

IFMBE News

International Federation for Medical and Biological Engineering

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**The baton has been passed
but the objective remains the same**



International Federation for Medical and Biological Engineering

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Editorial

In this current issue of the **IFMBE News**, where I have the privilege to write the editorial for the first time, we bring news and activities of the IFMBE and its affiliated societies from June 2015 till March 2016.

In 2015, most of the activities of the Federation were concentrated on the World Congress on Medical Physics and Biomedical Engineering held in Toronto, Canada at the beginning of June. The World Congress was also the place where the representatives of IFMBE meet with colleagues from IOMP and define the common policy of the umbrella organization, the IUPESM. During World Congress IFMBE had its General Assembly including the elections. During the General Assembly former President, Professor Ratko Magjarevic, welcomed the incoming President, Prof James Goh. We acknowledge excellent work for the Federation of our immediate past president Prof. Ratko Magjarevic. We welcome the new president Prof. James Goh and expect that he will provide his best possible services for the benefit of the IFMBE. The baton has been passed, but the objective remains the same.

In the previous issue of the **IFMBE news** nominees for IFMBE officers, AC members and other open positions were presented. I thank Prof. Kang-Ping Lin who edited the previous issue and all the preceding issues since the World Congress in Munich 2009. KP Lin put the **IFMBE News** back on track again in 2011 after nearly a four year pause and I am convinced that IFMBE community appreciates his hard work.

In this issue we bring the results of elections and welcome new officers and AC members. Also Council of Societies (CoS) of the IFMBE had elections during Council's meeting. Many great things happened. IFMBE remains in official relations with the World Health Organization (WHO), a big success as only ~50% of non-governmental organizations remained in that status. In the Events section we bring photo memories from 2015 World Congress on Medical Physics and Biomedical Engineering, held in Toronto, Canada; a report on the First IFMBE Summer School on Health Technology Assessment (HTA), held in Coventry, UK; a report on the First International Clinical Engineering and Health Technology Management Congress, held in Hangzhou, China; and a report on the International Conference for Innovation in Biomedical Engineering and Life Sciences (ICIBEL 2015), held in Malaysia. We also have a report on the 1st World Congress on Electroporation, held in Portorož, Slovenia; and a report on The III International Conference on Nanotechnologies and Biomedical Engineering (ICNBME-2015),

held in Chisinau, Moldova. Thanks to all report contributors! News in Brief section brings short news about various awards, recognitions, events related to IFMBE. Namely, the induction of James Goh and Chwee Teck Lim into AIMBE College of Fellows; Chwee Teck Lim was listed in Asia's top 100 scientist, Singapore will host 2021 World Congress of Medical Physics and Biomedical Engineering etc. Finally, the Announcement section brings information on upcoming events including events calendar.

IFMBE News is a fully electronic newsletter, which contains information on the activities of the Federation as well as its national and transnational affiliates, including forthcoming scientific meetings and features on new developments within the field of biomedical engineering and science. Please keep on supporting us by sharing information related to medical and biological engineering from your region. The newsletter appears on the web page <http://www.ifmbe.org> in downloadable PDF format. Frequency of publication is quarterly. Articles and announcements for **IFMBE News** should be sent to Prof. Igor Lackovic, Faculty of Electrical Engineering and Computing, University of Zagreb, Unska 3, HR-10000 Zagreb, Croatia, Phone: +385 1 6129 808, Fax: +385 1 6129 652, E-mail: igor.lackovic@fer.hr. Please include „IFMBE News“ when e-mailing materials. Text may be submitted via e-mail as either an ASCII (unformatted text) file in the body of the message or as an attachment in its native word processor format, which is preferable. Microsoft Word is the preferred format (doc or rtf). Please do not embed your photos in your document file. Instead submit them as separate attachments (TIF, JPEG, ...) at high enough resolution. When in doubt just send the image in the full size that your camera captured it. Along with your photos, please submit suggestions for captions. Captions can be provided via a text document with a list of filenames and captions. Usually, the article can be around 3 to 4 pages in regular single space Microsoft Words format with 2 to 6 high resolution photos.

We are looking forward to your feedback as this is the first issue after the redesign. Send your comments, ideas and objections, share your information relevant to medical and biological engineering with your colleagues around the world through your **IFMBE News**!

I wish you a pleasant reading,

Igor Lacković
Editor, IFMBE News



IFMBE Express

Welcome to the new President

Professor James Goh was inaugurated IFMBE President for the 2015-2018 term of office, during the IFMBE General Assembly held in conjunction with the 2015 World Congress on Medical Physics and Biomedical Engineering in Toronto, Canada on June 10.

"It's a great honor. Looking forward, I hope to harness IFMBE's global biomedical engineering network to influence the use of technology for human health and wellness.", said Prof. Goh in his inaugural speech.

James Goh obtained his BSc (1st Class Honors) in Mechanical Engineering (1978) as well as PhD in Bioengineering (1982) from the University of Strathclyde, Glasgow, UK. He is currently Professor and Head, Department of Biomedical Engineering, Faculty of Engineering, National University of Singapore (NUS) and holds a joint appointment as Research Professor in the Department of Orthopaedic Surgery, Yong Loo Lin School of Medicine, NUS. Prof Goh is on a number of national as well as international committees. He is the President of the Biomedical Engineering Society (Singapore). He is also a Fellow of the Institute of Engineers, Singapore (IES) and chairs IES' Technical Committee on Biomedical Engineering. He also



Former President, Professor Ratko Magjarevic, pinning the IFMBE President's badge onto the jacket of incoming President, Professor James Goh.

chairs the Science and Technology Advisory Board of the Singapore Sports Institute. He is a member of the Biomedical Standards Committee. Dr Goh has been actively involved in organizing international conferences and had served on numerous International Advisory Boards and Scientific Committees. He chaired the 6th World Congress of Biomechanics, (2010), TERMIS-AP

(2011) and 15th ICBME (2013). Dr Goh has a strong research interest in musculoskeletal research and actively promotes the field of biomedical engineering. He has given numerous invited talks at international and regional conferences. He has published well over 130 international peer review journal papers, more than 500 conference papers and 12 book chapters.

