

**Program “Silicon for the Chemical and Solar Industry, 2016”
Kristiansand, Norway - June 13-16, 2016**

Monday, June 13th	
17:00-19:00	Registration at Kristiansand Bystranda hotel
19:00 -	Reception
Tuesday, June 14th	
08:00 -	Registration
08:30-08:45	Opening
Session 1: New technologies	
08:45-09:10	Opening, Helge Aasen, CEO Elkem AS
09:10-09:35	Alf Tore Haug, Espen Dahl, Therese Videm Buø, Håvard Moe, Per Carlsson, Trond Andresen, Judit Sandquist, Per Eilif Wahl – Elkem AS <i>Carbon Neutral Metal Production a new environmental friendly method for production of silicon</i>
09:35-10:00	Matthias Heuer, Martin Kaes, T. Bartel, Alain Turenne, Terry Jester – Calisolar GmbH <i>Metallurgically purified silicon for photovoltaics – current development routes at Silicor Materials</i>
10:00-10:30	Coffee break and conference photo
10:30-10:55	José Manuel Míguez, Antonio Pérez, Alejandro Souto, Joaquín Diéguez, Ramón Ordás - FerroGlobe <i>New and future applications of different metallurgical silicon qualities: how could we produce them?</i>
10:55-11:20	Johannes Kaeppler, Marion Morach - SELFRAG AG <i>High purity silicon sizing by high voltage pulse power technology</i>
11:20-11:45	Michał Ksiazek - SINTEF <i>Five furnaces five different stories</i>
12:00-13:00	Lunch
Session 2: Sustainable production	
13:00-13:25	Lou Parous, Frank Weber, Valdineir y Domingos de Oliveira, Wolfgang Herbst - Viridis.iQ GmbH <i>Recycling silicon from kerf and grinding processes - the lost PV potential of silicon wastes</i>
13:25-13:50	Peter Sylvén, MD - Envicom AB <i>Tapping Si furnaces using advanced oxygen lances</i>
13:50-14:15	Birger Andresen <i>Operational Aspects of the Metallurgical Silicon Process</i>
14:15-14:35	Coffee break

Session 3: Intermetallic phases and trace elements	
14:35-15:00	Sylvain Gouttebroze, Qiang Du, Mohammed M'Hamdi, SINTEF <i>Sistruc: A microstructure model for optimization of silicon materials</i>
15:00-15:25	Andreas Broggi, Hallvard Tveit - NTNU <i>Growth of impurity phases below the melting point of silicon and consequences on fluidized bed reactor efficiency</i>
15:25-15:50	Anja Rietig, Jörg Acker, Brandenburgische Technische Universität Cottbus-Senftenberg <i>A new and fast method for determination of boron, phosphorous and other trace elements in metallurgical grade silicon</i>
Session 3 (cont.): Chlorosilanes Process optimization	
15:50-16:15	Torsten Gottschalk-Gaudig, Erwin-Peter Mayer - Wacker Chemie AG <i>Pyrogenic Silica – A High-Tech Material from Products of Silicon Processing</i>
18:00–21:00	Boat trip
Wednesday, June 15th	
Session 4: MCS-Production and DC safety	
08:30-08:55	Cecile Rosier, Maxime Riss, Michel Huet - Bluestar Silicone France <i>Copper transport in the methylchlorosilane fluidized bed reactor</i>
08:55-09:20	Javad Mohsseni, Andreas Bockholt - Wacker Chemie AG <i>Aluminum Species in Methylchlorosilanes Production: From Identification to Sequestering or Removal</i>
09:20-09:45	Genqiang Xue, Van V. Green - Dow Corning Corporation <i>Mechanistic Aspects of the Rochow Direct Process</i>
09:45-10:05	Coffee break
Session 4 (cont.): TCS Technology	
10:05-10:30	Michael Müller, Stefan Heinrich - Wacker Chemie AG, <i>Advanced Modelling of Müller-Rochow-Synthesis</i>
10:55-11:20	Sean Gaal, Bill Larson, John Herman, Eric Davis - Dow Corning Corporation <i>Identification and root cause analysis of micro-cracks in a trichlorosilane reactor</i>
11:20-11:45	Matt Wilson - Mitsubishi Polycrystalline Silicon America Corporation <i>Explosion and Fire at Yokkaichi Plant - Explanation, consequences and action items from the incident that had five fatalities</i>
12:00-13:00	Lunch

