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## NEWS



*Peter Farrell*



*James Graham*



*Colin Isaac*



*Des King*



*Marius Kloppers*



*Greg Lewin*



*Andrew Liveris*



*Stuart McGill*



*Julian Segal*



*Doug Rathbone*



*Chris Roberts*



*John Schubert*

## Influential chemical engineers

Chemical engineers are again heavily represented in this year's list of Australia's 100 most influential engineers. The list contains 19 chemical engineers, exceeded in numbers only by civil engineers.

The Top 100 list was compiled by Engineers Media and published in the June issue of *Engineers Australia*, the monthly news magazine of Engineers Australia.

The list was divided into seven categories – Industry, Consulting, Academia/Research, Associations, Public Service, Expertise, and Other. The Other category includes engineers influential in other areas such as politics.

The chemical engineers on the list are:

### Industry

- Peter Farrell, chairman and CEO of ResMed, San Diego, California, US.
- James Graham, managing director of Gresham Partners, Sydney.
- Colin Isaac, CEO of BOC South Pacific, Sydney.



*Paul Douglas*



*Merv Jones*



*Paul Greenfield*



*Tam Sridhar*



*(l-r)  
Geoff Stevens,  
Robin Batterham,  
Frank Sartor*



- Des King, managing director and CEO, Caltex Australia, Sydney.
- Marius Kloppers, group president non-ferrous materials and executive director, BHP Billiton, Melbourne.
- Greg Lewin, president, Shell Global Solutions International, The Hague, Netherlands.
- Andrew Liveris, president, CEO and chairman, the Dow Chemical Company, Michigan, US. ▶

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## NEWS

- Stuart McGill, senior vice-president, ExxonMobil Corporation, Irving, Texas, US.
- Julian Segal, managing director and CEO of Incitec Pivot, Melbourne.
- Douglas Rathbone, managing director and CEO of Nufarm, Melbourne.
- Christopher Roberts, president and CEO of Cochlear, Sydney.
- John Schubert, chair of the Commonwealth Bank of Australia, Sydney.

### Consulting:

- Paul Douglas, chief executive and managing director of Sinclair Knight Merz, Sydney.
- Merv Jones, managing director of URS Asia Pacific Pty Ltd, Sydney.

### Academia/Research

- Paul Greenfield, senior deputy vice-chancellor of the University of Queensland.
- Tamarapu Sridhar, dean of engineering

at Monash University, Melbourne

- Geoff Stevens, pro vice-chancellor and vice-president of the Academic Board at the University of Melbourne.

### Associations:

- Robin Batterham, president of the Australian Academy of Technological Sciences and Engineering, Melbourne.

### Other:

- Frank Sartor, Member for Rockdale, State government of NSW, Minister for Planning.

## Graduates win university prize

Two chemical engineering graduates were among six outstanding graduates from RMIT University who received a university prize at a ceremony at the university last month.

Nicole Lowndes, who completed a bachelor of engineering (chemical) degree with first class honours, received the Patricia Guthrie Memorial Award.

The award is presented to an outstanding female student who has completed an undergraduate degree program in the previous year. The student is assessed on academic excellence, social awareness and involvement in community affairs.

Guthrie was a news reporter and television documentary producer and director. She joined RMIT in 1975 as a lecturer in humanities and became the first woman to

be appointed head of the School, of Communication and Social Science.

Darren Pace, who holds a double bachelor of engineering (chemical engineering)/bachelor of business (business management) with first class honours, won the Institute Award (Higher Education).

The award is RMIT's highest award for student achievement.

## CSIRO fellow

David Trimm, professor at the School of Chemical Engineering and Industrial Chemistry, University of New South Wales (UNSW), and research group leader CSIRO Petroleum, is one of seven CSIRO Fellows appointed earlier this year (27 February).

At CSIRO, Trimm is leading research in syngas and hydrogen production and Fischer-Tropsch synthesis and developing the AusGas initiative. He also leads a research group at UNSW within the ARC Centre for Functional Nanomaterials.

Trimm holds a PhD from the University of Exeter. He was a lecturer at the Imperial College, London, and professor at the University of Trondheim, Norway.

The other new Fellows are: Dr Trevor Bird (CSIRO Information and Communication Technologies Centre), Dr Greg Constable (CSIRO Plant Industry), Dr Ron Ekers (Australian Telescope National Facility), Dr Dick Manchester (Australian Telescope National Facility), Dr Trevor McDougall (CSIRO Marine and Atmospheric Research), and Dr Steve Rintoul (CSIRO Marine and Atmospheric Research).

