
Prof. Dr. Dieter Scharnweber – Curriculum vitae

Name, first name **Prof. Dr. rer. nat. et Ing. habil.**
Scharnweber, Dieter

born: 10.03.1954 in Döbeln
 married since 1977; 2 children

Employment status Group leader

Work address Technische Universität Dresden
 Max Bergmann Center of Biomaterials
 Budapester Str. 27
 D-01069 Dresden
 Germany



Scientific career

1972 - 1976 Study of Chemistry in Dresden,
1976 Diploma in under guidance of Prof. Dr. Wolfgang Forker
1981 Ph. D. (Prof. Wolfgang Forker) Dissertation "Electrochemical and physico-chemical investigations on the corrosion behaviour of COR-TEN steels and related alloys"
2002 Habilitation for Biomaterials „Improvement of the biocompatibility and –functionality of Titanium and Titanium-based alloys for implant applications by bio surface-engineering”, Mentor Prof. Dr. H. Worch
2003 Appointment to Privatdozent for ‚Bio Surface-Engineering’ at TU Dresden
2008 Professor at TU Dresden

Profession

1976 - 1980 Scientific assistant at the Technische Universität Dresden,
1981 - 1991 Scientist at the Zentralinstitut für Kernforschung Rossendorf,
 subjects:
 - Electrochemical and surface-analytical investigations for characterization of hydrothermal corrosion of metallic materials
 - In-situ investigations under hydrothermal conditions
 - Electrochemical Impedance Spectroscopy
1992 - 1993 „Single Scientist“ at the KAI e.V.
 Project ‚Impedance modelling’
 subject: Modelling of the impedance behaviour of SS-steels under hydrothermal conditions
from 1993 Scientist at the Institute of Materials Science, TU Dresden
 Head of the Biomaterials Development Group

Memberships

- European Society of Biomaterials
- DFG Transregio 67
- DFG Research Center and Cluster of Excellence for Regenerative Therapies Dresden

External reviewer for

BMBF, Chinese German Center for Promotion of Sciences, DFG, Georgian Science Foundation, German Israeli Foundation, Natural Sciences and Engineering Research Council of Canada, and various journals, e.g. Acta Biomaterialia, Advanced Engineering Materials, Biomacromolecules, Biomaterials, Inorganica Chimica Acta, Clinical Oral Investigations, Journal of Biomedical Materials

Research, Journal of Materials Science, Journal of Materials Science: Materials in Medicine, Thin Solid Films, Tissue Engineering.

Research areas

- biochemical, chemical, electrochemical, and surface-analytical investigations for bio surface-engineering of biomaterials
- Electrochemistry of Titanium materials in neutral solutions
- Interaction of proteins with solid surfaces
- Tissue engineering of bone via physical and biochemical stimuli
- Proliferation and differentiation of human MSC
- μ CT-application for characterization of healing processes in bone

Cited in ISI Web of knowledge: 92 contributions

Patents: Sine 1990 17 patent applications, 6 granted.

Homepage:

http://tu-dresden.de/die_tu_dresden/fakultaeten/fakultaet_maschinenwesen/ifww/professuren/Bio_Oberflaeche_ntechnik/index_html