

# RESEARCH LINKS

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## Innovations of Chemical Engineering for Sustainable Environment Workshop

**This workshop will bring together researchers in Vietnam and the UK from diverse specialisms to discuss and identify routes to solutions to important research problems and to share their successes in chemical engineering for sustainable energy and the environment.**

### Dates and venue

- **Dates:** 9 – 12 March 2015  
13 March 2015 for researchers delivering the social event on 'Science makes fun'
- **Venue:** Hanoi University of Science and Technology  
No. 1 Dai Co Viet street, Hai Ba Trung District, Hanoi, Vietnam

### Organisers

- British Council Vietnam
- Hanoi University of Science and Technology, Vietnam
- Newcastle University, UK

### Format

- Policy dialogue
- Thematic workshops
- Scientific research exhibition

- Field trips

### Language

The workshop will be conducted entirely in English.

### Summary of the workshop

The workshop aims to examine and exchange information on three themes:

- Industrial waste treatment
- Green Energy Conversion from chemical processes
- Green chemical and electrochemical processes

With the first theme, participants will focus on new technologies for waste water treatment and metal recycling which draws great interest from both the UK and Vietnam. The second theme examines various innovations in Green Energy Conversion. Finally the third theme will focus on emerging green chemical technologies. In particular these aspects are expected to enable sustainable processes for manufacturing whilst minimising the carbon footprint, and reconfiguring the extraction and exploitation of useful materials from natural products.

An additional and important aspect of this workshop is to involve early career researchers from the UK and Vietnam, who will have the opportunity to participate in a field trip to examine waste water treatment systems in Vietnam and discuss the solutions to this environment problem.

The workshop is a great chance for young UK researchers who have just started their career. It is important that young researchers from the UK have more chances to make contact with their colleagues abroad, not only to exchange information, but also to gain more ideas for developing their own research. This international collaboration will also give UK researchers an opportunity to develop links which will lead to substantive proposals for international collaborative projects, particularly in the fields of environment and energy.

For Vietnamese participants, the workshop is clearly a very good opportunity for researchers to exchange the latest technological information, establish networks with industries, and propose new research projects in order to solve problems in the environment and energy fields. This kind of activity is even more important for Vietnamese young researchers due to the lack of information and conditions worldwide to realise their research ideas.

### Travel grants

The workshop will see the announcement of two travel grants of researcher exchange awarded for participants who will fully participate in, and make great contribution to the success of the workshop.

### Contacts

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## Programme

Time	Activity	Chair
<b>Day One – Monday, 9 March 2015 Policy Dialogue</b>		
1300	<b>Registration</b> Visit the Scientific research exhibition	
1400 – 1415	<b>Official welcome ceremony</b>  <b>Speakers:</b> <ul style="list-style-type: none"> <li>• <b>Cherry Gough</b>, Country Director, British Council Vietnam</li> <li>• <b>Assoc Prof Dr Pham Hoang Luong</b>, Vice President, Hanoi University of Science and Technology, Vietnam</li> <li>• <b>Prof Sudipta Roy</b>, Chair in Electrochemical Nanomaterials, School of Chemical Engineering and Advanced Materials, Newcastle University, UK</li> </ul>	<b>Assoc Prof Dr Pham Hoang Luong</b> , Vice President, Hanoi University of Science and Technology, Vietnam
1415 – 1435	<b>Opening Plenary - Modern Technologies for Social and Economic Development and Sustainability – Vietnamese Government priorities</b>	<b>Assoc Prof Dr Pham Hoang Luong</b> , Vice President, Hanoi University of Science and Technology, Vietnam
1435 – 1515	<b>Plenary session: Innovation for life, case study in the UK, and East – West interaction</b>  <b>Presentation 1: UK model on how researchers contribute to the national growth</b>  <b>Speaker:</b> <ul style="list-style-type: none"> <li>• <b>Prof Sudipta Roy</b>, Chair in Electrochemical Nanomaterials, School of Chemical Engineering and Advanced Materials, Newcastle University, UK</li> </ul> <b>Presentation 2: Success, Opportunities, Challenges in Vietnam on bringing research, innovation to live (case study)</b>  <b>Speakers:</b> <ul style="list-style-type: none"> <li>• <b>Assoc Prof Dr Mai Thanh Tung</b>, Vice Director, School of Chemical Engineering, Hanoi University of Science and Technology, Vietnam</li> <li>• <i>An industry partner in Vietnam (tbc)</i></li> </ul>	<b>Assoc Prof Dr Pham Hoang Luong</b> , Vice President, Hanoi University of Science and Technology, Vietnam
1515 – 1545	<b>Coffee break</b>	
1545 – 1645	<b>Panel discussions</b>  <b>Topic 1: Introduction of Research Funding Opportunity - Newton Fund Programme in Vietnam</b>  <b>Speaker:</b> <ul style="list-style-type: none"> <li>• British Embassy's Representative</li> </ul> <b>Topic 2: Vietnam Inclusive Innovation Project</b>  <b>Speaker:</b> <ul style="list-style-type: none"> <li>• The World Bank's Representative</li> </ul> <b>Panelists:</b> Representatives from the following bodies <ul style="list-style-type: none"> <li>• British Council Vietnam</li> </ul>	<b>Hoang Van Anh</b> , Assistant Director, Higher Education and Skills, British Council Vietnam