**IChem<sup>E</sup>**  
IN AUSTRALIA

### Board

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- Ming Ang (Western Australia)
- Matt Hardin (Queensland)
- Vik Kortian (New South Wales)

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ENGINEERS AUSTRALIA

College of Chemical Engineers Board

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- Elizabeth Harangozo (Council nominee)
- Ian Ackland (Sydney)
- Lindsay Wheeler (Victoria)
- Roger Kelson (Western Australia)
- Andre Jemison (Young Engineers)
- Georgina Brooke Cooper (Women in Engineering)
- Iven Mareels (Corresponding)

College contact  
Bill Chaffey

11 National Circuit,  
Barton ACT 2600  
phone 02 6270 6539

bchaffey@engineersaustralia.org.au



## NEWS

### Demonstration plant for clean coal

A 400MW demonstration powerstation based on pioneer Australian technology, developed for the clean production of electricity from brown coal, will be built in Victoria's Latrobe Valley later this year.

The plant will be built by a joint venture between Melbourne-based energy company HRL Limited and the Harbin Power Equipment Corporation – a Chinese manufacturer of power generation equipment.

The \$750 million project has been offered a grant of \$100 million under the federal government's Low Emissions Technology Demonstration Fund (LETDF). This is in addition to a \$50 million grant from the Victorian government's Energy Technology and Innovation Strategy (ETIS). The balance for the project will be a mixture of private equity and debt finance.

The technology, developed by HRL over the past 15 years, is called Integrated Drying and Gasification Combined Cycle Technology (IDGCC).



The 10MW gasification plant which was used to prove the integrated drying and gasification combined cycle technology.

# CHEMECA 2007

Academia and Industry Strengthening the Profession

Sofitel Melbourne, Victoria, Australia 23-26 September 2007

## Conference Theme

### Academia and Industry - Strengthening the Profession

The value of knowledge lies in its power to generate social benefit. Our success in this endeavour is dependent on industry's ability to apply that knowledge to fulfil the community's needs. Academia, in turn, has the responsibility to generate new knowledge to address the current deficiency. Together, academia and industry promote growth and advancement ... and hence strengthen our profession.

The Chemeca 2007 Committee invite papers and presentations on the following broad topic areas:

- Biotechnology and Nanotechnology
- Energy and the Environment
- Education and Engineering Resource Development
- Particle Technology
- Food Engineering
- Industrial Best Practice and Innovation

In the Industrial Best Practice and Innovation topic area, we are particularly keen to receive contributions from practising engineers in the following industries:

- Fuels (Clean coal, Synthetic Liquid Fuels, Biofuels)
- Oil & Gas Productions and Processing
- Chemicals
- Minerals
- Manufacturing Best Practice Systems
- Engineering Contracting & Design
- Equipment Suppliers
- Wood Chemicals, Pulp & Paper
- Food
- Pharmaceuticals
- Power Generation
- Water

## Registration online

Registration can now be done online. Go to [www.chemeca2007.com](http://www.chemeca2007.com) and then to Registration.

## Early bird registration

The early bird registration deadline is 13 July.

## Sponsorship and Exhibition Opportunities

Please email [sponsorship@icms.com.au](mailto:sponsorship@icms.com.au) or telephone +61 3 9682 0244 for information on Sponsorship and Exhibition.

## Conference Office

ICMS Pty Ltd 84 Queensbridge Street, Southbank VIC 3006 AUSTRALIA  
E: [chemeca2007@icms.com.au](mailto:chemeca2007@icms.com.au) T: + 61 3 9682 0244 F: + 61 3 9682 0288

[www.chemeca2007.com](http://www.chemeca2007.com)

### NEWS

It has been proven at 10MW scale in the Latrobe Valley over three and a half years.

It addresses the main challenge facing electricity generation from brown coal – the high emission of CO<sub>2</sub>.

Brown coal provides the fuel source for about 25% of Australia's energy supply. The Latrobe Valley brown coals support more than 6GW of generating capacity. However, because of the high moisture content of the coal, CO<sub>2</sub> emissions are above 1200kg/MWh.

To address this problem, HRL has developed the IDGCC technology for wet brown coal that closely integrates the drying and gasification processes.

CO<sub>2</sub> emissions from an IDGCC plant are estimated to be 770kg/MWh.

IDGCC is a variant of Integrated Gasification Combined Cycle (IGCC) technology. With IGCC technology the coal is first gasified and then burned in a gas turbine

to produce electricity. The heat in the gas turbine exhaust is then used to generate steam. The steam drives a steam turbine to produce additional electricity.

