



Brief biographical note

Dr. Frank Feyerabend is a biologist who obtained his diploma degree from the Philipps-University Marburg and his PhD from Hamburg University. After finishing his PhD he was appointed as Post-Doc by GKSS Forschungszentrum, Geesthacht in the department for structure research on macromolecules under supervision of Prof. Regine Willumeit. He is still working there as senior research assistant and head of the laboratory.

At GKSS, Dr. Feyerabend has worked on biomimetic surface modification of metallic biomaterials. Also he assisted in establishing the connection between material science, namely production of titanium and magnesium alloys and biological and biochemical analysis. In 2010 this resulted in the program "Metallic Biomaterials" at GKSS, of which he is one of the coordinators.

His professional and scientific activity comprises: papers published in scientific journals (13); papers published in the proceedings of international or national conferences (58); patents (1); participating in different international or national research projects; reviewer for different journals; travel and poster awards; lecturer at Hamburg University of Technology.

Name , salutation: Frank Feyerabend

Current appointment:

Department for Structure research on Macromolecules
Institute of Materials Science
GKSS Research Centre Geestacht
Germany



Educational Background:

- PhD in Biology, Faculty of Natural Sciences, University of Hamburg, 2003.
- Diploma in Biology, Department of Ecology, Philipps-University Marburg, 1998.

Experience:

- Member of Department for Structure research on Macromolecules, GKSS (2003-present)
- Head of the Laboratory, Department for Structure research on Macromolecules, GKSS (2005-present)
- Secretary of the Young Scientist Forum @ European Society for Biomaterials (2007-present).
- PhD thesis (University Hospital Eppendorf, Hamburg): Tissue engineering of human cartilage – Advantages of a 3-phase *in vitro* system
- Diploma thesis: Ecological evaluation of different aspects of behaviour in summer of the pipistrelle bat (*Pipistrellus pipistrellus*)

Research/clinical interest

Research activity in the field of:

- Development of porous implant materials and improved alloys for material manufacturing
- Investigation of biodegradable magnesium alloys and their influence on cellular metabolism
- Analysis and optimization of in vitro test methods for degradable materials
- Metallic biomaterials for orthopedic application



4th International Conference "Biomaterials, Tissue Engineering & Medical Devices"



- Biocompatibility testing and evaluation using genetic techniques
- Biological characterization of nano- and micro- particles for biomedical application;

Present Areas of Research

The ongoing research work is characterized by the following keywords: Magnesium, Metallic biomaterials, Interaction tissue-biomaterials, Bone regeneration, Magnetic nanoparticles, Surface modification.

Title of your BIOMMEDD 2010 lecture:

Understanding physiological magnesium corrosion – an in vitro approach