

The 12th SET Conference – Latest update

SET 2013

The 12th International Conference on Sustainable Energy Technologies Hong Kong, China (26th - 29th August 2013)



Inside this issue

Global Renewable Energy Education Network

Latest news & updates 12th SET conference, Hong Kong, China The GREEN Program

Technology & Products Next Generation Energy Storage: TESPP Coolnomix – Energy efficient AC The Pod – Nottingham The Rushlight Awards

Conference WSSET recommendations

IMPORTANT - Change in SET 2013 conference date and abstract extension

There has recently been a change in the date for the <u>SET 2013 conference to $26^{\text{th}} - 29^{\text{th}}$ August 2013 with registration for the conference being held on the 26^{th} August 2013. The conference will no longer be held from $27^{\text{th}} - 30^{\text{th}}$ August 2013 as previously planned. We at the organisation committee apologise for any inconveniences these changes may have caused. These changes have been made as an improved venue in the same previous location.</u>

Abstract submissions have also been extended to the **end of March**.

For more information and the latest updates for SET 2013 and abstract submissions, please see conference website at: <u>http://www.polyu.edu.hk/risud/set2013/</u>

The GREEN Program

The GREEN Program aims to enhance your understanding of Renewable Energy technologies and Sustainability industries by taking you outside of the classroom and into the field.

At GREEN they have identified a bridge between the traditional educational model and career advancement. Annually GREEN host 30 plus faculty and administrators in Costa Rica on 4-day programs specifically designed to assess both academic and education approaches of their program and to participate in the GREEN experience and collaborate with leading Universities and Colleges.

For more information please contact: <u>info@theGREENprogram.com</u> Or alternatively visit: <u>https://thegreenprogram.com/</u> program



Technologies & Products

Next Generation Energy Storage: Thermochemical Energy Storage Pumping Pipe (TESPP)

Ever-growing energy demands for space heating and hot water in the domestic and commercial building sector in addition to rising gas and electrical prices has resulted in the need for on-site heat and electrical energy generation. Therefore a micro-generation scheme has been recently developed to generate electricity and heat from both renewable and low-carbon technologies. Investment of domestic micro-generation requires efficient utilisation and integration of the irregular differentiated energy supply and reduction of capital costs to offset long payback periods.

Thermochemical Energy Storage (TES) has been recognised as an important technology for the application of renewable energy technologies as well as other energy resources. The increase in operational efficiency of heat and electrical energy generation systems is achieved by reducing equipment short cycling and bridging the period between times when energy is harvested and periods when it is needed. With this TES technology, the balancing between supply and demand of energy can easily be achieved.

The University of Nottingham's Built Environment Department is working in partnership with European Thermodynamics Ltd., BASF, P.A.K Engineering Ltd., E.ON, Environmental Process Systems Ltd., and Kensa Engineering Ltd. on a unique project funded by Department of Energy & Climate Change (DECC) to develop a new highperformance system named: "Thermochemical Energy Storage Pumping Pipe (TESPP)" system. The system is based on the application of an adsorption heat pipe. The TESSP system will be compact, cost effective and have the ability to provide a large capacity of thermal energy storage.



Coolnomix: Air conditioning energy saving products

Reducing energy consumption for the users of air conditioning and commercial refrigerators has been at the forefront of the development of the COOLNOMIX energy saving products. Energy consumption is a big problem for owners of air conditioning and refrigeration systems and up until now there are few technologies available for the retrofit market. This new technology optimises and reduces the compressor running time using the control algorithms built into the COOLNOMIX AC-01 for air conditioning and AR-01 for refrigeration systems. Sensors placed in the air flow prevent economising before the room or cabinet has reached a set temperature and therefore maximises performance on initial start-up while minimising cooling times.

COOLNOMIX are developing other energy saving devices for the world market in cooling and heating and will soon deliver a device for saving energy on reverse cycle heat pumps. Working with their European prime distributor NuVision Energy they expect to see a fast uptake by companies looking to reduce energy consumption all over the world.

For more information, please visit: www.nuvisionenergy.co.uk





Sustainable Office Development – The Pod, Nottingham

JMF Chartered Architects acting as Architect, Interior Designer, Landscape Designer and Lead Consultant managed the design process which included the external façade and terrace redesign and interior design of this city centre office development. The project internally included the main reception area including reception desk, first floor open plan office for 250 persons and associated staff and meeting spaces on the second and third floors within this existing building.

The client and JMF developed a brief that called for a working environment that stimulated and excited the TDX operatives. Standard / off-the-shelf was not an option. Through our extensive experience in this sector JMF produced a number of options, resulting in a proposal that responded to the client's brief, budget and programme.

The project concept was to expose both the existing concrete stucture and proposed services to give an industrial / didactic aesthetic, retaining the generous floor to soffit heights. The deep plan is skillfully subdivided through the use of strategically placed fully-glazed spill-out rooms and informal vend / sitting / meeting spaces.