HRL's Terry R Johnson said the conversion efficiency of an IGCC powerplant is about 30% higher than that of a conventional steam powerplant, with correspondingly lower CO<sub>2</sub> emissions. IGCC also offers lower pollutant emissions than conventional plants, he said.

He said an efficient drying system is needed for the full benefit of the IGCC technology to be realised.

IDGCC uses the hot fuel gas produced in the gasifier to dry the incoming coal under pressure in a direct contact entrained flow dryer. This cools the gas.


Johnson said the integrated coal drying process reduces the cost of drying the coal, eliminates expensive gas cooling heat exchangers and also increases the power generated by the gas turbine.

When these advantages are combined with the use of cheap brown coal, the cost of electricity produced is highly competitive with alternative systems, he said.

HRL expects the 400MW demonstration plant will be operational by late 2009 selling power into the National electricity market.

HRL Developments CEO Gordon Carter said: "The IDGCC technology is capable of reducing CO<sub>2</sub> emissions from power generation from brown coal by 30%, compared with the current most efficient brown coal generation in the Latrobe Valley. The technology also reduces water usage by 50% compared with current Latrobe Valley powerstations."

He said the technology is also suitable for carbon capture and geosequestration, providing the scope for the development of a near-zero emission power generation from brown coal in the future.



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23rd – 24th July 2007 Perth

*For more information contact:*  
Renaë Watson, ESD Simulation Training Pty Ltd  
Tel: (08) 9367 1844  
Email: [renaë.watson@esd-simulation.com](mailto:renaë.watson@esd-simulation.com)



### Former IChemE CEO to run academy

The Australian Academy of Technological Sciences and Engineering (ATSE) has appointed Dr Trevor Evans as chief executive officer, starting 1 July 2007.

Evans, who has earned a PhD in chemical engineering from University College London, was chief executive of the Institution of Chemical Engineers (IChemE).

Under Evans' leadership, IChemE has become a leading professional qualifying body and learned society for chemical engineering and related disciplines. It has now a worldwide membership of nearly 27,000.

ATSE's president Dr Robin Batterham said: "Our Council believes Dr Evans is the ideal person to lead implementation of ATSE's strategy, which includes national and international interactions dealing with technological issues of importance to the broad Australian community."



Dr Trevor Evans

### NEWS

## Clean fuel company buys US technology



The HyRadix hydrogen generating system will be integrated with Eden's own system.

Australian clean fuel technology company Eden Energy Limited has acquired US hydrogen generating company HyRadix Inc, of Chicago.

HyRadix systems have been installed in California, China and Malaysia for use in transport, oil hydrogenation and metal annealing.

Eden said the US systems are a natural fit for integration with its own suite of hydrogen fuel technologies - in particular allowing for onsite production and dispensing of Hythane.

It said Hythane, a mixture of hydrogen and natural gas, is a high efficiency, low emission premium blend of natural gas which reduces emissions of nitrogen oxide by up to 50% compared with just natural gas.

## Joint venture for clean coal

Global giants BP and Rio Tinto have joined forces to form a new joint-owned company, Hydrogen Energy, to develop decarbonised energy projects around the world.

Decarbonised energy projects are based on the conversion of fossil fuel feedstocks such as coal, petroleum coke (a refinery byproduct) or natural gas, to hydrogen and carbon dioxide gases, with the carbon dioxide being captured and transported for permanent storage in geological formations.

Hydrogen Energy will look to use the capabilities of both parent companies.

The company's first Australian project is to commence feasibility studies for the development of a \$2 billion power generation project at Kwinana, Western Australia that would be fully integrated with carbon capture and storage technology.

The planned project aims to gasify locally-produced coal from the Collie region. The project's gasification facility and power-station would be located in Kwinana, south of Perth, alongside BP's refinery and Rio Tinto's Hismelt facility.



### The Synfuel Alternative

GTL/CTL International Advanced Technology Symposium

**The Shine Dome, Canberra, Australia  
17-19 July 2007**

*Bringing together local and international research experts to review the latest technologies in Gas/Coal-to-Liquids research and development*

#### Days one and two:

- Alternative GTL/CTL processes
- Syngas generation technologies
- Syngas to synfuel
- Gasification of coal
- CO<sub>2</sub> separation and sequestration

#### Day three:

- Industry challenges
- Technology frontiers
- Cutting edge research opportunities



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**Speakers:** *Enrique Iglesias*, University of California; *Jens Rostrup-Nielsen*, Haldor Topsoe, Denmark; *Karl F Gerdes*, Chevron, USA; *Theo Fleisch*, BP, USA; *Geoff Stevens*, University of Melbourne; *David Trimm*, CSIRO; *Lincoln Paterson*, CSIRO.

