang SHI

Head of the Centre for International Manufacturing

University of Cambridge, U.K.

石涌江

国际制造研究中心主任

英国剑桥大学

Yongjiang SHI is a lecturer in the IfM Masters programme Industrial Systems, Manufacturing and Management and research head of the Centre for International Manufacturing (CIM). His research interests include global manufacturing networks, business ecosystem development, the strategies of multinational corporations in China, and sustainable industrial systems. He was also the Guangbiao Visiting Professor in Zhejiang University Management School where he is teaching Global Manufacturing and China Development for the EMBA Programme.

石涌江是国际制造中心(CIM)工业系统硕士课程讲师，国际制造研究中心主任。他的研究领域包括全球制造业网络、商业生态系统发展、跨国公司在华战略以及可持续产业体系。他曾是浙江大学管理学院的客座教授，EMBA 教授，主要授课内容为全球化制造和中国发展。

7. Prof. Xiaobo WU



Prof. Xiaobo WU

Dean, Faculty of Social Sciences

Head, National Institute for Innovation Management (NIIM)

Zhejiang University

吴晓波教授

社会科学学部主任，创新管理与持续竞争力研究中心主任

浙江大学

Professor Xiaobo WU is currently serving as Dean of Faculty of Social Sciences, Head of National Institute for Innovation Management (NIIM), the head of the Zhejiang University—Cambridge University Joint Research Center for Global Manufacturing and Innovation Management and Ruihua Institute for Innovation Management. He also serves as Board member and the vice-president of the Central, East European and Middle Asian Network on Management Development Association (CEEMAN).

His primary research interests center around Managing Technological Innovation, Inclusive Innovation and entrepreneurship, Global Manufacturing and Network-based Competitive Strategy. Professor WU has been actively involved in management consulting and was the advisor and board member of leading companies including Geely, Siemens China, Hikvision, Hangyang, Hengtong, XIZI UHC and etc. He is the Executive Vice President of International Council for Small Business (ICSB) China, and he had been elected the Senior Vice President of ICSB from 2011 to 2012. He also serves as the president of Zhejiang Provincial Technological Innovation Association and Hangzhou Enterprises Technological Innovation Association.

现任浙江大学社会科学学部主任、创新管理与持续竞争力研究中心主任、浙江大学-剑桥大学全球化制造与创新管理联合研究中心主任、睿华创新管理研究所所长，担任中欧、东欧和中亚管理发展协会(CEEMAN)的董事会成员和副主席。

吴教授的主要研究领域集中在技术创新管理、包容性创新和创业、全球化制造和基于网络的竞争战略。吴教授积极参与管理咨询工作，曾担任吉利、西门子中国、海康威视、杭氧、亨通、西子等知名企业的顾问和董事会成员。现任国际中小企业联合会(ICSB)中国执行副会长，2011年至2012年当选为ICSB高级副会长。曾任浙江省技术创新协会、杭州市企业技术创新协会副会长。

8. Dr. Ping XIAO



Dr. Ping XIAO

Vice President of Ali Research

Vice President of Digital Enterprise Learning Society

晓坪

阿里研究院副院长

数字化企业研习社副理事长

Dr. Xiao is the vice president of Ali Research and vice president of Digital Enterprise Learning Society. He has focused on the development of the Internet industry for many years.

晓坪博士现任阿里研究院副院长，数字化企业研习社副理事长。他多年来关注工业互联网的发展。

9. Stephen BRENNAN



Stephen BRENNAN

Consul for Science & Innovation with the FCO in East, South and South-West China

驻中国东部、南部和西南部英国外交部科技创新领事

Stephen is Consul for Science & Innovation with the FCO in East, South and South-West China (Shanghai, Guangzhou and Chongqing consular regions). He is sector lead for Sustainable Urban Environment and also oversees the Health and Life Sciences, Clean Energy and Future Manufacturing sectors for the Science and Innovation Network in China.

Stephen previously worked as a Project Manager and Change Manager for the Home Office and HM Passport Office. Prior to this he worked in the Energy sector, undertaking a number of senior management roles in various countries across the world including Kazakhstan, Georgia and Cameroon.

Stephen 是驻中国东部、南部和西南部(上海、广州和重庆领事地区) 英国外交部科技创新领事。他是可持续城市环境领域的部门领导,还为中国的科学和创新网络监管健康和生命科学、清洁能源和未来制造业。

Stephen 之前在内政部和 HM 护照办公室担任项目经理和变更经理。在此之前,他在能源部门工作,在包括哈萨克斯坦、格鲁吉亚和喀麦隆在内的世界各国担任高级管理职务。

10. Yunyun CHEN



Yunyun CHEN

**Deputy Director, Division of International Cooperation,
Center for International Economic and Technological
Cooperation, Ministry of Industry and Information
Technology of China**

陈芸芸

工业和信息化部国际经济技术合作中心国际合作处副处长

Ms. Yunyun CHEN has been working in the international trade promotion and industrial cooperation of industry and ICT fields for over 10 years. She has been deeply involved in the design, research and implementation of many bilateral cooperation mechanisms with UK, Switzerland, South Korea, Malaysia etc., and is also the key member of industry and digital economy task forces for G20 and BRICS.

从事工业和信息化领域贸易促进和产业合作工作十余年。参与中英、中瑞、中韩、中马等合作机制的设计、研究和实施工作，是二十国集团（G20）、金砖等多边机制工业通信业及数字经济磋商小组核心成员。

11. Yun LING



Yun LING

Inspector of Economy and Information Technology Department of Zhejiang

凌云

浙江省经济和信息化厅巡视员

Ling YUN holds a master's degree in Western Economics from Zhejiang University. He participated in the work in August 1984 and served as Deputy Director of Science and Technology Department of the Provincial Planning and Economic Commission, Director of Technical Equipment Department of the Provincial Economic and Trade Commission, Director of the Office of Advanced Manufacturing Bases. In October 2018, he became a member of the Party Group and Vice Director of Economy and Information Technology Department of Zhejiang. In May 2019, he was appointed inspector of Economy and Information Technology Department of Zhejiang. His main job is to assist the Director of the Department and is in charge of monitoring and analysis of economic operation, industrial investment, cadres and personnel, veteran cadres, party building of government organs, etc. He is also in charge of the Economic Operation Department, the Investment Department, the Personnel Department, the Party Committee of the organs and the Provincial Institute of Industry and Information Technology.

凌云，浙江大学西方经济学硕士学位。1984年8月参加工作，曾任省计经委科技处副处长，省经贸委技术装备处处长，先进制造业基地办公室主任，2018年10月任浙江省经济和信息化厅党组成员、副厅长。2019年5月任浙江省经济和信息化厅巡视员。协助厅长负责经济运行监测分析、产业投资、干部人事、老干部、机关党建等工作。分管经济运行处、投资处、人事处、机关党委。分管省工业和信息化研究院。

12. Mia ZHENG



Mia ZHENG

China Future Manufacturing lead, British Science & Innovation Network

英国外交部科技创新网络中国未来制造主管

Mia ZHENG is now the country future manufacturing lead for British Science & Innovation Network. She is responsible for policy research, partnership building and events organization in the manufacturing sector to strengthen UK-China partnership. In previous roles, she was a senior engineer and global business manager for civil aerospace industry. She managed a product team and led activities linking to global business partners.

