



University of
South Australia

中澳城市环境与可持续发展研究中心

China-Australia Centre for Sustainable Urban Development

Launch of the China-Australia Centre for
Sustainable Urban Development and
China-Australia Symposium 2013

中澳城市环境与可持续发展研究中心揭幕仪式暨
2013年中澳学术研讨会

Sustainable Urban Development: Challenges and Opportunities

可持续城市发展：挑战与机会

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The main purpose of CAC_SUD is for practitioners and researchers to work together to produce knowledge on sustainable urban development that is academically first rate, practically effective and relevant to society.

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中澳城市环境与可持续发展研究中心(CAC_SUD)的主要目的是让从业人员和研究人员一起创造学术一流、实用有效、和社会相关的可持续城市发展知识。

Foreword

Hon Jay WEATHERILL MP
Premier of South Australia

I welcome very warmly this initiative between Tianjin University and the University of South Australia to establish a joint research centre on sustainable urban development, and I look forward to the symposium, which will be part of the Adelaide launch of the centre.

The South Australian Government places a high value on South Australia's links with China, and we are working actively to broaden and deepen our relationships at all levels. That commitment was reflected in my own visit to China during 2012. It is also reflected in the South Australia-China Engagement Strategy, which we published in December 2012.

The China-Australia Centre for Sustainable Urban Development (CAC_SUD) is an example of the deep relationships of cooperation and shared endeavour that are essential to building long-term and flourishing relationships with benefits for everyone involved.

Just as China is dealing with the complex issues of its rapid urbanisation as it moves to take its place as the world's largest economy, so we in South Australia are involved in reconfiguring the way our city will work in the 21st century. By working together in this way, we can develop the potential to benefit not only our own citizens, but also the whole of the Asia-Pacific region.

前言

杰·威瑞尔 议员
南澳州州长



我非常热情地欢迎天津大学和南澳州大学建立可持续城市发展联合研究中心的动议，我期待着学术研讨会的召开，这将是该中心在阿德莱德揭幕仪式的部分内容。

南澳州政府高度重视南澳州与中国的联系，我们正在积极拓宽和加深我们在各个层面上的关系，这种努力反映在我本人2012年的访华之行中，同时也反映在我们于2012年12月公布的南澳州与中国接触战略之中。

加深合作关系和共同努力对建立一个生机勃勃的长远关系至关重要，每个参与的人都可从中获益，CAC_SUD（中澳城市环境与可持续发展研究中心）便是一个榜样。

伴随着向世界最大经济体迈进的脚步，中国正在应对快速城市发展所带来的复杂问题；和中国一样，我们南澳州也正在重新调整我们城市在21世纪的运作方式。通过这方面的共同协作，我们能够挖掘潜力，不仅能让我们自己的公民收益，还能让整个亚太地区受益。

Welcome

Professor David LLOYD Vice Chancellor and President University of South Australia (UniSA)

On behalf of the University of South Australia, it is both an honour and a pleasure to welcome you to the China–Australia Symposium and the launch of the China–Australia Centre for Sustainable Urban Development.

This initiative highlights the benefits of globally focused institutions working together to seek solutions to the challenges of the 21st century. Through collaboration and exchange we will build mutual understanding and produce practical outcomes in the vital area of sustainable urban development.

The University of South Australia continues to enhance its standing for research excellence, with the recent 2012 Excellence in Research for Australia evaluation rating more than 86 per cent of its assessed research as world class or above.

We are delighted and proud to have entered into a close cooperative agreement with Tianjin University, one of China's foremost centres of higher learning.

Professor David Lloyd became Vice Chancellor and President of the University of South Australia in January, 2013. Prior to his appointment, Professor Lloyd was Bursar and Director of Strategic Innovation at Trinity College Dublin, one of Europe's oldest and most prominent universities. He was also Dean and Vice President of Research at Trinity from 2007-2011.

Professor Lloyd is a biochemist who holds a BSc (Honours) in Applied Chemistry and a PhD in Medical Organic Chemistry from Dublin City University, and was a Post-Doctoral Research Fellow at Trinity. He is a Fellow of the Royal Society of Chemistry, and was inaugural Chair of the Irish Research Council.



欢迎辞

大卫·罗伊德 教授 校长 南澳州大学 (UniSA)

我很高兴、同时也非常荣幸地代表南澳州大学欢迎你们前来参加中澳学术研讨会以及中澳城市环境与可持续发展研究中心的揭幕仪式。

这项倡议突出显示了面向全球的教育机构携手探索21世纪挑战应对之策所带来的利益。通过合作和交流，我们将建立互相了解并在可持续城市发展这个关键领域取得实际的成果。

南澳州大学将继续巩固其突出的研究优势，根据最近澳大利亚2012年度优秀研究奖评选结果，超过86%接受评估的研究项目达到或超过世界水平。

能和中国顶尖学府之一天津大学缔结紧密的合作协议，我们感到十分高兴和自豪。

大卫·罗伊德教授于2013年1月就任南澳州大学校长。此前他曾在欧洲最老、最知名的大学之一，都柏林圣三一学院任战略创新部财务主管、主任。2007-2011年，他还在圣三一学院任研发长和科研副校长。

罗伊德教授是生化学家，在都柏林市大学(Dublin City University)获得应用化学荣誉学士学位、医用有机化学博士学位，曾是都柏林圣三一学院的博士后研究员。爱尔兰研究理事会首任主席。

Welcome

Professor Jiajun Li
President
Tianjin University (TU)

The partnership between the University of South Australia and Tianjin University has been significantly strengthened by the establishment of the China-Australia Centre for Sustainable Urban Development, a joint endeavour that overarches the synergy of the two universities' strengths.

The 2013 symposium will be an important portal to present cutting-edge research, spark inspiration and stimulate vigorous discussions around existing and future issues of sustainable development. We feel very pleased and privileged to be able to contribute to a gathering like this. I would like to extend my congratulations on the establishment and wish our two universities a long-lasting friendship.

Professor Li Jiajun received a masters degree from the Department of Mechanical Engineering, Tianjin University, and his PhD in Materials Engineering from the University of Wales, Swansea, UK in 1995. Previously Dean of the School of Materials Science and Engineering at Tianjin University, Professor Li Jiajun was then appointed as Deputy Director General of Tianjin Municipal Education Commission in 1998, and President of Tianjin Polytechnic University from 2001 to 2003. He has also served as Chair of Tianjin Municipal Science and Technology Commission and Head of Tianjin Intellectual Property Office.



欢迎辞

李家俊教授
校长
天津大学 (TU)

中澳城市环境与可持续发展研究中心极大地加强了南澳州大学和天津大学的合作关系，这项联合努力是我们两所大学的优势协同作用的结果。

2013年的学术研讨会是开启围绕当前及未来可持续发展问题开展尖端研究、点燃灵感火花并激发热烈辩论的重要大门。我们非常荣幸能够参与这样的集会，对此我愿献上衷心的祝福并愿我们两所大学友谊长存。

李家俊在天津大学机械工程系获得了硕士学位，1995年在英国斯旺西的威尔士大学(University of Wales)获得了材料工程博士学位。之前李家俊担任过天津大学材料科学工程学院的院长、1998年任天津市教育委员会副主任、2001-2003年任天津工业大学校长。他还担任过天津市科学技术委员会主任以及天津市知识产权局党组书记。



Nigel RELPH

Pro Vice Chancellor and
Vice President (International
and Development)
University of South Australia

Nigel Relph commenced as Pro Vice Chancellor and Vice President (International and Development) at the University of South Australia in 2010 and is responsible for the University's external relations globally and in Australia. Before joining the University of South Australia, Nigel was Director of Corporate Affairs at Queen Mary, University of London.