IFMBE Officers and AC members (2015-2018)



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National University of
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Academic Medical Center, University of Amsterdam
Amsterdam, The Netherlands

Igor LACKOVIC (2015 – 2021)

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School of Biomedical
Engineering
University of Valparaiso
Chile

Region 4 | North-America

Herbert F. VOIGT, III

Biomedical Engineering
Boston University
USA



IFMBE remains in official relations with WHO



The WHO Executive Board reviewed the report of our relations and collaboration at its 138th session in January 2016. The Board decided to maintain the International Federation for Medical and Biological

Engineering in official relations with the World Health Organization. A big success considering that only 50% of nongovernmental organizations (according to Prof. Marc Nyssen) managed to maintain that status.

Statement regarding WHO Executive Board meeting, January 2016 agenda item 10.1: Health workforce and services

Made by Prof. Marc Nyssen

Head of Department of Public Health, Vrije Universiteit Brussel

Focal point for NGO, The International Federation for Medical and Biological Engineering (IFMBE)

Dear Ms. Chair, Director General, distinguished Delegates, ladies and gentlemen,

The Ebola crisis has demonstrated that multidisciplinary teamwork and collaboration are key to accomplish good results; WHO's drive towards evidence based approaches and transparency via quantifiable results require efficient and reliable reporting, from the health centre up to the regional or country level and then to the global level. These two examples just to demonstrate that the "health workforce" consists of more than physicians, nurses and midwives. Next to several other paramedical professions, we would like to highlight the role of technology in health care.

Medical devices play essential roles for communicable and non communicable diseases and behind these we find biomedical and clinical engineers physicists and technicians, specialized in health care.

Efficient people-centered care would be unrealistic without appropriate Medical ICT applications such as electronic medical records, telemedicine ; here again we need specialized, well trained technical personnel at all levels: from engineer to technician.

To perform healthcare technology assessment (HTA) in order to select health technologies and interventions for universal health coverage, the biomedical engineers should be considered as indispensable team members

Therefore we plead that WHO acknowledges the merit and the implication of following biomedical

professionals: biomedical engineers, clinical engineers, medical/radiation physicists and medical technicians as being part of the "Health workforce".

Without them, members of the Health workforce with purely medical skills would miss essential competences.

Efficient health care services require multidisciplinary systems expertise, combining research, technology, and professional skills across the continuum of care. We therefore urge WHO to promote joint degree and certificate programs in Biomedical and Clinical Engineering.

We also strongly recommend that WHO expand its own global staff for medical devices, by establishing robust professional teams in Headquarters and Regions to reflect the growing importance of appropriate medical devices and the role of Biomedical and Clinical Engineers in integrated clinical solutions.

Thank you for your kind attention.



138th WHO Executive Board session . 25-30 January 2016

List of NGOs in official relations with WHO is available at:

<http://www.who.int/about/collaborations/non-state-actors/in-official-relations/en/>



Events

2015 World Congress on Medical Physics and Biomedical Engineering



<http://wc2015.org/iupesm-2015-photos/>



IFMBE General Assembly



<http://2016.ifmbe.org/wc2015-photos/>
(Photos courtesy of Andrei Linnenbank)

First IFMBE Summer School on Health Technology Assessment (HTA) Warwick, UK

Leandro Pecchia, University of Warwick, UK

From the 7th to the 10th of September 2015, the First IFMBE Summer School on HTA has been held at the University of Warwick, UK.

The School was organized by the Healthcare Technology Assessment Division of the IFMBE in collaboration with the COST Action BM1309 “European network for innovative uses of EMFs in biomedical applications”, and the University of Warwick (Institute of Advanced Studies, School of Engineering, GRP on Science and Technology for Health).

The Program Committee (Prof Nicola Pallikarakis¹, Prof Christopher James², Dr Rosanna Tarricone, Dr Ernesto Iadanza³ and Dr Leandro Pecchia⁴) organized the School over three days.

The first day provided an introduction to HTA and evidence based medicine methods and tools, introducing the attendees to HTA standard methods and their main criticisms and explaining why those methods provided limited information during the research and development of new medical devices. The second day focused on

methods and applications of HTA for Medical Devices and ethical problems arising from new healthcare technologies. The third day focused on HTA methods and tools aiming to inform the research and development of new healthcare innovations.

