



Programme

Monday, 21 February

Registration	15:00 - 20:00
<i>Sponsored by Global Toyo</i>	
Exhibition	15:00 - 20:00
Welcome Reception	18:30 - 20:00
<i>sponsored by Schmidt+Clemens Group</i>	

Tuesday, 22 February

Registration	08:30 - 18:15
<i>Sponsored by Global Toyo</i>	
Exhibition	08:30 - 18:15
Session 1	09:00 - 11:05
Session 2	11:40 - 13:15
Lunch	13:15 - 14:35
<i>sponsored by Johnson Matthey and Uhde</i>	
Session 3	14:35 - 17:15
Drink Reception	17:15 - 18:15
<i>Co-sponsored by Quest & SBN</i>	

Wednesday, 23 February

Registration	08:30 - 17:00
<i>Sponsored by Global Toyo</i>	
Exhibition	08:30 - 17:00
STREAM A	
Session 4	09:00 - 12:05
Lunch	12:05 - 14:00
<i>Sponsored by Casale and Süd-Chemie</i>	
Session 6	14:00 - 17:25
STREAM B	
Session 5	09:00 - 12:05
Lunch	12:05 - 13:35
<i>Sponsored by Casale and Süd-Chemie</i>	
Session 7	13:30 - 14:50

Thursday, 24 February

Registration	08:30 - 15:35
<i>Sponsored by Global Toyo</i>	
Exhibition	08:30 - 15:35
Session 8	09:30 - 12:15
Lunch	12:15 - 13:35
Session 9	13:35 - 15:35

This conference is an open forum and the content of papers and presentations given by guest authors and speakers from companies other than CRU and its subsidiaries and any opinions expressed therein are the responsibility of the authors and speakers concerned and are not endorsed by British Sulphur Events. British Sulphur Events disclaims all liability for any tort or damage arising out of any statement or opinion made in any paper or presentation by any guest author or speaker.

Organised by

CRU | EVENTS

A DIVISION OF CRU GROUP

Sponsors

Stamicarbon
pure knowledge

SC Schmidt + Clemens Group



Johnson Matthey
Catalysts

Uhde
ThyssenKrupp

Uhde GmbH, UFT, UHPT

Global Toyo

SANDVIK

CasaleGroup
THE INNOVATIVE TOUCH

SÜD-CHEMIE
CREATING PERFORMANCE TECHNOLOGY

SBN
Schöller-Elektrochemie

Lurgi

Official Publications

FERTILIZER WEEK

**nitrogen
+syngas**
Published by BCInsight

Monday 21 February

- 15:00 - 20.00 **Exhibition Opens**
15:00 - 20.00 **Registration sponsored by**



- 18:30 – 20:00 **Welcome Reception sponsored by**



Tuesday 22 February

- 09:00 **Welcome**
A. Prince, Research Manager-Fertilizer Team, CRU Analysis, United Kingdom

Session 1: Market influences

SESSION CHAIRMAN

- 09:05 **Natural Gas Outlook**
M. Fulwood, (Nexant Ltd)
- 09:35 **Nitrogen Overview**
A. Prince, Research Manager-Fertilizer Team, CRU Analysis, United Kingdom
- 10:05 **Global Methanol Market outlook**
J.Jordan, *President* (Jim Jordan & Associates)
- 10:35 **Indian Fertilizer Industry: Where are we? Where are we going to?"**
Dr MP Sukumaran Nair, *Special Secretary to Chief Minister* (Government of Kerala, India)
- 11:05 **Refreshment and Networking Break sponsored by**