He has held academic positions at the University of Liverpool and the University of Lancaster in the United Kingdom, and also senior positions at the Universities of Warwick and Birmingham, where he was Director of International Affairs. He spent a period in Malaysia as Academic Director of a private education group. On his return to the UK he was appointed as a senior consultant to the British Council, advising on the then Prime Minister Tony Blair's international initiatives.

Nigel has been involved in the development of collaborations with Chinese universities for over 20 years and has been delighted to contribute to the development of the University of South Australia's partnership with Tianjin University.

尼格·拉尔夫

副校长
(主管国际交流及开发)
南澳州大学

Nigel Relph (尼格·拉尔夫) 自2010年起担任南澳州大学的副校长(主管国际交流及开发), 负责学校国内国外的对外关系事务。在南澳州大学任职之前, Nigel (尼格) 是伦敦大学玛丽皇后学院法团事务主任。

他曾经在英国的利物浦大学和兰开斯特大学执教, 还在华威大学和伯明翰大学担任过国际事务主任的高级职务。他在马来西亚曾经为一家私营教育集团担任过一段时间的教学主任。回到英国后, 他被任命为英国文化协会的高级顾问, 为前首相托尼·布莱尔提供国际事务方面的咨询。

Nigel (尼格) 参与发展和中国大学的合作关系已逾20年, 非常高兴有机会为发展南澳州大学和天津大学的关系做出贡献。



Professor Gequn SHU

Vice President
Tianjin University

Gequn Shu is Professor of the State Key Laboratory of Engines at Tianjin University. He graduated from Zhejiang University with a bachelor's degree in 1984, received a master's degree from Tianjin University in 1987 and completed a PhD in 1998. His main research areas are about Noise and Vibration of IC Engines and Waste Heat Recovery of IC Engines.

Professor Gequn Shu is Chief Scientist for the National Basic Research Program of China (973 Program), Member of the State Council's Academic Degree Appraisal Committee and Director of the Chinese Mechanical Industry Education Association, Power Engineering Education Committee. His honours and awards include: the Outstanding Contribution award of CSICE (Chinese Society for Internal Combustion Engines), first prize of the GM China University Innovation Talent Award in the field of 'car', awarded by the Ministry of Education of the People's Republic of China and GM, and five awards of provincial and ministerial level.

舒歌群教授

副校长
天津大学

舒歌群是天津大学内燃机燃烧学国家重点实验室的教授。1984年他从浙江大学毕业, 获得了学士学位; 1987年在天津大学获得了硕士学位并于1998年获得了博士学位。他的主要研究领域是内燃机的噪声和震动以及内燃机的废热回收。

舒歌群是中国国家重点基础研究发展计划(973计划)的首席科学家、国务院学位评定委员会成员以及中国机械工业教育协会动力工程学科教学委员会主任委员。他获得的荣誉和奖励包括: CSICE (中国内燃机学会) 杰出贡献奖、中华人民共和国教育部和通用公司联合颁发的中国通用大学创新人才“汽车”类一等奖和五项省、部级奖。



Madam Liping ZHU

Member of the Standing
Committee of the CPC
Tianjin Municipal Committee,
Party Secretary of Education
Working Committee of CPC
Tianjin Municipal Committee

Madam Zhu Liping has a bachelor's degree in statistics from Tianjin University of Finance and Economics and an LLD from Nankai University. At present, Ms Zhu is a Member of the Standing Committee of the CPC Tianjin Municipal Committee, Party Secretary of the Tianjin Education Working Committee of CPC Tianjin Municipal Committee, Chair and Party Secretary of the Tianjin Women's Federation, Member of the Tenth Standing Committee of the All-China Women's Federation, Member of the Standing Committee of the Tianjin Municipal People's Congress, and Representative of the 11th National People's Congress.

朱丽萍 女士

中共天津市委常委，
天津市教育工委书记

朱丽萍女士在天津财经大学获得了统计学学士学位、在南开大学获得了法学博士学位。目前朱女士是中共天津市委常委、天津市委教育工委书记、天津市妇女联合会主席、中华全国妇女联合会第十届常务委员会委员、天津市人大常委会委员、第十一届全国人大代表。



Right Hon Stephen YARWOOD

Lord Mayor of Adelaide
The City of Adelaide

A town planner with nearly 20 years' experience in state and local government, Stephen has dedicated his professional life to developing cities. He is working to make Adelaide a modern, vibrant and sustainable place to do business, live and enjoy life. Stephen believes an economy based on innovation, education, arts and culture will make Adelaide prosperous. He is also encouraging strong working relationships between all levels of government, as well as business and the general community.

Stephen has an MBA, as well as postgraduate qualifications in Regional and Urban Planning and Environmental Studies from the University of South Australia. He has also lectured in planning and management in several countries.

Stephen lives in the heart of Adelaide's CBD with his wife, Emily, daughter, Megan and son, Oliver.

He will speak about the plans for Adelaide's urban transformation into Australia's most pedestrian- and cycle-friendly city.

史蒂夫·亚伍德

阿德莱德市市长

作为市政规划员，史蒂夫在州政府和当地市政府有近20年的工作经验，把自己的职业生涯都贡献在城市发展上。他正在努力使阿德莱德成为一个充满活力、符合可持续发展理念的现代之城，吸引人们在此工作、居住和享受生活。史蒂夫相信，阿德莱德的繁荣有利于一个以创新、教育、艺术和文化为基础的经济。他还积极鼓励各级政府、工商界和广大社区相互之间建立牢固的工作关系。

史蒂夫有一个工商管理硕士学位，还有南澳州大学的区域及城市规划和环境研究研究生文凭。他还在几个国家从事过规划和管理方面的教学工作。

史蒂夫和妻子艾米莉(Emily)、女儿梅根(Megan)和儿子奥利弗(Oliver)一起住在阿德莱德的市中心。

他将介绍阿德莱德城市转变的规划 - 把阿德莱德转变成澳大利亚最适合步行和骑自行车的城市。



Dr Haishan ZHAO

Chairman, Tianjin
Municipal Science and
Technology Commission

赵海山 博士

中共天津市委科学技术工作委
员会书记、天津市科学技术委
员会主任

Dr Zhao Haishan has a bachelor's degree in radio engineering from Beijing University of Post and Telecommunications, a master degree in telecommunications and electronic information system from Beijing University of Aeronautics & Astronautics, and a doctor degree in business administration from Nankai University. He is an expert on photoelectric technology. Dr Zhao Haishan currently holds the position of Party Secretary, Science and Technology Working Committee of CPC Tianjin Municipal Committee, Chairman of Tianjin Municipal Science and Technology Commission. He was previously the First Deputy Director of 8358 division of the third Research Institute of China Aerospace Science and Industry Corporation, Vice Chairman of Tianjin Municipal Science and Technology Commission, Deputy Director General of Tianjin Port Free Trade Zone Administrative Committee, General Manager of Tianjin Zhongtian Aviation Industry Investment Company, Chair of Airbus (Tianjin) Final Assembly Company Ltd and Director General of the Administrative Committee of Tianjin Binhai High-Tech Industrial Park.

赵海山在北京邮电大学获得无线电工程专业学士学位、在北京航空航天大学获得通讯与电子信息系统硕士学位，在南开大学获得企业管理博士学位，光电技术专家。现任中共天津市委科学技术工作委员会书记、天津市科学技术委员会主任。此前曾担任中国航天科技集团公司第三研究院8358所第一副所长，天津市科学技术委员会副主任，天津港保税区管委会副主任，天津中天航空工业投资公司总经理、空中客车（天津）总装有限公司董事长、总经理，天津滨海高新区管委会主任。



Message

Professor Steffen LEHMANN

Director, China–Australia
Centre for Sustainable Urban
Development

I am privileged to be Co-Director of the new China–Australia Centre for Sustainable Urban Development. CAC_SUD is part of a strategy to develop close research and educational links with top universities in China, a country that is becoming increasingly important in science, technology and design, and experiencing rapid urbanisation – a trend that has profound implications worldwide.

