

2015年1月-6月

# 中国会员通讯

## China Member Newsletter

**2015**  
First Half Year



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## ■ 中国大陆自 2015 年 1 月 - 6 月新入选 IET 会士名单 Fellow in China Mainland (Enroll from January 2015 to June 2015)

■ 姓名 Name	■ 单位 Company
白晓民 Prof. Xiaomin Bai	中国电力科学院 China Electric Power Research Institute
操晓春 Prof. Xiaochun Cao	中国科学院大学 University of Chinese Academy of Sciences
方攸同 Prof. Youtong Fang	浙江大学 Zhejiang University
何正友 Prof. Zhengyou He	西南交通大学 Southwest Jiaotong University
黄松龄 Prof. Songling Huang	清华大学 Tsinghua University
卢琴芬 Prof. Qinfen Lu	浙江大学 Zhejiang University
许稼 Prof. Jiang Xu	北京理工大学 Beijing Institute of Technology
闫学东 Prof. Xuedong Yan	北京交通大学 Beijing Jiaotong University
俞俊生 Prof. Junsheng Yu	北京邮电大学 Beijing University of Posts and Telecommunications
周远翔 Prof. Yuanxiang Zhou	清华大学 Tsinghua University

## ■ 2015 年新教育合作伙伴 Academic Affiliate enroll in 2015

复旦大学微电子学院 Microelectronics Institute of Fudan University
中科院计算技术研究所 Institute of Computing Technology, Chinese Academy of Science
重庆大学电气工程学院 School of Electrical Engineering, Chongqing University

## ■ IET 受邀参加“2015 年外国专家迎春招待会”

2015 年 1 月 15 日，英国工程技术学会 IET 国际运营总监 Ian Mercer 先生代表 IET 受邀出席了由中国国家外国专家局主办、中国国际人才交流协会办公室承办、北京市外国专家与外国人就业服务中心协办的“2015 年外国专家迎春招待会”。来自 46 个国家在华工作的外国专家代表，17 个国家驻华使馆的大使、公使和外交官，部分国际组织和人才交流合作机构的 600 余代表出席该活动并欣赏了倾情奉献的精彩演出。

中国外国专家局是英国工程技术学会 IET 在中国重要的政府合作伙伴之一。2013 年 12 月 20 日，双方在英国工程技术学会 IET 英国总部“麦克法拉第”大楼正式签署双边合作协议。中国国家人力资源和社会保障部副部长、中国国家外国专家局局长张建国先生、中国国家外国专家局副局长张亚力女士在过去一年中曾分别带领中国高级代表团

访问英国工程技术学会 IET 英国总部。双方就国际工程师资质认证项目、国际专家互换项目、国际工程和技术转移等项目开展了积极的合作。

2015 年英国工程技术学会 IET 与中国外国专家局将保持更加紧密关系，共同开展多个项目的合作。

The China State Administration of Foreign Experts Affairs (SAFEA) held a 2015 New Year reception for foreign experts for their great contribution to China's socio-economic development on January 15, 2015. More than 600 people attended the reception along with foreign experts from 46 countries, diplomats and representatives from 17 countries. IET Head of International Operations Mr. Ian Mercer was invited to attend the event as honored guest.

## ■ E&T 国际科技沙龙“与特斯拉的亲密接触”成功举办



2015 年 1 月 24 日，由 IET 中国和特斯拉中国联合主办的 IET 国际科技沙龙（E&T Networking）在特斯拉中国总部成功举办。作为电动汽车领域最耀眼的明星，特斯拉一直备受社会各界的关注。因此本次国际科技沙龙提供给会员

一个能够与特斯拉“亲密接触”的平台，并帮助会员了解电动汽车。

活动共分为三大部分，在“了解特斯拉”部分，特斯拉

中国的产品专家 Nick Yang 先生和 IET 国际运营总监 Ian Mercer 先生分别做了主题演讲。Nick Yang 先生介绍了特斯拉产品的性能和技术，引起了在场会员与嘉宾的极大兴趣，现场听众提问非常踊跃，都想了解更多相关的特斯拉以及电动汽车的技术。随后 Ian Mercer 先生介绍了 IET 的愿景与目标，以及 IET 中国的发展情况。Mercer 先生指出，IET 的服务和活动涵盖五大行业领域——建筑环境、设计与生产、能源电力、信息与通讯、交通运输，特斯拉的技术跨越了多个行业领域，例如交通运输、能源电力和设计生产。同时他进一步介绍了 IET 交通运输行业领域的最新动态。

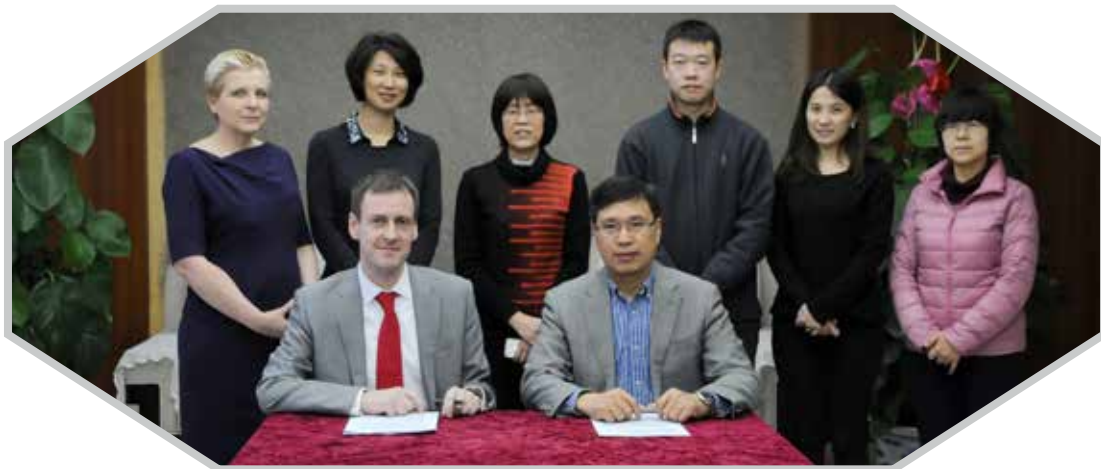
在“体验特斯拉”部分，到场的会员与嘉宾分别试乘试驾了特斯拉最新车型 Model S，每位体验过的会员都为其对传统汽车的“颠覆”鼓掌喝彩，并称深刻感受到“纯电动车也完全可以做到安全、高性能并提供愉悦的驾驶体验”。

在“交流特斯拉”部分，到场的会员与嘉宾，与来自特斯拉的专家、来自 IET 的工作人员就感兴趣的问题进一步进行了交流与探讨。

IET 国际科技沙龙是 IET 社区的重要组成部分，因其涵盖领域丰富、活动形式多样而备受中国会员的欢迎。

On 24th Jan 2015, IET China E&T Networking in collaboration with Tesla China was held successfully at Headquarter of Tesla China. Mr. Nick Yang, Product Advisor from Tesla introduced Tesla products and technologies; Mr. Ian Mercer introduced IET new Vision, Mission and how IET achieve them, as well as the development of IET China and development and latest news of IET Transport Sector. Then 43 attendees tested drive or tested ride Tesla Model S.