Mia ZHENG 现任英国外交部科技创新网络中国未来制造主管。她负责制造业的政策研究、伙伴关系建设和活动组织，以加强中英伙伴关系。在之前的工作中，她是民用航空工业的高级工程师和全球业务经理。她管理着一个产品团队，并领导着与全球商业伙伴建立联系的活动。

13. Jian CHU



Jian CHU

Founder of SUPCON

褚健

中控集团创始人

Jian CHU received his doctor degree in automation chemical production process and instrumentation in 1989. In April 1992, he was the deputy head of the National Engineering Research Center for Industrial Automation (the First Engineering Center in domestic universities). In 1993, the National Engineering Research Center for Industrial Automation of Zhejiang University established the predecessor of SUPCON, i.e. Zhejiang University Industrial Automation Company, and Mr. Chu Jian was one of the founders. In November 1999, he was appointed the head of the Institute of Advanced Control of Zhejiang University (now the Institute of Intelligent Systems and Control of Zhejiang University). In December 1999, he was the head of state key laboratory of industrial control technology, and in February 2005, he was appointed standing committee member and vice president of Zhejiang University.

褚健先生，于 1989 年获化工生产过程自动化及仪表专业博士学位，1992 年 4 月任工业自动化国家工程研究中心（国内高校第一个工程中心）副主任，1993 年，浙江大学工业自动化国家工程研究中心创建了中控科技的前身——浙江大学工业自动化公司，褚健是创始人之一，1999 年 11 月任浙江大学先进控制研究所（现浙江大学智能系统与控制研究所）所长，1999 年 12 月任工业控制技术国家重点实验室主任，2005 年 2 月任浙江大学党委常委、副校长。

14. Dr. Jianzhong LV



Dr. Jianzhong LV

President of Weir Group (China)

吕建中

英国伟尔集团（The Weir Group）中国总裁

Dr. Jianzhong LV, as one of the pioneers in the field of CSR and Sustainability, has rich, systematic and forward-looking theoretical system and practical experience in this field. Dr. Lv actively advocated the idea of sustainability, led many CSR managers, philanthropists and initiatives to innovate, and made outstanding contributions to the promotion of public welfare and CSR development. Dr. Lv is the founder of CSR Thought Lab, a Board member of the Global Reporting Initiative (GRI), Deputy Director-General of China Corporate Social Responsibility Think Tank, Expert of the Think Tank of China Federation of Industry & Economy, Expert of the Southern Weekly CSR Research Center, Member of the Shenzhen Manufacturing Strategy Advisory Board ; former Co-chair of American Chamber (Shanghai) BCSR Committee, Guest Professor at Nankai University.

Dr. Jianzhong LV is currently President of Weir Group (China) .

吕建中博士是可持续商务战略和企业社会责任（CSR）的先行者和思想引领者，在该领域有丰富、系统和前瞻性理论体系及实践经验。他积极倡导可持续发展思想，带领一大批 CSR 经理人和公益人不断创新，为推动公益和 CSR 发展做出了杰出贡献。他是 CSR 思想实验方法论的创立者，全球报告倡议组织董事会成员、中国 CSR 智库副理事长、中国工经联工业企业社会责任智库专家、《南方周末》CSR 研究中心专家，中国 CSR 百人论坛发起人、深圳智造战略咨询委员会委员、上海外商投资协会监事长、中国匠心企业家组委会常务副理事长；曾任美国商会（上海）可持续负责任商务委员会联席主席。担任天津南开大学客座教授、子牙学宫理事。

吕博士现任英国伟尔集团（The Weir Group）中国总裁。

15. Haochun DONG



Geoff DONG

CFO and Shareholder Representative of Geely UK

Deputy CFO of Zhejiang Geely Holdings

董浩淳

吉利英国 CFO 及股东代表

浙江吉利控股集团副 CFO

Geoff Dong joined Geely at the beginning of 2018 and served as the CFO and shareholder representative of Geely UK. He served as Deputy CFO of Geely Holdings in August this year. He has over 30-year experience with MNCs as well as academic work during early year of his career.

Mr. Dong received B.Sc. degree 1983 and M.Sc. degree 1986 in Naval Architecture in Shanghai Jiaotong University. Early 1990s he did three-year academic research with Professor P J Buckley in UK in the field of international business. Geoff and his wife Claire now live in Hangzhou, China. Over his executive career he has been mostly working with multinationals in Europe and Asia, leading and managing direct investments to Asia and particularly China. Prior to his current role whereby he changed the gear with an inspiration to help Chinese companies going global, he was VP and MD of IDEX Asia – a global portfolio company in critical industrial solution space, and APAC president of Meritor Inc. Before these, he had worked with Cummins for 18 years in Europe and East Asia with increasing responsibilities in areas of business development, product planning, sales and marketing, distribution and general management. He also served as East Asia CFO from 2003 to 2010 when the regional business grew profitably at 30% CAGR to reach \$3bn mark in 2010. Due to his financial leadership he was awarded as Top 10 CFO of China by CFO Magazine in 2010.

董浩淳先生早期从事学术研究，后在跨国公司任职近 30 年。2018 年初加入吉利，任吉利英国 CFO 及股东代表，今年八月担任吉利集团副 CFO。

董浩淳上世纪八十年代初毕业于上海交通大学船舶及海洋工程系，并于八十年代末在英国师从 P.J. Buckley 教授从事跨国公司研究。在 2018 年加入吉利之前，董浩淳一直供职于跨国公司，过去几年担任美驰公司亚太区董事总经理，艺达思工业集团亚太区董事总经理，包括曾在康明斯欧洲及中国工作 18 年，期间担任战略，业务开发，产品规划，分销管理，市场与销售，财务管理和事业部管理工作。在其担任东亚区 CFO 的 7 年间，康明斯东亚区销售实现 30% 年复合增长以及优异的运营现金流，并与 2010 年实现中国销售突破 30 亿美元。由此他也荣获 CFO 杂志“2010 年度 的中国 10 大杰出 CFO”。

16. Shaorong MAO



Shaorong MAO

General Manager of Hangzhou Hangyang Co., Ltd.

毛绍融

杭州杭氧股份有限公司总经理

Shaorong MAO is the general manager of Hangzhou Hangyang Co., Ltd. and the director of the national enterprise technology center. He is a professor-level senior engineer and a senior expert in the field of cryogenic technology. As the main participant in the project, he has won the first prize for the progress of science and technology of the Ministry of Machinery Industry, the second prize for the progress of science and technology in Zhejiang Province and the special government allowance.

毛绍融先生，杭州杭氧股份有限公司总经理、国家级企业技术中心主任，教授级高级工程师，低温技术领域的资深专家，作为主要完成人参与的项目曾荣获机械工业部科技进步一等奖、浙江省科技进步二等奖，享受政府特殊津贴。

17. Tingting LIU



Tingting LIU

Head of Market Access and Stakeholder Management, Department of International Trade

刘婷婷

国际贸易部市场准入与利益相关者管理主管

18. Zhaohui GUO



Zhaohui GUO

Chief Scientist of Shanghai Youye Information Technology Co., Ltd.

郭朝晖

上海优也信息科技有限公司首席科学家

Zhaohui GUO, former chief researcher and professor-level senior engineer of Baosteel Central Research Institute. Currently, he is the chief scientist of Shanghai Youye Information Technology

Co., Ltd. In 1986, he was admitted to Zhejiang University. In 1990, he received bachelor's degree in applied mathematics from Zhejiang University. In 1994, he received master's degree chemical engineering from Zhejiang University. In 1997, he received doctor's degree in automation from Zhejiang University. He joined Baosteel in 1997 and was promoted to Professor-level Senior Engineer in 2005. He has been engaged in the research and development of information, model, automatic control, big data and other fields for a long time.