The University of South Australia is proud to partner with Tianjin University – ranked in China's top one per cent and considered the country's first modern university. Tianjin, a science 'cluster' city of 12 million people, is located around 30 minutes by high-speed rail from Beijing.

Tianjin University and the University of South Australia share a synergy built on close cooperation and a memorandum of understanding. With a focus on sustainable design and development, CAC_SUD will combine leading Chinese and Australian perspectives in a world-class multidisciplinary research-intensive centre. The program will investigate the systemic design and engineering issues and the transformative potential of cities in the Asia-Pacific.

CAC_SUD will collaborate on student and staff exchange, grant application submissions, PhD supervision and consultation to industry and government, focusing on energy efficiency, sustainable buildings, urban ecology, public space, urban heat stress and the impact of climate change.

In 2013 this new international centre for sustainable urban development will start pilot research projects concerning better decision-making processes for sustainable urban development.

CAC_SUD is a living laboratory and platform for mutual understanding and practical solutions to shared urban challenges, transforming cities of the Asia-Pacific region into dynamic, meaningful and sustainable cultural artefacts.



致辞

史蒂夫·雷曼 教授
主任
中澳可持续城
市发展中心

我很荣幸成为新成立的中澳城市环境与可持续发展研究中心的联合主任。CAC_SUD（中澳城市环境与可持续发展研究中心）是与中国顶尖大学密切发展教研联系的部分战略。中国在科学、技术和设计领域的地位变得越来越重要，中国正在经历快速的城市发展 – 这种趋势具有世界范围的深远意义。

南澳州大学自豪地成为天津大学的紧密伙伴 – 天津大学的排名在中国列为前百分之一，被认为是中国第一个现代化高等学府。科技发达的天津有1200万人，距北京乘高速铁路车大约有30分钟的路程。

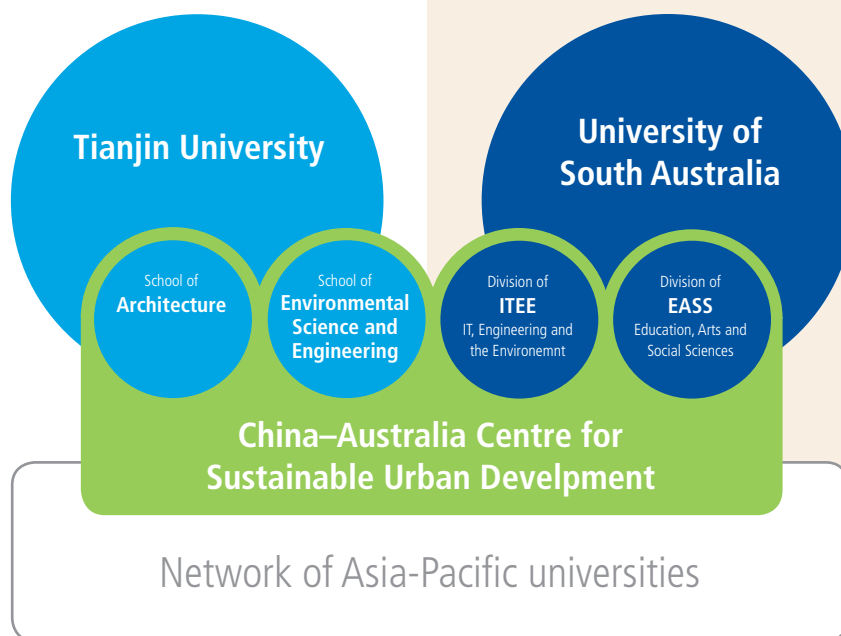
天津大学和南澳州大学共同分享建立在紧密合作和谅解备忘录上的协同效应。着眼于可持续性设计和发展之重点，CAC_SUD将把中国和澳大利亚的前沿思想集中在一个具有世界水平的跨学科研究密集型中心里。该项目将深入研究系统设计及系统工程问题和亚太地区城市的变革潜力。

CAC_SUD主导的合作内容将包括学生及教职员之间的交流、科研项目的拨款申请、博士生的指导以及为工业部门和政府部门提供咨询，重点领域包括能效、可持续性建筑、城市生态、公共空间、城市热岛反应和气候变化的影响。

CAC_SUD为加深相互了解、寻找实效对策以应对共同的城市挑战提供了一个充满生机的实验室和平台，为亚太地区城市演变成富有生机和意义的可持续性文化作品提供了契机。

China–Australia Centre for Sustainable Urban Development

中澳城市环境 与可持续发展 研究中心



The China–Australia Centre for Sustainable Urban Development, CAC_SUD, is an international research centre exploring how Asia-Pacific cities can plan for and manage sustainable growth.

The result of a memorandum of understanding between the University of South Australia and Tianjin University, CAC_SUD explores the opportunities and challenges of a region experiencing rapid urbanisation and population growth.

Collaboration with governments, private-sector organisations, research institutions, industry and environmental and community groups around the world enables CAC_SUD to develop innovative programs and policy recommendations of relevance to Australia, China and the region. Researchers contribute to the mission and research of CAC_SUD through a variety of structured processes.

CAC_SUD is a think tank dedicated to addressing complex, multidisciplinary research questions of national and international consequence in areas of strategic importance to China and Australia.

CAC_SUD produces valuable research on issues and practices that will support sustainable growth in the Asia-Pacific region while minimising impacts on our planet's ecosystem.

中澳城市环境与可持续发展研究中心(CAC_SUD)是一个国际性研究中心，致力于探索亚太地区城市如何对可持续性增长进行规划和管理。

CAC_SUD是南澳州大学和天津大学谅解备忘录的一项成果，将探索一个正在经历高速城市化发展和人口增长的地区所面临的机会和挑战。

通过与政府部门、私营机构、研究机构、工业部门、环境组织和社区组织的合作，CAC_SUD将有能力开发与澳大利亚、中国和本地区相关的创新计划 and 政策建议。研究人员通过各种结构性程序为CAC_SUD的使命和研究工作做出贡献。

CAC_SUD是一个智囊团，专门应对复杂的跨学科研究问题，这些问题具有全国性和国际性，而且对中国和澳大利亚具有战略意义。

CAC_SUD将致力于有价值的研究，这些研究有力支持亚太地区的可持续发展并把我们地球生态系统受到的影响降到最小。

Mission

To advance the science and knowledge of sustainable urban development for Asia-Pacific cities through fundamental and applied application-focused research.

Our work includes:

- Conducting and promoting high-quality research, training, scholarship and debate to help shape sustainable Asia-Pacific cities
- Providing a forum in which policymakers, public- and private-sector organisations and international thought leaders can identify, explore and assess issues relating to Asia-Pacific urbanisation
- Developing evidence-based policy recommendations
- Building a research culture within which students and researchers thrive
- Maximising value chain opportunities from our expertise in sustainable urban development.

Vision

To be an internationally acknowledged centre for research in sustainable urbanisation with a major focus on developing innovative solutions for issues relating to cities in the Asia-Pacific, and to produce relevant, high-quality research.

使命

通过基础与应用聚焦的研究，推进亚太地区可持续城市发展的科学和知识。

我们的工作包括：

- 开展和发起高质量的研究、培训、治学和辩论，帮助塑造亚太地区的可持续性城市
- 提供一个论坛，供决策部门、公共机构、私立机构和国际思想先驱辨别、探索及评价和亚太地区城市发展相关的问题
- 开发循证性政策建议
- 建设一个利于学生及研究人员茁壮成长的研究文化
- 利用我们在可持续城市发展领域的专业知识，将创造价值链的机会最大化。

愿景

成为一个国际上认可的可持续城市发展研究中心，其重点是针对亚太地区城市的相关问题提出创造性的应对之策，并开展相关的、高质量的研究工作。

Research

The collaboration between the University of South Australia and China's Tianjin University, CAC_SUD, promotes joint international research into urban issues across the Asia-Pacific region.