About 30 hours of practical and theoretical courses were delivered. All the lectures were registered and will be soon available online and accessible to all the members of BME societies affiliated to the IFMBE. The following speakers gave their contributions to the School:

- Prof **Saverio Stranges**, Scientific Director Population Health Department, Luxembourg Institute of Health, Luxembourg
- Dr **Rosanna Tarricone**, Director of “Centre for Health and Social Care Management (CERGAS) at Bocconi University, Italy
- Dr **Mark Bale**, Deputy Director, Genomics Science & Emerging Therapies, Health Science & Bioethics Division Public and International Health Directorate (PIHD), Department of Health
- Dr **Oriana Ciani**⁵, part-time Research Fellow at the Institute of Health Research and ESMI, Exeter University, UK and part-time Research Fellow at the Centre for Research in Health and Social Care Management at Bocconi University, Italy.
- Dr **Christian Boehler**⁶, Scientific Officer at the Join Research Centre, European Commission, Spain.
- Dr **Michael Craven**, Senior Research fellow at the University of Nottingham in the NIHR MindTech Healthcare Technology Co-operative, UK
- Dr **Paolo Melillo**, Second University of Naples, Italy
- Dr **Marjan Hummel**⁷, Assistant professor ‘Management of Medical Technology’ at the University of Twente, the Netherlands.
- Dr **Leandro Pecchia**, University of Warwick, UK.

¹ IFMBE Healthcare Technology Assessment Division (HTAD) Chairman 2012-2015

² IFMBE HTAD member 2012-2015

³ IFMBE Clinical Engineering Division (HTAD) Chairman 2015-2018

⁴ IFMBE Healthcare Technology Assessment Division (HTAD) Chairman 2015-2018

⁵ IFMBE Healthcare Technology Assessment Division (HTAD) Collaborator 2015-2018

⁶ IFMBE Healthcare Technology Assessment Division (HTAD) Collaborator 2015-2018

⁷ IFMBE Healthcare Technology Assessment Division (HTAD) Secretary 2015-2018





Additionally, nine tutors helped with the practical sessions: Mariangela Caserta (Balmed I.t.d, Italy), Lilly Meccariello (Campus Biomedico, Rome, Italy), and from the University of Warwick Rossana Castaldo, Abigail Jaitman, Nefeli Chatzistefani, Sam Agbroko, Vindy Tjendana Tjhin.

Each day was additionally enriched with lunch time seminars, which gave a view of particularly hot topics. Each seminary was introduced by an IFMBE AC member: IFMBE Past President Prof Ratko Magjarevic, IFMBE Elected President Prof Shankhar Krishnan, the Chairman

of the IFMBE Clinical Engineering Division Dr Ernesto Iadanza. Details about those keynote talks are available at <http://www2.warwick.ac.uk/fac/sci/eng/research/systems/abspie/hta/seminarprogramme/>.

In order to provide continuity and feedback to the IFMBE affiliates, many of the speakers will be attending the forthcoming MEDICON2016, where two Special Sessions on the second and third day topics have been organized to run in the Track "Clinical Engineering and "Health Technology Assessment": the first focusing on early stage HTA through the MAFEIP tool developed by the European Commission in the framework of the European Innovation Partnership for Active and Health Ageing (EIP-AHA), proposed by Dr Boehler and Dr Fico; the second focusing on HTA of medical devices, proposed Dr R. Tarricone (Bocconi University, Milano, Italy) and Dr O. Ciani (University of Exeter, UK) which will report also their experience with the EU funded MedtecHTA project.

Finally, 41 attendees registered to the First IFMBE Summer School on HTA from 20 different Institutions, including 3 SMEs, 3 Hospitals, 1 National Health Ministry of Health and 13 Universities.



This School was a significant achievement, not only for the significant number of registrations, which was relatively high considering that this summer school was the first offering formal training on HTA to BME and medical physicists, but also for other good reasons. It demonstrated the commitment of the IFMBE to support the diffusion of the HTA among the BME. The logo of the School was designed to represent this commitment and represented the IFMBE into a stylised pyramid (Figure 1), representing the pyramid of evidence, which is the base of the evidence based medicine, which represent one of the three main pillars of HTA (together with health economy and healthcare innovation) and the three cornerstones of the pyramid numbered to recall the three laws of thermodynamic, so important for any engineering branch.

Moreover, the School generated outstanding teaching materials on HTA that will be freely accessible to the IFMBE affiliates and will include about 20 hours of eLearning courses. For the first time, international experts of HTA with a background in health economy, medicine and pharm economy will attend proactively an IFMBE Conference, the MEDICON2016, organizing special sessions and workshops in collaboration with the HTA Division members. The HTAD agreed to organize future editions of the IFMBE HTA Summer School, each 2 years and is looking for opportunity to organise the next editions in other IFMBE Regions.



Figure 1.
first IFMBE Summer School on HTA



First International Clinical Engineering and Health Technology Management Congress

Hangzhou, China

Ernesto Iadanza, IFMBE/CED, Chairman, IUPESM/Education and Training Committee, Chairman

In last October 21-23, 2015, took place the First International Clinical Engineering and Health Technology Management Congress (ICEHT-MC) in Hangzhou (China), a true milestone for the advancement of the Clinical Engineering profession. The event, sponsored by IFMBE Clinical Engineering Division and by the Chinese Society of Biomedical Engineering, was organized by the China Medical Devices Journal and endorsed by many national and transnational organizations, including WHO, ACCE and many more.

We worked a lot, in the CED board, to prepare this event aiming at a great success. Almost 500 partic-



ipants attended the conference, co-chaired by Yadin David (CED coopted member and chairman of the IUPESM/HTTG) and Zhou Dan (President of Chinese Society of Biomedical Engineering, Clinical Engineering Branch). The date of October 21th has been proposed by Yadin as the "Global Clinical Engineering Day". A declaration

agreeing to this has been signed by various stakeholders.