郭朝晖先生，原宝钢中央研究院首席研究员、教授级高级工程师。现任上海优也信息科技有限公司首席科学家。1986 年考入浙江大学，分别于 1990、1994、1997 年获得浙大应用数学、化学工程和自动化的学士、硕士和博士学位。1997 年加入宝钢，2005 年晋升为教授级高级工程师。他长期从事信息、模型、自动控制、大数据等领域的研发。

19. Baochun MEI



Baochun MEI

Vice President of Government Affairs and Business Development of Smiths Group in China

梅报春

英国史密斯集团中国区政府事务和业务发展副总裁

Mei Baochun graduated from Beijing Language University (Bachelor of Arts) and Tsinghua University (Master of Business Administration). After graduating from university in 1995, he joined the Ministry of Foreign Trade and Economic Cooperation (now the Ministry of Commerce). Over the past 20 years, he has worked in the Ministry of Foreign Trade, the Chinese Embassy in South Africa, the American Embassy in China, General Electric (China) Co., Ltd. and Alston (China) Investment Co., Ltd. At present, he is the Vice President of Government Affairs and Business Development of Smiths Group in China. He is fully responsible for the government affairs of Smiths Group and its business departments in China.

梅报春，毕业于北京语言大学（文学学士）和 清华大学（工商管理硕士）。1995 年大学毕业后加入外经贸部(现商务部)。在迄今 20 多年的职业生涯中，曾先后就职于外经贸部、中国驻南非使馆、美国驻华使馆、通用电气(中国)有限公司和阿尔斯通(中国)投资有限公司。目前就任英国史密斯集团中国区政府事务和业务发展副总裁，全面负责史密斯集团及其各业务部在中国的政府事务。

20. Jian LIU



Jian LIU

Business Representative of Bombardier Belfast in China

刘健

庞巴迪贝尔法斯特中国业务代表

Jian Liu joined Bombardier Aerospace in 2014. Now he is business representative of Bombardier Belfast in China.

刘健于 2014 年加入庞巴迪航天。现为庞巴迪贝尔法斯特中国业务代表。

21. Chris LUHMAN



Chris LUHMAN

Technical Director of Renishaw (Shanghai) Trading Co., Ltd.

雷尼绍（上海）贸易有限公司技术总监

Chris LUHMAN has worked at Renishaw since 1997. He moved to Hong Kong in 2004 working first Technical Manager then Business Development Manager. He moved to Shanghai in July 2017 as Technical Director where he oversee the 60+ engineers that support customers in China.

Chris LUHMAN 自 1997 年以来一直在 Renishaw 工作。他于 2004 年移居香港，先后担任技术经理及业务发展经理。他于 2017 年 7 月作为技术总监来到上海，在那里他负责监督 60 多名支持中国客户的工程师。

22. Liedong ZHU



Liedong ZHU

Chairman of Chongqing Runtong Holdings (Group) Co., Ltd

朱列东

重庆润通控股（集团）有限公司董事长

Mr. Liedong ZHU, Chairman of Chongqing Runtong Holdings (Group) Co., Ltd., Master of Business Administration of Chongqing University, deputy of Chongqing People's Congress and vice-chairman of Chongqing Federation of Industry and Commerce. He has won the titles of ten innovative entrepreneurs in China's reform, outstanding entrepreneurs in Chongqing and outstanding private entrepreneurs in Chongqing. His founding enterprises have been awarded excellent industrial enterprises in Chongqing for many times, excellent private enterprises in Chongqing, top 500 manufacturing enterprises in China and top 100 enterprises in Chongqing.

朱列东先生，重庆润通控股（集团）有限公司董事长，重庆大学工商管理硕士，重庆市人大代表、重庆市工商联副主席。曾获中国改革十大创新企业家、重庆市杰出企业家、重庆市优秀民营企业企业家称号。其创办企业多次荣获重庆市优秀工业企业，重庆市优秀民营企业，多次上榜中国制造业企业 500 强，重庆企业 100 强。

23. Wei CHEN



Wei CHEN

General Manager of Jiangsu Hengtong Optical Fiber Technology Co., Ltd.

陈伟

江苏亨通光纤科技有限公司总经理

Wei CHEN is the general manager of Jiangsu Hengtong Optical Fiber Technology Co., Ltd., the subsidized expert of the State Council, the outstanding contribution expert of young and middle-aged people in Jiangsu Province, the "Double Creative Leading Talents" in Jiangsu Province, the "333 High-level Talents Training Project" in Jiangsu Province, and the senior member of the Optical Communications Committee of the Chinese Communication Society.

He has won the first prize for military scientific and technological progress, the first prize for Jiangsu scientific and technological progress, the first prize for Hubei scientific and technological progress, the first prize for scientific and technological innovation of the Chinese Society of Optical Engineering, and the first prize for Suzhou scientific and technological progress. He has undertaken more than 20 projects such as the "973 Plan" and "863 Plan" of the Ministry of Science and Technology, major instrument projects and major projects of industrial strong foundation engineering of the Ministry of Industry and Information Technology.

江苏亨通光纤科技有限公司总经理，国务院津贴专家，江苏省中青年突出贡献专家，江苏省“双创领军人才”，江苏省“333 高层次人才培养工程”，中国通信学会光通信委员会高级会员。

曾获军队科技进步一等奖，江苏省科技进步一等奖，湖北省科技进步一等奖，中国光学工程学会科技创新奖一等奖，苏州市科技进步奖一等奖 2 项。曾承担国家科技部“973 计划”、“863 计划”、重大仪器仪表专项、工信部工业强基工程重大项目等项目 20 余项。

24. Jonathan ROSS



Jonathan ROSS

Industrial Associate, IfM Education and Consultancy Services (IfM ECS)

IFM 教育和咨询服务（IFM ECS）产业经理

Jonathan ROSS is an Industrial Associate representing IfM ECS in Greater China. He brings with him nearly 15 years of manufacturing experience in China from senior leadership roles. Among those roles was CEO of Star Rapid, where he ran one of China's largest and most well-known rapid prototyping and low volume manufacturing companies.

Jonathan has extensive experience within the areas of product development, sales, marketing, and operations management, with a proven track record of business transformation, profitability, and growth.

In collaboration with IfM ECS, he successfully implemented strategic roadmapping and business strategy tools developed by the IfM in Star Rapid.

After having witnessed extraordinary results in the cognitive efficacy, creativity, problem solving, and teamwork amongst his Chinese and international colleagues, he decided to join IfM ECS as an Industrial Fellow and dedicate himself to help Chinese companies, multi-national enterprises operating within China, and government adopt cutting-edge research from the IfM.

He aims to help organizations create value with his experience while also drawing from the rich knowledge and wide-ranging talent from within the IfM to help clients meet their biggest challenges.

Jonathan is fluent in Mandarin Chinese and previously studied Chinese language and culture at Fudan University in Shanghai, China.