This initiative, which examines challenges faced by cities in the Asia-Pacific region, is an opportunity to bring leading Chinese and Australian perspectives together in conducting research into pressing problems of rapidly expanding cities. CAC_SUD also provides consultancy services to industry and government.

Researchers examine topics including affordable housing, sustainable buildings, air pollution, urban micro climates and the impacts of climate change within themes such as:

Engaging neighbourhoods • Green infrastructure • Increasing resource efficiency • Designing sustainable public spaces and waterfronts • Urban micro climates and urban heat stress mitigation • Material flow and low carbon construction • Retrofitting existing districts • Low carbon living in high-density cities.

Emerging research areas

Issues common to China and many Asia-Pacific nations, such as rapid population growth, ageing populations and unsustainable resource consumption, are leading to the emergence of new research themes aligned with sustainable urban development.

CAC_SUD researchers are contributing to evidence-based policy and program recommendations in areas such as:

- Building and adapting age-friendly cities
- Urban farming and productive urban landscapes
- Prefabricated timber high-rise
- Changing behaviours to reduce consumption
- Developing a zero waste mindset.

Cities in the Asia-Pacific region experience rapid growth, a defining feature with profound implications for people worldwide.

研究

作为南澳州大学和中国天津大学之间的合作项目，CAC_SUD促进对亚太地区的城市问题进行国际范围的联合研究。

这项倡议仔细分析了亚太地区城市所面临的挑战，为集合中国和澳大利亚的前沿思想、研究城市快速膨胀的紧迫问题提供了契机。CAC_SUD还为工业部门和政府部门提供咨询服务。

研究人员审视的课题包括经济适用住房、可持续性建筑、空气污染、城市微气候和气候变化的影响，其主题思想涵盖：

邻里接触 • 绿色基础设施 • 提高资源使用效率 • 设计可持续性公共空间和水滨设施 • 城市微气候和城市热激反应的舒缓 • 材料流动和低碳建设 • 现有小区改造 • 高密度城市内的低碳生活。

新兴研究领域

中国和许多亚太国家普遍存在的问题 - 比如人口高速增长、人口老龄化和无法持续的资源消耗等，正在导致与可持续城市发展理念一致的新兴研究主题的出现。

CAC_SUD研究人员将针对以下一些领域提出循证性的政策和计划建议：

- 建设和调整老龄友善城市
- 城市农耕和生产性城市绿化
- 预制木制高层建筑
- 减少消耗的行为变化
- 发展杜绝浪费的思维模式。

亚太地区的城市经历了快速增长，这一鲜明的特征对全世界人民都有着深远的意义。

Partnerships

Building the future together

The China-Australia Centre for Sustainable Urban Development, CAC_SUD, works with local, national and international experts and researchers specialising in issues such as sustainable design, energy efficiency, urban planning and building environmentally friendly neighbourhoods in high-density cities.

We seek and encourage collaboration and partnerships with industry, civic institutions and other research bodies. PhD candidates make significant contributions to CAC_SUD's research efforts.

Our cooperative activities include:

- Academic staff and student exchanges
- Joint graduate and postgraduate programs, including joint supervision of PhD studies
- Research, publications and symposia organised with key partners
- Consultancy services to industry and government.
- Training for municipalities in sustainable urban development.

合作关系

共建未来

中澳城市环境与可持续发展研究中心(CAC_SUD)的合作伙伴是来自本地、全国和国际上的专家和研究人員，他们的专业领域就是研究可持续性设计、能效、城市规划以及在高密度城市里建设环保型邻里等方面的问题。

我们寻求并鼓励和工业部门、民事机构及其它研究单位的合作及协作。博士生将为CAC_SUD的研究工作做出重大贡献。

我们的合作内容包括：

- 教员及学员交换
- 本科和研究生的联合计划，包括共同指导博士生的学习
- 和关键伙伴联合组织研究、出版和学术研讨会
- 为工业部门和政府部门提供咨询服务
- 为市政部门提供可持续城市发展专业培训。





Symposium Program

DAY 1: Thursday 21 February 2013

Time	Session
8.30am	Coffee and registration
9.00am	Welcome and Opening: <ul style="list-style-type: none">• Welcome: Pro Vice Chancellor and Vice President (International and Development) Nigel Relph• University of South Australia Opening: Vice Chancellor and President Professor David Lloyd• Tianjin University Opening: President of Tianjin University, Professor Jiajun LI
9.35am	Symposium introduction: <ul style="list-style-type: none">• Transforming Adelaide: Right Hon Stephen Yarwood, Lord Mayor of Adelaide• Development of science and technology in Tianjin and new research agendas in the fields of renewable energy, new materials, environmental protection and resource management: Dr Haishan ZHAO, Chair of the Municipal Science and Technology Commission, Tianjin Municipal People's Government
10.00am	Official opening and launch of the China–Australia Centre for Sustainable Urban Development <ul style="list-style-type: none">• Hon. Jay Weatherill MP, Premier of South Australia• Madam Liping ZHU, Party Secretary, Education Working Committee of CPC Tianjin Municipal Committee
10.30am	Morning tea
10.50am	Keynote speaker addresses: Moderated by Pro Vice Chancellor and Vice President Professor Pal Ahluwalia , University of South Australia Keynote address 1: 'Strategies for Adelaide's Urban Future' <ul style="list-style-type: none">• Fred Hansen, CEO Renewal SA Keynote address 2: 'User-centred public space' <ul style="list-style-type: none">• Professor Cees de Bont, Dean, School of Design, Hong Kong Polytechnic University
12.00pm	Debate: A fast-paced debate on the merits of long-term city planning and the application of research in the urban environment moderated by Professor Ying ZHU and featuring: <ul style="list-style-type: none">• Professor Guanyi CHEN, Dean, School of Environmental Science, Tianjin University• Professor Steffen Lehmann, Director, China–Australia Centre for Sustainable Urban Development, University of South Australia• Professor Edwin CHAN, Department of Building and Real Estate, Hong Kong Polytechnic University• Associate Professor Jon Kellett, School of Natural and Built Environments, University of South Australia
1.20pm	Lunch

2.00pm	<p>Workshop 1: Case studies and research projects discussion Moderated by Stephen Ward, School of Art, Architecture and Design, University of South Australia</p> <ul style="list-style-type: none"> • Professor Zhu LI, Architecture, Tianjin University • Mabel John, PhD Candidate, Zero Waste SA Research Centre for Sustainable Design and Behaviour, University of South Australia • Associate Professor Stephen Pullen, School of Natural and Built Environments, University of South Australia 	<p>Workshop 2: Case studies and research projects discussion Moderated by Dr Jian ZUO, School of Natural and Built Environments, University of South Australia</p> <ul style="list-style-type: none"> • Professor Xin TAN, Environmental Sciences, Tianjin University • Professor Mads Gaardboe, School of Art Architecture, Design, University of South Australia • Associate Professor Ian Clark, School of Natural and Built Environments, University of South Australia
2.55pm	Afternoon tea	
3.15pm	<p>Workshop 1 and 2 Overview:</p> <ul style="list-style-type: none"> • Reports by Stephen Ward and Dr Jian ZUO 	
3.25pm	<p>Sustainable Urban Development: Bridging the gap between research and practice</p> <ul style="list-style-type: none"> • Professor Sakkie Pretorius, Deputy Vice Chancellor (Research and Innovation) and Vice President, University of South Australia 	
3.45pm	<p>New Research Agendas Panel Discussion Moderated by Professor Chris Daniels, Director BHI, University of South Australia Panel participants:</p> <ul style="list-style-type: none"> • Professor Sakkie Pretorius, Deputy Vice Chancellor (Research and Innovation) and Vice President, University of South Australia • Professor Simon Beecham, School of Natural and Built Environments, University of South Australia • Professor John Boland, School of Information Technology and Mathematical Sciences, University of South Australia 	
4.45pm	<p>Symposium summary The final summary will tie the discussions together, outlining key lessons and the next steps for the new China–Australia Centre for Sustainable Urban Development: Pro Vice Chancellor and Vice President (International and Development) Nigel Relph, University of South Australia and Dean Professor Guanyi CHEN, Tianjin University</p>	
5.00pm	Networking Drinks and Food	