The exposed concrete structure and soffits act as thermal sinks which provide essential thermal balancing of the internal environment, in particular at the main first floor area. The generous floor to ceiling heights provide and act as a thermal reservoir, with a first floor rooflight acting as a vent to induce the stack-effect.

The secondary ancillery spaces employ a mix of localised A/C cassettes and a central system, allowing all areas to be flexible, reacting to their specific needs. All lighting is sensored reducing the energy use when areas are unused. The external glazing is predominantly north-facing allowing natural daylight but without excessive solar heat gain. Two external terrace areas were also refurbished, providing pleasing and calming spaces for contemplation.

Working closely with the Contractor the bespoke solutions were achieved through fastidious attention to detail, with very little abortive work, resulting in very little waste of materials. Where possible building operatives and building materials were sourced locally. JMF also assisted with statutory building regulations compliance working closely with the Approved Building Inspector. As the project was within an existing building, existing constraints were resolved within the proposed design.

Rushlight Awards 2013

Each year, The Rushlight Awards bring together the leading organisations which are developing new clean technologies and innovations and those that are supporting them. The awards are supported by members of DECC, Carbon Trust, Technology Strategy Board, Energy Savings Trust, CIWM, NESTA, Low Carbon Vehicle Partnership, Environment Agency, WRAP, UKERC, DEFRA, STFC and many more.

The Rushlight Awards were celebrated on the 31st January 2013 at The Royal College of Surgeons of England at Lincoln's Inn Fields, London. The event was attended by the Minister of Energy and Climate Change, Greg Barker, MP. This year the University of Nottingham's' Department of Architecture and Built Environment, headed by Professor Saffa Riffat, Blue Planet Ltd, Tru-Stone Ltd and Marsh-Growchowski Architects LLP were awarded a prestigious Rushlight Award for their work on low carbon buildings.

www.rushlightevents.com/rushlight-awards/



Client TDX Group

Construction Cost £2.5million

Project dates

commencement February 2012 completion November 2012

> Project Architect JMF Chartered Architects 2 Trent Lane East Bridgford Nottingham NG13 8PF UK

Professor Saffa Riffat receiving a prestigious Rushlight Award for work on low carbon buildings.

Conferences WSSET recommends

- 5th International Conference on Carbon Accounting News Wednesday, 13th March, 2013, Edinburgh <u>http://icarbconference.org/</u>
- 9th International Hydrogen and Fuel Cell Conference, Partnering & Exhibition 20th – 21st March 2013, NEC Birmingham UK <u>http://www.climate-change-solutions.co.uk/Hydrogen2013.php</u>
- 18th Annual POWER Conference on Energy Research and Policy Friday, 22nd March, 2013, California USA <u>http://ei.haas.berkeley.edu/power.html</u>
- 3rd International Conference on Microgeneration and Related Technologies 15th – 17th April, 2013, Naples Italy <u>http://www.microgen3.eu/</u>
- 2nd International Conference on Energy and Environmental Protection 20th – 21st April, 2013, Guilin, China <u>http://www.iceep2013.org/</u>
- 3rd International Conference on Civil Engineering, Architecture and Building Materials 25th – 26th May, 2013, Jinan China <u>http://www.ceabm.org/</u>
- 3rd International Conference on Sustainable Energy Information Technology 25th – 28th June, 2013, Nova Scotia, Canada <u>http://cs-conferences.acadiau.ca/SEIT-13/</u>
- 6th International Exergy, Energy and Environmental Symposium 1st – 4th July, 2013, Rize Turkey <u>http://ieees6.rize.edu.tr/</u>
- 12th International Conference on Sustainable Energy Technologies
 26th 29th August, 2013, Hong Kong
 http://www.polyu.edu.hk/risud/set2013/download/SET2013 first announcement.pdf
- 3rd International Symposium on Engineering, Energy and Environment 17th – 20th November 2013, Bangkok Thailand
- Call for Papers International Journal of Business, Humanities and Technology
 International Journal of Business, Humanities and Technology (IJBHT) is an open access, peer-reviewed and refereed multidisciplinary journal published by Centre for Promoting Ideas (CPI), USA. The objective of IJBHT is to provide a forum for the publication of scientific articles in the fields of business, humanities and technology. In pursuit of this objective the journal not only publishes high quality research papers but also ensures that the published papers achieve broad international credibility.

www.ijbhtnet.com

WSSET has recently joined the social network Facebook. Being connected with WSSET on Facebook is an effective way of getting in touch with members from both academic and industrial backgrounds, finding the latest updates and news from WSSET and get the latest updates and news of up-and-

coming events.



www.facebook.com

Donations are welcomed and greatly appreciated!

We would like to remind our members that WSSET is a non-profit organisation, hence providing free membership. We would not be able to play a significant role in consolidating practical partnerships between academic and industrial organisations without the help of our members. Whether you would like to get more involved or contribute financially, please get in touch with us at <u>secretary@wsset.org</u>.

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