Jonathan ROSS 是大中华区 IFM ECS 的产业经理。他在中国担任高级领导职务，拥有近 15 年的生产制造经验。其中包括 Star Rapid 的首席执行官，他管理着中国最大、最知名的快速成型和小批量制造公司之一。

Jonathan 在产品开发、销售、营销和运营管理领域拥有丰富的经验，在业务转型、盈利能力和增长方面有着良好的业绩记录。

在与 IFM ECS 的合作下，他成功地实现了 IFM 在 Star Rapid 开发的战略路线图和业务战略工具。

在见证了中国和国际同事在认知效能、创造力、解决问题和团队合作方面的非凡成就后，他决定以行业伙伴的身份加入 IFM ECS，并致力于帮助中国公司、在中国的跨国企业运营和政府采用 IFM 的前沿研究。

他致力于帮助企业利用自己的经验创造价值，同时也从 IFM 内部汲取丰富的知识和广泛的人才，帮助客户应对最大的挑战。

Jonathan 普通话流利，曾在中国上海复旦大学学习汉语和文化。

25. Ella WHELLAMS



Ella WHELLAMS

Events Manager, IfM ECS and Stakeholder Engagement, Policy Links

活动项目经理，IfM 教育及顾问服务(IfM ECS)利益相关者

Policy Links

Ella manages events for IfM Education and Consultancy Services. Ella's work includes working closely with the UK Science and Innovation Network in selected countries to develop opportunities for collaboration. Ella previously worked in the Events Team at Kensington Palace. She has over ten years' experience of planning events both in the UK and overseas including conferences for up to 500 delegates, and senior policy workshops held at the British Embassy in Berlin and the White House in Washington DC.

Ella 负责管理 IfM 教育和咨询服务的活动。Ella 的工作包括在选定的国家与英国科学和创新网络紧密合作，开发合作机会。Ella 之前在肯辛顿宫的活动团队工作。她在英国和海外策划活动方面有超过十年的经验，其中包括多达 500 名代表的会议，以及在英国驻柏林大使馆和华盛顿特区白宫举行的高级政策研讨会。

26. A.P. Dong WU



A.P. Dong WU

Associate Professor of School of Management

Zhejiang University

吴东

浙江大学管理学院副教授

Dong WU is the Associate Professor of School of Management at Zhejiang University. He is the assistant head of the Joint Center for Global Manufacturing and Innovation Management, assistant head of Ruihua Innovation Management Institute and Assistant Secretary-General of Zhejiang Technological Innovation Management Association. His main research interests are technology and innovation management, global manufacturing and strategy, big data and innovation management.

吴东博士，浙江大学管理学院副教授，求是青年学者，浙江大学—英国剑桥大学全球化制造与创新管理联合研究中心所长助理，浙江大学睿华创新管理研究所所长助理，浙江省技术创新管理协会副秘书长。主要研究方向为技术与创新管理，全球化制造与战略，大数据与创新管理。

27. Jingchen DONG



Jingchen DONG

Chief Expert of Manufacturing Research of Chinese Academy of Engineering

董景辰

中国工程院制造业研究室首席专家

Jingchen DONG graduated from Nankai University in 1965. He was the Chief engineer, CEO and Chief of the board of ShannGu Xiyi Group Corporation (formerly Xi'an Instrument Group). From 2001 to 2015, he served as Vice-secretary and adviser of China Instrument Association. In 2015, he was appointed Chief Expert of Manufacturing Research of Chinese Academy of Engineering. Currently, he is the deputy head of the National Intelligent Manufacturing Standardization Advisory Group, member of Intelligent Manufacturing Advisory Group of Ministry of Industry and Information Technology, and a Commissioner of 863 major projects of the Ministry of Science and Technology.

He has served as the vice-chairman and group leader of the overall technical group of the national key research projects during the Seventh, Eighth and Ninth Five-Year Plan. He is the principal author of the Eleventh Five-Year Plan and the Twelfth Five-Year Plan for China's Instrument and Instrument Industry. He is also a member of the compiling group of the Intelligent Manufacturing Equipment Development Strategy for the Strong Power Strategy of China Academy of Engineering.

董景辰，1965 年毕业于天津南开大学物理系。曾担任陕鼓西仪集团有限公司（原西安仪表集团）总工程师、总经理、董事长。2001 年至 2015 年在中国仪器仪表行业协会任副秘书长、顾问，专家委员会委员。2015 年任中国工程院制造业研究室首席专家。现任国家智能制造标准化专家咨询组副组长，工信部智能制造专家组成员，科技部 863 重大项目专员。

曾担任国家“七五”、“八五”、“九五”攻关课题项目总体技术组副组长、组长，中国仪器仪表行业“十一五”规划和“十二五”规划主要执笔人，中国工程院《强国战略之智能制造装备发展战略》编写组成员。

28. A.P. Victor CUI



A.P. Victor CUI

Guest Editor of the 2018 JIBS

Associate Professor of University of Manitoba, Canada

崔鸿

2018 JIBS 客座编辑

加拿大曼尼托巴大学副教授

Dr. Victor CUI focuses on business strategy. He obtained his first PhD from the Faculty of Engineering of the City University of Hong Kong and second PhD from the Sauder School of Business at the University of British Columbia. His research relies heavily on “big data” to document the interplay of collaboration and competition between and within firms. His work has paid particular attention to what factors cause such interplays and how to manage them in the innovation process. He has also studied international policies on intellectual property right protection and corporate social responsibility. His research has been published in top-tier management journals such as Strategic Management Journal, Journal of International Business Studies (JIBS), and Journal of Product Innovation Management. His work has won best paper awards at the Academy of Management and the Administrative Sciences Association of Canada. He is currently serving on the editorial board of JIBS.

崔鸿专注于企业战略研究。他于香港城市大学工程学院获第一个博士学位，并于英属哥伦比亚大学尚德商学院获第二个博士学位。他的研究利用“大数据”记录企业内部和企业之间的合作与竞争的相互作用。他的工作尤其关注是什么因素导致了这种相互作用，以及如何在创新过程中进行管理。他还研究了知识产权保护和企业社会责任的国际政策。他的研究成果发表在《战略管理杂志》、《国际商业研究杂志》、《产品创新管理杂志》等顶级管理期刊上。曾获得加拿大管理学院和管理科学协会颁发的最佳论文奖。目前在 JIBS 编辑委员会任职。

29. A.P. Jian DU



A.P. Jian DU

Associate Professor of School of Management

Zhejiang University

杜健

浙江大学管理学院副教授

Dr. Jian DU is the associate professor at School of Management, Zhejiang University now. Her research focuses on technology innovation; foreign direct investment and global manufacturing strategy. She published several papers in international journals. She currently presides over and completes three projects of the National Natural Science Foundation of China.

She is a core member of National Institute for Innovation Management (NIIM) in Zhejiang University. Since 2000, he has been the director and management editor of the editorial department of Journal of Management Engineering. She was a visiting professor of Kellogg School of Management in US during 2012, a visiting scholar of IfM of Cambridge University in UK during 2014.

杜健现任浙江大学管理学院副教授。研究领域包括技术创新、外商直接投资与全球制造战略。她在国际期刊上发表了数十篇论文，主持和完成国家自然科学基金项目 3 项。杜健副教授是浙江大学创新管理与持续竞争力研究中心(NIIM)的核心成员，2000 年至今一直担任《管理工程学报》编辑部主任兼管理编辑。2011-2012 年期间在美国西北大学 Kellogg 商学院做一年的访问学者，2014-2015 年期间在英国剑桥大学国际制造中心做一年的访问学者。

30. A.P. Yufeng ZHANG



A.P. Yufeng ZHANG

Deputy Lead for Research Excellence Framework

University of Birmingham, U.K.

