

PROFESSOR AL-JUMAILY HAS BEEN APPOINTED EDITOR FOR ASME

Professor Al-Jumaily has been appointed by the American Society of Mechanical Engineers (ASME) as the Editor for ASME Journal of Engineering and Science in Medical Diagnostics and Therapy. An international Board consists of medical doctors, physiologists, engineers and scientists has been appointed for the journal. The Journal has an office in the AUT South Campus and an Editorial Assistant Dr Kathryn Owler has been appointed to help with the editorial process.

The ASME Journal of Engineering and Science in Medical Diagnostics and Therapy is a unique publishing forum for the international community of engineers, scientists and medical researchers with a shared vision to use knowledge from mechanical engineering as well as other engineering and scientific disciplines to accelerate biomedical innovation, trial and commercialization.

See next two pages for more details.



JULY 2017



NOW AVAILABLE ASME Journal of Engineering and Science in Medical Diagnostics and Therapy

EDITOR

Ahmed Al-Jumaily, PhD Auckland University of Technolo New Zealand

SENIOR ASSOCIATE EDITORS

Tissue Characterization Mostafa Fatemi, PhD Mayo Clinic College of Medicine, USA

Physiology, Biomedicine Chun Seow, PhD The University of British C Canada

Pharmacology and Biotechnolo Alistair G. Stewart, PhD The University of Melbourne, Australia

Xiaoning Jiang, PhD North Carolina State University USA

ASSOCIATE EDITORS

Azra Alizad, MD Mayo Clinic College of Medicine USA Maan Mustafa Alkaisi, PhD

University of Canterbury, New Zealand

Seyed M. Allameh, PhD Northern Kentucky University, USA Ning An, PhD

Hefei University of Technology, China

Amit Bagchi, PhD US Naval Research Laboratory, USA

(Continued on back)

• TIMELY • ACCESSIBLE • HIGH IMPACT

Increasingly, engineering skills, knowledge and perspective are required to solve clinical healthcare challenges. The *ASME Journal of Engineering and Science in Medical Diagnostics and Therapy* is a unique publishing forum for the international community of engineers, scientists and medical researchers with a shared vision to use knowledge from mechanical engineering as well as other engineering and scientific disciplines to accelerate biomedical innovation, trial and commercialization.

This journal will not focus on basic, theoretical, or experimental bioengineering research, but rather on lab-proven biomedical and biotechnology applications that contribute to achieving T1 translational research objectives and moving research from bench to bedside. (T1 transfers knowledge from basic research to clinical research).

To achieve this aim, this journal publishes high quality, peer-reviewed and advanced engineering research on materials, therapies, technology, systems, methods and processes that stand to transform the dynamics of disease prevention, diagnosis and treatment.

SCOPE

- Clinical Diagnostics, Imaging and Characterization
- Therapeutic Technologies, Techniques, Equipment and Procedures
- Clinical Applications of Biomaterials, Chemical Processes and Pharmaceuticals
- Micro and Nanotechnology in Medicine
- Cell Physiology and Applied Mechanics
- Computing in Medicine and Biotechnology
- Drug and Biological Delivery Science and Biopharmaceuticals
- Cancer Diagnostics and Treatments

- Electro-mechanical and Chemical Sensors
 Technology
- Wave Propagations in Medical Applications, including Vibration, Acoustics, Ultrasounds and Electrography
- Sports Medicine and Prevention of Impact
 Injury
- Mechanopharmacology, Mechanopharmaceutics and Mechanobiochemistry
- Clinical System Dynamics and Control
- Engineering and Science in Clinical Applications

Article submission, visit: journaltool.asme.org (select ASME Journal of Engineering and Science in Medical Diagnostics and Therapy)

ASME Journals

The American Society of Mechanical Engineers® (ASME®)

AUT INSTITUTE OF BIOMEDICAL TECHNOLOGIES

JULY 2017

ASSOCIATE EDITORS (cont'd)

Stavroula Balabani, PhD University College London, UK Douglas Dow, PhD University of Illinois at Urbana-