**To be confirmed:** Sasol Chevron, South Africa; USA.

For further information

Email [james.pullar@csiro.au](mailto:james.pullar@csiro.au)

Phone +61 3 9545 8386

Web [www.csiro.au/events/SynfuelAlternative](http://www.csiro.au/events/SynfuelAlternative)

[www.csiro.au](http://www.csiro.au)



## ICHEME

### Feedback on Roadmap invited

What does society need? What are the desirable outcomes and how can chemical engineers work in partnership with other stakeholders to make it happen? These are challenging questions. But IChemE believes that chemical engineers must be able to put forward rational answers if our profession is to be taken seriously by decision makers and opinion formers.

The 50th anniversary of the granting of IChemE's Royal Charter presents a timely opportunity for chemical engineers to engage in the wider public debate and highlight possible solutions. In 2006, IChemE initiated consultation among its international membership with the aim of seeking answers to the questions, identifying priorities and canvassing the views of professional chemical engineers on future strategy. The initiative also clarified IChemE's stance on a series of key issues where chemical engineering, in conjunction with other disciplines, can deliver sustainable solutions to some of the major challenges facing society.

The findings are set out in "A Roadmap for 21st Century Chemical Engineering" A PDF version is available for download at: [www.icheme.org/technicalroadmap](http://www.icheme.org/technicalroadmap). Hard copies are available on request from any of IChemE's offices.

This Roadmap also sets out a series of proposed action plans that will shape

IChemE's technical direction in the years ahead. The Institution's Subject Groups, fully supported by the IChemE staff team and its governing Council, will play a central role in implementing these plans and delivering the specified outcomes. In addition, IChemE will collaborate with kindred professional bodies and sister organisations internationally in pursuit of shared solutions to global challenges.

In order to succeed in this mission, IChemE will need to secure a broad coal-

ition of support from across the chemical, biochemical and process engineering community.

Process sector employers, regulators, educators, representatives from stakeholder groups and individual members of the Institution are invited to study the Roadmap, assess its content and offer feedback on options for future progress. While the positions and proposed action plans represent mainstream majority opinion within IChemE, they are not prescriptive and should be viewed as a basis for engagement and dialogue.

The Board of IChemE in Australia is working to develop a strategy to engage with Australian members about the Roadmap.

If you have any feedback, or input on how the Board can consider implementation plans regarding the Roadmap, email Jan Althorp at: [jalthorp@icheme.org](mailto:jalthorp@icheme.org).

### Membership officer

Tanya Graham joined IChemE in the Melbourne office at the start of June as the new membership development officer. She brings to this role experience in working with a membership organisation and marketing. She holds a bachelor of business with major studies in marketing and accounting.

Graham will be focusing on the on-campus recruitment of students and academics over the next three months as well as on retention of members and assisting those who want to get chartered. She can be contacted on phone +61 (0) 3 9642 4494 or by email: [tgraham@icheme.org](mailto:tgraham@icheme.org).

### New email addresses

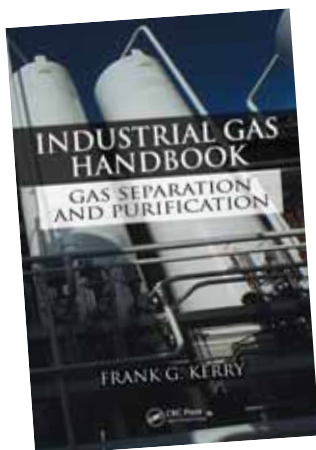
The staff of the IChemE office in Melbourne have new email addresses:

- Jan Althorp, executive director: [jalthorp@icheme.org](mailto:jalthorp@icheme.org)
- Tanya Graham, membership inquiries: [tgraham@icheme.org](mailto:tgraham@icheme.org)
- Mizette Meighan, office manager: [mmeighan@icheme.org](mailto:mmeighan@icheme.org)
- Christine Torrance, membership administration: [ctorrance@icheme.org](mailto:ctorrance@icheme.org)
- All student inquiries: [students@icheme.org.au](mailto:students@icheme.org.au)
- All membership inquiries: [members@icheme.org.au](mailto:members@icheme.org.au)

### Diary dates:

The 8th World Congress of Chemical Engineering will be held in Montreal, Canada, on 23-29 August 2009. [www.chemengcongress2009.com/](http://www.chemengcongress2009.com/)

The 9th World Congress of Chemical Engineering incorporating the 14th APCCChE Congress will be held in Jeju, Korea on 26-31 May 2013.



