



IMPC 2018

May 27–30

Program

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The Technical Association of
The Norwegian Pulp and Paper Industry (PTF)



**Scandic Nidelven Hotel
Trondheim, Norway**



Sunday, May 27

- 19.00–21.00 **Welcome Reception**
Hotel Scandic Nidelven, Trondheim, Conference Department

Day 1, Monday, May 28

- 09.00–10.00 **Opening session – Conference Chair Philip A. Reme & Keynote speech – Kjell-Arve Kure**
- 10.00–10.30 **Coffee Break & Networking**
- 10.00–12.00 Accompanying persons program: Guided walk in the city with lunch**
- 10.30–12.00 **Session 1: HC/LC Refining, Chair: Lars Johansson, RISE PFI**
- 10.30–11.00 **Increasing fiber compression in low consistency refining utilizing a unique refiner plate filling concept –**
Ron Musselman
- 11.00–11.30 **LC refining combined with screen fractionation – Reducing system complexity for mechanical pulping –**
Christer Sandberg, Jan-Erik Berg and Per Engstrand
- 11.30–12.00 **Theoretical study of systems composed of low consistency refining and pressure screening –**
Jorge Enrique Rubiano Berna, Christer Sandberg, Mark Martinez and James A. Olson
- 12.00–13.00 **Lunch**
- 13.00–14.30 **Session 2: Process I, Chair: Per Engstrand, Mid Sweden University**
- 13.00–13.30 **Soft sensor-based consistency control of twin refiners at Hylte Mill –**
Karin Eriksson and Stefan Snygg
- 13.30–14.00 **Improving mechanical pulping business potential by operating single layer grinding surfaces on electricity market –**
Tomas Björkqvist, Timo Korpela, Yrjö Majanne, Matti Vilkkö and Olli Tuovinen
- 14.00–14.30 **Catalytic improvement of the strength properties of chemimechanical pulp fibres by eco-friendly catalysis –**
Rana Alimohammadzadeh, Christina Dahlström and Armando Cordova
- 14.30–15.00 **Coffee Break & Networking**
- 15.00–16.30 **Session 3: Process II, Chair: Ron Musselman, Musselman Process Solutions**
- 15.00–15.30 **Industrial demand side management in mechanical pulping process –**
Panu Karhu, Juha Mäntysaaria and Toni Kymäläinen
- 15.30–16.00 **Long term experience with energy saving mechanical pulping technology –**
Olli Tuovinen
- 16.00–16.30 **Feeding of double disc refiners – Modelling of particle flow –**
Johan Persson, Birgitta A. Engberg and Thomas Granfeldt
- 17.30–23.00 **BASF Event Munkholmen**

Boat trip, Guided tour, Grill Buffet at the Historical Island of Munkholmen

Dress code: Casual – warm clothes!

