



**SAIMM**  
THE SOUTHERN AFRICAN INSTITUTE  
OF MINING AND METALLURGY

**Outotec**

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**SAIMM**  
THE SOUTHERN AFRICAN INSTITUTE  
OF MINING AND METALLURGY  
WESTERN CAPE BRANCH

## PRACTICAL GEOMETALLURGY WORKSHOP

*An interactive workshop on ore to metals optimization  
that demonstrates the application of geometallurgy*

**6 August 2018**

Lagoon Beach Conference Venue, Cape Town, South Africa

The optimization of the minerals value chain is a holistic approach towards more economically and environmentally sustainable operations. The concept is based on value creation over the whole mining and mineral processing chain.

Ore to metals optimization combines the use of mineralogical data, geometallurgical modelling and powerful advanced process simulation from minerals to final payable metal. The optimization uses detailed geometallurgical characterization of the ore domains, and concentrator plant models integrated as a digital plant that simulates the kinetic behavior of mineral particles in beneficiation processes for each ore types and plant operating scenarios.

This interactive workshop provides insight into the advanced use of Outotec's HSC Chemistry software modules with some hands-on practical case examples. These exercises include the use of the HSC Chemistry modules and mineral database that carry out functions such as; element-to-mineral conversion, and ore type-based concentrator simulations integrated with Net Smelter Return and Operating Cost calculations.

This workshop is limited to 30 participants, on a first come first serve basis.

### WORKSHOP PRESENTERS



#### Dr Jussi Liipo

Chief Mineralogist, MAusIMM (CP), Outotec Research Center, Finland

Jussi is an experienced Process Mineralogist with a demonstrated record of over 20 years in the mining and metals industry. Jussi holds

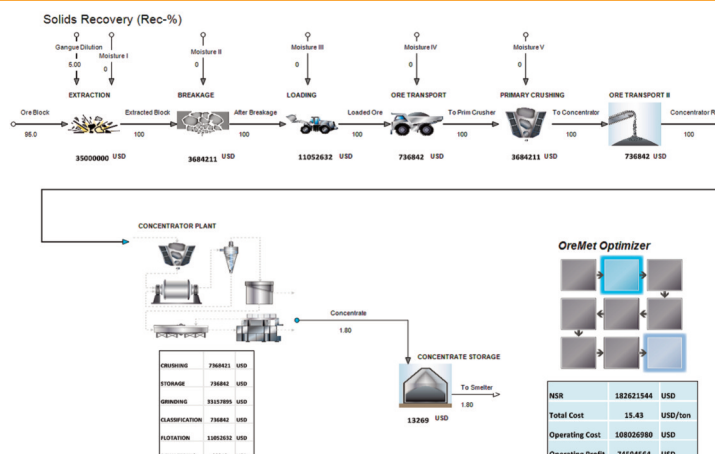
Ph.D. degree from the University of Oulu, Finland.



#### Dr Antti Remes

Technology Advisor – Process Modeling and Simulation, Outotec, Finland

Antti has been working with mineral processing applications for more than 15 years. His special profession is flotation modelling and plant design. He is one of the scientific advisors and developers behind the HSC Sim process modeling software. Antti holds Ph.D. degree from the Helsinki University of Technology, Finland.



**For further information contact:** Head of Conferencing, Camielah Jardine, SAIMM, P O Box 61127, Marshalltown 2107

Tel: +27 11 834-1273/7, Fax: +27 11 833-8156 or +27 11 838-5923, E-mail: [camielah@saimm.co.za](mailto:camielah@saimm.co.za), Website: <http://www.saimm.co.za>



