

Innovative Technologies for Future Cities

Can we realise zero-emissions buildings in the tropics? How might robots bring innovation to the construction industry? What advantages does bamboo have over steel as a building material? These are just some of the research questions addressed by the Singapore-ETH Centre Future Cities Laboratory (SEC FCL), which is committed to addressing both the potentials and the challenges facing the contemporary city. Through a trans-disciplinary framework, SEC FCL investigates how cities might be designed, produced, managed, maintained and inhabited in a way that supports global sustainability. This presentation will give a snapshot of some of the innovative technologies being developed in the Future Cities Laboratory (FCL) from green building

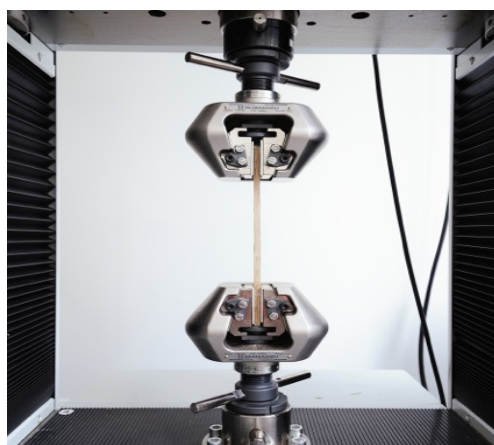
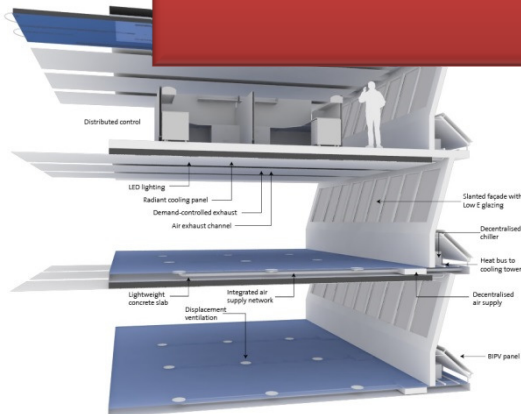
EVENT DETAILS

Date : 27 February 2014, Thursday
Time : 6.30pm - 9.00pm
(Registration will start from 6.15pm onwards with light dinner @ Sky Garden Level 7)
Venue : Singapore-ETH Centre Future Cities Laboratory
1 CREATE Way, Level 6, CREATE Tower, Singapore 138602

[Click here for map:](http://www.streetdirectory.com/sq/create-tower-university-town/1-create-way-138602/57032_152758.html)
http://www.streetdirectory.com/sq/create-tower-university-town/1-create-way-138602/57032_152758.html

BOA-SIA CPD : 4 CPD points

REGISTRATION CLOSED



Confirmed, attendance is compulsory. Absentee/Cancellations 3 days or less before the event will be charged at \$20.00. Verbal notification of cancellation is not acceptable.

**** Registration for attendance of seminar shall be closed 30 mins after the seminar commences.**

PROGRAMME SCHEDULE

- 6.30pm Light dinner at the Sky Garden Level 7
- 7.15pm Welcome and Introduction to the Future Cities Laboratory at Level 6
by Prof. Stephen Cairns
- 7.30pm Presentation on Low Exergy, including 10 min Q&A **by Dr. Matthias Mast**
- 7.55pm Presentation on Digital Fabrication, including 10 min Q&A **by Mr. Michael Budig**
- 8.20pm Presentation on Bamboo Concrete, including 10 min Q&A **by Asst. Prof. Dirk E. Hebel**
- 8.45pm Guided tour of FCL exhibition, including a visit to the Robotics Laboratory
- 9.00pm End

For more information, please contact SIA (**Ms Jacey Tay**):

Tel: (65) 6226 2668

Fax: (65) 6226 2663

Email: cpd@sia.org.sg

Jointly Organized by:



(FCL) FUTURE CITIES LABORATORY

未来城市实验室

BUILDING TRUST



(SEC) SINGAPORE-ETH CENTRE 新加坡-ETH 研究中心

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Speakers



1) Prof. Stephen Cairns

Stephen Cairns completed an undergraduate degree in anthropology and classical studies at the University of Otago. He trained in architecture at the University of Auckland, and practiced as an architect in New Zealand, Australia and the Pacific, designing the competition-winning entry for the Headquarters for the Secretariat of the Pacific Community in Noumea. He subsequently undertook doctoral studies at the University of Melbourne writing a thesis on the colonial architecture in Java, with an emphasis on aesthetics and the politics of representation. On completion of his PhD he was appointed to a Lectureship at the University of Melbourne. He took up a Senior Lectureship at the University of Edinburgh, and was appointed Professor of Architecture and Urbanism there in 2009. He served as Head of Department of Architecture, and Director of the newly founded Edinburgh School of Architecture and Landscape Architecture. He is currently based in Singapore where he is Scientific Director of the Future Cities Laboratory.



2) Dr. Matthias Mast

Matthias started his career with studying Environmental Engineering at the University of Stuttgart in Germany, specialising on energy supply and process engineering. During his studies he spent two terms at the University of Waterloo in Canada. His master thesis focused on the simulation and testing of a novel concept for a thermal solar collector, which was performed at the research division of a German company. After graduating, he worked as research assistant at the chair of building systems at ETH Zurich where he also received his Doctoral degree. The topic of his thesis was the analysis of ways of improving hydronic heating networks using several heat pumps. Since 2013, he is Module Coordinator of Module I.



