

CURRICULUM VITAE

Personal information

Last name: Korhonen
First names: Antti Samuli

Born in Heinola, Finland, July 14, 1950

Citizenship: Finland
Parents: Vilho Korhonen and Inkeri Korhonen, born Kiesilä
Married to: Maire Korhonen, born Niskanen, June 14, 1975
Children: One child, Sanna Marita, born Sept. 10, 1982
Military service: June 16, 1976 - May 10, 1977, second lieutenant

Education

Matriculation examination:

May 31, 1969 Pielaveden yhteiskoulu

Academic degrees:

March 26, 1974 Diplomi-insinööri (Master of Science)
June 7, 1977 Tekniikan lisensiaatti (Licentiate of Technology)
November 14, 1981 Tekniikan tohtori (Doctor of Technology)

All degrees from Helsinki University of Technology, Finland.

Work experience

July 1, 1974 - Senior teaching assistant
Dec. 31, 1981 Helsinki University of Technology

Jan. 1, 1982 - Junior research fellow,
June 30, 1986 The Academy of Finland

July 1, 1986 - Senior research fellow
Dec. 31, 1986 The Academy of Finland

Jan. 1, 1987 - Acting professor in physical metallurgy, especially metal
May 31, 1988 forming and heat treatment, Helsinki University of
Technology

June 1, 1988 - Appointed by the President of Finland as the professor of
physical metallurgy, especially metal forming and heat
treatment at the Helsinki University of Technology

1989 - Professor, physical metallurgy and materials science, especially processing and heat treatment of materials

Other positions held

1975 and 1979 Member of the departmental board of the department of Mining and Metallurgy at the Helsinki University of Technology

1979 - 1980 Teaching and research assistant, Duke University, North Carolina, USA

1981 - 1986 Special lecturer, Fundamentals of plasticity, Helsinki University of Technology

1984 - 1986 Special lecturer, Metallurgical coatings, thin films and surface treatments, Helsinki University of Technology

1982 Elected as a candidate for professorship in metal forming at the Luleå University, Sweden

1982 - 1988 Docent in metal forming and heat treatment at the Helsinki University of Technology

1985 - 1987 Appointed by the Academy of Finland as a member of the supervisory board for the project "Development of Ion Beam Technology"

1982 - 1988 Plasmateknikka Oy (Plasma Technology Inc.), Member and Vice Chairman of the Board of Directors

1987 - 2001 Ohutlevyutiset/MET (Sheet Metal News), Member of the Editorial Board

1987 - 1988 Member of the Sheet Metal Users Group, Federation of the Finnish Metals Industries (MET)

1993 - Member of the Finnish Academy of Engineering

1996 - 2001 Vice Chairman, Department of Materials Science and Rock Engineering, Helsinki University of Technology

International activities

July 8, 1979 - August 19, 1979 University of Texas at Austin, Scholarship from the Institute for International Education

1979 - 1980	Duke University, Department of Mechanical Engineering and Materials Science, research scholarship for graduate studies
1987 - 2004	International Union for Vacuum Science Techniques and Application (IUVSTA), Finnish representative in the Vacuum Metallurgy Division
1990 -	European Joint Committee on Plasma and Ion Surface Engineering, Finnish representative
1991 – 2000	Jernkontoret, Technical Area 31, Associate member
1992 - 2001	Finnish Deep Drawing Research Group, Chairman and National Secretary
1993 - 1996	IUVSTA Vacuum Metallurgy Division, Secretary
1996 – 1998	IUVSTA Vacuum Metallurgy Division, Vice Chairman
1998 - 2001	IUVSTA Vacuum Metallurgy Division, Chairman
2001 - 2004	IUVSTA Surface Engineering Division, Vice Chairman
2007 -	IUVSTA Councillor, Finland
2007 -	IUVSTA Surface Engineering Division, Thin Films Division and Surface Science Division, Finnish Representative
2000 - 2006	ESAFORM (European Scientific Association for FORMing), Member of the Board
2007 -	ESAFORM Scientific Committee, Member
2001 - 2002	Eminent Scientist, RIKEN The Institute of Physical and Chemical Research, Japan
2002	Invited reviewer of a Swedish proposal: National Graduate School for Advanced Studies of Metal Forming Processes.
2005	Invited reviewer for National Research Foundation of South Africa
2011 -	Invited reviewer for Qatar National Research Fund