学术研讨会日程安排

第一天：2013年2月21日星期四

时间	内容
上午8.30	咖啡和登记时间
上午9.00	欢迎辞及开幕词： <ul style="list-style-type: none">• 欢迎辞：南澳州大学副校长（主管国际交流及开发）Nigel Relph (尼格·拉尔夫)• 南澳州大学开幕词：校长 Professor David Lloyd (大卫·罗伊德) 教授• 天津大学开幕词：天津大学校长李家俊教授
上午9.35	学术研讨会介绍： <ul style="list-style-type: none">• 转变阿德莱德：阿德莱德市长 Stephen Yarwood, (史蒂夫·亚伍德)• 天津市的科技发​​展以及再生能源、新材料、环保和资源管理等领域新的研究日程安排：天津市人民政府天津市科学技术委员会主任赵海山博士
上午10.00	中澳城市环境与可持续发展研究中心正式揭幕 <ul style="list-style-type: none">• 南澳州州长 Jay Weatherill (杰·威瑞尔) 议员• 中共天津市委常委、天津市教育工委书记朱丽萍女士
上午10.30	早茶
上午10.50	主题演讲： 由南澳州大学副校长 Pal Ahluwalia （帕尔·阿鲁瓦利亚）教授主持 主题演讲1: ‘阿德莱德的城​​市未来战略’ <ul style="list-style-type: none">• 南澳州城市再生局(Renewal SA)首席执行官Fred Hansen (弗莱德·汉森) 主题演讲2: ‘用户为本的公共空间’ <ul style="list-style-type: none">• 香港理工大学设计学院工业设计系主任 Cees de Bont (基斯·杜邦) 教授
下午12.00	讨论：快节奏地讨论远期城市规划的长处以及城市环境研究的应用，由 朱迎 教授主持，发言人包括： <ul style="list-style-type: none">• 天津大学环境科学与工程学院院长陈冠益教授• 南澳州大学中澳可持续城市发展中心主任Steffen Lehmann（史蒂夫·雷曼）教授• 香港理工大学建设及环境学院建筑及房地产系陈汉云教授• 南澳州大学自然及建成环境学院Jon Kellett（炅·凯立特）副教授
下午1.20	午餐

下午2.00	<p>工作坊1： 讨论案例研究及研究项目 由南澳州大学艺术、建筑和设计学院的 Stephen Ward (史蒂夫·沃德) 主持：</p> <ul style="list-style-type: none">• 天津大学建筑学院朱丽教授• 南澳州大学可持续设计及行为之零废弃研究中心博士候选人Mabel John (梅博·约翰)• 南澳州大学自然及建成环境学院 Stephen Pullen (史蒂夫·普伦) 副教授	<p>工作坊2： 讨论案例研究及研究项目 由南澳州大学自然及建成环境学院的左剑博士主持：</p> <ul style="list-style-type: none">• 天津大学环境科学系谭欣教授• 南澳州大学艺术建筑及设计学院 Mads Gaardboe (麦兹·伽博) 教授• 南澳州大学自然及建成环境学院 Ian Clark (伊恩·克拉克) 副教授
下午2.55	午茶	
下午3.15	<p>工作坊1及2概述：</p> <ul style="list-style-type: none">• Stephen Ward (史蒂夫·沃德) 和左剑博士的报告	
下午3.25	<p>可持续城市发展：填补研究和实践之间的缺口</p> <ul style="list-style-type: none">• 南澳州大学副校长（研究和创新）Sakkie Pretorius (萨基·普托里斯) 教授	
下午3.45	<p>最新研究安排小组讨论</p> <p>由南澳州大学芭芭拉·哈迪(Barbara Hardy)研究所所长克里斯·丹尼尔斯Chris Daniels教授主持，小组成员包括：</p> <ul style="list-style-type: none">• 南澳州大学副校长（研究和创新）Sakkie Pretorius (萨基·普托里斯) 教授• 南澳州大学自然及建成环境学院的Simon Beecham (赛蒙·毕乾) 教授• 南澳州大学信息技术及数学科学学院的John Boland (约翰·波兰德) 教授	
下午4.45	<p>学术研讨会总结</p> <p>最终总结将汇总所有讨论内容，概述关键经验以及勾画出中澳城市环境与可持续发展研究中心下一步工作方向：</p> <p>南澳州大学副校长（主管国际交流及开发）Nigel Relph (尼格·拉尔夫) 天津大学陈冠益教授</p>	
下午5.00	联谊酒会	



Fred HANSEN

Chief Executive Officer
Renewal SA

Keynote 1

Strategies for Adelaide's urban future

Renewal SA has strategies to deliver the targets set by the 30-year Plan for Greater Adelaide, in part through an increase in housing supply and product in inner- and middle-ring markets. This will involve infill development and a shift to higher density living along transport corridors, assisted by amalgamation of development sites. A strategy to provide a more vibrant city, quality community engagement and careful design is in place to ensure the neighbourhoods created are places where people want to be; that encourage healthy activity; and are walkable, rideable and sustainable.

Fred Hansen is an international transport and liveable cities expert. As General Manager of TriMet, the public transport provider for Portland (Oregon), Fred pursued an ambitious and world-leading public transport strategy for the city, transforming it into an international model of a sustainable and integrated system. Appointed Chief Executive of Renewal SA in April 2012, he is charged with the responsibility for driving and coordinating urban development, redevelopment and renewal activity in South Australia.

弗莱德·汉森

南澳州城市再生局 (Renewal SA)
首席执行官

主要讲话1

阿德莱德的城市未来战略

南澳州城市再生局(Renewal SA)制定了实现大阿德莱德30年规划目标的战略，部分通过增加内城区、中环区的住房供应和产品来实现。这会涉及到填充式开发和沿交通要道向高密度居住环境转变，这种转变要获得各开发用地集中整合的支持。一项旨在为城市增添活力、提供高质量的社区接触和细致设计的战略已经到位，这项战略规划的目的是确保所创建的邻里环境成为人们向往之处、能鼓励健康的活动、适合行走、骑自行车而且可以持续发展。

弗莱德·汉森是国际交通和宜居城市方面的专家。作为俄勒冈州波特兰市(Portland, Oregon)公交公司TriMet的总经理，弗莱德为该市实施了一项雄心勃勃、世界领先的公交战略，使之成为可持续集成系统的国际样板。他于2012年4月被任命为南澳州城市再生局的首席执行官，负责驱动和协调南澳州的城市发展、再开发和再生项目活动。



Professor Cees DE BONT

Dean and Chair Professor of
Industrial Design, School of Design
Hong Kong Polytechnic University

Keynote 2

debont@polyu.edu.hk

基斯·杜邦 教授

香港理工大学设计学院工业设计系主任
及首席教授

主要讲话2

debont@polyu.edu.hk

User-centred design in the context of sustainable urban development

In the context of urban environments, user-centredness manifests itself through inclusive public spaces, safe and healthy living environments, possibilities for work and leisure, public transport and so on. Design methods such as participatory design and early prototyping are valuable tools for capturing community values and for generating desirable and sustainable outcomes. In the fast development of urban environments in China much effort should be invested in better involving users.