张玉峰

英国伯明翰大学卓越研究框架副主任

Dr. Yufeng ZHANG is working in Operations Management at the Department of Management, University of Birmingham. His undergraduate background was in Mechanical Engineering and International Finance at Shanghai Jiao Tong University, China. He has an MSc in Global Production Engineering from the Technical University of Berlin, Germany. He gained his PhD in Engineering at the University of Cambridge and then stayed there as a Research Associate with the International Manufacturing team of the Institute for Manufacturing (IfM). Yufeng's earlier industrial career included responsibilities for project management and new business development in a Japan-based multinational company specialising in precision equipment manufacturing. He continues to work very closely with industry. His work aims to help companies cope with complex challenges and opportunities in global network operations, engineering innovation and digital transformation.

张玉峰博士在伯明翰大学管理系从事运营管理研究。他的本科毕业于中国上海交通大学机械工程和国际金融专业。他拥有德国柏林技术大学全球生产工程硕士学位。他在剑桥大学获得了工程学博士学位，然后作为制造研究院（ifm）国际制造团队的研究助理。张玉峰早年的职业生涯包括在一家日本跨国公司负责项目管理和新业务开发，该公司专门从事精密设备制造。他继续与工业界密切合作。他的工作旨在帮助企业应对全球网络运营、工程创新和数字化转型方面的复杂挑战和机遇。

31. Dr. Linan LEI



Dr. Linan LEI

Assistant researcher, School of Management, Zhejiang University

雷李楠

浙江大学管理学院助理研究员

Linan LEI is the assistant researcher in School of Management, Zhejiang University. She gets the doctoral degree from Zhejiang University and master degree from University of Leeds. Her research focuses on the innovative strategy of manufacturing in China, especially the strategy of hidden champions in niche markets. She has published over 10 journal papers, and got the Sino-British Fellowship.

雷李楠，浙江大学管理学院助理研究员，浙江大学管理学博士，英国利兹大学国际商务硕士。主要研究中国制造企业的创新战略，尤其是隐形冠军企业的发展战略，已发表论文十余篇，曾获中英学者奖学金。

32. Dr. Ziyi ZHAO



Dr. Ziyi ZHAO

Alibaba Business School, Hangzhou Normal University

赵子溢

阿里巴巴商学院，杭州师范大学

Ziyi ZHAO is currently an assistant professor at Alibaba Business School, Hangzhou Normal University. She also works as a researcher in the Alibaba Research Center for Industrial Internet. Ziyi holds a PhD in management from Zhejiang University, and she participated the joint-trained PhD programme of University of Cambridge and Zhejiang University. Her recent research interest is on the digital transformation of manufacturing firms. She is now developing case studies on apparel manufacturing industry.

赵子溢是杭州师范大学阿里巴巴商学院的助理教授，阿里巴巴产业互联网研究中心研究员。她博士毕业于浙江大学管理学院，并参与浙江大学-剑桥大学联合培养博士项目。她目前的研究方向是传统制造型企业的数字化转型，并正在针对此问题开发服装制造产业的相关案例。

33. Dr. Jinyuan QIAN



Jin yuan Qian
Lecturer, College of Energy Engineering,
Zhejiang University
钱锦远
浙江大学能源工程学院讲师

Dr. Jinyuan QIAN is a Lecturer at College of Energy Engineering, Zhejiang University currently. He achieved his doctoral degree from Zhejiang University, a visiting Ph.D student in TU Bergakademie Freiberg, Germany, and a Postdoc in Lund University, Sweden. Currently, he serves as the deputy director of “Zhejiang University- China National Nuclear Technology Joint R&D Center”. His research interests are heat transfer enhancement, smart flow control technology, intelligent manufacturing of novel heat exchanger and special functional valves etc. He has published more than 30 SCI-index papers, also won the China Youth Science and Technology Innovation Award, First Prize of Zhejiang Science and Technology Progress Award.

钱锦远博士，浙江大学能源工程学院讲师，求是青年学者。浙江大学与德国弗莱贝格工业大学联合培养博士，瑞典隆德大学博士后。浙江大学-中核科技高性能控制阀联合研发中心副主任。研究领域为高效流动传热技术与装备（特种控制阀和强化换热元件），已在国际著名期刊上发表 SCI 论文 30 余篇，曾获中国青少年科技创新奖、浙江省科技进步一等奖等。

34. Prof. Yongyi SHOU



Prof. Yongyi SHOU
Professor of School of Management
Zhejiang University
寿涌毅
浙江大学管理学院教授

Dr. Yongyi SHOU, a Professor and Ph.D. supervisor of School of Management at Zhejiang University. He received Doctor's degree in Nanyang Polytechnic University in Singapore. He was a Visiting Scholar of University of Cambridge and Indiana University. His academic research involves supply chain management, green logistics, operation strategy, project governance, innovation management and other fields. Dozens of papers have been published in first-class periodicals at home and abroad. He is also the eitorial board of SCI Journal Industrial Management & Data Systems and Project Management Manager of Journal of Management Engineering.

He has served as director of MBA Education Center of Zhejiang University for eight consecutive years. He is currently the co-director of the Double Master Program of Global Manufacturing and Supply Chain Management of Zhejiang University-McGill University, the Chinese Responsibility Professor of the Double Master Program of Innovation and Entrepreneurship between China and France in the College of Engineers of Zhejiang University, and the teacher of Intensive Training Program of Innovation and Entrepreneurship in Zhu Kezhen College of Zhejiang University. He was awarded the first prize of national teaching achievement award, the first prize of novice in teaching circle of Zhejiang higher education, and the best teacher of Zhu Kezhen College of Zhejiang University in 2010.

寿涌毅博士，浙江大学管理学院教授，博士生导师。新加坡南洋理工大学博士。英国剑桥大学访问学者；美国印第安纳大学访问学者。学术研究涉及供应链管理、绿色物流、运营战略、项目治理、创新管理等领域。在国内外一流期刊上发表论文数十篇。担任 SCI 期刊 *Industrial Management & Data Systems* 编委，《管理工程学报》项目管理专题负责人。

曾连续八年担任浙江大学 MBA 教育中心主任。目前担任浙江大学—McGill University 全球制造与供应链管理双硕士项目联合主任、浙江大学工程师学院中法创新创业双硕士项目中方责任教授、浙江大学竺可桢学院创新与创业管理强化班任课教师。获国家级教学成果奖一等奖、浙江省高等学校教坛新秀奖，浙江大学竺可桢学院 2010 年度最佳任课教师。

35. Prof. Shulin GU



Prof. Shulin GU

Research Fellow of Research Institute of Scientific and Technological Strategic Consultation, Chinese Academy of Sciences

顾淑林

中国科学院科技战略咨询研究院研究院

Prof. Shulin GU is a Research Fellow of Research Institute of Scientific and Technological Strategic Consultation, Chinese Academy of Sciences. She also serves as an Advisory Research Professor at the China Institute of Science and Technology Policy (CISTP) at Tsinghua University and adjunct Professor of the Management School at Zhejiang University. She is a Constitution Committee member of Globelics. She was a Senior Research Fellow at Institute for New Technologies of UN University (1992--2000, now called as MERIT of UN University, also of Maastricht University). Her research areas include S&T policy, S&T system reform in China, comparative innovation and development studies, innovation policy, institutional change, inclusive and green innovation.