All the most important topics have been treated, such as WHO tools and resources for improving outcomes of healthcare services, HTM programs in challenging locations, innovation in CE, device standards, HTA, best practices for procurement, risk management, disaster preparedness, models, benchmarking and many more.

In the first part of 2015, the CED Awards Committee selected the recipient of the CED Award that was given during the IFMBE World Conference in Toronto in last June, to Ms. Adriana Velazquez Berumen



for her outstanding career and contribution to the field.

On the first conference day, October 21, in Hangzhou I had the privilege as CED chairman to announce the winners of the two CED Teamwork Awards and the two CED Best Paper Awards for the year 2015.

We had some outstanding candidates, so the CED Awards Committee performed a fantastic work fixing the criteria, selecting the candidates and choosing the winners.

Right after the conference, on October 23, many of the representatives of all the participant associations – including the IFMBE President, Prof. James Goh, and the Secretary General, Prof. Kang-Ping Lin – participated to the first Global CE Summit, convened by Yadin David and facilitated by IFMBE CED and ACCE.

The purpose of the Summit was to review various country approaches for: CE/BME/HTM Definitions & Job Roles / Body of Practice (BoP); Value proposition and CE Recognition; International Labor Organization (ILO) recognition of BME in ISCO 2018 (ILO Classification of Occupations); CE Education (levels and content) Body of Knowledge (BoK); CE Certification (local and global); CE Licensing and Registration; CE Education Accreditation; CE Regulation.

The Global CE Summit, after this first meeting, has become a stable project under the IFMBE/CED umbrella, with the permanent participation of WHO (Adriana Velasquez). We had many more web-meetings, almost on a weekly basis until march 2016, in order to collect CE success/failure stories and to prepare a whitepaper with the first goal of being included by ILO in ISCO2018.

The next ICEHTM conferences will be in Brazil (2017) and Italy (2019).

This is a great moment for Clinical Engineering worldwide, counting many resonant initiatives on a local, regional and worldwide scale. I am founding in these days a “Committee for the promotion of the Biomedical Engineering and Clinical Engineering professions” together with Edgardo Maria Iozia (European Union/CESE), Leandro Pecchia (HTAD Chairman and EAMBES Public Affairs Working Group), and Luca Radice (Provincial Council of Engineers, Monza e Brianza).

I am aware of many more initiatives in other countries and regions all over the world. All these efforts and projects to increase the role of CEs will always find in the Clinical Engineering Division of IFMBE their natural home, for the safety of the patients: “Together we can make it better”!



International Conference for Innovation in Biomedical Engineering and Life Sciences (ICIBEL 2015)

Malaysia

Fatimah Ibrahim, President of Malaysia's Society of Medical and Biological Engineering (MSMBE), Centre For Innovation in Medical Engineering, Department of Biomedical Engineering, Faculty of Engineering, University of Malaya



Launching ceremony of ICIBEL conference

The International Conference for Innovation in Biomedical Engineering and Life Sciences (ICIBEL 2015) took place from 6th to 8th December 2015 at Pullman Putrajaya Lakeside, Malaysia. The conference was organized by Center for Innovation in Medical Engineering (CIME), Faculty of Engineering University of Malaya (UM), Malaysia and co-organized by Malaysia's Society of Medical and Biological Engineering (MSMBE). This conference was endorsed by International Federation for Medical and Biological Engineering (IFMBE). The conference consists of 12 sessions with seven Plenary Speakers, and five Invited Speakers. ICIBEL 2015 commenced with concurrent workshops on 6th December, followed by two days of technical sessions on December 7th and 8th. Papers submissions were received from participants from all over the world including Australia, China, Egypt, Germany, India, New Zealand, Pakistan, Singapore, Taiwan, Japan, Hong Kong, Canada, Bangladesh, United States of America and Malaysia. The proceedings were indexed by ISI-Web of Science and are part of the IFMBE Proceedings series, published by Springer (<http://www.springer.com/us/book/9789811002656>). Extended versions of selected papers presented at the conference will be considered for publication in the Medical & Biological Engineering &

Computing (MBEC) ISI Journal. The Board of Engineers, Malaysia had awarded 10 Continuing Professional Development (CPD) points, five CPD points for the workshops, and another five CPD points for the conference. Sponsorships were received from University of Malaya (main sponsor), Collaborative Research in Engineering, Science & Technology (CREST) Malaysia (silver sponsorship), as well as RF Station Sdn. Bhd., National Heart Research Institute of Singapore, Brain Rhythm, Springer, Anex Pte Ltd, and Dahan Technology.

On the 6th of December, three workshops were held in parallel at the Department of Biomedical Engineering, University of Malaya. The workshop on *Safety in Healthcare with an Ageing Population* was given by Professor Alan Murray from Newcastle University. Prof Murray is the founder of *Cardiovascular Physics and Engineering*, an international research group, and has published over 300 research papers, including in *Nature* and the *Lancet*. His primary areas of research are in the development of devices and measurement techniques of clinical value in cardiovascular medicine and surgery.

Another workshop on *Design and Protection of Low Voltage Electrical Systems for Healthcare Facilities and Medical*

Devices was conducted by Ir. K. T. Lim. He received his Bachelor of Electrical Engineering from the University of Malaya in 1979 and Master of Science (Electrical) from the National University of Singapore in 1991. He began his engineering career in the semiconductor industries where he worked for eight years in semiconductor process, equipment maintenance and automatic, product, and test engineering before joining the Singapore Polytechnic for three years as a lecturer and industrial con-

sultant in electrical and industrial electronics engineering and applications.