### Industrial Gas Handbook: Gas Separation and Purification

Frank Kerry

Usual price \$231.82 + GST - \$255

Special price for June - August \$200 + GST = \$220

The author draws on 60 years experience to provide detailed discussion and up-to-date approaches to process cycles for cryogenic separation of air, adsorption processes for front-end air purification, and related process control and instrumentation. He covers topics such as chronological development, industrial applications, air separation technologies, noble gases, front-end purification systems, insulation, non-cryogenic separation, safety, cleaning for oxygen systems, economics, and product liquefaction, storage and transportation. There is guidance on how to choose the correct cleaning procedure to fit existing conditions.

2006 9780849390050 521pp

This book is available from EA Books.  
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## APCChE

### Activities in Asia-Pacific region

by Russell Scott

The meeting of the Board of the Asia Pacific Confederation of Chemical Engineers (APCChE), was held in Beijing on 13 May.

I attended that meeting as the recently elected Australian and New Zealand Federation of Chemical Engineers representative (representing IChemE in Australia, Engineers Australia and RACI). It was my first APCChE Board Meeting and it was both an enjoyable and an enlightening experience.

At the meeting, the Board received an update from Professor Philippe Tanguy, president of the 8th World Congress of Chemical Engineering to be held in Montreal, Canada on 23-27 August 2009 and an update from Professor Qian Xuhong, president of the 12th APCChE Congress to be held in Dalian, China on 4-6 August 2008. Preparations for both conferences are well in hand and the conferences promise to be exciting events in the calendar for chemical engineers around the world.

The balance of the meeting was devoted to discussion on the

promotion of chemical engineering within the region and the support that APCChE can provide to ensure participation from all member countries at future congresses.

In my role as the Australian representative, I am following Professor Rolf Prince, who was a founding member of the APCChE Board and has made a huge contribution to the ongoing success of APCChE during his many years as the Australian representative. In recognition of his most valuable contribution, the Board has invited him to stay on as an honorary member.

*Russell Scott is the deputy chair of the IChemE in Australia.*

### Brief on APCChE

The Asia Pacific Confederation of Chemical Engineers (APCChE) was founded in 1975 to provide a focus for various non-profit societies, associations and institutions working in chemical engineering in the Asia Pacific region. APCChE comprises member societies in 13 countries and regions – the People's Republic of China, Korea, Japan, New Zealand, Thailand, India, Philippines, Indonesia, Singapore, Australia, Malaysia, Taiwan and Hong Kong. The American Institute of Chemical Engineers and the Institution of Chemical Engineers are corresponding members. Engineers Australia provides secretariat support to the Board.

The objectives of APCChE are:

- to establish and maintain relations between organisations working in the field of chemical engineering, and to promote human welfare through progress of chemical engineering
- to organise international congresses of chemical engineering in cooperation with other confederations
- to promote the exchange of information and sharing of experience connected with chemical engineering
- to promote the interchange of chemical engineers in the countries belonging to the confederation
- to promote the development and improvement of chemical engineering education in member countries.

#### Diary dates:

The 12th APCChE Congress will be held in Dalian, China, on 4-6 August 2008 (organised by The Chemical Industry and Engineering Society of China).

The 13th APCChE Congress will be held in Taiwan. The proposed date is 20-21 October 2010 (hosted by the Institute of Chemical Engineers, Chinese Taipei).

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## CONFERENCES SEMINARS EXHIBITIONS

### AUSTRALIA

#### Chemical Engineering

Conference: **21st international congress for heterocyclic chemistry** (6 days) Sydney 15 Jul. Inquiries: 02 9280 0577, fax 02 9280 0533, email [ichc21@pharmaevents.com.au](mailto:ichc21@pharmaevents.com.au), web [www.ichc21.com.au](http://www.ichc21.com.au)

Conference: **30th international conference on solution chemistry** (5 days) Perth 16 Jul. Inquiries: Prof Glenn Hefter, Murdoch University 08 9360 2226, fax 08 9360 1711, email [g.hefter@murdoch.edu.au](mailto:g.hefter@murdoch.edu.au), web

Conference: **Chemeca 2007** (4 days) Melbourne 23 Sep. Inquiries: ICMS 03 9682 0244, fax 03 9682 0288, email [chemeca2007@icms.com.au](mailto:chemeca2007@icms.com.au), web [www.chemeca2007.com](http://www.chemeca2007.com)