3) Mr. Michael Budig

Michael Budig studied architecture at the University of Innsbruck, University of Texas at Arlington (USA), and the Bartlett School of Architecture (London/UK). He has been Senior Researcher for Module II at the Future Cities Laboratory since 2011. Prior to that he was teaching and researching at Studio Hadid, University of Applied Arts Vienna, between 2010 and 2011, and at the Institute for Experimental Architecture, University of Innsbruck (AT), between 2001 and 2011. He is registered as architect in Austria (ZT), and was principal at moll budig architecture (www.mollbudig.com). Built projects include a metal recycling company, and a cosmetics production plant, both located in Innsbruck (Austria). Research projects focused on digital design and construction methods, including a parametrically driven shell structure for a ceramics factory in St. Georgen (Austria), and studies on a range of concrete elements in cooperation with Rieder Betonwerke in Salzburg (Austria) and fibreC in Rosenheim (Germany).



4) Asst. Prof. Dirk E. Hebel

Dirk Hebel is currently holding the position of Assistant Professor of Architecture and Construction at the Future Cities Laboratory in Singapore. Prior to that, he was the founding Scientific Director of the Ethiopian Institute of Architecture, Building Construction and City Development in Addis Ababa, Ethiopia. Between 2002 and 2009 he taught at the Department of Architecture, ETHZ as the coordinator for first year architectural design program and the director of the 'Master of Advanced Studies' program in Urban Design with Prof. Dr. Marc Angélil. The resulting work of his teaching and research has been published in numerous academic journals and book publications, lately SUDU: THE CONSTRUCTION OF A SUSTAINABLE URBAN DWELLING UNIT (forthcoming) and CITIES OF CHANGE ADDIS ABABA (with Marc Angélil). In 2008, he published the book DEVIATIONS (with Marc Angélil), an experiment in architectural design pedagogy and in 2005 BATHROOM UNPLUGGED (with Jörg Stollmann). Dirk Hebel practices architecture by activating unusual building materials such as air (DISCOVERIES, an exhibition for the Foundation Lindau Nobel Prize Winners and ON_AIR, and installation for KunstWerke Berlin), water (as the project manager for the BLUR Building for EXPO.02 in Switzerland) or plastic bottles (as in the award-winning project UNITED_BOTTLE).

EVENT DETAIL

GST REG. NO.: M9-0001281-J
G.N. No. 565 in Gazette No. 27

Seminar : Innovative Technologies for Future Cities
 Date : 27 February 2014, Thursday
 Time : 6.30PM - 9.00PM (Registration will start from 6.15pm onwards with light dinner @ Sky Garden Level 7)
 Venue : Singapore-ETH Centre Future Cities Laboratory, 1 CREATE Way, Level 6, CREATE Tower, (S) 138602
http://www.streetdirectory.com.sg/create-tower-university-town/1-create-way-138602/57032_152758.html
 BOA-SIA CPD : 4 CPD points
 Seminar fee : SIA Members* (Complimentary), Non Members (\$65.00) – fees inclusive of GST
 Closing date : 20 February 2014

* For SIA Members whose registrations have been confirmed, attendance is compulsory. Absentee/Cancellations 3 days or less before the event will be charged at \$20.00. Verbal notification of cancellation is not acceptable.

Please fax / email the completed registration form to Ms Jacey Tay:

Tel: (65) 6226 2668

Fax: (65) 6226 2663

Email: cpd@sia.org.sg

And follow up with cheque / cash / online payment to Singapore Institute of Architects.

Please tick your mode of payment:

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Bank/Chq # : _____ Amt S\$: _____

Local Cheque (must be drawn in Singapore) should be crossed and made payable to "Singapore Institute of Architects".

☐ By Cash

You can drop by SIA office to make cash payment between 9.30am – 5.30pm on weekdays.

☐ By Online Payment

<http://members.sia.org.sg/payment/sia-20140227.html>

(It is mandatory to provide us with your Receipt ID # after your credit card payment transaction)

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Mail to SIA address:

Singapore Institute of Architects

79B Neil Road, Singapore 088904

Please indicate your name, company/institution and course date/title on the back of the document.

Participant's Details

Organization: _____

Tel: _____

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REGISTRATION CLOSED

Full Name of Participant

(as per NRIC / FIN, pls underline surname)

NRIC / FIN #

Email

Amt

1				
	HP #:	<input type="checkbox"/> SIA Member, SIA #: []	<input type="checkbox"/> Non Member, BOA # (if any): []	
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	HP #:	<input type="checkbox"/> SIA Member, SIA #: []	<input type="checkbox"/> Non Member, BOA # (if any): []	
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Cheque payment for this activity should not be combined with payment for other SIA events/courses.

Fees paid are non-refundable under all circumstances. Replacement of participant will be allowed only if written notification is made at least 3 days before the event.

Where a Non-Member replaces a Member (must be from the same Org.) the fee difference will have to be made good to SIA prior to the event.

Registration for attendance of seminar shall be closed 30 mins after the seminar commences.

Registration will be on a First-Come-First-Served basis and will be accepted upon receipt of registration form and payment to SIA. Registration by fax will only be confirmed upon receipt of payment.

Registration Confirmation No.:-



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