



BIOROB2018

26-29 AUG HIGH TECH HUMAN TOUCH

CALL FOR PAPERS AND WORKSHOPS

Advisory board

G. Bekey, University of Southern California
A. Berthoz, Collège de France
E. Bizzi, Massachusetts Institute of Technology
P. Dario, Scuola Superiore Sant'Anna
A. Forner-Cordero, University of Sao Paulo
E. Guglielmelli, University Campus Bio-Medico di Roma
B. Hannaford, University of Washington
K. Ikuta, University of Tokyo
R. Johansson, University of Lund
O. Khatib, Stanford University
D. Meldrum, Arizona State University
M. Mitsuishi, University of Tokyo
Y. Nakamura, University of Tokyo
N.V. Thakor, National University of Singapore
A. Takanishi, Waseda University
R. Taylor, Johns Hopkins University

Conference chair

H. van der Kooij, University of Twente

Conference co-chair

H.F.J.M. Koopman, University of Twente

Program chair

S. Misra, University of Twente

Program co-chairs

H.I. Krebs, Massachusetts Institute of Technology
Forner Cordero, University of São Paulo
H. van der Kooij, University of Twente
S.L. Kujreja, United Technologies Research Center

Editors

S. Misra, University of Twente
P.H. Veltink, University of Twente
L. Masia, Nanyang Tech. University

Interactive session chair

E.H.F. van Asseldonk, University of Twente

Award chairs

H. Vallery, Delft University of Technology
H.F.J.M. Koopman, University of Twente

Tutorials and workshop chair

M. Sartori, University of Twente

Publicity chair

R. Carloni, University of Groningen

IEEE BioRob 2018, 26 -29 August 2018, Enschede, the Netherlands 7th IEEE RAS/EMBS International Conference on Biomedical Robotics and Biomechanics

The seventh IEEE International Conference on Biomedical Robotics and Biomechanics - **BIOROB 2018** - is a joint effort of the two IEEE Societies of Robotics and Automation - **RAS** - and Engineering in Medicine and Biology - **EMBS**.

BIOROB covers both theoretical and experimental challenges posed by the application of robotics and mechatronics in medicine and biology. The primary focus of Biorobotics is to analyze biological systems from a "biomechatronic" point of view, trying to understand the scientific and engineering principles underlying their extraordinary performance. This profound understanding of how biological systems work, behave and interact can be used for two main objectives: to guide the design and fabrication of novel, high performance bio-inspired machines and systems for many different applications; and to develop novel nano-, micro-, and macro- devices that can act upon, substitute parts of, and assist human beings in prevention, diagnosis, surgery, prosthetics, rehabilitation and personal assistance.

Major Conference Themes

The theme of BIOROB2018 is high tech human touch. The technical program of IEEE BIOROB2018 will consist of invited talks, special sessions, posters, and paper presentations. Papers can cover areas of Biorobotics and Biomechanics including:

- Robotics and Rehabilitation
- Biologically-Inspired Robotics
- Robotic Surgery
- Human-Machine Interaction
- Wearable Technologies
- Brain-Machine Interface
- Neuroprosthesis
- Robot Companions and Home Care
- Technology Translation
- Clinical
- Commercialization
- Human Augmentation
- Micro-Robotics
- Nano-Robotics

Important Dates

Full paper submission date:	February 15, 2018
Notification of acceptance date:	May 15, 2018
Final paper submission date:	June 15, 2018
Workshop and tutorial proposal submission deadline:	February 15, 2018
Notification of acceptance of workshops and tutorials:	March 22, 2018

For more information and submission visit www.biorob2018.org



UNIVERSITY
OF TWENTE.

Venue

BIOROB 2018 will take place at the campus of the University of Twente, in Enschede, The Netherlands. The venue is two hours by train from Schiphol Airport that has frequent direct flights to most countries. With Enschede as the home base, BIOROB delegates are well positioned to explore the Netherlands before and after the BIOROB 2018.