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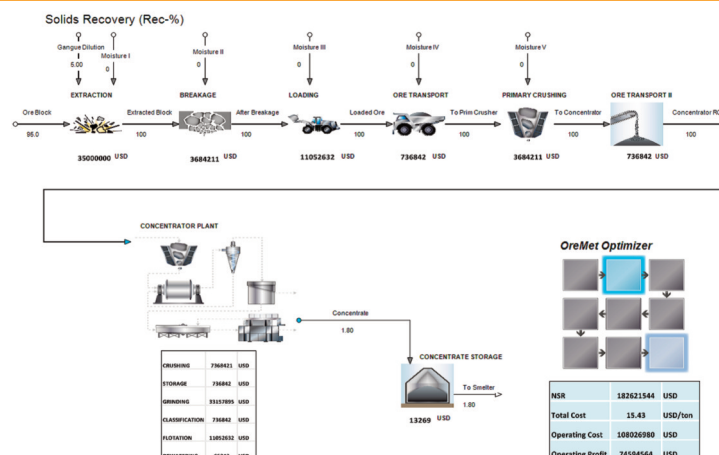
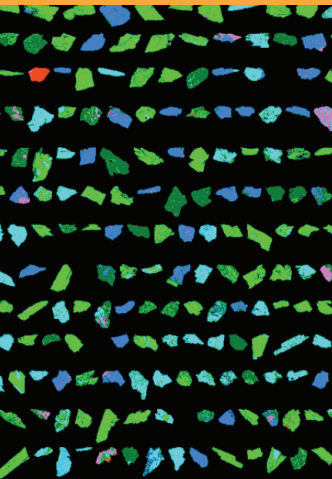
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### PRELIMINARY PROGRAMME

- 08:30–09:00 **Coffee and registration**
- 09:00–10:00 **Welcome and introduction**  
**Information required for Geometallurgy**  
**Mineralogical inputs**
- 10:00–10:30 **Coffee break**
- 10:30–12:00 **Practical (1): Element to mineral conversion**
- 12:00–13:00 **Lunch**
- 13:00–14:30 **Mineral processing / Metallurgical inputs**  
**Practical (2): Creating HSC Sim mineral processing flowsheet model**  
**Copper-Gold mine case description**  
**Practical (3): Introducing the case data to HSC Sim and OreMetOptimizer**
- 14:30–15:00 **Coffee break**
- 15:00–17:00 **Optimizing the value chain from ore to payable product**  
**Practical (4): HSC simulation based optimization**
- 17:00: **Workshop close**



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## REGISTRATION FORM

### PERSONAL DETAILS

Title ..... First Name ..... Other Initials ..... Surname/Family Name .....

Preferred Name (for use on name badge) .....

Company ..... Designation .....

Company VAT Registration (Compulsory—SA companies) ..... Order No. ....

Invoice Address .....

..... Code ..... Country .....

Tel/Cell: ..... Fax: ..... E-mail: .....

SAIMM Membership No. ....

Would you like to become a member of SAIMM?  
Please indicate by (✓ tick) ☐

<b>Registration fee:</b>	<b>Delegates</b>	<b>R3 000</b>	<input type="checkbox"/>
	<b>Students</b>	<b>R1 500</b>	<input type="checkbox"/>

### Cancellation and transfer policy:

Delegates unable to attend the event may send a substitute delegate in their place. Please send written details of substitution. Written cancellations must be received more than 10 working days prior to the date of the event and will be liable for 50% of the event fee. Failure to cancel, or cancellation received 10 working days or less prior to the event date, will result in liability for the full event fee.

**Cheques**—Please find enclosed a cheque/money order (in SA Rands) payable to SAIMM or

**EFT** (Electronic Fund Transfer) – Please attach proof of payment

**Credit Cards**—Please debit (✓ tick) my:

Visa ☐ Mastercard ☐ American Express ☐ Diners Club ☐

Card No.

Expiry Date: ..... Last 3 digits on back of card: .....

Signature: .....

Please print name of card holder:

.....

### Payment:

Full payment is due on application for registration. Registration will be confirmed ONLY after payment is received. **PROOF OF PAYMENT** with your invoice number reflected must be sent via fax or e-mail to the Conference Co-ordinator. Delegates who have not paid will not be permitted to attend the conference.

### Our banking details are:

Bank: Standard Bank  
Branch Code: 000205  
Account Type: Cheque Account

Branch: Johannesburg  
Account No: 000402974  
Swift No. SBZAZAJJ

*Please complete and return to:*

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E-mail: camielah@saimm.co.za (Head of Conferencing) or anna@saimm.co.za (Registration)