The 3rd workshop was on *Carbon-MEMS/NEMS Fundamental and Applications* by Professor Marc Madou from University of California, Irvine. Prof Madou specializes in the application of miniaturization technology to chemical and biological problems (BIO-MEMS). He is the author of several books in this field, which he helped pioneer both in academia industry.

The following tables list the organizing committee members, plenary and invited speakers that participated in the conference.

Organizing Committee Members:

Chair : Prof. Ir. Dr. Fatimah Ibrahim	Co-chair: Assoc. Prof. Dr. Tan Maw Pin
Publication: Prof. Ir. Dr. Fatimah Ibrahim	Co-publication: Dr. Juliana Usman
Secretary: Dr. Noraisyah Mohamed Shah	Treasurer: Dr. Mas Sahidayana Mokhtar
Publicity: Assoc. Prof. Dr. Norhayati Soin	Technical: Dr. Mas Sahidayana Mokhtar
Co-technical: Dr. Mohd Yazed Ahmad	Co-technical: Dr. Mohd Yazed Ahmad
Sponsorship: Associate Prof. Dr. Siti Zawiah Binti Md Dawal	

Plenary Speakers	Invited Speakers
Prof James Goh (Singapore)	Mr Zamane Abdul Rahman (Malaysia)
Prof Alan Murray (United Kingdom)	Dr Zhong Liang (Singapore)
Prof Nigel Lovell (Australia)	Prof Dang Mau Chien (Vietnam)
Prof Toshiyo Tamura (Japan)	Prof Yongping Zheng (Hong Kong)
Prof Marc Madou (USA)	Mr Khairul Azmy Kamaluddin (Malaysia)
Prof Sharifah Bee (Malaysia)	
Prof Nitish Thakor (Singapore/USA)	

The overall conference activities are summarized as follows:

Day 1 : Opening and Special sessions

During the conference opening, speeches were delivered by the Conference Chair, Prof. Ir Dr Fatimah Ibrahim and by Prof Dato' Dr Mohd Amin Jalaludin, the Vice Chancellor of the University of Malaya. The Vice Chancellor then launched the conference which ended with a photography session together with the participants and committee members. Prof Dr. James Goh (The



Prof. Dato' Dr. Mohd Amin Bin Jalaludin (Vice Chancellor, University of Malaya) delivering his speech during the opening ceremony. Seating on left Prof James, Goh president of IFMBE, right is Prof Ir Dr Fatimah Ibrahim, ICIBEL chair and president of MSMBE



President of IFMBE) was the invited to witness the opening ceremony.

Prof James Goh gave the first plenary talk on *Silk-Based Scaffolds for Tissue Engineering Applications*, at the conference's Main Room. Two parallel paper presentations began after tea break. The second plenary speaker, Prof Alan Murray, presented a talk entitled *Medical Innovation: Clinical Problem to Engineering Development to Clinical Solution*. This was followed by Parallel Sessions 3 and 4. After lunch, plenary speaker 3, Prof Nigel Lovell presented a talk on *Convergent Telehealth and Telecare Technologies for Managing the Frail Elderly* and plenary speaker 4, Prof Toshiyo Tamura, presented on the *Current Topics of Unobtrusive and Wearable Monitoring Systems*.

After that, a forum on *Aging* was chaired by Prof Tan Maw Pin, and the panelists were Prof Murray, Prof Nigel and Prof Tamura. After a short break, Prof Murray delivered his talk on *How to Publish your Research*. This was followed by two parallel sessions delivered by the invited speakers. Mr Zamane Abdul Rahman, the CEO of the Medical Device



Prof. Amin accompanied by Prof. Datuk Dr. Rohana Yusof and (Deputy Vice-Chancellor (student affairs & alumni, UM)), Prof. Fatimah Ibrahim and Assoc. Prof. Dr. Tan Maw Pin (co-chair ICIBEL) at the exhibition booths.

Authority (MDA), Ministry of Health Malaysia, spoke on *Medical Device: Laws, Investments, Competency Requirements and Global Convergence* at the Main Room, while at Putra 1, Dr Zhong Liang presented his talk entitled *Curvedness-based Imaging of the Heart: From Bench to Clinical Cardiology*. These were followed by parallel paper presentations (sessions 5 and 6).

The conference dinner was then held at the night of the first day. Events included renditions of songs by Miss Nurisa Shabrina as well as traditional dances by dance troupe students from the University of Ma-

laya. During the dinner, certificates and token of appreciations were presented to plenary and invited speakers and workshop facilitators. Furthermore, best papers awards and the Young Investigator Award were given out to the winners. The best paper in Biomedical Engineering was awarded to Queenie T. K. Shea (Hong Kong), the Best Paper on Biomedical Science & Technology to F. Newberry (New Zealand) and the Best Paper on Life Science to Ahmed Rufai Usman (Malaysia). The Young Investigator Award went to M. Mehdi Aeinehvand (Malaysia).

Day 2: 8th December 2015

Day 2 began with Prof Marc Madou's plenary session on *Suspended Carbon Nanowires, Carbon Nanogaps and Carbon Nanorestrictions*, followed by Prof Sharifah Bee's plenary session on *Challenges and Opportunities in Carbon Nanostructured Designing*. The session continued with the invited speaker, Prof Dang Mau Chien, on *A Review on*

Inkjet Printing Technology and Its Application at Laboratory for Nanotechnology. This was followed by a short forum on C-Nems with Prof Madou, Prof Sharifah and Prof Dang. This was followed by the invited speaker session after a tea break with Prof Yongping Zheng, presenting a talk on *A Novel Device for Radiation-free Assessment of Scoliosis using 3D Ul-*

traSound Imaging and Mr Khairul Azmy Kamaluddin, with a talk on *Certified Healthcare Facility Manager*. The parallel paper presentations (session 7 and session 8) were held immediately after.