## ■ IET 与中国电子学会签订合作出版协议



近日，英国工程技术学会（IET）与中国电子学会（CIE）就《电子学报》的全球网络出版签订了合作出版协议。该协议自今年开始执行，其服务范围不包括中国内地。IET 学术部负责人 Daniel Smith 先生，中国电子学会副秘书长、中国云计算专家委员会秘书长林润华作为代表参与了协议协商。此次协议的签订，将大大提升合作双方的国际影响力。

《电子学报》将被收入 IET 电子图书馆，加入其世界一流工程期刊的行列，在中国大陆以外的 100 多个国家都能够

被广泛订阅，同时还能享受平台的高级用户服务功能。IET 图书馆始建于 1880 年，拥有工程科技领域世界一流的数字和纸质图书、期刊、杂志、会议报告及等文献，且不断更新和增加的内容，旨在给工程技术人员提供更广泛的阅读资源。IET 持续的通过这些优质的知识资源库，丰富的活动和服务，提供国际交流平台，致力于推动科学技术领域中的知识共享和交流。而作为中国知名的学术期刊，

《电子学报》是世界了解中国学术成果的一扇窗口。期刊涵盖的领域包括计算机技术、信号处理、微波技术及电子

系统工程技术。此次更借助 IET 电子图书馆的平台优势，更好的推广其在国外的知名度和影响力。

IET 知识产品总监 Tim Hamer 先生表示：“与中国电子学会的合作展现出了诸多协同优势。我们非常期待有更多机会能与这样优质的期刊合作，欢迎其加入到我们一流研究性期刊的队伍中来。”中国电子学会秘书长徐晓兰女士表示：“此次合作可谓意义深远，不仅能提高《电子学报》的引用率，同时也将借助 IET 数字图书馆的覆盖量，使读者们可以更方便地读到《电子学报》。”

IET 的电子图书馆可提供工程、商务、政策法规、市场及公司运作方面的最新信息，随时随地提供学会独具特色的电子书库服务，在这里可以查询由世界知名出版商提供的 800 种完整的工程技术和资讯交流技术类文章类目；准确搜索并浏览专业技术界内的最新高级技术资讯，此外，IET 还出版大量报导研究和技术发展的专业技术期刊，包括 20 多种专业领域的学术期刊和科学快报，均被著名的科学索引 SCI, Inspec 和 EI 收录。自 2015 年 4 月起，《电子学报》将在 IET 数字图书馆开放，注册的用户可获得免费阅读权限直至 2015 年底。

### IET and CIE sign co-publishing agreement

The Institution of Engineering & Technology (IET) has signed a co-publishing agreement with the Chinese Institute of Electronics (CIE) for global online publication of the Chinese Journal of Electronics (CJE). The agreement, which excludes mainland China, runs for a five year period, starting this year.

This agreement, which will significantly extend the

international influence of both organisations was negotiated with the CIE's Deputy Secretary, Forrest Lin, also Secretary General of China Cloud Computing Technology Association.

The CJE will join the IET portfolio of leading engineering journals hosted on the IET's Digital Library, offering it extensive exposure in 100+ countries outside mainland China, as well as access to the platform's advanced user functionalities. The CJE will also benefit from the IET's considerable international sales and marketing expertise.

Mrs Xu Xiaolan, the General-Secretary of CIE said "This cooperation will be an important step toward increasing not only the CJE's citations and hopefully its impact factor but also the exposure of the IET Digital Library and the easy access to CJE in it".

Widely known and respected in China, the CJE is the world's window into Chinese academic achievements in the field. The journal's coverage includes computer technology, signal processing, microwaves, and electronic systems engineering. The CJE is indexed by Thomson Reuters, SCOPUS and EI Compendex.

Tim Hamer, director of knowledge, IET said: "Through this partnership with the Chinese Institute of Electronics we demonstrate many synergies with the CIE and we welcome the opportunity to extend the reach of a journal with such strong pedigree, alongside our own leading research journals".

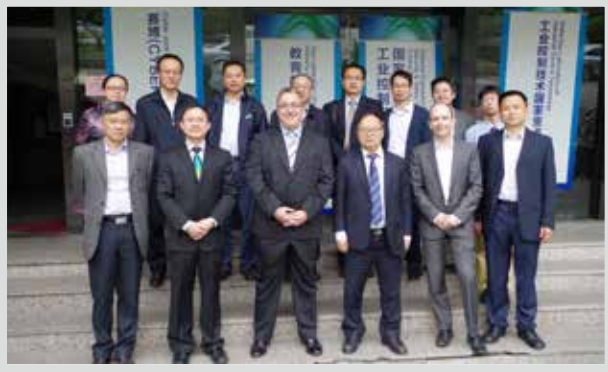
The CJE will be available via the IET Digital Library from April 2015 with the content available to registrants free of charge for the remainder of 2015.