Cees de Bont was previously Dean of Industrial Design Engineering, Delft University of Technology, Netherlands, chair of D-incert (Dutch Innovation Centre for Electric Road Transport) and leader of CRISP (Creative Industry Scientific Programme), Netherlands. Cees holds an MA Consumer Psychology (Tilburg) and a PhD in Industrial Design (Delft).

Research area: Networked innovation in the urban context

用户为本的可持续城市发展设计

就城市环境而言，用户为本之理念体现在包容性公共空间、安全健康的生活环境、工作休闲的多重可能性、公共交通等多方面内容上。像参与型设计、早期原型化一样的设计方法是捕获社区价值并创造可持续满意成果的宝贵工具。中国在快速发展城市环境时应大力介入用户。

基斯·杜邦曾经是荷兰代尔夫特(Delft)理工大学工业设计工程系主任、荷兰电气道路创新研究中心(D-incert)主任、荷兰创新产业科学计划(CRISP)负责人。基斯拥有消费者心理学硕士学位(Tilburg)和工业设计博士学位(Delft)。

研究领域: 城市环境中的网络化创新。



Professor Guanyi CHEN

Dean, School of Environment
Science and Engineering,
Tianjin University

chen@tju.edu.cn

Bioenergy and transforming waste into energy

Rapid development of urban areas throughout the Asia-Pacific requires the efficient management and recovery of solid waste, including e-waste, biomass and waste from construction and demolition. This talk will cover research on management techniques such as dismantling, treatment, recycling and re-use, including the transformation of waste-to-energy. Fundamental to this process is the measurement of urban sustainability through sustainability indexing.

Professor Guanyi Chen has a masters in Energy Engineering and a PhD in Energy Engineering from Zhejiang University. He was previously Senior Research Fellow at Delft University of Technology, the Netherlands. Professor Guanyi Chen is a senior member of ISES (International Solar Energy Society), member of ACS (American Chemical Society) and the expert commission member of China Sustainable Development Zone. He is Co-Director of the China-Australia Centre for Sustainable Urban Development.

Research area: Bioenergy and waste management

陈冠益 教授

天津大学环境科学与工程学院院长

chen@tju.edu.cn

生物能及变废为能

生物能及变废为能亚太地区各城市地区的快速发展要求对固体废弃物进行有效的管理和回收，固体废弃物包括电子废弃物、生物质废物、建筑和拆卸废弃物。这个主题包括拆卸、处理、回收和再利用技术及相关管理的研究内容，尤其包括变废为能技术。这个过程的最基本要求就是要通过可持续发展指数来衡量城市的可持续发展能力。

陈冠益教授在浙江大学获得了能源工程硕士学位和能源工程博士学位。之前他是荷兰代尔夫特理工大学(Delft)的高级研究人员，也是国际太阳能协会(ISES)高级会员、美国化学学会(ACS)成员、中国国家可持续发展实验区专家委员会成员。他是中澳城市环境与可持续发展研究中心的联合主任。

研究领域：生物能和废弃物管理。



Professor Steffen LEHMANN

Director, China-Australia Centre
for Sustainable Urban Development
University of South Australia

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A new Centre for research in low carbon cities

This presentation will outline CAC_SUD's strategy to develop close research and educational links with top universities in China, with a view to establishing a sustainable engagement for the University of South Australia in the Asia-Pacific region. I will discuss what it means to be an architect or urban planner in the Asia-Pacific region in the 21st century, and the aim of CAC_SUD to build a world-class multidisciplinary research-intensive centre, which will focus on sustainable urbanisation, energy efficiency, sustainable buildings, urban ecology, urban heat stress and the impacts of climate change.

Steffen Lehmann, AA Dip, is a German-Australian architect, engineer, author, urbanist and researcher, the founding Director of the Zero Waste Research Centre for Sustainable Design and Behaviour sd+b and of the China-Australia Centre for Sustainable Urban Development, CAC_SUD, at the University of South Australia. He holds a PhD from the TU-Berlin and is founder of the s_Lab (Berlin-Sydney): www.slabs.com.au

Research area: Sustainable cities and green urbanism

史蒂夫·雷曼 教授

南澳州大学中澳可持续城市发展
中心主任

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低碳城市的研究新中心

着眼于为南澳州大学在亚太地区建立可持续发展的接触，本次谈话内容将介绍中澳城市环境与可持续发展研究中心(CAC_SUD)和中国顶尖大学发展紧密研究和教学联系的战略。我将谈及这对21世纪亚太地区的建筑师或城市规划人员意味着什么、CAC_SUD建立世界水平的跨学科研究密集型中心的目标，其聚焦点在于可持续城市发展、能效、可持续建筑、城市生态、城市热激反应和气候变化的影响。

史蒂夫·雷曼，持有建筑师协会文凭，是一名德裔澳大利亚建筑师、工程师、作者、城市主义者和研究员，可持续设计及行为(sd+b)零废弃研究中心的创办主任，南澳州大学中澳城市环境与可持续发展研究中心的创办主任。他在柏林工大获得博士学位，是s_Lab研究(柏林-悉尼)的创始人: slabs.com.au

研究领域：可持续城市和绿色城市主义。



Professor Edwin H W CHAN

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Urban design and control framework for sustainable dense cities

Dense development in a city is not only a practical response to land constraints, but is also one of the best ways of contributing to low carbon development. However, to achieve balanced sustainability in dense cities requires a sound theory of urban design for innovations and effective control to facilitate contribution from all stakeholders. This presentation shares some of the research on the principles of and barriers to sustainable urban design, unique problems in dense cities and the latest incentive scheme and control framework implemented in Hong Kong.

Edwin Chan is a Chartered Architect and a Barrister-at-Law called to the UK and Hong Kong Bars. He has a PhD from King's College, London University, is an Adjunct Professor of the University of South Australia and has published over 100 international journal papers.

Research area: Urban renewal and analysis of costs for green building

陈汉云 教授

香港理工大学建设及环境学院建筑
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可持续高密度城市的城市设计及控制框架

一个城市的高密度发展不仅是对土地限制的现实回应，而且还是低碳发展的最好贡献方法之一。不过，要在高密度城市实现均衡的可持续发展，需要有一套良好的、有利于创新和有效控制的城市设计理论，如此才能协调好所有利益相关人的贡献。本次谈话内容分享了一些可持续城市设计的原理和障碍方面的研究、高密度城市面临的独特困难以及最新在香港实施的奖励计划和控制框架。

陈汉云(Edwin)是一位特许建筑师、英国和香港律师协会的出庭律师。他在伦敦大学国王学院获得了博士学位，是南澳州大学的兼职教授，在国际学术期刊上出版了逾百篇论文。

研究领域：城市再生和绿色建筑的成本分析。



Associate Professor Jon KELLETT

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How can we respond to rising sea levels?

As sea levels rise over the next century many coastal settlements will face an increased threat from periodic flooding and permanent erosion. Planning policy in Australia and elsewhere is already starting to address this issue by defining coastal zones and placing specific controls on new development in these zones. But the question of how policy deals with existing development in threatened coastal areas remains problematic. Several locations in Australia have faced this problem in recent years and policy has begun to emerge as a result of experience. Much of this policy may be viewed as reactive to specific circumstances. I'll discuss a range of issues and outline the data requirements for proactive decision making, including planning, technical, legal and financial aspects.

Jon Kellett, PhD, is Head of Urban and Regional Planning, University of South Australia. He has extensive academic experience in the UK and Australia with particular interests in energy and the environment, climate change impacts on cities and regions, and urban sustainability.