Association with professional journals

Thin Solid Films (Elsevier), Referee

Journal of Engineering Manufacture, Proc. of the IMechE, Part B, Referee

Journal of Mechanical Engineering Science, Proc. of the IMechE, Part C, Referee

Journal of Automobile Engineering, Proceedings of the Institution of Mechanical Engineers, Part D, Referee

Journal of Aerospace Engineering, Proceedings of the Institution of Mechanical Engineers, Part G, Referee

Journal of Engineering Tribology, Proceedings of the Institution of Mechanical Engineers, Part J, Referee

Journal of Materials: Design and Applications
Proceedings of the Institution of Mechanical Engineers,
Part L, Referee

Journal of Nanoengineering and Nanosystems
Proceedings of the Institution of Mechanical Engineers,
Part N, Referee

The Journal of Strain Analysis for Engineering Design
IMechE, Referee

Surface and Coatings Technology (Elsevier), Referee

Computational Materials Science (Elsevier), Referee

Computer Methods in Materials Science, Member of the
International Editorial Board and Referee

International Journal of Solids and Structures (Elsevier),
Referee

steel research international (Wiley) , Referee

Indian Journal of Engineering & Materials Science,
Referee

Canadian Metallurgical Quarterly, Referee

Member of the following organizations

- CIRP, International Academy for Production Engineering (Fellow)
- ESAFORM Association, Member of the Board 2000 - 2006
- Int. Committee on Environment and Manufacturing, ICEM
- ASM International
- The American Society of Mechanical Engineers
- The Minerals, Metals and Materials Society
- Materials Research Society
- American Vacuum Society
- American Powder Metallurgy Institute
- The Japan Society for Technology of Plasticity
- International Cold Forging Group
- European Joint Committee on Plasma and Ion Surface Engineering
- The Finnish Academy of Technology
- IEEE, Institute of Electrical and Electronic Engineers
- Swedish Vacuum Society

Awards

1987	The American Vacuum Society's R.F. Bunshah Award for the best paper in Hard Coatings Session at the International Conference on Metallurgical Coatings in San Diego, California, 1986.
2000	Eminent Scientist of RIKEN Award, August 8, 2000, RIKEN, The Institute of Physical and Chemical Research, Japan.
2002	Grant of the Scandinavia – Japan Sasakawa Foundation for research in Japan

Supervised doctoral dissertations and other theses

I have been working as a professor at the Helsinki University of Technology since January 1, 1987. Since then following persons have obtained their doctoral degrees from my professorship.

1987

K. Rahka, On the relations between cyclic contraction ratio, flow stress and deformation mechanisms in bainitic CrMoV steels

K.R.W. Wallin, A Quantitative Statistical Model for Cleavage Fracture Initiation in Carbide Strengthened Steels

J.M. Molarius, Structure and Properties of Titanium Nitride and Zirconium Nitride Thin Films Prepared by Reactive Ion Plating

S.O.J. Kivivuori, Designing Extrusion and Forging Dies Taking into Account the Limitations Due to Metal Flow and Formability

S.J. Mäkimattila, Studies on Hot-Dip Zinc-Aluminium Coated Sheet Steels

1989

V. Ollilainen, The Influence of Structure and Alloying on the Cold-Formability of Ferritic Steels and the Utility of Uniaxial Tensile Testing in its Assessment

1990

P. Mäntylä, Crown and Shape Control in the Rolling of Thin, Wide Plates

1997

J. Larkiola, Dimensional Ranges and Rolling Efficiency in a Tandem Cold Rolling Mill

P. Myllykoski, On Using Artificial Neural Networks to Predict Process and Quality Parameters in Steel Strip Production

P. Kauppinen, The evaluation of integrity and elasticity of thermally sprayed ceramic coatings by ultrasonics

2000

Ulla McNiven

Systematics and Methodology in Boiler Plant Life and Plant Condition Management

In addition about 50 persons have got their M. Sc. Theses from my professorship.