## ■ 第二届 IET 会士论坛圆满落幕

第二届 IET 中国会士论坛于 2015 年 4 月 20 日，在浙江大学圆满落幕。出席本次活动的会士、重要会员包括：IET 主席 William Webb 教授，会士代表——浙江大学宋永华校长、华中科技大学骆清铭校长、同济大学蒋昌俊校长（方钰教授代表）、中国电力科学院白晓民教授、浙江工业大学陈胜勇教授、中科院苏州纳米所崔铮教授、广州工业大学凌永权教授、同济大学刘儿兀教授、北京理工大学龙腾教授、北京四方继保自动化股份有限公司任雁铭总工程师，浙江大学工业控制重点实验室苏宏业主任、李光教授、陈

剑秘书长，以及 IET 国际运营总监 Ian Mercer 先生。（排名不分先后）

活动伊始，宋永华校长对 IET 主席的到访表示欢迎，并介绍了浙江大学的基本情况，以及团队的发展情况。此后 IET 主席 William Webb 教授介绍了 IET 愿景和使命，IET 全球战略、中国发展战略，以及 IET 中国发展情况。随后浙江大学工业控制重点实验室苏宏业主任介绍了实验室的发展情况，并带领到场会士参观了实验室的最新技术与成



果。参观结束后，会士们进行了座谈，大家分别介绍了自己和团队、发展情况，以及发展成果，并就 IET 在中国的发展，积极提出了自己的想法与建议。随后 IET 主席及到场会士畅所欲言，就感兴趣的领域进行了进一步沟通。会议取得了圆满的成功，并得到了会士们的高度赞许，会士们表示，这次会议促进了会士们与 IET 之间，会士们相互之间的了解、沟通和联系，扩大了 IET 在中国的影响，希望这样的论坛能够按期经常举办。

浙江大学，特别是浙江大学工业控制重点实验室为这次会

议做了大量的前期准备工作和会议期间的服务工作，借此机会，一并表示感谢！

IET 英国工程技术学会中国会士论坛由 IET 英国工程技术学会中国办公室主办，是 IET 中国会士年度重要活动。论坛旨在开展多学科交叉性的学术交流，促进 IET 中国会士间的沟通与互动。

On Monday 20th April 2015, 2nd IET China Fellow Forum was held at Zhejiang University. IET President Prof. William Webb, 10 Fellow delegates and 3 delegates from The State Key Laboratory of Industrial Control Technology, Zhejiang University ("State Key Laboratory" as followed) attended in this forum. Followed the welcome address and key message introduction, all attendees visited State Key Laboratory to learn the latest technology. Each Fellow gave a brief introduction of themselves, their academic achievement and development of their team. All attendees exchanged idea and communicated freely, furthering discussing for better development of the IET in China.

## ■ 全球主席受邀参加第 13 届中国国际人才交流大会

2015 年 4 月 18 日，由国家外国专家局和深圳市人民政府联合主办的第十三届中国国际人才交流大会·深圳论坛在深圳会展中心隆重举行。本届深圳论坛围绕习近平主席“择天下英才而用之”的人才观、李克强总理所倡导的“大众创业”“万众创新”这一主线，邀请贵阳市委书记陈刚、杭州市副市长谢双成、深圳市副市长唐杰以及国际城市管理协会执行总裁奥尼尔、加拿大城市联合会主席布拉德利、华大基因董事长汪建、阿里巴巴集团副总裁曹光荣等 10 位中外嘉宾，就“创客、创新、大数据与城市发展”开展头脑风暴。论坛由香港凤凰卫视著名主持人许戈辉主持，共吸引 2000 多各界代表和观众参加。

在论坛第三板块，英国工程技术学会全球主席 William Webb 与贵阳市委书记陈刚、加拿大阿尔伯尼港市长马克、华大基因董事长汪建围绕“大数据与创新创业”展开互动交流。从技术专家的角度展望大数据将怎样在未来引领城市发展。



Prof. William Webb, IET President was invited to attend the 13th Conference on International Exchange of Professionals in Shenzhen, China on 18 April and participated in panel discussion on "Big Data & Innovation" with government officials and entrepreneurs. Such event attracted more than 2,000 audiences.

## ■ 第十届 IET 全球英语演讲竞赛中国区决赛圆满落幕



2015 IET 全球英语演讲竞赛 (Present Around the World, PATW) 于 5 月 29 日在电子科技大学圆满落幕。本次比赛由 IET 主办、电子科技大学承办。来自清华大学的李抒苒同学勇夺桂冠, 她将代表中国区选手参加 8 月份的亚太区决赛。来自同济大学的黄兆祺获得第二名。比赛最佳人气奖则被浙江大学的林婷婷摘得。

PATW 作为工程技术领域规格最高、最具影响力的国际赛事, 每年面向 12 个国家举行, 在中国境内已经成功举办了九届。参赛对象为全国理工科高等院校、研究机构 18-26 岁理工专业的在读本科生、研究生。选手将通过 10 分钟的英语演讲, 以通俗易懂的方式向现场观众介绍某项工程技术知识, 随后进入问答环节, 最后根据评分高低评选出冠、亚军。

今年 PATW 迎来了第十届, 经过 2 个多月的校园赛选拔, 最终 24 名选手从各自赛区中脱颖而出, 进入了最后的中国区决赛。参赛院校包括清华大学、浙江大学、复旦大学、同济大学、电子科技大学、兰州大学、四川大学、北京邮电大学、中国科学院大学、北京交通大学、北京航空航天大学、西南交通大学、华北电力大学、宁波诺丁汉大学、北京邮电大学国际学院、兰州交通大学、北京工业大学、广东工

业大学、浙江工业大学、北京信息科技大学、重庆大学、重庆交通大学、重庆科技学院等。

经过激烈的角逐, 最终来自清华大学的李抒苒同学凭借出色的发挥摘下桂冠, 其演讲题《Let Our City Be "Sponge Bob"》内容浅显而有趣, 获得了观众、评委的一致好评。

中国区决赛当天邀请到了 IET 国际运营总监 Ian Mercer 先生、前英国总领事馆气候变化与能源处领事 Andrew Holmes 先生和德国 HCP 咨询有限公司中国西南区总监 Jerry Sun 先生担任评委。同时, 来自英国总领事馆文化教育处的官员及电子科技大学的各位领导作为嘉宾出席。

IET 国际运营总监 Ian Mercer 先生表示: “PATW 是 IET 专门为工程技术领域的学生和青年专业人士打造一项传统赛事, 至今已有十年历史。我们希望通过这一赛事, 为工程技术领域的学生、青年专业人士提供一个登上国际演讲舞台、与全球参赛选手同台竞技的机会, 并提高他们英语综合运用水平以及自我表达能力。”

“除了 PATW 外, IET 每年都在全球各地举办大量国际会议和国际交流活动, 并有 500 多种出版物。我们与清华大学、





北京邮电大学、北京交通大学、浙江大学、宁波诺丁汉大学、中国计量大学等多所高等院校均保持合作关系，在教育认证、出版、论文写作与发表、职业生涯规划等方面展开合作。通过 IET 的平台，我们希望让更多的海外学生和教育机构了解中国的工科类大学，提升中国大学的国际化水平。”易恩补充说。