顾淑林，中国科学院科学院科技战略咨询研究院研究院。中国清华大学科学技术政策研究所 (CISTP) 和浙江大学管理学院访问教授，国际创新研究“GLOBELICS”学术网络的董事会成员。曾任联合国大学新技术研究所高级研究员(1992- 2000 年，现为联合国大学荣誉研究员，马斯特里赫特大学荣誉研究员)。她的研究领域包括科技政策、中国科技体制改革、比较创新

与发展研究、创新政策、制度变迁、包容性创新和绿色创新。

36. Dr. Hongna CHEN



Dr. Hongna CHEN

**Assistant Researcher of the Foreign Economic Research Department of
the Development Research Center of the State Council.**

陈红娜

国务院发展研究中心对外经济研究部助理研究员

Hongna CHEN is currently the assistant researcher and doctor of economics of the Foreign Economic Research Department of the Development Research Center of the State Council. In 2016 and 2018, she visited University of Cambridge and Oxford University respectively.

Her main research interests are world economy, international trade, digital economy, regional economic cooperation, free trade pilot area, etc. Her publishing research reports include Sino-US Bilateral Trade in Services, Research on Cross-border Data Flow in Digital Trade, Research on Privacy Protection and Cross-border Data Flow, Policy Recommendations to Promote the Accelerated Development of China's Trade in Services, etc. Her publishing summaries are Specific Policies for Expanding the Opening-up of Services under the New Situation, Suggestions, the Development Characteristics, Problems and Policy Suggestions of China's Trade in Services, etc., Many reports have been approved or circled by Party and state leaders.

She has published many articles in newspapers and magazines such as China Government Network, People's Daily, World Management, Development Research, Learning and Observation, China Economic Times and so on.

陈红娜现任国务院发展研究中心对外经济研究部主任科员，助理研究员，经济学博士。2016年、2018年分别赴剑桥大学和牛津大学访学交流。

主要研究领域：世界经济、国际贸易、数字经济、区域经济合作、自贸试验区等。发表调研报告：《中美双边服务贸易研究》《数字贸易中的跨境数据流动问题研究》《隐私保护与跨境数据流动问题研究》《推动我国服务贸易加快发展的政策建议》等；发表择要：《新形势下扩大服务业对外开放的具体政策建议》《我国服务贸易的发展特征、存在的问题与政策建议》等，曾有多篇报告获党和国家领导人批示或圈阅。

对外在中国政府网、人民网、管理世界、发展研究、学习与观察、中国经济时报等报刊杂志上发表多篇文章。

37. Liming LIU



Liming LIU

Project Coordinator, Division of International Cooperation, Center for International Economic and Technological Cooperation, Ministry of Industry and Information Technology of China

刘力铭

工业和信息化部国际经济技术合作中心国际合作处干部

Liming LIU engages in major international events like G20 summit, BRICS Industry/Communications Ministers Meeting and Belt and Road Forum for the implementation of the events. He is also responsible for the promotion of China-UK Industrial Cooperation Partnership and provide administrative support for bilateral industrial cooperation mechanisms with UK, Switzerland, France, Russia and Thailand for the Ministry of Industry and Information Technology of China.

参与二十国集团峰会、金砖工业通信业部长会，一带一路峰会等大型国际项目的协调和执行工作，负责“中英现代产业合作伙伴关系”的推进工作，以及工信部中英、中瑞、中法、中俄、中泰等双边产业合作机制的支撑工作。

38. Zhijun GU



Zhijun GU

Professional Consultant for the Digital Transformation of the World Consulting Company

古智俊

天下顾问公司数字化转型专业顾问

Mr. Zhijun GU graduated from the Institute of Business Administration of Zhejiang University. Currently, he is a professional consultant for the digital transformation of the World Consulting Company. He was the chief information officer of Communication & Network Solution Business Group of Foxconn Technology Group, the world's largest technology product design, manufacturing and service provider. He was the Director of Planning and Operating Department of Telecom Company focusing on mobile communications and digital services. He was also the manager of Information Department of Unified Enterprise Group, Taiwan's largest food manufacturing, logistics and chain retail channel.

古智俊先生博士毕业于浙江大学企业管理研究所。现任天下顾问公司数字化转型专业顾问。曾任全球第一大科技产品设计、制造与服务商富士康科技集团网路与通讯事业群信息长，专

注于移动通信与数字服务的远传电信公司企划营运部 总监，台湾第一大食品制造、物流及连锁零售通路统一企业集团信息部 经理。

39. Chunjiang WANG



Chunjiang WANG

General Manager of Zhejiang Jiechuang Intelligent Technology Co., Ltd.

王春江

浙江捷创智能技术有限公司总经理

Mr. Chunjiang WANG is the general manager of Zhejiang Jiechuang Intelligent Technology Co., Ltd. Mr. Chunjiang WANG is an expert in China's nonferrous metal industry. He has completed dozens of technological and management innovation projects in the field of information and automation. He has many years of experience in intelligent manufacturing and information technology projects. During the implementation of the strategic planning project of China Aluminum Industry Information Strategic Planning and Manufacturing Execution System, he had in-depth cooperation with strategic consultants of IBM, SAP, PricewaterhouseCoopers, Deloitte and other well-known international companies and consultants of automation companies such as Honeywell.

王春江先生现任浙江捷创智能技术有限公司总经理。王春江先生是中国有色金属行业专家，主持完成了信息和自动化领域数十项技术创新和管理创新项目，具有多年智能制造和信息化项目经验。在开展中国铝业信息战略规划和制造执行系统战略规划项目期间，与 IBM 公司、SAP、普华永道公司、德勤等国际知名公司战略咨询顾问和 Honeywell 等自动化公司咨询顾问有深入的咨询项目合作。

40. Yanmin WANG



Yanmin WANG

Founder of Xinchang College

王彦敏

新场学院创始人

Yanmin WANG, founder of Xinchang College and Doctor of Management of Peking University. She has a unique perspective and practical experience in the research and development, manufacturing, innovation of automotive products and cross-border cooperation in the era of intelligence. As an expert consultant of the Ministry of Science and Technology, the Ministry of Industry and Information Technology, the National Political Consultative Conference, the Central Committee of the Communist Party of China and the Zhongguancun Administrative Committee, she wrote policy advisory reports for them. She was a research assistant of Academician Guanhua

XU who is the former Minister of science and technology. She was a member of the Research Association for the Reform of China's Scientific and Technological System and a member of Scientific and Technological Advisory Committee of China Electronics Society. She has successively served as strategic consultant for Easy Access Vehicles, Beijing Creator Space, Chery New Energy Vehicles, and co-founder and founding CEO of Easy Chi Automobile.

王彦敏，新场学院创始人，北京大学管理学博士，对于汽车产品的研发、制造、创新，以及智能时代的跨界合作有独特的视角和实践经历。曾作为科技部、工信部、全国政协、致公党中央、中关村管委会等政府机构的专家顾问，执笔政策咨询报告。曾担任科技部前部长徐冠华院士研究助手，兼任中国科技体制改革研究会理事，中国电子学会科技咨询工作委员会委员。先后担任易到用车、北京创客空间、奇瑞新能源汽车战略顾问，易奇汽车联合创始人兼创始 CEO。

41. Guiyao MA



Guiyao MA

Strategic Marketing Manager of IKD Co., Ltd.

马贵耀

吉利汽车动力系统项目管理部长/规划专家

Guiyao Ma is currently the strategic marketing manager of IKD Co., Ltd. He was the Project Manager/Planning Expert of Geely Automotive Power System, Operating Manager of EATON Hydraulic (Ningbo) Company, Factory Manager of RECTICEL Automotive Interior System.

