

NEW MEMBERS OF EDITORIAL BOARD



Heikki Kusti Jalkanen

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Professor in metallurgy Dr. Heikki Kusti Jalkanen - born on April 28 1940 in Nilsinä, Finland.

Academic degrees: 1965: Master of Science in Engineering, Metallurgy at Helsinki University of Technology; 1968: Licentiate of Technology, Metallurgy at Helsinki University of Technology; 1977: Doctor of Science in Engineering, Metallurgy at Helsinki University of Technology

Professional career: 1965: Research assistant at Laboratory of Metallurgy, Helsinki University of Technology; 1965-1966: Research fellow of Oy Kovametalli Ab, Espoo, Finland at Helsinki University of Technology; 1967-1970: Research fellow at Outokumpu Oy, Metallurgical Research Institute,

Pori, Finland; 1970-1972: Research fellow of Research Organisation of Scandinavian Metals Industry “Jernkontoret” at Laboratory of Metallurgy, Helsinki University of Technology; 1972-1980: Teaching assistant at Helsinki University of Technology, laboratory of metallurgy; 1980-1984: Senior research fellow of Finnish Academy at Laboratory of Metallurgy, Helsinki University of Technology; 1980-1984: Docent at Helsinki University of Technology; 1984- : Associate professor in metallurgy at Helsinki University of Technology; 1996-1997: Acting professor in metallurgy at Helsinki University of Technology; 1998 –: Professor in metallurgy at Helsinki University of Technology.

Membership in scientific and industrial organs: since 1965: Membership in the Finnish Mining and Metallurgy Society; since 1994: Membership in the Joint Committee for Planning of Lifelong Education of Society of Mining and Metallurgical Engineers and Northern Industrial Institute (POHTO); 1997 - 1999: Chairman of the section: “Metallic and Mineral Resources” at “Foundation for Finnish Natural Resources”; 1995-97: Member of Organising Committee of “Colloquium on Process Simulation”; 1998-99: Member of Program Committee for IPMM’99 “Australasian – Pacific Forum for Intelligent Processing and Manufacturing of Materials”; 1997-05: Member of Scientific Committee of “Quo Vadis Hydrometallurgy” II-IV; 1997-05: Member of Scientific Committee of “Quo Vadis Hydrometallurgy” II-IV.

Scientific visits (long term): 1.11.1980-30.2.1981: Moscow State University, Laboratory of Chemical Thermodynamics

Research projects supervised by H. Jalkanen (last ten years): 1993-1995: Innovative Control Model for BOF-Subprogram of the project “Konverterstyrning”, financed by Centre for Technical Development (TEKES) and Jernkontoret (Nordic Research Organisation of Metals Industry); 1996-1999: Control Model for BOF- Subprogram of “SULA 2”-program, financed by TEKES, Jernkontoret and Finnish Steel industry; 1994-1998: Settler reactions in Flash Smelting Furnace-Financed by Outokumpu Oy Foundation; 1997-1998: Thermodynamic modelling of leaching and leach solution-Subprogram in the project “Modelling of the leaching of complex,

low-grade sulphide copper ores”, financed by Finnish Academy; 1998-1999: Monitoring of sulphur species in process gases-Subprogram of the research program “Materials in Energy Technology” by TEKES and Finnish Metallurgical and Energy Industry; 1998-1999: Preparation of nitrogen standard for microanalysis on the basis of chromium nitride-Subcontractor of “Microlite-project” within the EU research program: “Standards, Measurements and Testing”; 1999-2002 : Simulation and modelling of oxygen converter processes-Subprogram of the research program for developing of converter technology, (KONVERTO), financed TEKES and Finnish Steel industry; 1999-2002: “Hydro Nickel” Modelling of solution equilibria in ammoniacal nickel sulphate solutions-Subprogram of the industrial research project financed by TEKES, Outokumpu Oyj and OMG; 2003-05: “Metallurgical utilisation of shredder residue gasification bottom ash” - Subresearch in the project “Gasification of automobile shredder residue”, financed by TEKES.

Fields of teaching: Unit Processes in Metallurgy; Thermodynamics of Materials and Materials Processing; High Temperature Chemistry of Materials; Computation of Chemical Equilibria; Surface phenomena.