The PATW campus level has been hold successfully in 23 top universities around china, total 597 competitors joined the campus level and it attracted 2066 audiences. 24 competitors from these universities joined the china national level campaign and competed for Asia pacific level on 29 May 2015 in Chengdu successfully. Miss Shuyi Li from Tsinghua University won the champion of China National finals, and Tingting Lin from Zhejiang University won the Best Popularity Award (Online vote) with 8007 votes. As the highest-profile and most influential presentation competition in engineering and technology community,

PATW has been held among 12 countries/regions. 23 universities were

Tsinghua University; Beijing University of Technology; Beijing University of Aeronautics and Astronautics; Beijing Jiaotong University; Beijing Information Science & Technology University; Beijing University of Posts and Telecommunications, International School; Beijing University of Posts and Telecommunications, School of Information and Communication Engineering; UoG-UESTC Joint School; Fudan University; Guangdong University of Technology; North China Electric Power University; Lanzhou University; Lanzhou Jiaotong University; The University of Nottingham Ningbo, China; Sichuan University; Tongji University; Southwest Jiaotong University; Zhejiang University; Zhejiang University of Technology; China Academy of Science, Computer Institute; Chongqing University; Chongqing Jiaotong University; Chongqing University of Science and Technology.

## ■ IET 最年轻主席 William Webb 首次访华



4月16日至26日，IET144年历史上最年轻的主席、英国皇家工程院院士 William Webb（威廉·韦伯）教授迎来了他上任以来的首次访华活动。此次来华，威廉教授代表 IET 访问深圳、杭州、上海、北京、西安等多座城市，并与国家外国专家局、比亚迪公司、浙江大学、上海大学、西安电子科技大学等单位进行会晤交流，以进一步扩大 IET 与中国各企业及院校间的合作关系。

作为通信及物联网方面全球顶级的专家，此次威廉教授访华的主题演讲以热门的 5G 技术为切入点，探讨了无线通信及物联网未来的发展方向，并对中国相关行业的发展提出了建设性意见。他认为，无线通信的未来不应局限于对速度的追求。只有通过扩大物联网的部署与应用、提高对大数据（特别是在云端）的驾驭能力、并解决信号覆盖率等基础设施问题，逐步将“遥控人生”与“智能生活”变为现实，才能真正为人们创造价值。

“物联网在全世界都还是一个新鲜事物。目前中国与发达国家的物联网水平处于同一起跑线上，并无太大差距。我个人认为物联网的发展对中国来说更有价值，因为物联网的关键应用就是智能城市。中国的城市规模远大于其他国家，会受益更广。我预测未来智能城市能首先在中国得以实现，在这一方面领跑其他国家。”威廉教授表示，“IET

是全球工程技术领域的思想引导者，拥有全球范围最高质量的工程技术知识网络。我们很愿意结合自身优势，与中国相关产业共同成长。”

在对浙江大学、上海大学、及西安电子科技大学的访问中，威廉教授与校方进行了友好会谈，并与中国的大学生们进行了亲切交流。“学术访问是我此次行程中非常重要的一部分。IET 每年出版 100 多种科学及工程技术类读物，我们的电子图书馆和 Inspec 全球工程技术文献索引能提供多达 19 万种技术文献及近 1500 万篇的文摘索引。我们希望能通过活动与学术交流，引起中国学术界及学生们的更多关注，以扩大在中国的会员基础，并尽可能地加深与中国的内容与出版合作。”

威廉教授透露，未来 IET 在中国将进一步建立与大学院校和企业之间的伙伴关系，共同推动工程技术各个领域在中国的发展。

## ■ Youngest President of IET: William Webb's First Visit to China

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Professor William Webb, the youngest president in IET's 144 year history, academician of The Royal Academy of Engineering, went on his first tour to China from April 16 to 26. During his tour, Professor Webb, on behalf of IET, visited several cities such as Shenzhen, Hangzhou, Shanghai, Beijing, Xi'an and others, as well held exchanges with State Administration of Foreign Experts Affairs P.R. China (SAFEA), BYD (an automobile company), Zhejiang University, Shanghai University and XiDian University to further expand partnership between IET and various companies and colleges in China.

As the top global expert on communication and the internet of things (IOT), Professor Webb started off his speech with 5G technology, discussed future development orientation of wireless communication and IOT, and put forward constructive ideas on advancement of relevant industries in China. He stated that the future of wireless communication can not be restrained in pursuit of speed. Only by expanding deployment and application of IOT, improving the ruling ability of big data (particularly for the "cloud"), addressing such infrastructure issues as signal coverage rate and so on, and gradually bringing "remote control life" and "intelligent life" to reality, will there truly create value for humanity.

"IOT is still a new and emerging thing. For the moment, China stands at the same starting line with advanced countries in terms of IOT. I personally think that the advancement of IOT proves more valuable for China, as its key application lies in intelligent cities. Urban scale in China is larger than that of other countries, so it will yield more benefits. I predict that intelligent cities will become reality

in China in the future, and China will lead the world in this aspect." Professor Webb presented, "IET is an ideological guide in the global engineering technology sector, and offers the world's highest quality engineering technology knowledge network. We would love to forge ahead with relevant industries to grow together in China. "

During his visit with Zhejiang University, Shanghai University and XiDian University, Professor Webb conducted amicable discussions with the university and held exchanges with college students in China. "Academic visits constitute an important part of my trip. IET publishes more than 100 books, journals and magazines covering science, engineering and technology every year. IET Digital Library holds more than 190,000 technical papers from 1994 onwards, and our Inspec index provides over 15 million abstracts and specialized indexing to quality research literature in physics and engineering. It's our hope that through activities and academic exchanges, we can draw greater attention from students and academia so as to expand our membership base in China and deepen publishing cooperation."

Professor Webb revealed that IET will further establish partnerships with colleges, institutions and companies in China to jointly promote the development of all areas of engineering technology in China.