The session continued with Prof Nitish Thakor's plenary session on *Frontiers of Neuroengineering*. This was followed immediately by

Meet the Editorial Board of Medical & Biological Engineering & Computing Journal (MBEC), with Prof Thakor as MBEC editor together with Prof James Goh and Dr. Baumann. This continued with parallel sessions 9, 10, 11 and 12. The conference concluded with the closing ceremony and the naming of the Best Presenter award winner, Dr. Wan Wardatul from International Islamic University of Malaysia.

Conclusion

This conference was illuminated with the brilliant inputs shared among all delegates. The tremendous effort of all involved organizations such as CIME UM, MSMBE, IFMBE, IEEE University of Malaya Student Branch, IEEE Engineering Medicine Biology (EMB) Malaysia Chapter, Biomedical Engineering Society(BES) Singapore, Springer and other local industries are highly appreciated. We hope this involvement and collaboration will continue in the future conferences for the betterment of innovation in Biomedical Engineering and Life Sciences.



The winners of the conference awards.



Delegates with the traditional dance performers during the gala dinner



Some of ICIBEL conference delegates

1st World Congress on Electroporation

Portorož, Slovenia

Damijan Miklavčič, University of Ljubljana

Four hundred registered participants joined the 1st World Congress on Electroporation and Pulsed Electric Fields in Biology, Medicine and Food & Environmental Technologies – the meeting endorsed by IFMBE – held in Portorož, Slovenia, during September 6-10, 2015. In response to the call for papers we received 376 submissions by authors from 48 countries and 6 continents. Altogether, 231 presentations were scheduled for oral along with 162 poster presentations in four days. The meeting was intense as the scheduled plenary lectures started at 8:30 in the morning and the parallel sessions ended at 18:30! Due to the interdisciplinary nature of electroporation research and the ambition to cover basic research as well as applied electroporation in areas of medicine, food processing and environment, there was great emphasis on mixing the plenary lectures and giving ample opportunities to discuss and develop new contacts during the poster/coffee and lunch breaks. Based on the feedbacks the organisers and members of various committees received the 1st World Congress proved to be successful and we can proudly announce the 2nd World Congress in September 2017 in Norfolk, Virginia (USA).

One of the emphases was given to the Young Investigators Competition. In fact the endorsement by IFMBE and its support of the YIC along with large interest of partici-



pants persuaded the organisers to develop the competition in three categories: Biomedical Engineering; Medicine and Biology; and Food, Biotechnology, and Environment category. The standard rules of IFMBE have been adapted also to the other two categories and I can clearly say that without the support of IFMBE we would probably not decide to organise YIC – but it was important! Additional funds were provided by Frank Reidy and German Institute of Food Technologies. The finalists of the YIC were also highlighted on the web page and in the programme of the Congress (<https://wc2015.electroporation.net/yic/finalists>).

In the frame of the Young Investigators Competition, we received 51 submissions competing for awards in three categories. Out of 51 submissions, 21 young investigator competition finalists in 3 categories were selected based on peer review scoring. The finalists' presentations

(three of them could unfortunately not attend the Congress) were further evaluated by the Awards Committee, consisting of five distinguished researchers and members of the International Program Committee of the Congress. The Awards Committee members were: Nikolai I. Lebovka, Ukraine; James Lyng, Ireland; Boris Rubinsky, USA; Justin Teissié, France; and P. Thomas Vernier, USA. The choices they had to make were not easy, as stated by the Committee member dr. Justin Teissié at the Closing ceremony.

For the winners of the YIC in categories: Biomedical Engineering; Food, Biotechnology and Environment; and Medicine and Biology, prizes were provided by the International Federation of Medical and Biological Engineering (IFMBE), German Institute of Food Technologies (DIL), and Frank Reidy, respectively. Springer provided books on electroporation for the finalists.

The announcement of the winners and awards were presented by prof. Ratko Magjarević, past-president of IFMBE for the Biomedical Engineering category:

Aude Silve	Study of transmembrane voltage kinetics during 100 μs pulse using voltage sensitive dyes	1st prize	IHM KIT, Germany
Klemens Wassermann	A Novel Sample Preparation Concept for Sepsis Diagnostics using High Frequency Electric Fields	2nd prize	AIT Austrian Institute of Technology, Austria
Lara Prosen	Magnetofection: An effective, selective and feasible non-viral gene delivery method	3rd prize	Institute of Oncology Ljubljana, Slovenia

by prof. Richard Heller from the Frank Reidy Center for Bioelectrics, Old Dominion University on behalf of Frank Reidy in category Medicine and Biology:

Laure Gibot	Mixed spheroids as a relevant 3D biological tool to understand therapeutic window of electrochemotherapy	1st prize	IPBS-CNRS UMR 5089, France
Stefania Romeo	Electroporation of a bladder cancer cell line in presence of calcium: efficacy dependence on electric field strength and calcium concentration	2nd prize	CNR-IREA, Italy
Urša Lampreht	In vitro and in vivo evaluation of a plasmid encoding canine interleukin 12	3rd prize	Institute of Oncology Ljubljana, Slovenia

and by prof. Stefan Töpfl from the German Institute of Food Technologies in the Food, Biotechnology, and Environment category:

Nicolò Dellarosa	Effect of pulsed electric fields on water distribution in apple tissue as monitored by NMR relaxometry	1st prize	University of Bologna, Italy
Song Li	Study on a solid-state pulse generator based on magnetic switch for food treatments by pulsed electric field (PEF)	2nd prize	National University of Defense Technology, China
Oleksii Parniakov	Electro-biorefinery as a potential tool for valorization of mango and papaya by-products	3rd prize	Université de Technologie de Compiègne, France

For a complete list, see: <https://wc2015.electroporation.net/yic>. *Congratulations!*



1st World Congress on Electroporation and Pulsed Electric Fields in Biology, Medicine, Food & Environmental Technologies

Portorož, Slovenia
September 6–10, 2015



Tentative topics for the World Congress 2015

- Basics, biology of electroporation
- Basics, modeling of electroporation including MD studies
- Technology for PEF and large treatment capacities
- Technology for electric pulses for research and medical applications
 - Medical applications (ECT, IRE, GET)
 - Food industry applications
 - Environmental applications
- Micro and Nanotechnologies (single cell electroporation, microfluidics, ...)



WC2015.ELECTROPORATION.NET

International Organizing Committee V. Heinz (Germany) R. Heller (USA) D. Miklavčič (Slovenia) L. M. Mir (France) J. Raso (Spain)	Scientific Advisory Board G. V. Barbosa-Cánovas (USA) D. Knorr (Germany) E. Neumann (Germany) C. R. Rossi (Italy) B. Rubinsky (USA) K. H. Schoenbach (USA) J. Teissié (France) J. C. Weaver (USA)	Scientific Programme Committee H. Akiyama (Japan) S. Becker (New Zealand) R. Buckow (Australia) M. Cemažar (Slovenia) R. V. Davalos (USA) D. A. Dean (USA) G. Ferrari (Italy) W. Frey (Germany) S. Töpfl (Germany) P. T. Vernier (USA) M. J. Jaroszeski (USA) E. Vorobiev (France) C. Y. Xiao (China) K.-I. Yano (Japan)
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Committees

International Organising Committee	Scientific Programme Committee	
V. Heinz (Germany)	H. Akiyama (Japan)	G. Marshall (Argentina)
R. Heller (USA)	S. Becker (New Zealand)	O. Martín-Belloso (Spain)
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J. C. Weaver (USA)		



The III International Conference on Nanotechnologies and Biomedical Engineering (ICNBME-2015)

Chisinau, Moldova



Victor Sontea, Ion Tiginyanu, Conference Co-Chairs

The III International Conference on Nanotechnologies and Biomedical Engineering (ICNBME-2015) was held in Chisinau, the capital of Republic of Moldova, from September 23 to 25, 2015. ICNBME-2015 was organized by the Academy of Sciences of Moldova (ASM), the Technical University of Moldova (TUM), the Biomedical Engineering Society of Moldova and was endorsed by the International Federation for Medical and Biological Engineering (IFMBE).



Conference opening

Welcome Addresses at the official opening of the forum were given by the corresponding member of ASM Vladimir Hotineanu; the Chairman of the Parliamentary Committee for Culture, Education, Research, Youth, Sports and Media, Gheorghe Turcanu; the Vice-minister of Health and academician, Stanislav Groppi; the Vice President of ASM, academician Valeriu Canter; the academician, Rector of the Technical University of Moldova, Ion Bostan; the first deputy of ASM, academician Ion Tighineanu; and, finally, the President of Moldova Biomedical Engineering Society, Professor Victor Sontea.

The Conference program consisted of plenary sessions, symposiums, invited, oral and poster sessions, and expositions. The conference program included a variety of topics:

- Nanotechnologies and nanomaterials;
- Bio-nanotechnologies and biomaterials;
- Biomedical signal processing and imaging;
- Biomedical instrumentation and sensors;
- Clinical Engineering;
- Medical Informatics;
- Cell and tissue engineering;
- Biomedical Engineering education;
- Nuclear and Radiation security;

The Conference was attended by more than 250 participants from 20 countries.

Plenary reports were presented by scientists from Germany, Moldova, USA, and Japan.

Researchers from Germany, Rainer Adelung from Christian-Albrechts University, Kiel, and Denys Makarov from Institute for Integrative Nanoscience of the Leibniz Institute for Solid State and Materials Research, Dresden, presented reports on oxide semiconductors as antiviral agents for herpes therapy in terms of graduation from laboratory research to pharmacies, respectively about active and passive electronic smart implants.



Plenary session



*Professor Rainer Adelung,
Germany*



*Academician Svyatoslav Moskalenko,
Moldova*



*Professor Hidenori Mimura,
Japan*

Academician Svyatoslav Moskalenko from Institute of Applied Physics of the ASM did a review of development works on exciton-polariton lasers.

Professor Hidenori Mimura from the Research Institute of the University of Shizuoka, Japan, presented the results of high quantum efficiency photocathodes development involving surface plasmon.

The fascination and inspiration possibilities were demonstrated in an accessible manner to the general public in the report by prof. Cordt Zollfrank from Munich Technical University, entitled "Bioinspired Optical materials".

In the field of bio-nanotechnology and biomaterials, relevant results were presented concerning further technology of biomaterials obtaining biocompatibility with human body and possibilities of implementation in medicine.