马贵耀现任爱柯迪股份有限公司战略市场部经理。曾任吉利汽车动力系统项目管理部长/规划专家，伊顿液压(宁波)公司运营经理，瑞斯汽车内饰系统工厂经理。

42. Bingbing ZHANG

Bingbing ZHANG

Deputy General Manager of Romax Technology (Hangzhou) Co., Ltd.

张冰冰

诺迈士（杭州）有限公司副总经理

43. Maple FENG



Maple FENG

Assistant of Jonathan ROSS, University of Cambridge

Jonathan ROSS 助理

剑桥大学 Jonathan Ross 助理

Maple Feng has over ten years of experience in manufacturing covering product development, New Product Introduction (NPI), and Business Development.

As an active member of Toastmasters, an organization dedicated to improving public speaking and leadership skills, she aims to improve her public speaking ability to inspire others.

With this mindset of continuous self-improvement, Maple consistently delivers value to her clients, her colleagues, and the company.

Maples' role involves supporting Jonathan on projects, business development, and managing day to day operations.

Maple FENG 在产品开发、新产品引进和业务开发方面拥有十多年的经验。作为一个致力于提高公众演讲和领导能力的组织 toastmasters 的积极成员，她致力于提高自己的公众演讲能力，以激励他人。凭借这种不断自我完善的心态，Maple 始终如一地为客户、同事和公司提供价值。Maple 的职责包括在项目、业务开发和日常运营管理方面协助 Jonathan。

ZHEJIANG UNIVERSITY & UNIVERSITY OF CAMBRIDGE

JOINT RESEARCH CENTER FOR GLOBAL MANUFACTURING AND INNOVATION MANAGEMENT



CO-HEAD

Prof. Xiaobo WU

NIIM
Zhejiang University

The Joint Research Center for Global Manufacturing and Innovation Management was co-founded by National Institute for Innovation Management of Zhejiang University and the Institute for Manufacturing (IfM) of Cambridge University. The Center mainly focuses on researches in the field of global manufacturing and innovation management, including the evolution and sustainable development of global manufacturing, FDI and technology transfer, transnational corporations and made-in-China, industrial innovation and strategy, etc. The Joint Research Center also makes contributions to cultivation of academic talents and technological service through cooperative research between both sides, with the vision to become one of the leading platforms in the field of global manufacturing and innovation management.



CO-HEAD

Prof. Tim Minshall

IfM
University of Cambridge

As the result of close cooperation between Zhejiang University and Cambridge University, the joint center dedicates to promoting cooperation for major projects, mutual academic exchange, the exchange between master and doctoral students, organizing international academic conferences that both are interested in, building the connections between Chinese and British industries and providing related training programs. The Joint Research Center will make great efforts to contribute further to the research and practice of global manufacturing and innovation management, and try to become a worldwide top academic institute in the coming future.

Twenty-One YEARS' SOLID RELATIONSHIP BETWEEN IFM & NIIM

NIIM is China's leading institutes in innovation management studies sponsored by the national funding. NIIM devotes in promoting innovation management and competitiveness related studies in China. It is known for its pioneer work in initiating technological innovation management studies based on China's practice, its remarkable achievements and very active cooperation network worldwide.

IfM and NIIM have been collaborated in the area of global manufacturing and innovation management very productively for already 21 years. One of the achievements is the Joint Research Centre for Global Manufacturing and Innovation Management in Zhejiang University, Hangzhou, China, established in September 2005.

The vision for this centre is to become one of the leading platforms in the field of global manufacturing and innovation management studies. This centre commits joint training academic talents and providing technological service through deeply cooperating in scientific research work and academic exchange activities. Our research fields focus on the development of theories and methods on global manufacturing network and innovation strategy, especially in emerging market - secondary innovation, catch-up and beyond, foreign direct investment and innovation capability building, manufacturing servitizing, global new product designing and knowledge management, business ecosystems and business model innovation etc.

In the past 14 years, Prof. Xiaobo WU have already signed two Research Collaboration Agreement with former head of IfM-Prof. Mike Gregory and Prof. Andy Neely. Both sides have been involved into the cooperation affairs of the joint research centre, e.g. Dr. Yongjiang Shi from IfM and Prof. Bin Guo from NIIM, Zhejiang University. We have a very fruitful cooperation with their help.

We have jointly host international academic annual conferences-International Symposium on Global Manufacturing and China (GMC)-in turn at Zhejiang University and University of Cambridge since 2005. ZJU delegation will attend the CIM annual conferences and IfM delegation will attend the GMC conferences in China every other year.

We have collaboratively developed joint research funding from **National natural science foundation of China(NSFC)**, **the EU's seventh framework project(FP 7)** and **the Royal Society Project**. Now we are still working hard to get the research funding from Horizon 2020. One good news is that we have just got the **2nd National natural science foundation of China (Key Program)** and Dr. Yongjiang Shi is our research member.

Every year, 1-2 ZJU Ph.D student will visit IfM for our joint PhD student program. ZJU also accepts many IfM research faculties and students, providing local assistance to field survey, case studies, and other academic visits. We have jointly published research papers and books in these years, e.g. *The Transformation of Huawei* will be published at Cambridge University Press soon, *Value*

Creation through Engineering Excellence: Building Global Network Capabilities is published at Palgrave Macmillan.

In the late September, 2018, ZJU delegation visited IfM, University of Cambridge and attended the CIM annual conferences again. In order to continue the collaborative relationship and push our joint research centre into a new height, we were renewing the research collaboration agreement and continuing the operations of the joint centre hereinafter.

As the result of close and solid cooperation between Zhejiang University and University of Cambridge, the joint center will keep on dedicating to promoting cooperation for major projects, mutual academic exchange, the exchange between master and doctoral students, organizing international academic conferences that both are interested in, building the connections between Chinese and British industries and providing related training programs. The Joint Research Center will keep on making great efforts to contribute further to the research and practice of global manufacturing and innovation management, and try to become a worldwide top academic institute in the coming future.

Past 14 Themes of GMC Symposium

- 2005: The Harmonious Road of Globalization Manufacturing: Technological Innovation and Development Strategy, Hangzhou, China
- 2006: Managing Global Manufacturing and Supply Networks, Cambridge, UK
- 2007: DESIGN-MAKE-SERVE: Business Model Innovation in Global Manufacturing, Hangzhou, China
- 2008: Global Value Chains: Capturing Value in International Manufacturing and Supply Networks, Cambridge, UK
- 2009: Global Manufacturing in Transition and China, Hangzhou, China
- 2010: Innovation in Global Manufacturing - New Models for Sustainable Value Capture, Cambridge, UK
- 2011: The New Stage of Manufacturing in China: Outward FDI Upgrading and Strategy, Hangzhou, China
- 2012: Capturing Value in International Manufacturing and Supply Networks New Models for a Changing World, Cambridge, UK
- 2013: High Performance Manufacturing: Global Perspective, Cambridge, UK
- 2014: Capturing Value from Global Networks: Implications for Manufacturing, Supply Chains and Industrial Policy, Cambridge, UK
- 2015: Beyond catching-up: The Next Era of Chinese Manufacturing Growth and Innovation, Hangzhou, China
- 2016: Architecting the Digital Supply Chain the Implications of Digitalisation for Global Manufacturing, Cambridge, UK
- 2017: Exploring the Emerging Paradigm of Manufacturing, Hangzhou, China
- 2018: Supply chain transformation enabled by advanced technologies: implications for producers, consumers and society, Cambridge, UK

A BRIEF INTRODUCTION OF IFM

The IfM is part of the University of Cambridge's Department of Engineering. Our Vision is Manufacture a Better World.



