



## SCIENCE SYMPOSIUM

### Next Generation Liquid Biofuels and Co-Products

To be held at the InterContinental Hotel, Wellington

#### PROGRAMME

Technical Meeting: Monday 28 November

- 8.30 am Registration
- 9.20 am Welcome
- 9.30 am **Andrew Goodison**  
Senior Project Manager for the BioPathways study at FP Innovations, Canada  
*Bio Pathways Phase II – Moving the Transformation Agenda Forward.*
- 10.15 am Morning tea
- 10.35 am **Gerfried Jungmeier**  
Head of Energy Systems and Strategy, Institute of Energy Research at Joanneum Research, Austrian team leader in IEA Bioenergy Task 42: Biorefineries  
*Biofuel driven biorefineries and their co-products – status and outlook until 2025*
- 11.20 pm **Steve Wratten**, Bruce McKenzie, Wadia Kandula, Alison Stewart, Bruce Smallfield, Alan Gash  
Dick Martin, Karen Adair, Andrew Simcock, Anish Shah  
Lincoln University, Christchurch  
*Establishing a sustainable biodiesel feedcrop designed for New Zealand conditions*
- 11.40 pm **Sam Bahzadi** and Mohammed M. Farid  
Department of Chemical and Materials Engineering, University of Auckland, Auckland  
*Production of biodiesel using a continuous gas-liquid reactor*
- 12.00 pm **Nick Roberts**, Richard Scott, Somrutai Winichayakul, Amy Curran, Marissa Roldan, Ruth Cookson, Sam Livingstone, Jimmy Hatier  
AgResearch Grasslands Research Centre, Private Bag 11008, Palmerston North  
*Supersize it – 50% bigger and twice as fat, the biofuelers dream?*
- 12.20 pm Lunch
- 1.20 pm **Tana Levi**  
CRL Energy, 68 Gracefield Road, Lower Hutt.  
*Liquid fuel production from coal and biomass in New Zealand*
- 1.40 pm **Chris Penniall** and Chris Williamson  
Department of Chemical and Process Engineering, University of Canterbury, Christchurch  
*Microchannel reactor construction and online performance of Fischer-Tropsch synthesis*
- 2.00 pm **Sam Behzadi** and Mohammed M. Farid  
Department of Chemical and Materials Engineering, University of Auckland, Auckland  
*Pyrolysis of plastic and biomass into liquid fuel*
- 2.20 pm H. McKinnon, W. Saw, I. Gilmour and **Shusheng Pang**  
Department of Chemical and Process Engineering, University of Canterbury, Christchurch  
*Production of hydrogen-rich syngas from steam gasification of blend of biosolids and wood*

- 2.40 pm **Kirk Torr**, Michael Jack, John Lloyd, Karl Murton, Roger Newman, Ian Suckling and Alankar Vaidya  
Scion, Private Bag 3020, Rotorua  
*Studies on improving saccharification of pretreated radiata pine in New Zealand Lignocellulosic Biofuel Initiative*
- 3.00 pm Afternoon Tea
- 3.20 pm **Rupert Craggs** and Jason Park  
NIWA, PO Box 11-115, Hamilton  
*Enhancing Production, Harvest and Conversion of Wastewater HRAP Algae for Biofuel*
- 3.40 pm **Mohammed Imroz Sohel** and Michael Jack  
Scion, Private Bag 3020, Rotorua  
*Thermodynamic analysis of biofuel production using a hybrid process*
- 4.00 pm **Michael Smith** and Olga Kolokolova  
CRL Energy, 68 Gracefield Road, Lower Hutt  
*Torrefaction of woody biomass in a continuous reactor*
- 4.20 pm Lip Tat Ong and **Shusheng Pang**,  
Department of Chemical and Process Engineering, University of Canterbury, Christchurch  
*Sustainability analysis for biomass to liquid fuels through biomass gasification and Fischer-Tropsch*
- 4.40 pm Poster session
- 6.00 pm Close of technical meeting
- 6.00 pm Drinks
- 7.00 pm Conference dinner at InterContinental Wellington

Workshop: Tuesday 29 November

- 8.30 am Introduction
- 8.40 am **David Jones**  
Department of Microbiology and Immunology, University of Otago, Dunedin  
*Biobutanol*
- 9.00 am **Edward Green**  
Chief Scientific Officer and Founder, Green Biologics Ltd, UK  
*Title to be advised*
- 9.20 am **Brent Martin**  
Scientist Applied Chemistry, New Zealand Defence Force  
*Fuelling the New Zealand Defence Force: Current and Future Requirements*
- 9.40 am **Sean Simpson**  
Chief Scientific Officer and Co-Founder, LanzaTech  
*Title to be advised*
- 10.00 am Morning tea
- 10.20 am Workshop discussion session:  
*New Zealand research and development strategies and directions*
- 11.20 am Workshop discussion session:  
*The Advanced Biofuel Research Network*
- 12.10 am Summary and conclusion
- 12.20 pm Lunch
- 1.20 pm Close of workshop
- 2.00 pm Optional tour of CRL Energy and IRL's laboratories (Details to be determined)

**Co-Host:**



**Sponsors:**



**Attendance of keynote speakers is supported by:**



**Symposium also supported by the Bioenergy Association of New Zealand**

## **REGISTRATION FORM**

2<sup>nd</sup> Science Symposium on Next Generation Liquid Biofuels and Co-Products  
InterContinental Wellington  
28-29<sup>th</sup> November 2011

**EFNZ/BANZ/ABRN members\*: \$250 (+ gst)**

**Non-EFNZ/BANZ/ABRN members: \$350 (+ gst)**

**Students/Non-waged: \$100 (+gst)**

**(Includes: Lunch and Am/PM tea breaks on both days, plus dinner on 28 Nov. 2011)**

*Cancellations after 26<sup>th</sup> November 2011 and non-attendance will be invoiced.*

PLEASE COMPLETE AND EMAIL/FAX THIS FORM TO:

C.Gazo@crl.co.nz or energy.fed@crl.co.nz

Fax: +64 4 570 3701

Name: Ms./Mr./Dr./Prof.: \_\_\_\_\_

Organisation: \_\_\_\_\_

Postal/Mailing Address: \_\_\_\_\_

Telephone: \_\_\_\_\_ Facsimile: \_\_\_\_\_

Mobile: \_\_\_\_\_ Email: \_\_\_\_\_

Special dietary requirement (e.g. Vegan, etc.) \_\_\_\_\_

Are you attending the dinner on the 28<sup>th</sup> Nov. 2011 at InterCon? Yes [ ] No [ ]

Are you joining the tour of CRL/IRL facilities in Lower Hutt at 2pm, 29<sup>th</sup> Nov. 2011? Yes [ ] No [ ]

I would like [ ] registration(s). Amount paid: \$\_\_\_\_\_ (+gst).

[ ] Send me an invoice

[ ] I wish to pay by cheque (*payable to the Energy Federation of New Zealand*) or

[ ] Direct credit into *Westpac Trust (030584 0034617 00)* or

[ ] MasterCard [ ] Visa

Card number: \_\_\_\_\_ Expiry: \_\_\_\_\_

Name on Card: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

### **Special accommodation rate at InterContinental Wellington:**

Classic Queen room at \$259/night (gst inclusive)

Reservations will be confirmed on a subject to availability basis and must be booked with the group code "CRL". Email [C.Gazo@crl.co.nz](mailto:C.Gazo@crl.co.nz) for reservation details.