Session 2: Methanol technology – Ready for the 10,000-t/d plant

- 11:40 **Methanol technology – The bespoke approach**
Leigh Taylor (Johnson Matthey Catalysts)
- 12:00 **Realizing the 10,000-t/d single-stream methanol plant (provisional title)**
P. di Zanno, *Director Chemical* (Lurgi GmbH)
- 12:20 **The global methanol market in transition – Challenges in catalyst technology**
N. Ringer *Group Product Manager Methanol* (Süd-Chemie AG)
- 12:40 **MK 151 Fence – A new catalyst for more cost-effective methanol plants**
K. Svennerberg, *Product Manager, Methanol and DME catalysts and Carsten Sejrbo Nielsen, Sales Manager, Ammonia and Petrochemical Technology Sales*, (Haldor Topsøe A/S)
- 13:00 **Questions & Answers**

Tuesday 22 February

13:15 Lunch sponsored by



Session 3: Ammonia operations and technology

14:35 **Flawless project development**
J. Camps, *General Manager - Synthesis Gas* (Jacobs Engineering Consultants)

14:55 **tbc**
tbc

15:15 **Qafco's experience in the application of DeNOx technologies on combustion gases**
U. Desai, *Plant Engineer (Ammonia 3)* (Qatar Fertilizer Co.)

15:35 **Questions & Answers**

15:50 **Refreshment and Networking Break sponsored by**



16:20 **Low-energy consumption ammonia production – Baseline energy consumption; options for energy optimization**
K. Noelker, *Head of Process Department* (Uhde GmbH)

16:40 **Casale coal-based ammonia and methanol synthesis loops**
P. Moreo, *Syngas Process Group Leader* (Ammonia Casale SA)

17:00 **Question and Answer**

17:15 **Drink Reception sponsored by**



Wednesday 23 February –Stream A

Session 4: Ammonia revamps and catalysts

09:05 **KRES-ES™ revamp makes more ammonia from less natural gas by energy substitution**
S. Singh *Senior Process Manager, Ammonia & Syngas Technology* (KBR, Inc.)

09:25 **Rejuvenating a 27-year-old ammonia plant**
S. Iftikhar Ahmad Kirmani, *DM-Engineering (Process)*, (Fauji Fertilizer Co.)

09:45 **Revamp of JSC Cherkassy Azot's ammonia plant for energy savings and capacity increase**
P. Han, *Technology Supervisor* (Haldor Topsøe A/S); V. Sklyarov (JSC Cherkassy Azot)

10:05 **Question and Answer**

10:20 **Refreshment and Networking Break**



Wednesday 23 February –Stream A

- 10:50** **The science of catalysis: The chemistry within your catalysts**
P. Broadhurst *Technical Manager - Syngas Products* (Johnson Matthey Catalysts)
- 11:10** **Safe operation of HT shift catalyst – Best practices in case of WHB leaks and catastrophic failures**
T. Archer, *Director - Sales and Marketing* (Süd-Chemie, Inc.)
- 11:30** **Current trends in ammonia synthesis catalysts**
Y. Kamal, *Key Account Manager - Middle East & Africa* (Johnson Matthey Catalysts) and M. Abdel Aaty (MOPCO)
- 11:50** **Question and Answer**
- 12:05** **LUNCH sponsored by**



CasaleGroup
THE INNOVATIVE TOUCH

Session 6: Nitric acid and nitrates

- 14:05** **Abatement of N₂O from nitric acid plants in the context of emissions trading – A continuing concern for the fertilizer industry**
M. von Welsen-Zerweck, *Managing Director* (N-Serve Environmental Services GmbH)
- 14:25** **The development and applications of tertiary alloys for ammonia oxidation**
C Brown, *Product Specialist* (Johnson Matthey Noble Metals)
- 14:45** **Heraeus experience and developments for N₂O emission reduction**
T. Keller, *Senior Manager Application Technology, Nitro Technologies* (W. C. Heraeus GmbH)
- 15:05** **Question and Answers**
- 15:25** **Refreshment and Networking Break**