## ■ 世界极速纪录保持者应 IET 邀请来访中国： “挑战极限是为了激励下一代工程师”



近日，一位神秘的嘉宾应 IET 邀请现身中国 - 他，就是英国皇家空军飞行员、世界极速纪录保持者、超音速车“寻血猎犬”号设计者及驾驶者 Andy Green。Andy 此行包括上海和北京两站，并与来自上海大学和北京交通大学的学生进行了亲切交流。除了将“寻血猎犬”号这一伟大工程介绍到中国，他表示，更希望借此机会激发年轻一代的想象力和对科学的热情，鼓励更多中国年轻人投身工程技术事业。

作为一名“工作时间的战斗机驾驶员，业余时间的陆地极速纪录挑战者”，Andy 有着与电影主人公相比毫不逊色甚至更加惊心动魄的传奇人生。

“寻血猎犬”号 (BloodHound) 是一款搭载了战斗机及火箭动力系统的超音速“汽车”。2016 年，Andy 与其团队将驾驶“寻血猎犬”号挑战每小时 1000 英里 (约 1608 公里) 的陆地竞速理论极限，这一壮举堪称人类挑战科技与工程技术极限的神话。事实上，早在 18 年前 Andy 就已带领他的团队驾驶超音速“推进号” (Thrust SSC) 创下了 763 英里/小时的惊人世界记录，这一记录至今无人能打破。“寻血猎犬”号的诞生标志着一个全新的里程碑。“我们希望打造一个影响力堪比‘阿波罗登月计划’的伟大工程，并

将整个过程分享给全人类。” Andy 称。

有趣的是，追求速度的极限、创造新的记录并不是 Andy 与其团队打造“寻血猎犬”号的唯一原因，这背后的深意耐人寻味。“‘寻血猎犬’号的目标受众主要是十来岁的青少年。我们想用这样一个活生生的案例来让他们知道，工程技术也可以是一件如此有趣的事。” Andy 表示。“造一辆世界上最快的车，其意义并不在于要在未来 5-10 年内投入使用。我们相信有对的人、对的知识，就会产生对的解决方案。激发下一代人对工程事业的热情、使其成为创造未来解决方案的人，我们认为这更加重要。”

提及对中国大学生的印象，Andy 赞不绝口：“中国的学生非常聪明，尤其是他们活跃的思维能力，给我留下了深刻印象。在当前世界工程技术人才普遍短缺的情况下，如何启发更多这样聪明、有潜力青少年去思考问题，并在未来利用工程技术解决问题，我觉得这是我们需要思考的事。”

IET 国际运营总监易恩 Ian Mercer 先生补充说：“IET 在全球 127 个国家拥有 16 万名会员，为什么要邀请 Andy 先生来中国，主要基于两方面考虑。首先 IET 的使命是激励下一代工程师，这恰好与‘寻血猎犬’项目的初衷不谋



而合，是我们合作的一个契机。另一方面，中国的学术创新能力实际要远高于外界预期。IET 共出版有 28 种学术刊物，据我们统计，其中有高达 30% 的论文投稿来自中国。作为世界工程技术知识的领导者和传播者，IET 也希望把来自中国的知识力量传播到全世界。”

据 Ian 先生介绍，目前 IET 与中国的高等院校的合作主要

有两方面。一方面通过在大学里举办活动来进行相关知识的传播，另一方面也通过自身的学术刊物为师生提供论文发表的渠道。此外，IET 正在积极推进与中国的工程师职业资格认证合作。该认证将对工程师的实际项目与工作经验进行考量，并在全球范围内受到认可，具有相当高的含金量。IET 有望于 2016 年在中国建立起相关认证标准，届时将使更多的中国工程师从中获益。

## ■ World Land Speed Record Holder Visits China at the Invitation of IET: *“Challenge the limits to motivate the Next Generation of Engineers”*



Andy Green, Fighter Pilot of Royal Air Force, United Kingdom, the world land speed record holder, and the designer and driver of the supersonic car “BloodHound”, recently visited China at the invitation of IET. Andy's visit included Shanghai and Beijing, where he held friendly exchanges with students at Shanghai University and Beijing Jiaotong University. In addition to introducing the “BloodHound” project to China, he also took this opportunity to inspire the imagination and passion for science in the younger generation and encourage more Chinese youth to pursue an engineering career.



As a “fighter pilot at work and a land-speed record challenger in his spare time”, Andy's life is even more thrilling than an action movie

“BloodHound” is a supersonic “car” with a jet and rocket propulsion system. In 2016, Andy and his team will drive the “BloodHound” at a speed of 1000 miles per hour (1608 kilometers per hour) to challenge the land speed racing limit, a feat which can be described as challenging the limits



of science and engineering technology. In fact, 18 years ago, Andy had led his team in driving the Thrust SSC, hitting the world record with a speed of 763 miles per hour, a record which no one else has yet to break. The birth of the “BloodHound” represents a new milestone. Andy said, “We want to embark on a project comparable with the ‘Apollo Program’ in its influence and share the entire process with the world.”

In addition to pursuing even greater speed limits and

achieving a new record, there's other interesting reason behind. The main target audience of the "BloodHound" is teenagers. "We want to use a real case to let young men know that engineering technology can also be very interesting," Andy said. "The meaning of building the world's fastest car is not to put it in use in the next five to ten years. We believe the right person and right knowledge leads to proper solutions. What really matters is to inspire the enthusiasm of the next generation and allow them to become the problem solvers of the future."

When asked on his impression of Chinese college students, Andy praised them highly, "Chinese students are very smart. Their ability to actively think deeply impressed me. With the current challenge of shortage in engineering talent, we are confronted with the problem of how to inspire those teenagers with great potential, and how to encourage them to find future solutions with the help of engineering technology, which are really worth of serious consideration."

Mr. Ian Mercer, Head of International Operations of IET, added, "IET has nearly 160,000 members worldwide in 127 countries. We invited Andy to visit China is for two main reasons. First, the mission of IET is to inspire the next

generation of engineers and technicians. Since it happens to coincide with the intention of the "BloodHound" project, it gave us an opportunity to work together. Second, China's academic innovation ability is far beyond the external expectation. IET has published 28 academic journals. According to our statistics, up to 30% of the submitted papers are from China. As the leader in engineering industry and a disseminator offering the full spectrum of reliable engineering and technology information, IET also hopes to share knowledge original from China with the world."

