

Curriculum Vitae of Ludwig Schultz

Prof. Dr. Ludwig Schultz Institute of Materials Science, TU Dresden (retired) Institute of Solid State Physics, TU Dresden (retired)

Leibniz-Institute of Solid State and Materials Science Dresden (IFW Dresden) (retired)

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I Personal:

Born: May 18, 1947, Meissen, Germany

Marital status: married, 3 children

II Education:

November 1966 - Study of Physics, University of Goettingen, Germany

October 1971 Diploma Thesis: "Anisotropic Critical Currents in Superconducting

PbNa-Alloys", Supervisor: Prof. Dr. P. Haasen

November 1971 - Ph.D. in Physics, University of Goettingen,

July 1976 Thesis: "Flux Pinning in Superconductors by Regularly or Statistically

Distributed Precipitates", Supervisor: Prof. Dr. P. Haasen

III Professional:

November 1973 - Research Associate, Institute of Metal Physics,

December 1979 University of Goettingen

January 1978 - IBM World Trade Postdoc, IBM Thomas J. Watson January 1979 - Research Center, Yorktown Heights, N.Y., USA

January 1980 - Staff Scientist, Siemens Research Laboratories, Erlangen,

September 1989

October 1989 - Head of "High Temperature Superconductors and Magnetic

May 1993 Materials" Department, Siemens Research Laboratories, Erlangen

May 1990 - July 1993 Honorary Lecturer, Physics Department, University of Augsburg

July 1991 Call on a C4 Professorship, TU Berlin (declined)

July 1991 Call on a C4 Professorship, University of Ulm (declined)

April 1992 Call on a C4 Professorship, TU Dresden, combined with directorship

at IFW Dresden (accepted in May 1993)

June 1993 Full Professor (C4) of Metallic Materials and Metal Physics,

TU Dresden, and Director of the Institute of Metallic Materials at IFW

Dresden

1999 Call on a C4 Professorship, University of Jena (declined)

April 2008 – March 2013	Scientific Director of IFW Dresden
since March 2010	Fellow Professor at University of Ulsan (South Korea)
2012 – 2021	Editor-in-Chief of Journal of Alloys and Compounds
January 2014 – December 2016	Scientific Advisor at International Laboratory of High Magnetic Fields and Low Temperatures, Wroclaw, Poland, and Coordinator of "Smart Materials Lab" at Wroclaw
September 2014	Retirement from TU Dresden and Leibniz-Institute of Solid State and Materials Research (IFW) Dresden
October 2014 – December 2017	Experienced Researcher at Institute of Metallic Materials at IFW Dresden
Since October 2014	Professor Emeritus TU Dresden, related to the Institute of Materials Science at TU Dresden
January 2016 – April 2019	Scientific Coordinator of DRESDEN-concept e.V.

IV Activities and Memberships:

January 2023 –

today

• 1196 publications in refereed journals (according to web of science: >42 000 citations, h-index: 86, search: Schultz L AND Dresden OR Erlangen OR Yorktown Hts OR Gottingen) on:

Editor-in-Chief of Journal of Alloys and Metallurgical Systems

- superconducting materials
- superconducting levitation systems
- permanent and soft magnets
- giant and colossal magnetoresistance materials
- magnetic thin films
- amorphization by mechanical alloying or solid state reaction
- bulk metallic glasses
- nanocrystalline materials
- electrochemical properties of functional materials
- mechanical properties
- > 70 patent applications
- Meeting organization:
 - DGM Conference "New Materials by Mechanical Alloying Techniques", Hirsau, October 1988 (with E. Arzt)
 - 15th International Workshop on Rare Earth Permanent Magnets and their Applications, Dresden, September 1998 (with K.H. Müller)
 - ISMANAM '99, Dresden, September 1999 (with J. Eckert and H. Hahn)
 - DPG Solid State Physics Spring Meeting, Dresden, March 2003
 - Joint European Symposia on Magnetism (JEMS'04), Dresden, September 2004 (with K. Doerr, O. Gutfleisch, K.H. Mueller)
 - EPS Condensed Matter Division and DPG Solid State Physics Spring Meeting, Dresden, March 2006
 - 13th International Conference on Rapidly Quenched & Metastable Materials RQ13, Dresden, August 2008 (with J. Eckert)
 - European Conference on Applied Superconductivity EUCAS 09, Dresden, September 2009 (with B. Holzapfel)