Conference: **12th APCChE congress** (3 days) Dalian, China 4 August, 2008. Inquiries: web [www.apcche.org](http://www.apcche.org)

Conference: **8th world congress of chemical engineering** (7 days) Montreal, Canada 23 Aug, 2009. Inquiries: web [www.chemengcongress2009.com](http://www.chemengcongress2009.com)

Conference: **13th APCChE congress** (2 days) Taiwan 20 Oct, 2010. Inquiries: web [www.apcche.org](http://www.apcche.org)

Conference: **9th world congress of chemical engineering incorporating the 14th APCChE congress** (6 days) Jeju, South Korea 26 May, 2013. Inquiries: web [www.apcche.org](http://www.apcche.org)

#### Energy

Conference: **17th world hydrogen energy conference** (5 days) Brisbane 15 Jun, 2008. Inquiries: ICMS 07 3307 4000, fax 07 3844 0909, email [whec2008@icms.com.au](mailto:whec2008@icms.com.au), web [www.whec2008.com](http://www.whec2008.com)

#### Oil & gas

Courses: **Design & operation of floating production storage & offloading** (3 days) Perth 16 Jul; **Subsea systems** (2 days) Perth 19 Jul; **Floating LNG – production storage offloading & regasification** (2 days) Perth 23 Jul. Inquiries: Julie Scholey, ESD Simulations 08 9367 1844, fax 08 9367 3886, email [julie.scholey@esd-simulation.com](mailto:julie.scholey@esd-simulation.com), web [www.esd-simulation.com](http://www.esd-simulation.com)

### OVERSEAS

#### Chemical Engineering

Conference: **21st international congress on glass** (6 days) Strasbourg, France 1 Jul. Inquiries: Mylène Boscus, Université Montpellier II +33 4 6760 9255, fax +33 4 6704 5405, email [icg2007@wanadoo.fr](mailto:icg2007@wanadoo.fr), web [www.icg2007.org](http://www.icg2007.org)

Conference: **16th Russian international conference on chemical thermodynamics** (6 days) Suzdal, Russia 1 Jul. Inquiries: email [rcct2007@isc-ras.ru](mailto:rcct2007@isc-ras.ru), web [www.isc-ras.ru/RCCT2007](http://www.isc-ras.ru/RCCT2007)

Course: **Advances in emulsion polymerisation & latex technology** (5 days) Davos, Switzerland 6 Aug. Inquiries: Dr Joseph Schork, Department of Chemical & Biomolecular Engineering, University of Maryland, email [davoscourse@gmail.com](mailto:davoscourse@gmail.com), web [www.davoscourse.com](http://www.davoscourse.com)

Conference: **12th Asian chemical congress** (3 days) Kuala Lumpur, Malaysia 23 Aug. Inquiries: +603 7728 3272, fax +603 7728 9909, email [ikmmy@pc.jaring.my](mailto:ikmmy@pc.jaring.my), web [www.ikm.org.my/DecACC.htm](http://www.ikm.org.my/DecACC.htm)

Conference: **11th international conference on chemistry & the environment** (4 days) Torun, Poland 9 Sep. Inquiries: email , web [www.50zjazd.ptchem.pl/en/index.php](http://www.50zjazd.ptchem.pl/en/index.php)

Conference: **International soft matter conference 2007** (5 days) Aachen, Germany 1 Oct. Inquiries: Forschungszentrum Jülich +49 2461 613008, fax +49 2461 618108, email [ismc@fz-juelich.de](mailto:ismc@fz-juelich.de), web [www.fz-juelich.de/iff/ismc2007](http://www.fz-juelich.de/iff/ismc2007)

Conference: **9th international workshop on polymer reaction engineering** (3 days) Hamburg, Germany 8 Oct. Inquiries: Dechema e.V., web [events.dechema.de/events.html](http://events.dechema.de/events.html)

#### Minerals processing

Conference: **Processing of nickel ores & concentrates 07** (2 days) Cape Town, South Africa 12 Nov. Inquiries: email [amanda@min-eng.com](mailto:amanda@min-eng.com), web [www.min-eng.com/nickel07/index.html](http://www.min-eng.com/nickel07/index.html)

Conference: **Solid-liquid separation 07** (2 days) Cape Town, South Africa 14 Nov. Inquiries: email [amanda@min-eng.com](mailto:amanda@min-eng.com), web [www.min-eng.com/sls07/index.html](http://www.min-eng.com/sls07/index.html)