According to Ian's introduction, the cooperation between IET and universities and institutions in China involves two major aspects: spreading related knowledge through events and providing teachers and students with publication channels taking advantage of IET's academic journals. In addition, IET is actively promoting cooperation with China on professional registration qualifications for engineers. The license will be awarded by examination of the actual project and work experience of engineers, and is recognized worldwide for its high value and reliability. IET expects to set up relevant standards in China in 2016, benefiting a greater number of Chinese engineers.

## ■ IET 与中国知网 (CNKI) 实现强强联手

近日，英国工程技术学会 (IET) 与中国知网 (CNKI) 于北京签署题录合作协议。目前，IET 的 129 种刊的题录数据已经上线，另外 446 本书和 1433 本会议论文的题录数据即将上线，用户可以在 CNKI Scholar 平台中使用这些文献。IET 优秀文献的题录信息极大地丰富了中国的学术资源，为国际学术资源在中国的交流与传播做出了贡献。

英国工程技术学会 (The Institution of Engineering and Technology, 简称 IET) 是工程技术领域全球领先的专业学会，目前在全球 127 个国家拥有 16 万会员。IET 涵盖能源电力、交通运输、信息与通信、设计与制造、建筑环境 5 大行业和 40 多个专业领域。同时，IET 拥有的 Inspec 全球工程技术文献索引是占世界主导地位的英文工程出版物索引数据库，资讯包括全球范围内 1000 万篇科

技论文、专业技术杂志以及其他多种语言的出版物，内容涉及电子、电气、制造、生物、物理、电信等多个工程技术领域。

此外，IET 还拥有的 IDL (IET Digital Library) 是 IET 出版的全文数据库。数据库包括 IET 期刊 27 种，杂志 1 种，以及 1300 余会议录和研讨会全文。数据内容回溯至 1994 年。IDL 收录的绝大部分期刊和杂志均被 SCI、Inspec 和 EI 收录。

为了加快国际学术资源在中国的传播和利用，CNKI 从 2008 年开始投入建设学术搜索平台 CNKI Scholar (<http://scholar.cnki.net>)。基于出版社的合法授权，CNKI Scholar 将各类国际学术资源整合在一起，为国内外读者提供免费题录、摘要检索和全文的获取服务。CNKI Scholar 已与

240 多家国际出版社进行了版权合作，整合出版了数百个重要的数据库，共有 3 亿多篇中外文文献。CNKI Scholar 收录的资源类型包括期刊、图书、学位论文、会议论文、专利、标准、工作报告等，内容涵盖理、工、农、医和人文、社会科学以及经管等各个学科领域。

在谈及此次双方的合作时，IET 学术出版负责人 Daniel Smith 先生表示：IET 很高兴能够与 CNKI 在内容方面的合

作，使得更多的中国读者能够看到 IET 在工程技术领域的期刊。目前，全球正积极努力应对研发领域如安全、能源和运输等方面的重大挑战，因此对这些领域信息的需求也急剧增加。IET 的内容能够在 CNKI 的平台上线，是帮助研究人员了解最新的相关技术领域的有效方式，同时让中国的研究人员始终处在这些领域发展的前沿。”

## ■ IET and CNKI Establish Win-Win Partnership

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Recently, The Institution of Engineering and Technology (IET) signed a bibliography cooperation agreement with China National Knowledge Infrastructure (CNKI) in Beijing. Currently, the bibliography data of IET's 129 publications are included in CNKI, and that of another 446 books and 1433 conference proceedings will be available online soon. Users may access these documents via the platform CNKI Scholar. IET's excellent bibliographic information has enriched China's academic resources tremendously and made great contributions to the communication and dispersal of international academic resources in China.

The Institution of Engineering and Technology (IET) is one of the largest engineering institutions with over 160,000 members in 127 countries. IET covers more than 40 professional fields, mainly focusing on five sectors: Energy, Transport, Information & Communication, Design & Production and Built Environment. At the same time, Inspec, the leading bibliographic database in electrical engineering and electronics, mechanical and production engineering, biology, physics and information technology, contains over 10 million scientific and technical abstracts, journals and publications in different languages, pushing the boundaries of research capability.

Additionally, the IDL (IET Digital Library), which is a full-text database, includes 27 IET periodicals, 1 magazine and more than 1300 full-text conference proceedings from 1994 onwards. Most of the periodicals and magazines included in IDL are also indexed by SCI, Inspec and EI.

In order to speed up the dispersal and utilization of its international academic resources in China, CNKI has been investing in the academic search platform CNKI Scholar (<http://scholar.cnki.net>) since 2008. Based on authorization by presses, CNKI Scholar integrates all kinds of international academic resources to provide Chinese and foreign readers with free accesses to bibliographies, abstracts and full-text resources. Today, with over 300 million documents in Chinese and foreign languages, CNKI Scholar have copyright cooperation agreements with more than 240 international presses, integrating information from hundreds of important databases. The types of resources included by CNKI Scholar include periodicals, books, dissertations, conference proceedings, copyrights, standards and work reports, etc. The content covers subjects such as science, technology, agriculture, medicine, humanities, social science and business & management.

Daniel Smith, Head of Academic Publishing at the IET said: "The IET is delighted to have agreement with CNKI to make its engineering journals content more discoverable to researchers in Chinese institutions. The demand for information in key areas of R&D, such as security, energy and transport, is increasing dramatically as the world struggles to manage these challenges. Availability of IET's content information on the CNKI Platform is an ideal way for us to keep researchers aware of the latest relevant engineering intelligence, allowing Chinese researchers to remain at the forefront of developments in these areas."



■ 蝴蝶翅膀表面纳米结构大小和分布的不规则性，使其从所有视角上看反光都很微弱。这些纳米柱高度与间距参差不齐。研究人员模拟了蝶翅上纳米柱的这种不规则性，发现它能防眩光，而且几乎不反光。研究小组接下来将把研究成果投入实际应用。实验表明，蝶翅的这种表面涂层还具有防水性和自净效果。

A butterfly could help make phone and laptop screens less bright after researchers determined that non-reflective screens could be developed by recreating the structure of its wings.

Materials such as glass always reflect part of the incident light, making display screens hard to use in sunlight, but the glasswing butterfly hardly reflects any light in spite of its transparent wings. Researchers at the Karlsruhe Institute of Technology (KIT) in Germany have found that irregular nanostructures on the surface of the butterfly wing cause the low reflectivity and hope that a synthetic version of the structure could be used for lenses or mobile phone displays.