Research area: Urban planning, energy and climate change

灵·凯立特 副教授

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我们如何应对上升的海平面？

在接下来的一个世纪里海平面将持续上升，许多沿海定居点将面临更多来自周期性水灾和永久性侵蚀的威胁。澳大利亚及其它地方的规划政策已经开始通过界定沿海划区及对划区内新开发施以特殊的控制来应对这个问题。但在已受到威胁的沿海地区如何在政策上处理现有的开发举措仍然是未解决的难题。最近几年里澳大利亚有几个地方就遇到了这种困难，积累经验后相关的政策已开始出台。这种政策的大部分内容也许会被视为对特殊情形的反应性措施。我将讨论一系列问题并介绍主动预见性决策的资料要求，包括计划、技术、法律和财务方面的内容。

灵·凯立特，博士，是南澳州大学城市及区域规划部的负责人。他在英国和澳大利亚有着广泛的学术经验，特别感兴趣的领域包括能源及环境、气候变化对城市及区域的影响、城市可持续发展。

研究领域：城市规划、能源和气候变化。



Professor Li ZHU 朱丽 教授

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New energy, new city: Chinese low carbon towns under economic transformation

China is experiencing a transformation for maintaining a fast and sustainable economic growth rate. Rapid urbanisation means the low carbon town takes an essential role. This presentation summarises theories and practices of low carbon towns in China, introducing typical models such as YUJIAPU CBD and eco-city. The sustainable core of low carbon towns greatly relies on new energy, so the innovation and application of low carbon technologies are significant. Advanced low carbon technologies at TU will be addressed too.

Li Zhu is Professor in the School of Architecture, Tianjin University, and holds a PhD in Engineering Thermal Physics. She is Executive Director and Vice Secretary of the Tianjin Renewable Energy Society. Li Zhu was awarded a New Century Excellent Talents in University by the Chinese Ministry of Education, has over 90 publications (49 indexed by SCI and EI) and has been granted 11 invention and three PCT patents.

Research area: Low carbon building energy systems and infrastructure

新能源、新城市：正在经历经济变革的中国低碳城镇

中国正在经历一项变革，以维持可持续的经济高速发展。快速城市化意味着低碳城镇将承担一个重要角色。本次谈及的内容将总结中国低碳城镇的理论和实践、介绍于家堡CBD和亿达生态城(YIDA)的典型模式。低碳城镇的可持续核心极大地依赖新型能源，为此低碳技术创新和应用具有重要意义。另外还会谈及天津大学的先进低碳技术。

朱丽是天津大学建筑学院的教授，持有工程热物理博士学位。她是天津再生能源协会的执行主任和副秘书长。朱丽曾荣获中国教育部颁发的新世纪大学杰出人才奖，出版了90多份学术论文（49份编入SCI科学引文索引和EI核心检索）、获得11项发明权和3项PCT国际专利。

研究领域：低碳建筑能源系统及基础设施。



Mabel JOHN

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梅博·约翰

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及设计学院sd+b中心

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Emerging public spaces in the Asia-Pacific region: case studies from Sydney, Hong Kong and Singapore

Emerging water's edge public spaces' distinct characteristics differentiate them from historic designs. Water's edge developments are of local significance and are also key to the identity and perceived image of a city, with implications for the economic benefits from tourism. This presentation will discuss a pilot study comparing three public spaces in Sydney, Hong Kong and Singapore within the context of changing relationship dynamics, understanding underlying subservient associations, and with a realisation of the valued and reliant social, architectural and cultural relationships between the East and West.

Mabel John is a planner, architecture professional, urban geographer, teacher and PhD candidate, specialising in emerging water's edge public spaces in the Asia-Pacific region, including in Sydney, Hong Kong and Singapore. With an Indian background, Mabel was raised in New Zealand and lives in Adelaide, Australia.

Research area: Sustainable public space networks

亚太地区新出现的公共空间：悉尼、香港和新加坡的案例分析

新出现的水滨公共空间的显著特征把它们和传统设计区别开来。水滨开发具有本地意义，对一个城市的个性和认知形象亦至关重要，而且会影响到旅游业的经济效益。本次谈话将讨论一个试点研究项目，从变化关系动态、理解深层从属联系的角度比较悉尼、香港和新加坡三地的公共空间，从而得出东方和西方之间互为珍重、互为依存的社会、建筑和文化关系。

梅博·约翰是一位规划师、建筑专业人士、城市地理学家、教师和博士候选人，专长是包括悉尼、香港和新加坡在内的亚太地区新出现的水滨公共空间。梅博有印度背景，在新西兰长大，生活在澳大利亚的阿德莱德。

研究领域：可持续公共空间网络。



Associate Professor Stephen PULLEN

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Residential buildings and heat wave risks

Climate change poses many challenges to the operation of the built environment and one aspect requiring attention is that of heat waves. These are predicted to increase in both severity and duration over the coming decades. Recent heat waves have caused significant morbidity and mortality. This presentation reports on a research project that aims to determine possible design options for adapting residential buildings to more severe heat waves. A number of options are canvassed including the concept of cool retreats.

Stephen Pullen, PhD, is a building scientist with over twenty years' experience in the study of the sustainability of construction materials, buildings and the urban environment. He teaches energy efficiency, building performance and building surveying. Currently he is engaged in research projects in the area of sustainability and the built environment.

Research area: Sustainability of the built environment

史蒂夫·普伦 副教授

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住宅建筑和热浪风险

气候变化对建成环境的运作提出了诸多挑战，需要注意的一方面问题是热浪的挑战。预计在未来几十年里热浪的严重程度和持续长度都会提高。最近的热浪引发了重大的疾病和死亡。本次谈话将汇报一个研究项目，该项目旨在确定可能的设计选项，使住宅建筑能适应更剧烈的热浪。研究中探讨了众多选项，其中包括避暑精修所的概念。

史蒂夫·普伦，博士候选人，是一位建筑科学家，有20多年研究建筑材料、建筑和城市环境可持续发展的经验。他的授课内容包括能效、建筑性能和建筑勘测。目前他正在从事可持续发展和建成环境方面的研究项目。

研究领域：建成环境的可持续发展。



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Dynamic model to assess policy effects in regional low carbon development

Since the British first proposed the concept of a 'low carbon economy', the international community has made a great effort to control greenhouse gas emissions. However, the development of a low carbon economy is a top-down economic transformation driven by policy, which is different from the bottom-up, technology progress-driven economic transition of the past. The influence of policymaking in a low carbon economy is everywhere, so the study of policy formulation and decision making can be significant for low carbon economy transition. This presentation delivers a policy influence research method by constructing a regional low carbon development model based on System Dynamics, and validates this model by comparing the simulation data and the Chinese calendar year statistics. Finally, some policymaking suggestions based on the research are provided.

Xin Tan has a PhD and MSc in Chemistry Engineering from Tianjin University, China and a BSc in Materials Science and Engineering from Beihang University, China. He is also Director of Human Resources at TU.

Research area: Environmental photochemistry, pollution control and remediation

在区域性低碳发展中评价政策效果的动态模式

自英国人首次提出‘低碳经济’概念以来，国际社区已付出了巨大努力来控制温室气体排放。不过，低碳经济发展是一种从上到下、受政策驱动的经济转变，这不同于过去从下到上、受技术进步驱动的经济转变。决策影响在一个低碳经济里随处可见，所以政策编制和决策方面的研究对低碳经济转型能起到重要作用。本次谈话通过建立一个基于系统动态的区域性低碳发展模型来提供一个政策影响的研究方法，并通过比较模拟数据和中国农历年的统计数据来论证这个模型。最后根据所提供的研究结果提出一些决策建议。

谭欣在中国天津大学获得了化工硕士学位和博士学位，在中国北京航空航天大学获得了材料科学及工程学士学位。他还是天津大学人事处处长。

研究领域：环境光化学、污染控制和补救。



Professor Mads GAARDBOE

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Interpretations of sustainable design: case study Canberra

It is a century ago the plan of Canberra was won by Walter Burley Griffin, based on a City Beautiful concept infused with the Garden City. It almost vanished until a mid-century resurgence that was inspired by the British New Towns. The last decade has seen the Town Centre grow tighter and higher. Sustainability can have different meanings for different needs and times. Here Canberra, a planned capital, is discussed as a case study of such interpretations, whether functional, ecological, architectural or behavioural.