	<ul style="list-style-type: none"> <li>Royal Society of Chemistry, UK</li> <li>Innovate UK and other delivery partner</li> <li>International Unit</li> </ul>		
1645 – 1715	<ul style="list-style-type: none"> <li><b>Plenary presentation - Introduction to VIIP project</b></li> <li><b>UK- Vietnam Innovation and Education exhibition</b></li> </ul>	UK educations, industrial partners	
1715	<b>Day One ends</b>		
1830	Networking dinner		
<b>Day Two – Tuesday, 10 March 2015 Thematic workshops</b>			
0900 – 0930	<b>Plenary presentation – Innovation in electrochemical technology for environment and energy applications</b>  <b>Speaker:</b> <ul style="list-style-type: none"> <li><b>Prof Sudipta Roy</b>, Chair in Electrochemical Nanomaterials, School of Chemical Engineering and Advanced Materials, Newcastle University, UK</li> </ul>		
0930 – 1000	<b>Plenary presentation – Innovation in Renewable Energy Technology</b>		
1000 – 1030	<b>Plenary presentation – Biorefining Plant Natural Products</b>  <b>Speaker:</b> <ul style="list-style-type: none"> <li><b>Prof Robert Edwards</b>, Head of School of Agriculture, Food &amp; Rural Development Agriculture Building, Newcastle University, UK</li> </ul>		
1030 – 1100	Coffee break		
<b>Parallel thematic workshops</b>			
	<b>Theme 1: Waste Treatment and Recycling</b>	<b>Theme 2: Green Energy Conversion from chemical processes</b>	<b>Theme 3: Green Chemical Processes</b>
1100 – 1130	<i>Metal Recycling from electronic waste</i>  <b>Speaker:</b> <ul style="list-style-type: none"> <li><b>Assoc Prof Dr Huynh Trung Hai</b>, Lecturer, School of Environmental Science and Technology, Hanoi University of Science and Technology, Vietnam</li> </ul>	<i>Biomass for energy and environmental control.</i>  <b>Speaker:</b> <ul style="list-style-type: none"> <li><b>Prof Mark Thomas</b>, Head of the Wolfson Northern Carbon Reduction Laboratories, School of Chemical Engineering and Advanced Materials, Newcastle University, UK</li> </ul>	<i>An integrated Biorefinery for high -value Products from Curcuma longa in Vietnam</i>  <b>Speaker:</b> <ul style="list-style-type: none"> <li><b>Dr Duong Ngoc Tu</b>, Head of Department of Pharmaceutical Biology, Institute of Chemistry, Vietnam Academy of Science and Technology</li> </ul>
1130 – 1200	<i>Recycling of Polymeric and Composite Materials</i>  <b>Speaker:</b> <ul style="list-style-type: none"> <li><b>Prof Steve Bull</b>, Cookson Group Chair of Engineering Materials, School of Chemical Engineering and Advanced Materials, Newcastle University, UK</li> </ul>	TBC	TBC

1200 – 1215	<i>Selected excellent applicant's presentation on his/ her current research</i>	<i>Selected excellent applicant's presentation on his/ her current research</i>	<i>Selected excellent applicant's presentation on his/ her current research</i>
1215 – 1230	<i>Selected excellent applicant's presentation on his/ her current research</i>	<i>Selected excellent applicant's presentation on his/ her current research</i>	<i>Selected excellent applicant's presentation on his/ her current research</i>
1230 – 1400	Lunch		
1400 – 1430	<i>Hydrothermal technique for industrial and waste treatment</i>  <b>Speaker:</b> <ul style="list-style-type: none"> <li>• <b>Prof Kunio Yoshikawa</b>, Head of Yoshikawa Laboratory, Tokyo Institute of Technology, Japan</li> </ul>	TBC	TBC
1430 – 1530	Daily debrief and discussions to identify problems and establish collaborations and joint project based on information and ideas from partners	Daily debrief and discussions to identify problems and establish collaborations and joint project based on information and ideas from partners	Daily debrief and discussions to identify problems and establish collaborations and joint project based on information and ideas from partners
1530	<b>Day Two ends</b>		
<b>Day Three – Wednesday, 11 March 2015 Field trip to Quang Ninh Province</b>			
800	Depart for Ha Long Bay, Quang Ninh province		
1200	Lunch		
1300	Boarding on cruise		
Dinner and Evening Activity	<b>Evening forum:</b> <ul style="list-style-type: none"> <li>• Establishing collaborations and joint project based on information and ideas from partners</li> <li>• Research funding in the UK and the importance of cross sector collaboration; the possibilities and the practicalities (including grant writing and publications). Sandpit groups consider funding issues</li> </ul>		
<b>Day Four – Thursday, 12 March 2015 Field trip (continued)</b>			
0800	Morning discussion on board		
1200	Lunch		
1300 – 1500	Visit PETROLIMEX - a waste water treatment plant		
1500 – 1630	Wrap up the excursion trip and discussion of project proposals in three groups as follows <ul style="list-style-type: none"> <li>• Environmental Technology</li> <li>• Green Energy</li> <li>• Natural Products</li> </ul>		
1630 – 1730	Trip close with next steps and action plan		
1800 – 2000	Farewell dinner		
2000	<b>Workshop ends</b>		
<b>Day Five – Friday, 13 March 2015 Social event – ‘Science makes fun’ workshop</b>			

0900 – 1200	Social event promoting Science, Technology, Engineering and Math (STEM) education in the area of environmental and energy innovation for motivation of high school student to study science and technology
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