■ 一款仿人类机器人通过配备的图像识别软件，可以识别它面前的人，并与之互动。控制者通过手机发出命令，可以使它显示面部表情。安装于其眼睛和胸部的摄像机中加载的图案识别软件使它可以识别人类的眼睛，与之保持目光接触，或读出人类的面部表情，并作出各种表情来回应。

A humanoid robot named Han, equipped with pattern recognition software, is able to recognise and interact with the person in front of it. Although Han can also react as the controller commands it via a mobile phone to make facial expressions, the patterned recognition software coupled with an array of cameras in its eyes and chest allow it, for instance, to identify a person's eyes and maintain eye contact or read human facial expressions and respond with a variety of its own.



■ 研究人员认为未来的机器人有望跑起来。一款真人大小的机器人，通过模仿动物的弹性腿部动作跑动。动物腿部动能能被保留，在运动开始后，仅通过有效的肌肉和肌腱推动，就能持续运动。受到启发，该机器人可以保持平衡、承受反弹带来的轻微撞击，以每小时三英里多一点的正常步行速度，在平地以及坡地行走。

A human-sized, two-legged robot has been designed to walk outdoors by mimicking the spring-legged action of animals, embedded with technology that researchers believe could herald the running robots of the future.





■ 喷上石墨烯和碳纳米管的蜘蛛，可产生出一种新型超纤，结合了最好的自然材料及最新的人造材料物性。研究人员进行了一项实验，在 15 只蜘蛛身上喷洒了水和 200 至 300 纳米的石墨烯颗粒混合物或碳纳米管。蜘蛛产生的牵引丝具有前所未有的力学性能，称得上是最坚韧的纤维，其强度可与最强的碳纤维或帽贝牙齿媲美。

Spiders sprayed with graphene and carbon nanotubes can create a new type of super-fibre combining properties of one of the best nature's material with the cutting edge man-made substance. As reported by the New Scientist, researchers from the University of Trente, Italy, conducted an experiment in which they used fifteen spiders from the Pholcidae family and sprayed them with a mixture of water and graphene particles 200 to 300 nanometres wide or with carbon nanotubes.



■ 世界上第一个钠离子动力电动自行车试验成功标志着钠离子可以取代现有的锂离子电池技术。钠离子技术不仅可以媲美现有的锂离子电池，还有显著优势。因为钠盐储量丰富，其生产成本可降低约 30%，仅为锂离子电池中相同含量盐成本的十分之一，且电解质成本也低。此外钠离子电池的制作成本也会更经济。

Sodium-ion batteries could replace existing lithium-ion technology following the successful test of the world's first sodium-ion powered e-bike, produced by British company Faradion. Faradion also claims that sodium-ion batteries have significant advantages as they can be produced at around 30 per cent lower cost thanks to the abundance of sodium salts – which cost one tenth of the price of equivalent salts in lithium-ion batteries – and lower electrolyte costs.

■ 微软一项研究显示，人类的注意力已经从 2000 年的 12 秒跌至 8 秒钟，这主要归咎于智能手机，它缩短了人类的注意力，即使金鱼的思考时间也比人类长，比人类的平均水平还要多 1 秒。这项研究的对象是加拿大的 2000 人，使用脑电图扫描研究了 112 人的大脑活动。然而，研究也发现，人类进行多任务的能力有所提高。

A Microsoft study has revealed that the attention span of humans has fallen from 12 seconds in 2000 to eight seconds, mostly due to smartphones. Smartphones have left humans with such a short attention span that even a goldfish can hold a thought for longer, researchers said. The research was conducted on 2,000 people in Canada and studied the brain activity of 112 others using EEG scans.





■ 世界上主要交通系统的互动地图已研制成功。采用来自火车和巴士的实时公开数据，可以展示主要城市的交通状况。这种地图融合了来自世界各地的200个系统，互动主要是基于来自交通部门的静态调度数据。但即便如此，它也尽量采用了实时数据，从而可以实时观测世界各地的公共交通实况。

An interactive map of the world's major transit systems has been launched, using live public data feeds from trains and buses to show how major cities move. The Travic map is the brainchild of Swiss-German technology firm GeOps and the University of Freiburg, and features over 200 systems from around the globe as colourful dots, which slowly move across the grid. The interactivity is mostly based on static schedule data from transit authorities, but even so, it incorporates live data where it can, making it possible to watch the world's public transport live.

■ 英国研究人员发明了一种新的技术，只需要一个通道就可以进行双向沟通，还可以实现4G全球漫游。移动电话和无线网络连接等无线电系统，一般使用无线电频谱。新的技术能够预估和抵消自身传输的干扰，让无线电设备在同一时间、使用同一信道发射和接收信息。相比目前的技术，该新技术可以用一半的频谱。

A new technique that requires only one channel for two-way communication and could enable global roaming on 4G has been devised by UK researchers. Radio systems like mobile phones and wireless internet connections use as much of the radio spectrum as is necessary. But the new technology can estimate and cancel out the interference from one's own transmission, allowing a radio device to transmit and receive on the same channel at the same time.



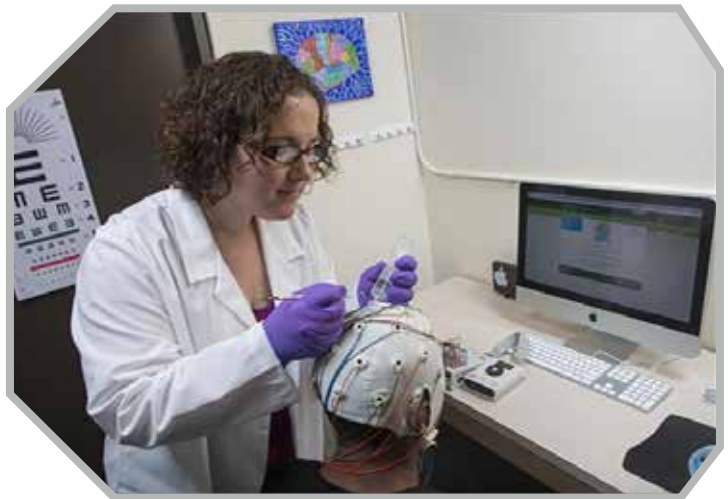


■ 清华大学设计出一种从废弃的液晶显示屏中重新获得稀有金属铟的方法，有望在世界稀有金属储量耗尽之前，提供闭环回收可能性。该方法包括将液晶显示屏打碎，研磨成小于75微米的微粒，浸泡在温度为50°C的硫酸溶液中。实验结果证明，这有助于实现废弃液晶显示屏闭环回收，也有助于金属铟行业的可持续发展。

Chinese scientists have devised a set of new methods to recover indium from used LCD screens, hoping to develop a closed-loop recycling process before the world's reserves of the rare metal run out. The team from the School of Environment of Tsinghua University in Beijing tested 18 methods for removing indium from discarded LCD screens and displays. The methods involved crushing and grinding the LCD glass into particles less than 75 micrometres in size. The researchers then soaked the particles in a sulphuric acid solution at a temperature of 50°C.