Conference: **Magnetic & electrical separation 08** (1 day) Falmouth, UK 5 May, 2008. Inquiries: Minerals Engineering International, email [amanda@min-eng.com](mailto:amanda@min-eng.com), web [www.min-eng.com/magnetic08/index.html](http://www.min-eng.com/magnetic08/index.html)

Conference: **Gravity concentration 08** (2 days) Falmouth, UK 6 May, 2008. Inquiries: email [amanda@min-eng.com](mailto:amanda@min-eng.com), web [www.min-eng.com/gravityconcentration08/index.html](http://www.min-eng.com/gravityconcentration08/index.html)

Conference: **Hydrocyclones 08** (2 days) Falmouth, UK 8 May, 2008. Inquiries: email [amanda@min-eng.com](mailto:amanda@min-eng.com), web [www.min-eng.com/hydrocyclones08/index.html](http://www.min-eng.com/hydrocyclones08/index.html)

Conference: **Comminution 08** (5 days) Falmouth, UK 16 Jun, 2008. Inquiries: email [amanda@min-eng.com](mailto:amanda@min-eng.com), web [www.min-eng.com/comminution08/index.html](http://www.min-eng.com/comminution08/index.html)

Conference: **24th international mineral processing conference 2008** (5 days) Beijing, China 24 Sep, 2008. Inquiries: email [impc2008@impc2008.org](mailto:impc2008@impc2008.org), web [www.impc2008.org](http://www.impc2008.org)

## Process Technologist

### Mineral Resources

- An important advisory and influencing role
- Strong chemistry background
- International travel

Our client is an Australian resources company investing in, developing and operating resource-related projects with a primary focus on coal. The company also owns technology and assets capable of producing ultra high purity coal-based fuel which can be used with more greenhouse friendly power generation technologies.

We are looking for an experienced and very capable technical person to join the company in a leading advisory capacity as the company proceeds to full commercial viability of the technology. Ideally you will have:

- A very strong chemistry background with process experience, possibly chemical engineer qualifications
- At least 4 - 5 years post grad experience
- Thorough knowledge of inorganic and organic minerals chemistry
- Strong presentation and persuasive skills
- Commercial acumen
- A genuine interest in coal technology

This is an exciting new role which will play an important part in the company's growth. As major customers are located overseas, some international travel will be required to visit energy producers, large coal mining companies and equipment manufacturers.

If you believe you meet the requirements we're looking for then apply in confidence to **Peter Ambrose** at Ards Consulting Group on **02 9362 9222**; email applications to [jobsnsw@ardus.com.au](mailto:jobsnsw@ardus.com.au) quoting ref# 2/577.

[www.ardus.com](http://www.ardus.com)

**ARDUS**

## NEW PRODUCTS

### Gas cleaners

Australian pollution control company Ozone Manufacturing has launched a range of cleaners of gases, vapours and odours, such as those associated with printing or chemical and plastics manufacturing.

Ozone gas cleaners capture and filter gases by absorption, also known as dry scrubbing. This is achieved through the use of activated granular media. Each granule has millions of pores through which the gas passes, creating an active surface area of 1000m<sup>2</sup>/g.

Six types of media are available, ranging from a standard activated carbon to chemically impregnated alumina, allowing the cleaner to be tailored to suit a particular gas.

The filter cartridge of the company's cleaners holds between 4kg to 54kg of media, depending on the cleaner model. Electrically charged pre-filters prevent any airborne particulates from blocking the granular media and prematurely reducing filter life. The filter cartridge is fully enclosed within the cleaner case.

The range of cleaners includes: small, portable units; mobile units; and large, fixed units for multi-inlet high flow systems. Cleaners can be either used as recirculators to clean ambient air within a workshop, or with an inlet such as a flexi arm or enclosure.

The extraction drive motor is located out of the filtered airstream for increased safety. A flow rate control damper is fitted, and discharge ducting can be added if necessary.

*More info? Qikreply 18*

### Mould level motor

The Ronan X96 ML mould level system, available from AMS Instrumentation & Calibration, gives update time of 10ms, and fast "Cast start" capability.

The company said the user can now obtain high-speed sampling of the level of steel in a mould, giving better control and enabling the user to increase throughput and improve quality.

*More info? Qikreply 19*



*The Gould Pump agitates paper pulp to assist flow.*

### Pump for paper pulp

Goulds Pumps, one of the fluid brands of ITT Corporation, has announced the Model 3500XD, a medium consistency paper pulp pump with X-Ducer technology.