- DPG Solid State Physics Spring Meeting, Dresden, March 2009
- Annual Meeting of DPG, Dresden, March 2011
- DPG Solid State Physics Spring Meeting, Dresden, March 2014
- IEEE International Magnetics Conference (Intermag) 2014, Dresden, May 2014
- DPG Solid State Physics Spring Meeting, Dresden, March 2017
- President (2011-2012) of the German Association for the Advancement of Science and Medicine (Gesellschaft Deutscher Naturforscher und Ärzte, GDNÄ), its Vice President (2009-2010 and 2013-2014) and Member of its Executive Board (2004-2014)
- Executive Board of the German Physical Society (DPG), responsible for press and public relations (2004 – 2008)
- Head of Solid State Physics Division of DPG (1999 2001)
- Head of Metal Physics Division of DPG (1989 1998)
- Member of AG Magnetism Vorstandsrat (since 2000)
- Executive Board of FEMS (Federation of European Materials Societies) (1996 2000)
- Executive Board of Deutsche Gesellschaft für Materialkunde (DGM) (1992 1996)
- Alexander von Humboldt Foundation, Selection Committee of Georg-Forster-Program (2008 – 2014), Selection Committee of Feodor-Lynen-Program (2014 – 2020),
- DFG Senate Commission "Collaborative Research Centers" (1997 2002)
- EU COST Committee on "Technology-Driven Physics" (1995 1999)
- President of the International Committee of the Joint European Symposia on Magnetism (JEMS) (2006 – 2010, Vice President from 2010 to 2012)
- European Advisory Committee of the Instituto de Magnetismo Aplicado, Madrid
- Visiting Committee of the Department of Materials, ETH Zurich
- Scientific Advisory Board Programme "Storage and Cross Linked Infrastructures", KIT Karlsruhe (2013 – 2016)
- Advisory Board of the Faculty of Physics, University of Jena
- Advisory Board of Leibniz-Institute of New Materials, Saarbruecken
- Advisory Board of Center of Excellence "Nanocentre", Warsaw University of Technology
- International Advisory Board of SOLID21, Institute of Physics, Czech Academy of Science (since 2021)
- International Maglev Board (since 2014)
- Advisory Board, Emerging Fields Initiative (EFI), Friedrich-Alexander University Erlangen
- Advisory Board VIP+ project MAG4INK (since 2019), Helmholtz-Center Dresden-Rossendorf
- Scientific Advisory Board Research Field Energy, Karlsruhe Institute of Technology (since 2019)
- Award Committees: Science Prize NRW; Gaede-Preis; DGM Price Committee, Rudolf-Jaeckel-Prize Committee (DVG) (Head)

V Honors and Awards

1986	Masing Memorial Award of Deutsche Gesellschaft für Materialkunde (DGM)
2004	Dresden Congress Award 2004 (class: over 1001 participants) for DPG Solid State Physics Spring Meeting, Dresden, March 2003
2005	ISMANAM Senior Scientist Award 2005
2006	Heyn-Denkmünze of Deutsche Gesellschaft für Materialkunde
2006	Wissenschaftspreis des Stifterverbandes für die deutsche Wissenschaft
2009	European Materials Gold Medal (FEMS)
Since 2015	Honorary Member of Deutsche Gesellschaft für Materialkunde (DGM)
2015	Distinguished Lecturer of IEEE Magnetics Society (60 presentations worldwide)