Lectures confirmed as per 15/2-2016

Opening
Helge Aasen, CEO Elkem AS

Raw materials – *Silicon Production*
Phase tranformations in quartz and it's effect on furnace operation
Eli Ringdalen, NTNU, Norway

Quartz raw materials for silicon production
Kurt Aasly, NTNU – Department of Geology and Mineral Resources Engineering, Trondheim, Norway and Vishu Dosaj, Dow Corning Corporation, Midland, USA

NEW: Usage of agglomerated raw materials in Si production
Li Fei, NTNU, Norway

Silicon - *Production*
Operational aspects of Silicon production
Birger Andresen, Fesil AS, Norway

NEW: Mechanisms in Silicon Submerged Arc Furnaces
Michal Ksiazek, SINTEF, Norway

Numerical simulation of Multi-fields in submerged arc furnace for metallurgical grade silicon production
Wenhui MA, Yanqi DONG, Kuixian WEI, Xi YANG and Xingwei YANG, Kunming University of Science and Technology, China

Silicon - *Refining*
NEW: Fume formation during refining of silicon
Gabriella Tranell, NTNU, Norway

Silicon - *Solidification*
Sistruc: A microstructure model for optimization of silicon materials
S. Gouttebroze, Q. Du, M. M'Hamdi, SINTEF Materials and Chemistry, Oslo, Norway

Silicon - *Casting*
Growth of intermetallic phases below the melting point of silicon and consequences on FBR efficiency
Andrea Broggi, NTNU, Norway

Removal iron from metallurgical grade silicon melt with plasma assisted solidification
Kuixian WEI, Longzhong GAO, Wenhui MA, Damin Zheng and Yongnian Dai, Kunming University of Science and Technology, China

Silicon - *Analytical*
A new and fast method for determination of boron, phosphorous and other trace elements in metallurgical grade silicon
Anja Rietig and Jörg Acker, Brandenburgische Technische Universität Cottbus-Senftenberg , Germany

Silicon – *Environmental*
Exergy analyses in Si production
Marit Takla, NTNU, Norway

An overview of recent EU regulatory developments in industrial emissions having a direct impact on silicon production in Europe
Nadia Vinck, Euroalliage

Silicon – *New development*

New environmental friendly method for production of silicon
Alf Tore Haug, Elkem AS, Norway

MCS –P*roduction*

Transport of copper in the MCS reactor
Cecile Rosier, Bluestar Silicone France, France

Aluminum Species in Methylchlorosilanes Production: From Identification to Sequestering or Removal,
J. Mohsseni, A. Bockholt, Wacker Chemie AG, Germany

NEW: Mechanistic Aspects of the Rochow Direct Process
Genqiang Xue, Unni Pillai, Dow Corning Corporation, Carrollton, Kentucky, USA

Advanced Modelling of Müller-Rochow-Synthesis
Michael Müller, Wacker Chemie AG, Stefan Heinrich, Institute of Solids Process Engineering and Particle Technology, Hamburg University of Technology, Denickestr. 15, 21071 Hamburg, Germany

DC –*Safety*

NEW: Identification and root cause analysis of micro-cracks in a trichlorosilane reactor
Sean Gaal, Bill Larson, John Herman and Eric Davis, Dow Corning Corporation, Midland, USA

Explosion and Fire at Yokkaichi Plant - Explanation, consequences and action items from the Yokkaichi plant incident that had 5 fatalities
Matt Wilson, Mitsubishi Polycrystalline Silicon America Corporation, USA

Quantum chemical approach toward the identification of hydrolyzed chlorosilane oligomer - Investigations into polymers generated in polysilicon process
Norikazu Komada, Yasuhiro Hanaue and Takako Kudo, Mitsubishi Materials Corporation and Gumma University, Japan

DC/HC – *Distillation*

Optimize Your Chlorosilane Distillation Columns
Larry Coleman, Consultants on demand, USA

DC/HC – *CVD*

New Method to Improve Siemens CVD Operations
Larry Coleman, Consultants on demand, USA

HC - *Production*

NEW: Cost saving of using a metallurgical grade silicon with higher silicon tetrachloride conversion in the hydrochlorination based polysilicon process
Alan Crawford, Alan Crawford Consulting LLC, USA

Silane - *Production*

New Monosilane Decomposition Technology
Mark W. Dassel, Centrotherm photovoltaics USA

Silane – *CVD*

NEW: On the road to industrialisation of a new centrifuge CVD reactor for polysilicon
Sverre Sørensen, Werner Filtvedt & Josef Filtvedt, Dynatec Engineering AS, Norway

NEW: New technologies for silicon production from monosilane, and how lab testing and process monitoring can aid the development
Trygve Mongstad, Hallgeir Klette, Thomas Preston, Guro Marie Wyller & Werner Filtvedt, Institute for Energy Technology, Norway

Solar – *Properties*

Property control of B and P containing mc-Si by co-doping Al
Yuliu YOU and Kazuki MORITA, Department of Materials Engineering, The University of Tokyo, Japan

Solar – *UMG*

NEW: Removal of phosphorus and boron from silicon via solvent refining with ferrosilicon alloys
Leili Tafaghodi, University of British Columbia, Canada

NEW: Silicon refining by directional solidification
Tiago Ramos Ribeiro, IPT, Brazil

Application – *Silicon*

NEW: New and future applications of different metallurgical silicon qualities: how could we produce them?
José Manuel Míguez, Antonio Pérez, Alejandro Souto, Joaquín Diéguez and Ramón Ordás, FerroGlobe, Spain

Application – *By-products*

Fumed Silica – A High-Tech Material from Products of Silicon Processing
T. Gottschalk-Gaudig and E.-P. Mayer, Wacker Chemie AG, Germany

Application – E*nvironmental*

Silicon to Silicone – We help make things work better
Dr. Pierre Germain, CES Secretary General, CEFIC, Ralf Maecker, Director Government & Industry Relations, Momentive Performance Materials, Germany

Silicon - *Market*

How are supply-side changes affecting the silicon market?
Jørn de Linde, CRU International Inc, USA