The X-Ducer agitates paper pulp to assist flow into the pump inlet while separating air from the water and fibres. Ac-

ording to the company pump efficiency is increased by up to 5 to 8 points with the X-Ducer, allowing smaller motor sizes and lower operating costs.

The XD design allows pumping of medium consistency pulp up to 10% without a vacuum pump, the company said.

*More info? Qikreply 17*

### Keeping the airflow to turbines clear

The Donaldson TTD Huff 'n' Puff system has been designed to help turbines and generators operate in all conditions with minimum maintenance requirements.

A reverse pulse of air, back through its vertically mounted filters, knocks off accumulated dirt, dust and larger particulate matter before these can penetrate the filter core. Filters therefore last longer, and the system requires little maintenance because it effectively self-cleans, thus avoiding problems such as premature blade fouling.

Depending on airflow requirements, filter cartridges, mounted vertically, are available

with one level of filter elements for airflow up to 2237m<sup>3</sup>/min, or with several filter levels to accommodate larger airflow.

As with all Donaldson filtration systems, the TTD filter cartridges can be provided with a range of media types: synthetic fibres that are sturdy, durable, and moisture resistant; Duratek, a synthetic and natural fibre blend (lower pressure airflows) with superior dust holding capacity, and moisture resistance; and Cellulose, natural fibres that stop a range of particulate sizes.

Where very fine dust (smaller than 5 microns) is a problem, Donaldson Spider-Web can be a solution: where a layer of fine-fibre technology catches such fine particulate before it reaches the media substrate.

*More info? Qikreply 24*

## NEW PRODUCTS

### Vortex flowmeters

Endress+Hauser has launched its Prowirl R Style and S Style vortex flowmeters that include a reduction by one or even two line sizes inside a single device - with the same flange-to-flange length as a standard meter.

The company said with an integrated reduction of line size in a single, simple



The new flowmeters offer increased measuring capabilities.

device, Proline Prowirl 72F and 73F eliminate the need for reducers and expanders.

Their increased measuring capabilities in the low flow range are accompanied by significant time and cost savings, the company said.

Prowirl 72FR and 73FR reduce the line size by one size, ie DN50 to DN40, and Prowirl 72FS and 73FS reduce the line size by two sizes, DN50 to DN26, for example.

The flowmeters can withstand high levels of vibration - up to 1g in all axes. Prowirl 73 can withstand temperature shocks up to 150K/s. It also has a high resistance to clogging fluids and resilience to the water hammer problems associated with steam applications, the company said.

*More info? Qikreply 20*

### Welder for thinner sheets

BOC has launched a new generation of MagMATE Pro welding solutions that make inverter technology accessible to light users.

The range includes three models: The MagMATE Pro 180, suitable for those working with thin gauge sheet metal including airconditioning, smash repairs and panel beaters; the MagMATE Pro 200, for continuous welding applications; and the MagMATE Pro 250, for light to medium production.

*More info? Qikreply 21*

### Flow sensor

The ST series of mass flowmeters from Fluid Components International are designed with an innovative thermal dispersion mass flow sensing element. They are designed for rugged environments typically found in the oil & gas, chemical, electric power, pulp & paper, and wastewater treatment industries.

Their nonclogging flow sensing element provides direct mass flow output and features built-in temperature compensation.

The ST98 operates over a flow range

from 0.21 to 172 NMPS in air with a standard flow accuracy of +1% of reading, +0.5% of full scale.

The ST75 is a direct mass flowmeter for air or gas measurement in smaller line sizes from 6mm to 51mm.

The ST50 is an insertion-style mass flowmeter for air, compressed air or nitrogen measurements.

*More info? Qikreply 22*

### Motors for washdown

Baldor Electric Company has added IEC-frame models to its range of all-stainless-steel washdown-duty AC motors.

Designed for corrosion resistance, the new SSE motors are particularly suitable for the food and dairy product processing, and pharmaceutical and brewing industries.

The motors operate from standard 50Hz, three-phase supplies and are available in IEC D80, 90, 100 and 120 frame sizes, spanning a power range from 0.37kW to 4kW - with higher power versions following. Motors with ratings up to 0.75kW employ TENV (totally enclosed, non-ventilated) housings, while higher output models use TEFC (totally enclosed, fan-cooled) enclosures.

*More info? Qikreply 23*

**For more information on any of these products, send an email to [kharrison@engineersmedia.com.au](mailto:kharrison@engineersmedia.com.au) with the subject headline "CEA Qikreply".**

**Your contact details and the Qikreply number of the product should be included in the body of the email.**