Danish-raised Mads Gaardboe was previously Head of Architecture at Liverpool John Moore's University and Associate Director of Liverpool School of Art, UK. He has had architectural practices in Canberra and London and is a fellow of the Royal Society of Art, UK.

Research area: Urban design

麦兹·伽博 教授

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解读可持续设计：堪培拉案例研究

一个世纪前华尔特·博雷·格里芬(Walter Burley Griffin)基于花园城的美丽城市概念赢得了堪培拉规划项目，这个概念几乎完全消失，直到受英国新镇的启发在上世纪中叶又重新复燃。过去十年看到市中心往紧凑和高度发展。根据不同需要和不同时代，可持续发展可以有不同的含义。在这里将用堪培拉——一个规划的首都作为研究案例，来进行这种功能、生态、建筑和行为方面的解读。

麦兹·伽博来自丹麦，之前是利物浦约翰摩尔(John Moore)大学建筑系主任、英国利物浦艺术学院副院长。他在堪培拉和伦敦设立了建筑咨询业务，是英国皇家艺术协会的会员。

研究领域：城市设计。



Associate Professor Ian CLARK

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Sustainable management of groundwater in parts of arid South Australia

Apart from captured rainwater, groundwater, much of which is contained in fractured rocks, is the only water available to multiple users and the environment in the arid and semi-arid parts of South Australia. Little is known about factors that control the size and quality of the resource. Detailed geological mapping and structural analysis of the host rocks, the fractures, their regional distribution and connectedness along with radio-isotopes and the relationship between rainfall and water levels in wells are used to estimate recharge processes and determination of flow paths.

Ian Clark is a geoscientist with more than 35 years' research and tertiary teaching experience in environmental management and sustainability. He is currently investigating sustainable management of groundwater resources in fractured rock aquifers and also conducts and supervises research into teaching and learning.

Research area: Hydrogeology and sustainable resource management

伊恩·克拉克 副教授

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南澳州部分干旱地区地下水的可持续管理

除了收集雨水之外，大部分裹藏在岩层裂隙的地下水是南澳州干旱及半干旱地区多重使用者和环境唯一可利用的水资源。人们对资源大小及资源质量的控制因素知之甚少。在估计蓄水流程、确定流向时，要对集水岩、集水间隙、其区域分布及连接做详细的地质测绘和结构分析、放射性同位素分析，并要考虑降雨和水井水位之间的关系。

伊恩·克拉克是地质学家，在环境管理和可持续发展领域有逾35年的研究和大学教学经验。目前他正在研究对裂隙岩集水层里的地下水资源进行可持续性管理，他还主持并监督教学研究方面的工作。

研究领域：水利地址学和可持续资源管理。



Professor Sakkie 萨基·普托里斯 教授 PRETORIUS

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Sustainable urban development: bridging the gap between research and practice

Collaborative research into urban development, both within Australia and internationally, is critical to the development of attitudes and practices that will ensure ongoing social, economic and ecological sustainability. Researchers and planning authorities are faced with many challenges in this area, with increasingly urbanised populations putting already strained resources under further pressure.

These challenges can, however, be reframed as opportunities for the research community. By engaging in collaboration – across disciplines, organisations and borders – researchers can develop innovative solutions around this issue, to build a more equitable and sustainable world for future generations.

Born in South Africa, Sakkie Pretorius is internationally recognised as a pioneer in yeast biotechnology and applying research outcomes to industry. He is committed to academic excellence with relevance: creating value and opportunity for the wider community.

Research area: Molecular microbiology

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可持续城市发展：填补研究和实践之间的缺口

在澳大利亚国内及在国际上进行城市发展的联合研究对建立确保社会、经济、生态可持续发展的态度和行为至关重要。在这方面，研究人员和规划主管部门面临着诸多挑战，不断增长的城市化人口对已经吃紧的资源带来了更多压力。

不过这些挑战可以转化为研究界的机遇。通过跨学科、跨机构、跨国境的合作，研究人员能够针对这个问题开发创新对策，为我们的子孙后代建设一个更公平、更可持续的世界。

萨基·普托里斯来自南非，是国际上公认的酵母生物技术开发和将研究成果应用到产业的先锋。他致力于优异且带关联性的学术工作：为更广泛的社区创造价值和机会。

研究领域：分子微生物学。



Professor Simon BEECHAM

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The role of green infrastructure in healthy cities

Cleaner water, healthier soils and reduced heat island effects are just some of the outcomes achievable through integration of green infrastructure into our cities. Green infrastructure, including green roofs, bioretention systems and street trees, will make our urban environments more liveable and more attractive for our ever-growing populations. It will also greatly assist in our efforts to adapt to increased climate variability and indeed to climate change. However, green infrastructure comes with many challenges and this presentation will explore some of the key research questions that need to be addressed if countries such as China and Australia are to create and sustain healthy cities.

Simon Beecham is Fellow of both Engineers Australia and the Australian Institute of Company Directors, Board Director for Water Quality Research Australia Limited, Chief Investigator on numerous Australian Research Council grants and Project Leader with the Goyder Institute for Water Research. He holds a PhD in Civil Engineering from the University of Manchester.

Research area: Water sensitive urban design

赛蒙·毕乾 教授

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健康城市中绿色基础设施的角色

水更干净、土壤更肥沃、热岛效应减弱 – 这只是其中一些通过向我们城市中投入绿色基础设施便能实现的成果。包括绿色屋顶、生物滞留系统和街道树木在内的绿色基础设施将使我们的城市环境更适合居住、更能吸引我们日益增长的人口。这还将极大地协助我们努力适应加大的气候变化度，实际上就是适应气候变化。然而，绿色基础设施也会带来许多挑战。本次谈话将探索一些关键研究课题，如果像中国和澳大利亚这样的国家要创建并维持健康的城市，就首先要应对这些问题。

赛蒙·毕乾是澳大利亚工程师协会和澳大利亚公司董事协会的会员、澳大利亚水质研究有限公司的董事、多个澳大利亚研究理事会赞助项目的首席研究员、高德(Goyder)水资源研究协会的项目负责人。他在曼切斯特大学获得了土木工程的博士学位。

研究领域：重视水的城市设计。



Professor John BOLAND

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Integrated design of house and garden for sustainable living

Over 90 per cent of the houses in Adelaide have air conditioning, yet Adelaide's climate is classified under the Köppen climate classification system as warm temperate. I will describe the renovation of a weatherboard house in an inner suburb wherein the house and garden work as an integrated system. We have 50–60 productive trees and source 30 per cent of our food from the garden. The house is light and comfortable with minimal energy use. This is one way to combat the heat island effect.

John Boland is an expert in environmental modelling, specialising in time series and statistical modelling of climate variables and modelling systems under uncertainty. He is Associate Editor for *Renewable Energy* journal and Head of the Resource Assessment and Climate Division of the International Solar Energy Society. He holds a PhD from the University of Adelaide.

Research area: Environmental mathematics

约翰·波兰德 教授

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通向可持续生活方式的住房花园一体化设计

阿德莱德超过90%的住房配备了空调，但根据科本(Köppen)气候分类办法，阿德莱德仍属于温带气候。我将介绍对内城区一个木板房的改造过程，既采用一体化系统思路对住房和花园一并进行改造。我们有50–60棵结果子的树，我们所需食物中有30%来自花园；房子轻巧舒适，能耗极少，应付热岛效应也有一个办法。

约翰·波兰德是环境模型制作专家，擅长气候变量的时间序列模型及统计模型制作，以及对不确定系统的模型制作。他是再生能源杂志的副编辑、国际太阳能协会资源评估及气候处的负责人。他在阿德莱德大学获得了博士学位。

研究领域：环境数学。





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