■ 大脑研究者提出，大脑碰到词语时的独特反应，更适于鉴定目的而非密码。科学家对45名志愿者读了一系列首字母缩略词，然后观察他们大脑反应信号，发现每个人的大脑对这些词的回应是不一样的。研究人员认为，未来脑电波可用于牢不可破的生物识别钥匙，帮助计算机应用程序用户摆脱记住冗长密码的烦恼。

The unique way the brain of every person responds to certain words could be used for identification purposes instead of passwords, researchers have proposed. In a new study described in the journal *Neurocomputing*, a team of scientists from Binghamton University, USA, observed the brain signals of 45 volunteers as they reacted to a list of acronyms being read out to them. The scientists found that the brain of each individual responded differently to such an extent to the acronyms, including words such as FBI and DVD, that identification of each person was possible with 94 per cent accuracy. The researchers argue that, in light of their findings, brain waves could be used in the future as safe, unbreakable biometric keys that could help users of computer-based applications get rid of the need to remember lengthy passwords. The team believes brainwaves could even present certain advantages over more established current means of biometric identification.





# RPG™ 2015

## 4th Renewable Power Generation Conference (RPG™)

17 - 18 October 2015 | North China Electric Power University, Beijing, China

### About the event

The 2015 conference is the fourth in planned annual series linked to the IET Renewable Power Generation (RPG) Journal. The aim is to provide a forum for the latest research in renewable power generation technology and issues of integration into power systems. The link to the journal is emphasized by the commitment to a dedicated Special Issue for the best papers in these RPG conferences.

### Keynote Speakers



Dr. Andrew  
Kusiak



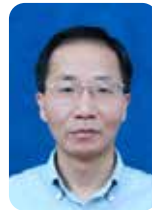
Prof.  
Bikash Pal



Prof.  
Jizhen Liu



Prof.  
Ping JU



Dr. Xiaoming  
Yuan

### Co-organised by



### Supporting Sector

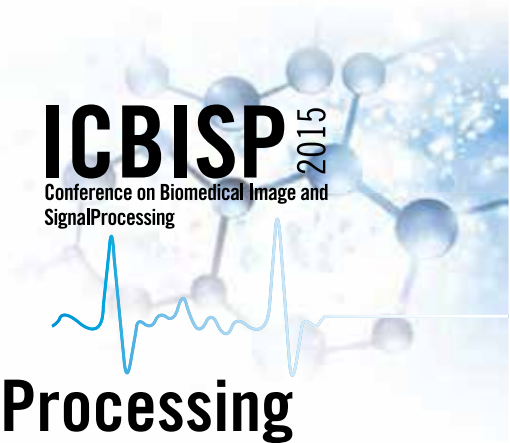


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## IET International Conference on Biomedical Image and Signal Processing

19-20 November 2015 | Beijing, China

### About the event

IET International Conference on Biomedical Image and Signal Processing (ICBISP) 2015 aims to gather leading academic scientists, researchers and research scholars to exchange and share their experiences and research results on all aspects of Signal and Image Processing. It also provides a premier interdisciplinary and multidisciplinary forum for researchers, practitioners and educators to present and discuss the ways that innovation, knowledge exchange and enterprise can be applied to issues relating to medicine, surgery and healthcare.

### Keynote Speakers



Prof.  
Qingming  
LUO



Prof.  
Christopher  
James



Prof.  
Cristian A.  
Linte



Prof.  
Zuhong  
LU



Prof. Xin  
TIAN



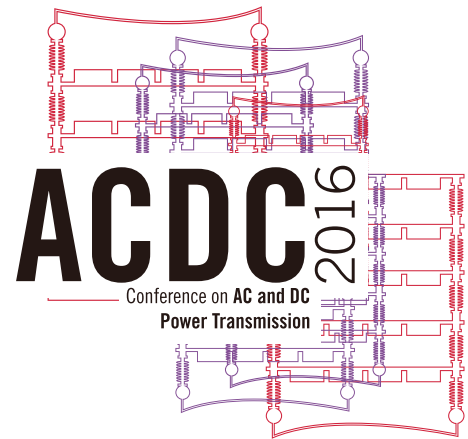
Prof.  
Shouyan  
WANG

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# Call for Papers

## The 12<sup>th</sup> IET International Conference on AC and DC Power Transmission

**28 - 29 May 2016 | Beijing, China Abstract submission deadline: 29 October 2015**

### About the conference

ACDC is a long established and highly respected international conference on AC and DC power transmission. ACDC 2016, to be held in Beijing, China is the twelfth in the planned series conference linked to the IET Generation, Transmission & Distribution Journal. Co-organised with Tsinghua university and supported by various organisations both in China and abroad, the ACDC 2016 is truly one of the best international conferences focusing on AC and DC power transmission.

### Benefits to successful authors include:

- All selected papers will be published in the conference proceedings
- All selected papers will be indexed by IET Inspec and IEEE Xplore and published online in IET Digital Library (IDL)
- All selected papers will be submitted to Ei Compendex for consideration for indexing
- Successful authors will receive an oral or poster presentation slot at the conference
- Best papers will be invited for consideration in a Special Issue focused on the ACDC event in the IET Generation, Transmission & Distribution Journal

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## 英国工程技术学会

地址：北京市朝阳区建国路 118 号

招商局大厦 10G 邮编 100022

电话：010-6566 4687

传真：010-6566 4647

[www.theiet.org.cn](http://www.theiet.org.cn)

China Merchants Tower  
No.118 Jianguo Road  
Chaoyang District  
Beijing China  
100022

**T:** +86 10 6566 4687

**F:** +86 10 6566 4647

**E:** china@theiet.org

[www.theiet.org.cn](http://www.theiet.org.cn)