Cahit Evrensel, PhD

Linxia Gu, PhD University of Nebraska-Lincoln, USA

David W. Kaczka, MD, PhD University of Iowa, and Oscillaver Inc., USA

Carola Susanne König, PhD Brunel University, UK

Chwee Teck Lim, PhD National University of Singapore Singapore

Peter McNair, PhD Auckland University of Technolo New Zealand

Mihai Mihaescu, PhD KTH Royal Institute of Technology, Sweden

Karim Heinz Muci-Kuchler, PhD South Dakota School of Mines & Technology, USA

Osama M. Mukdadi, PhD West Virginia University, USA

Michael C. Murphy, PhD Louisiana State University, USA

Assimina Pelegri, PhD Rutgers, The State University New Jersey, USA

Dominique P. Pioletti, PhD EPFL, Switzerland

Etienne Roux, PhD Universite Bordeaux Segalen France

Thomas J. Royston, PhD University of Illinois at Chicago, USA Ali M. Sadegh, PhD

City University of New York, US Anil Saigal, PhD

Tufts University, USA Takashi Saito, D.E.,

Yamaguchi University, Japan Toshihiko Shiraishi, PhD

Yokohama National University Japan Cindy Thamrin, PhD

The University of Sydney, and Noolcock Institute of Medical Research, Australia

June 2017

Masahiro Todoh, PhD Hokkaido University, Japan Peter Weiliang Xu, PhD The University of Auckland, New Zealand

Xun Yu, PhD, New York Institute of

Lijie Grace Zhang, PhD The George Washington University, USA

Shijia Zhao, PhD Shenzhen Institutes of Advanced Fechnology, CAS, China

ASME ASME JOURNAL OF ENGINEERING AND SCIENCE IN MEDICAL DIAGNOSTICS AND THERAPY







ARUNKUMAR JAYAKUMAR ATTENDS CONFERENCE IN ROME, ITALY



Arunkumar, a PhD student in IBTec, represented AUT at the, 2nd International Conference on Battery and Fuel Cell Technology, Rome, Italy on 28 July 2017. The conference was funded by the Organising committee of the conference series and he gave two presentations. One was а kev note presentation entitled, "Measurement techniques and related challenges involved in the gas diffusion electrode characterization of PEM fuel cell stack" and the other one was "The Potential of Micro-Fuel cells to power the pacemaker-A critical assessment on material selection". Arunkumar is also invited to provide a key note speech for the "3rd International Conference on Battery and Fuel Cell Technology" to be held in London, UK from September, 10-11, 2018.

DAVID BERKE VISITING PHD SCHOLAR WITH IBTEC



David Berke received a B.Sc. and M.Sc. in Computer Science and Engineering from the Budapest University of Technology and Economics (BUTE), Hungary.

In 2016, he started a PhD in Information Technology (IT) from BUTE in the area of endurance sports modelling with IT tools. In addition, he is a board member of Multimedia in Education Society in Hungary, an IT engineer at Ericsson, and a young instructor in Department of Networked Systems and Services from BUTE.

Between July and December 2017, he is participating in Erasmus Mundus Pacific Atlantic Network for Technical Higher Education and Research (PANTHER) programme, designed to foster knowledge exchange and collaboration between NZ, Australia and Europe. IBTec at Auckland University and Technology (AUT) is currently hosting him.

His research involves statistical analysis on physiological and environmental parameters and conditions like fluid loss, thirst and dehydration. Besides using clustering techniques in sport, especially long distance running is also involved his PhD research.

To date article resulting from IT part of this research appeared in the Journal of Applied Multimedia.



PARN JONES GRADUATES WITH A MASTERS OF ENGINEERING



Parn with his fellow students



Professor Ahmed Al-Jumaily with Parn Jones

Parn Jones graduated with a Masters of Engineering, with an A grade. His research was in the development of a novel extra-aortic cuff with peristaltic motion and counterpulsation to assist heart function. His supervisors were Dr Andrew Lowe and Prof Ahmed Al-Jumaily. We wish Parn all the best as he continues to pursue his interests in healthcare technology.