- 15:50** **MKSprecise: A singular catalyst solution and the cost drivers behind it**
K. Burchard, *Group Account Manager, Performance Catalysts* (Umicore)
- 16:10** **Development of integrated ammonium nitrate complexes**
K. Ruthardt, *Head of Process Department* (Uhde GmbH)
- 16:30** **Prozap's experience in N₂O/NO_x control and a re-invented nitrogen fertilizer: liquid calcium nitrate**
M. Skorupka, *President & CEO* (PROZAP Engineering Ltd)
- 16:50** **Start-up of the world's biggest UAN plant**
R. Schallert, *Head of Process Group Nitric Acid* (Uhde GmbH)
- 17:10** **Question and Answers**
- 17:30** **End of session**

09:00 Session 5: Nitrogen fertilizer finishing procedures

- 09:05 Jumbo single-line urea granulation plants – Ready for implementation**
M. Potthoff, *Director Licensing and Sales* (Uhde Fertilizer Technology bv)
- 09:25 Rotoform pastillation in the fertilizer finishing process**
K. Swamy, *Global Product Manager, Fertilizers* (Sandvik Process Systems)
- 09:45 Technical upgrading of a low-rise prilling tower. Case study of JSC Salavatnefteorgsintez**
N. Cheblakov, *Senior Research Engineer* (NIIK – Urea Research and Design Institute)
- 10:05 Question and Answers**
- 10:20 Refreshment and Networking Break**



- 10:50 Benefits of the new Coperion Bulk-X-Change® for cooling fertilizers**
H. Nigsch, *Sales Manager Thermal Processes* (Coperion GmbH)
- 11:10 The influence of screening processes in fertilizer production**
O. Pickard (Rhewum GmbH)
- 11:30 Vortex granulation: the new route to high-quality solid nitrogen fertilizers**
F. Zardi (Urea Casale SA)
- 11:50 Questions and Answers**
- 12:05 LUNCH sponsored by**



13:00 Session 7: Urea operations and technology – I

- 13:35 Saipem's breakthrough in large-scale ammonia-urea plants**
A. Gianazza (Saipem)
- 13:55 Sirius@Max: A new approach for urea plant optimization using advanced process control**
L. Dieltjens (Stamicarbon); C Moons (IPCOS)
- 14:15 Toyo's approach to environmental protection in urea plants**
G. Nishikawa (Toyo Engineering Corporation)
- 14:35 Questions and Answers**
- 14:50 End of session**

09:00 Session 8: Synthesis gas generation and other products

- 09:35 Nano-technology for substantial material improvement: Centralloy® G 4582 Micro R for steam reformers**
D. Jakobi, *Head of Corporate Research & Development Services* (Schmidt + Clemens)
- 09:55 Enhanced steam reformer tube inspection and remaining life assessment methodologies**
R. Roberts, *V.P. & General Manager* (Quest Integrity Group)
- 10:15 Improving metal dusting resistance in the synthesis gas environment with the new Sumitomo 696 Ni-based alloy**
S. Kurihara (Sumitomo Metal Industry Ltd)
- 10:35 Question and Answers**
- 10:50 Refreshment and Networking Break**



- 11:20 Improved efficiency for hydrogen plants**
T. von Trotha (Uhde GmbH)
- 11:40 Accurately monitoring the temperature of catalyst beds with CatTracker®**
E. Heidt (Daily Thermetrics)
- 12:00 Question and Answers**
- 12:10 Lunch**

13:30 Session 9: Urea operations and technology (2)

- 13:35 Economics of third-generation alloy protection**
J. Visser (Stamicarbon)
- 13:55 Revamping of a total recycle urea solution plant to increase capacity and energy-efficiency**
P. Orphanides (Orphanco)
- 14:15 An improved technique for lining high-pressure urea strippers with reactive metals**
P. Mantovani (Officine Luigi Resta SpA)
- 14:35 Urea and nitric acid plants: Improving shut-down, revamping, debottlenecking and refurbishment**
J-M Sluyters (Gemaco)
- 14:55 Using DP28™ to reduce passivation in urea plants**
M. Takahashi (Toyo Engineering Corporation)
- 15:15 Question and Answers**
- 15:35 Closing remarks**