

Personal information form for Fellow members of EAMBES

Personal Info

Name: Jozef (Jos) VANDER SLOTEN

Gender: male

Date and place of birth: October 2, 1962

Present affiliations and functions:

- Full professor, KU Leuven
- Chair, Biomechanics section, Mechanical Engineering Department
- Chair, Leuven Medical Technology Centre
- Programme director, Master of Biomedical Engineering, KU Leuven

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Short CV

M.Sc. Mechanical Engineering, option Production Management

Thesis : Development of a computer-controlled knee joint mechanism
(K.U.Leuven, 1980-1985)

Great Honours

Ph.D. in Engineering sciences

Thesis : The functional adaptation of bones in vivo and consequences for prosthesis design
(K.U.Leuven, 1985-1990)

Greatest Honours

Professional experience

1986-1990 : Research Assistant (Belgian National Fund for Scientific Research)
Division of Biomechanics and Engineering Design, K.U.Leuven

1990-1996 : Senior Research Associate N.F.W.O.
Division of Biomechanics and Engineering Design, K.U.Leuven

1993-1997 : Teacher of course Basic Engineering Mechanics
(Transitory programme High School Engineer-Academic Engineer)

- 1993- Member of the Working Group Biomedical Engineering and Health Care (Royal Flemish Chamber of Academic Engineers)
- 1993-1996 Editor ESEM News (Newsletter of the European Society for Engineering and Medicine), Member of the ESEM Council
- 1994-1996 Executive Secretary 10th Conference of the European Society of Biomechanics (Leuven, Belgium, August 28-31, 1996)
- 1995- Member Editorial Board 'Het Ingenieursblad'
- 1996- Postdoctoral Researcher FWO-Flanders
- 1997-2003 Secretary-General ESEM (European Society for Engineering and Medicine)
- 1997- Deputy-secretary-general of the World Academy for Biomedical Technologies (UNESCO-UATI)
- 1997- Part-time professor Katholieke Universiteit Leuven (course on Engineering Mechanics)
- 1998- Professor Katholieke Universiteit Leuven (courses on Engineering Mechanics, Descriptive Geometry, Problem Solving and Engineering Design)
- 1999-2000 President of the Working Group Biomedical Engineering and Health Care (Royal Flemish Chamber of Academic Engineers)
- 2000-... Chairman of the Commission for Technical Drawings and Engineering Design (Technological Institute, Royal Flemish Chamber of Academic Engineers)
- 2000 Member of the Protem group, created by the IFMBE, for the establishment of the European Alliance on Medical and Biological Engineering and Sciences (EAMBES)
- 2001-2006 Elected member of the Council, European Society of Biomechanics
- 2002-2005 Secretary-general, Interim Executive Board of the European Alliance for Medical and Biological Engineering and Sciences (EAMBES)
- 2001-... Chairman of the Editorial Board, Het Ingenieursblad (official journal of the Royal Flemish Academy of Engineers)
- 2005 President-elect, European Alliance for Medical and Biological Engineering and Science (EAMBES)
- 2006-... Member, International Advisory Board, National Metals and Materials Research Centre (MTEC), Thailand.
- 2006 President, European Alliance for Medical and Biological Engineering and Science (EAMBES)
- 2006-... Full professor and Chair, Division of Biomechanics and Engineering Design, K.U.Leuven
- 2007-2008 Vice-President for European Affairs, EAMBES
- 2007-... Chair, Leuven Medical Technology Centre

Membership

European Society of Biomechanics

European Society for Engineering and Medicine

International Society for Computer Assisted Surgery

Belgian Society for Medical and Biological Engineering and Computing

Editorial Board: Journals

Member of the International Editorial Board : Journal of Engineering in Medicine

Editorial Consultant: Journal of Biomechanics

Member of the Editorial Board: Computer Methods in Biomechanics and Biomedical Engineering

Member of the Editorial Board : Biocybernetics and Biomedical Engineering

Member of the Editorial Board : Scientific Proceedings of Riga Technical University

Scientific Advisory Boards

Member of the International Scientific Board, International Center for Biocybernetics, Warsaw, Poland (Polish Academy of Sciences)

Member of the International Scientific Advisory Board, Metals and Materials Research Centre, Bangkok, Thailand

Reviewer for

Journals:

- IEEE Transactions on Biological and Medical Engineering
- Journal of Engineering in Medicine
- Journal of Biomechanics
- Clinical Biomechanics
- European Journal of Oral Sciences
- Bone
- Biomaterials

Agencies:

- European Commission
- Hong Kong Research Council
- Stichting Technologie en Wetenschap (The Netherlands)
- EPSRC (United Kingdom)
- University College Dublin – External Examiner 2006-2010
- IWT (Flanders)
- CINECA (Italy)
- Agence Nationale de Recherche (France)
- AERES (France)

Teaching assignments

Engineering mechanics (bachelor of engineering) – appr. 1000 students per year

Problem solving and engineering design (bachelor of engineering) – appr. 500 students per year

Medical device design and regulatory affairs (master of biomedical engineering)

Design in biomedical engineering (master of biomedical engineering)

Computer integrated surgery systems (master of biomedical engineering)

Industrial liaison

Member of the Board of Directors of

- Custom 8 N.V. (spin-off company Division of Biomechanics, K.U.Leuven)
- Materialise N.V.

Keywords:

Research: Biomedical engineering, i.e. biomechanics, biomaterials, computer aided surgery

Teaching and education: Engineering design, engineering mechanics, innovation in education (web based learning, project based learning), biomedical engineering

Scientific output:

- Author or co-author of > 70 papers in peer-reviewed journals (2006-2011)
- Three patents
