



## Brief biographical note

**Dr. Florin Munteanu** is a mechanical engineer who obtained his Bachelors degree and Ph.D. from Faculty of Mechanical Engineering, "Gheorghe Asachi" Technical University of Iasi. After a brief period in the field of mechanical design, he goes at the Biomechanics Group from Prosthetic Technologies and Biotechnologies Department, Faculty of Medical Bioengineering, University of Medicine and Pharmacy "Gr. T. Popa" Iasi.

Dr. Munteanu has worked on prosthesis tribology used for different biomedical application like hip prosthesis, knee prosthesis, spine prosthesis, implants for trauma, vascular prosthesis, dental prosthesis. Also, he works in gait analysis study and rehabilitation and in Finite Element Analysis for geometric shape optimization of different endoprosthesis, and periprosthetic tissue preservation.

**His professional and scientific activity comprises:** handbooks/textbooks (4); papers published in scientific journals (16); papers published in the proceedings of international or national conferences (43); participating in different international or national research projects (11); member organizing committee for different international conferences (3).

**Name, salutation:** Associate Professor Florin Munteanu

**Current appointment:**

Biomechanics Group,  
Department of Prosthetic Technologies and Biotechnologies,  
Faculty of Medical Bioengineering,  
University of Medicine and Pharmacy "Gr. T. Popa" Iasi, Romania



### **Educational Background:**

- PhD in Mechanical Engineering, Faculty of Mechanical Engineering, "Gheorghe Asachi" Technical University of Iasi, 2003.
- Master of Science in Mechanical Systems Tribology, Department of Tribology, Faculty of Mechanical Engineering, "Gheorghe Asachi" Technical University of Iasi, June 1996.

### **Experience:**

- Member of Biomechanics Group, Department of Prosthetic Technologies and Biotechnologies, Faculty of Medical Bioengineering, University of Medicine and Pharmacy "Gr. T. Popa" Iasi, (1998-present)
- Head of Department of Prosthetic Technologies and Biotechnologies (2004-2008)
- Founded member of the ATEQUAL Society.

### **Research/clinical interest**

Research activity in the field of:

- Prosthetic tribology
- Gait analysis and gait rehabilitation
- Geometrical prosthetic optimization using Finite Element Analysis
- Mechanical proprieties optimization of biomaterials used in prosthetic devices, using Finite Element Method

### **Present Areas of Research**

The ongoing research work is characterized by the following keywords: Prosthetic tribology, Biomechanical compatibility, Prosthetic fixation optimisation, Interaction stent-carotid artery, Bone regeneration at prosthesis interface.



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



**Title of your BIOMMEDD 2010 lecture:**

*Finite Element Method models for prosthetic biomechanics*