	Session 5A – TCS Technology (cont.)	Session 5B Silane Technology
13:00-13:25	Takako Kudo, Yasuhiro Hanaue, Norikazu Komada - Gunma University <i>Quantum chemical approach toward the identification of hydrolyzed chlorosilane oligomer</i>	Li Fei, Merete Tangstad – NTNU <i>Use of agglomerated raw materials in Si production</i>
13:25-13:50	Alan Crawford - Alan Crawford Consulting LLC <i>Cost saving of using a metallurgical grade silicon with higher trichlorosilane yield in the hydrochlorination based polysilicon process</i>	Eli Ringdalen, Merete Tangstad – SINTEF <i>Phase transformations in quartz and it's effect on furnace operation</i>
13:50-14:15	Larry Coleman - Consultants on demand <i>Optimize Your Chlorosilane Distillation Columns</i>	Kurt Aasly, Vishu Dosaj – NTNU <i>Assessment of production performance of quartz in the Si-furnace</i>
14:15-14:35	Coffee break	
		Session 6B Silane Production and Chemical vapor deposition Chair: Professor Javier Bullon, USC
14:35-15:00	Nadia Vinck – Euroalliage <i>An overview of recent EU regulatory developments in industrial emissions having a direct impact on silicon production in Europe</i>	Mark W. Dassel - SiTec GmbH <i>New Monosilane Decomposition Technology</i>
15:00-15:25	Larry Coleman - Consultants on demand <i>A New Method to Improve Siemens Chemical Vapor Deposition Operations</i>	Werner Filtvedt, Sverre Sørensen, Hallgeir Klette, Josef Filtvedt - Dynatec Engineering AS <i>On the road to industrialisation of a new centrifuge CVD reactor for polysilicon</i>
15:25-15:50	Ida Kero, Svend Grådahl, Gabriella Tranell - SINTEF <i>Emissions from MG-Si/FeSi production - a summary</i>	Trygve Mongstad, Hallgeir Klette, Ørnulf Nordseth, Thomas J. Preston, Guro M. Wyller, Werner O. Filtvedt - Institute for Energy Technology New technologies for silicon production from monosilane; Pilot testing and on-line process monitoring aiding the development

Thursday, June 16th

Session 7 – Solar cell silicon

08:30-08:55	Yuliu You, Kazuki Morita - The University of Tokyo <i>Property control of mc-Si containing P and B using Al co-doping method</i>
08:55-09:20	Leili Tafaghodi, Mansoor Barati - University of British Columbia <i>Removal of phosphorus and boron from silicon via solvent refining with ferrosilicon alloys</i>
09:20-09:45	Tiago Ramos Ribeiro, Moysés Leite de Lima, João Batista Ferreira Neto, John Bernardo Vilca Neira, André Alexandrino Lotto - Institute for Technological Research – IPT <i>Metallurgical route to produce solar grade silicon</i>
09:45-10:05	Coffee break

Session 8 – Market

10:05-10:30	Pierre Germain, Ralf Maecker - CEFIC <i>Silicon to Silicone – We help make things work better</i>
10:55-11:20	Johannes Bernreuter - Bernreuter Research <i>Between Oversupply and Shortage - Where Will the Polysilicon Market Head?</i>
11:20-11:45	Jørn de Linde - CRU International Inc. <i>How are supply-side changes affecting the silicon market?</i>
12:00-13:00	Lunch
13:00-	Departure