World-leading research

Our research aims to help:

- Companies develop life-changing products and services, build better businesses, create meaningful jobs, and improve the environment for the future.
- Governments foster innovation and enterprise to deliver social and economic benefits.

Our researchers work on a wide range of manufacturing-related topics including:

- new materials and advanced production technologies
- digital manufacturing technologies and data analytics and how they can be used to transform factories, supply chains and business models
- how new technologies can be nurtured through the development phase and turned into successful businesses.
- effective business tools and processes (such as roadmapping) that can help organisations achieve their strategic goals

World-class education

We provide undergraduate and postgraduate education to create the manufacturing leaders of the future.

Real-world application

Through our dissemination arm, IfM Education and Consultancy Services (IfM ECS) Ltd, we provide consultancy and professional development to companies of all sizes and to national and regional governments. IfM ECS is owned by the University of Cambridge and our profits are gifted to the University to fund future research.

浙江大学与剑桥大学全球化制造与创新管理联合研究中心



主任

中国浙江大学创新管理与

持续竞争力研究中心主任

吴晓波教授

全球化制造与创新管理联合研究中心是由浙江大学创新管理与持续竞争力研究中心和剑桥大学制造研究院联合创办。中心主要从事全球化制造和创新管理领域的研究，包括全球制造业的演变与可持续发展、外商直接投资与技术转移、跨国公司与中国制造、产业创新与战略等。联合研究中心还通过双方的合作研究，为培养学术人才和技术服务做出贡献，希望成为全球化制造和创新管理领域的领先平台之一。



主任

剑桥大学制造研究院主任

Tim Minshall 教授

浙江大学和剑桥大学之间密切合作,联合中心共同致力于促进主要项目的合作,合作涉及学术交流,硕士和博士生联合培养,组织双方都感兴趣的国际学术会议,建立中英工业联系和提供相关的培训项目。联合研究中心将努力为全球化制造和创新管理的研究与实践做出更大的贡献,力争在未来成为全球顶尖的学术机构。

浙江大学创新管理与持续竞争力研究中心与剑桥大学制造研究院 21 年的合作关系

浙江大学创新管理与持续竞争力研究中心是国家资助的中国领先的创新管理研究机构，致力于推动中国的创新管理和竞争力相关研究。它以在中国实践基础上开展技术创新管理研究的开拓性工作、卓越的成就和活跃的全球合作网络而闻名。

剑桥大学制造研究院与浙江大学创新管理与持续竞争力研究中心已经在全球化制造和创新管理领域进行了 21 年卓有成效的合作。其中一项成果是在 2005 年 9 月，双方联合成立了浙江大学全球化制造和创新管理联合研究中心。

该中心的愿景是成为全球化制造和创新管理研究领域的领先平台之一。本中心致力于联合培养学术人才，通过深入合作开展科研工作和学术交流活动，提供技术服务。我们的研究领域集中在全球制造网络和创新战略的理论和方法的发展，特别是在新兴市场二次创新、追赶与超越、外商直接投资和创新能力建设、制造业服务化、全球新产品设计和知识管理、商业生态系统和商业模式创新等。

在过去的 14 年里，吴晓波教授已经与制造研究院的前负责人 Mike Gregory 教授和 Andy Neely 教授签署了两份研究合作协议。双方共同参与了联合研究中心的合作事务，如来自制造研究院的石涌江老师和浙江大学创新管理与持续竞争力研究中心的郭斌教授。在他们的帮助下，我们进行了卓有成效的合作。

2005 年以来，我们先后在浙江大学和剑桥大学联合举办“全球化制造与中国国际研讨会”。ZJU 代表团将参加 CIM 年会，IfM 代表团将每隔一年在中国参加 GMC 会议。

我们合作了中国国家自然科学基金(NSFC)、欧盟第七框架计划(FP 7)和英国皇家学会联合资助的科研项目。目前，我们还在努力争取“地平线 2020”项目的科研经费。我们刚刚获得了中国第二届全国自然科学基金(重点项目)且石涌江老师是我们的主要研究成员。

每年都会有 1-2 名 ZJU 博士生到 IfM 进行联合博士生培养。ZJU 还招收了许多 IfM 的研究人员和学生，为实地调查、个案研究和其他学术访问提供了协助。近年来，我们共同发表研究论文和著作，如《华为管理变革》即将在剑桥大学出版社出版，《卓越工程创造价值:构建全球网络能力》将在帕尔格雷夫麦克米伦出版社出版。

2018 年 9 月下旬，ZJU 代表团访问剑桥大学制造研究院，再次出席 CIM 年会。为了继续我们的合作关系，把我们的联合研究中心推向一个新的高度，我们正在续签研究合作协议，并继续推进联合中心的业务。

浙江大学和剑桥大学之间密切合作,联合中心共同致力于促进主要项目的合作,合作涉及学术交流,硕士和博士生联合培养,组织双方都感兴趣的国际学术会议,建立中英工业联系和提供相关的培训项目。联合研究中心将努力为全球化和创新管理的研究与实践做出更大的贡献,力争在未来成为全球顶尖的学术机构。

GMC 研讨会过去 14 个主题

2005 年:全球化制造的和谐之路:技术创新与发展战略, 杭州, 中国

2006 年:管理全球化制造和供应网络, 剑桥, 英国

2007 年:设计-制造-服务:全球制造业的商业模式创新, 杭州, 中国

2008 年:全球价值链:在国际制造和供应网络中获取价值, 剑桥, 英国

2009 年:中国转型中的全球制造业, 杭州, 中国

2010 年:全球制造业的创新——可持续价值获取的新模式, 剑桥, 英国

2011 年:中国制造业新阶段:对外直接投资升级与战略, 杭州, 中国

2012 年:在不断变化的世界中从国际制造和供应网络的新模式获取价值, 剑桥, 英国

2013 年:高性能制造:全球视野, 剑桥, 英国

2014 年:从全球网络中获取价值:对制造业、供应链和产业政策的影响, 剑桥, 英国

2015 年:超越追赶:中国制造业增长和创新的下一个时代, 杭州, 中国

2016:构建数字供应链数字化对全球制造业的影响, 剑桥, 英国

2017 年:探索制造业的新兴范式, 杭州, 中国

2018 年:先进技术推动供应链转型:对生产者、消费者和社会的启示, 剑桥, 英国

制造研究院简介

制造研究院是剑桥大学工程系的一部分。我们的愿景是创造一个更美好的世界。



世界领先的研究

我们的研究旨在:

- 公司开发改变生活的产品和服务, 建立更好的企业, 创造有意义的工作, 并改善未来的环境。

- 政府鼓励创新和企业创造社会和经济效益。

我们的研究人员从事与制造有关的广泛课题包括:

- 新材料和先进的生产技术
- 数字制造技术和数据分析, 以及如何利用它们来变革工厂、供应链和商业模式
- 如何在开发阶段培育新技术并将其转化为成功的业务
- 有效的业务工具和流程(如路标方式)可以帮助组织实现其战略目标

世界一流的教育

我们提供本科和研究生教育，培养未来制造业的领导者。

实际的应用程序

透过我们的传播，IfM 教育及顾问服务有限公司（IfMECS），我们为不同规模的公司、国家及地区政府提供顾问及专业发展服务。IfMECS 由剑桥大学拥有，我们的利润将捐赠给剑桥大学，以资助未来的研究。