The Event is sponsored by BASF

Guided walk from Scandic Nidelven Hotel to the boat 17.30



Day 2, Tuesday, May 29

- 9.00–10.30 **Session 4: Evaluation Tools, Chair: Antti Fredrikson, A. Fredrikson Research & Consulting Ltd**
- 9.00–9.30 **Single Point Morphology instrument yields insight to short term variations in a commercial TMP process –**
Ola Johansson, Magnus Rydstrand, Niclas Andersson, Henrik Brundin, Maria McGuinness and Rahul Yadav
- 9.30–10.00 **The independent state of fibres in relation to the mechanical pulping world –**
Olof Ferritsius, Rita Ferritsius, Mats Rundlöf, Birgitta Engberg and Per Engstrand
- 10.00–10.30 **Crill measurements for improved fines material control –**
Mathias Lundberg, Magnus Norgren and Håkan Edlund
- 10.30–11.00 **Coffee Break & Networking**
- 11.00–12.00 **Session 5: Bleaching, Chair: Michel Petit–Conil, Centre Technique du Papier**
- 11.00–11.30 **Adlite in (C)TMP for paper and board with high brightness, less specific energy consumption and favorable pulp and paper properties –**
Martin Schachtl, Stefan Erren, Dieter Schönhaber, Pavel Osipov, James Taft, Steffen Fischer and Christian Bäurich
- 11.30–12.00 **Bleachmag natural Mg(OH)₂ with low CO₂ emissions; Mill operation experiences and cost savings in TMP and PRC–APMP –**
Henk Don, Elroy Delger, Sergey Gusev, Petri Ratala and Antti Fredrikson
- 12.00–13.00 **Lunch**
- 13.00–14.30 **Session 6: Alternative Use of Mechanical Pulp I, Chair: Philip André Reme, RISE PFI**
- 13.30–14.00 **Effect of chlorine dioxide treatment on the properties of thermomechanical pulp –**
Zhaoyang Yuan, Jayg Dimayacyac and Rodger Beatson
- 14.00–14.30 **Deep eutectic solvent treatment to low–energy TMP to produce fibers for papermaking –**
Juha Fiskari, Rita Ferritsius, Sinke Henshaw Osong, Anders Persson, Tomas Höglund and Magnus Norgren
- 14.00–14.30 **New international standard (ISO 20494) on paper stability: Implications for mechanical and high-yield pulp producers –**
Maurice Douek, Xuejun Zou and Yajun Zhou
- 14.30–15.00 **Coffee Break & Networking**
- 15.00–16.00 **Session 7: Mill Optimization, Chair: Karl Murton, Scion Research**
- 15.00–15.30 **An overview of some efforts to understand CD–refiners –**
Anders Karlström, Jan Hill and Lars Johansson
- 15.30–16.00 **High quality Eucalyptus CTMP for board grades at the Stora Enso Beihai Mill –**
Frank Peng, Jason Xing, Göran Olsson, Jesper Nåvik, and Thomas Granfeldt
- 18.00–23.00 **Organ Concert and Dinner with presentation of the Arne Asplund Award**
Concert in the cathedral Nidarosdomen, Banquet in the Archbishop's Palace nearby
Dress Code: *Formal*

Guided walk from Scandic Nidelven to Nidarosdomen 17.20



Day 3, Wednesday, May 30

- 8.30–10.00 **Session 8: Alternative Use of Mechanical Pulp II, Chair: Lars Johansson, RISE PFI**
- 8.30–9.00 **Mechanical pulp with added value products and lower COD –**
Oleg Shagaev, Peter Bräuer and Lukas Wiesegger
- 9.00–9.30 **Development of strong and water resistant packaging materials from high yield pulps –**
fundamental aspects –
Tove Samuelsson, Gunilla Pettersson, Hans Höglund, Sven Norgren, Anna Svedberg,
Christer Götesson and Per Engstrand
- 9.30–10.00 **TEMPO mediated oxidation effects on thermomechanical pulp components –**
David Myja, Eric Loranger and Robert Lanouette
- 10.00–10.30 **Coffee Break & Networking**
- 10.30–12.00 **Session 9: ERGS Award/ Mechanical Pulp in New Products, Chair: Robert Lanouette,**
Université du Québec à Trois-Rivières
- 10.30–11.00 **Industrially relevant in-situ production of high yield pulp based nanocellulose materials**
optimized to improve strength in packing and printing papers – A Comparison
between CMC and MFC as the anionic component in layer-by-layer technology -
Tommy Nordin, Anna Svedberg, Sven Norgrén, Gunilla Pettersson and Per Engstrand
- 11.00–11.30 **Production of Microfibrillated Cellulose (MFC) from Chemical and Mechanical Pulps to**
Enhance TMP and DIP Paper Properties–
Valérie Meyer, Michaël Lecourt, Sandra Tapin–Lingua and Michel Petit–Conil
- 11.30–12.00 **Summing Up of Conference and Closing Remarks – Lars Johansson**
- 12.00–13.00 **Lunch**

The Keith Kirkpatrick Award

The Keith Kirkpatrick Award is presented to the author(s) of the best paper delivered to the International mechanical Pulping Conference. Selected from the sub-set of authors who are making their first contribution to an international conference. The award is given by the ERGS, an association of international mechanical pulping scientists with the purpose of promoting the science of mechanical pulping and interchanging technical information among members. The Keith Kirkpatrick Award commemorates the generous concern of its namesake, a founding member of ERGS, for the professional development of young technologist in the mechanical pulping industry.

The recipient will be announced on Wednesday during Session 9 at 10.30-12.00.

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