

Curriculum Vitae Professor Dr Gunnar Berg

Name: Gunnar Berg
Date of birth: 29 March 1940



Image: Markus Scholz | Leopoldina

Research Priorities: Glass physics, history of physics, physics education, university and science policy, funding and structures of research and teaching

Gunnar Berg is a German physicist. During his time as an active researcher, his main work concerned glass physics. Later, he focused on the history of physics and physics education. In expert committees, he examined issues regarding university and science policy and was involved in the restructuring of teaching and research in Germany's new federal states.

Academic and Professional Career

1992 - 2005	Professor of Experimental Physics, Martin Luther University (MLU) Halle-Wittenberg, Halle, Germany
1992 - 1996	Rector, MLU Halle-Wittenberg, Halle, Germany
1991 - 1992	Head, Subject Group Experimental Physics I "Glass Physics", MLU Halle-Wittenberg, Halle, Germany
1990	Director, Physics Section, MLU Halle-Wittenberg, Halle, Germany
1989	Associate Lecturer for Experimental Physics, MLU Halle-Wittenberg, Halle, Germany
1987	Achievement of Facultas Docendi, Subject of Experimental Physics
1983 - 1992	Head Assistant, Physics Section, MLU Halle-Wittenberg, Halle, Germany
1982	Habilitation, MLU Halle-Wittenberg, Halle, Germany
1975	PhD in Engineering, Bergakademie Freiberg, Freiberg, Germany
1971	PhD in Natural Science, MLU Halle-Wittenberg, Halle, Germany
1970 - 1982	Assistant, Physics Section, MLU Halle-Wittenberg, Halle, Germany

- 1963 - 1970 Group Head (Work Priorities: shaft conveyance, cables, deep-drilling systems),
Institute of Mining Safety Leipzig, Leipzig, Germany
- 1958 - 1963 Diploma in Physics, MLU Halle-Wittenberg, Halle, Germany

Functions in Scientific Societies and Committees

- 2010 - 2020 Vice-President, German National Academy of Sciences Leopoldina, Germany
- since 2002 Member, Presidium, German Association of University Professors and Lecturers
- 2000 - 2010 Secretary of Class I – Mathematics, Natural and Technical Sciences, German National
Academy of Sciences Leopoldina, Germany
- 2000 - 2002 Chairperson, Conference of Mathematical and Scientific Faculties, Germany
- 1998 Member, Scientific Advisory Board, Walter Raymond Foundation, Confederation of
German Employers' Associations (BDA), Cologne, Germany
- 1996 - 2007 Chairperson, Board of Directors, LEUCOREA Foundation, Wittenberg, Germany
- 1996 - 2005 Member, Scientific Advisory Board, Wilhelm and Else Heraeus Foundation, Hanau,
Germany
- 1996 - 1998 Chairperson, Conference of Mathematical and Scientific Faculties, Germany
- 1992 Member, Advisory Board, Conference of Mathematical and Scientific Faculties,
Germany
- 1991 - 1992 Dean, Faculty of Mathematics and Natural Sciences, MLU Halle-Wittenberg, Halle,
Germany
- 1991 - 1992 Speaker, Physics Department, MLU Halle-Wittenberg, Halle, Germany
- 1990 - 1998 Member of the Board of Directors, German Physical Society (DPG)
- 1990 Deputy Chairperson, Physics Society of the GDR until its merging with the German
Physical Society (DPG)
- 1989 Member, Initiative Group for Renewal of the Martin Luther University Halle-
Wittenberg, MLU Halle-Wittenberg, Halle, Germany
- Member, Working Group STEM Teacher Training, National STEM Forum, Berlin,
Germany

Project Coordination, Membership in Collaborative Research Projects

- 1998 - 2004 Project “Mikrobielle Wechselwirkung mit Werkstoffoberflächen” [Microbial
Interactions with Material Surfaces], German Research Foundation (DFG)

1996 - 2005 Subproject "Bildung metallischer Nanopartikel in Mikrobereichen anorganischer Gläser" [Forming Metallic Nanoparticles in Micro-regions of Anorganic Glasses], Collaborative Research Centre (SFB) 418, DFG

Honours and Awarded Memberships

2019 Cross of Merit, Federal Republic of Germany
2014 Werner Pöls Medal, German Association of University Professors and Lecturers
since 1999 Member, German National Academy of Sciences Leopoldina, Germany
1982 Gustav Hertz Prize, Physics Society of the GDR
1979 Research Prize, MLU Halle-Wittenberg, Halle, Germany

Research Priorities

Gunnar Berg is a German physicist. During his time as an active researcher, his main work concerned glass physics. Later, he focused on the history of physics and physics education. In expert committees, he examined issues regarding university and science policy and was involved in the restructuring of teaching and research in the new federal states.

Glass physics studies glasses, glass surfaces, and glass ceramics. It especially seeks to determine correlations between structure and characteristics. To this end, the optical, electrical or mechanical characteristics are altered using ion exchange, ion implantation or laser irradiation. By analysing these processes in connection with the effects on the structure, the correlations between structure and characteristics can be determined, i.e. the solidity of glasses and their absorption behaviour. For the structural analysis of glasses, methods such as optical spectroscopy, x-ray absorption spectroscopy, electron microscopy, and x-ray small-angle scattering are used.

In his later career as a dean and a rector, Gunnar Berg considered questions of university and science policy. He looked into how university performance might be measured and what effects performance incentives have on teaching. Additionally, he examined the issue of funding for universities as well as competition between universities. In various expert committees, Gunnar Berg advocated for the role of natural sciences in schools and the training of teachers. He was also involved with the restructuring of teaching and research in Germany's new federal states.