Advanced medical devices are an indispensable part of the medical act, of the prevention, diagnosis and correct diseases treatment. The results presented at the conference in the fields of signal and image processing, medical bioinstrumentation and clinical engineering have a high impact on healthcare improvement by maintaining a high level of medical devices performance and safety in hospitals and in providing accessible and high quality health services.

In conjunction with the Conference, the 2nd General Assembly Meeting of the TEMPUS IV BME-ENA project: "BME-ENA - Biomedical Engineering Education Tempus Initiative in Eastern Neighbouring Area" was held. With the occasion of this meeting newly implemented National Center for Biomedical Engineering was officially opened. The center will provide the essential infrastruc-



Plenary session



Session on Education in Biomedical Engineering



Opening of the National Center for Biomedical Engineering



ture for performing the necessary laboratory exercises within the new Joint MSc program in Biomedical Engineering in Moldova.

Promotion, establishment and improvement of biomedical engineering education in Armenia, Georgia, Moldova and Ukraine to satisfy the criteria of EU policies in higher education through capacity-building and institution-building measures within the TEMPUS IV BME-ENA project were discussed during the Workshop "Education in Biomedical Engineering" attended by representatives from 18 universities in 12 countries. It should be noted that biomedical engineering specialty, according to CareerCast.com (USA), ranks in the top five of 10 best jobs for 2015, taking into account the revenue, prospects for development, work environment, stress and physical effort. Biomedical engineering specialists are the main link between medicine and technological progress.



TEMPUS BME-ENA Project 2nd General Assembly Meeting

ICNBME Conference 2015 was combined with a Moldovan-Japanese Autumn School in nanotechnology and biomedical engineering. This event offered young researchers, undergraduate, master and PhD students, a unique opportunity to deepen their knowledge in these areas. The lectures were presented in English by professors and researchers from Moldova and abroad: Acad. Ion Tighineanu, Honorary member of the ASM Vladimir Fomin; Prof. Rainer Adelung from Germany; Prof. Hidenori Mimura from Japan; Prof. Mircea Dragoman from Romania, etc. Among the beneficiaries of the courses were a



Moldovan-Japanese Autumn School

group of students from Japan. At the end of the autumn school, diplomas were awarded to all participants.

The Conference has established itself at national and international scale not only as a benefit for multidisciplinary scientific cooperation, but also for its social resonance. It is undoubtedly merit of Conference co-chair acad. Ion Tighineanu and Prof. PhD. Victor Şontea who identified this niche of scientific and practical importance - the intersection of nanotechnology and biomedical engineering, and through them, promoted a positive image of Moldova in the world and created new bridges of cooperation with scientists on different continents.



Professor Ratko Magjarević, Croatia

ICNBME Conference 2015 offered valuable opportunity for ideas exchange and presentations of latest concepts in various fields, such as physics, chemistry, biomedicine, information technology etc. The conference was attended by physicists, chemists, electronics engineers, medical doctors, biomedical engineering specialists who discussed the opportunities of the nanotechnologies and nanomaterials use in biomedicine in order to boost the exchange of information and initiation of new projects in the scientific fields. The geography of countries represented by participants at the conference covers different parts of the world - Germany, USA, Japan, France, Italy, Belgium, Finland, Greece, Lithuania, Poland, Turkey, Romania, Russia, Belarus, Armenia, Georgia, Ukraine, Moldova, etc.



Professor Ashok Vaseashta, USA

All participants noted the high scientific level of the Conference.

Conference material was published in IFMBE Proceedings, Volume 55. By decision of the International Program Committee and the Conference Organizing Committee, the next Conference will take place in 2017.



Poster session



Rest zone at conference venue



Conference registration



Visit to Cricova wine cellars



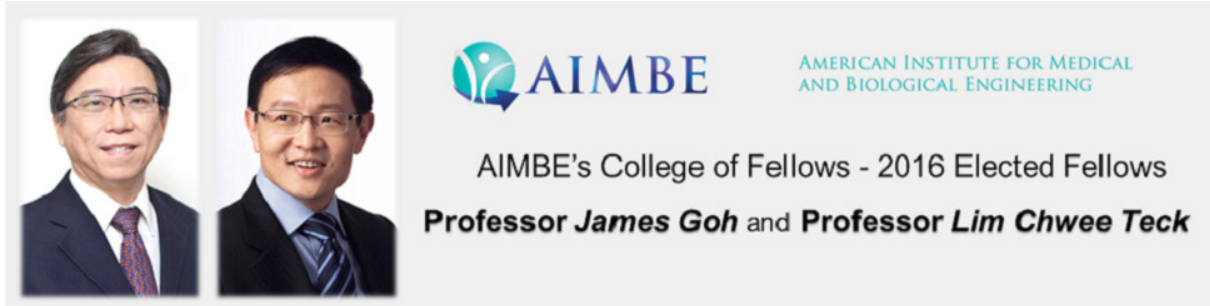
Conference venue



Closing ceremony

News in Brief

James Goh and Chwee Teck Lim to be Inducted into AIMBE College of Fellows



The American Institute for Medical and Biological Engineering (AIMBE) has announced on January 20, 2016 the pending induction of James Goh, Ph.D., Professor, Department of Biomedical Engineering, Faculty of Engineering, National University of Singapore, and Chwee Teck Lim, Ph.D., Provost Chair Professor, Department of Biomedical Engineering, Faculty of Engineering, National University of Singapore to its College of Fellows.

Dr. Goh was nominated, reviewed, and elected by peers and members of the College of Fellows *for exceptional contributions to musculoskeletal bioengineering and active promotion of the field of biomedical engineering*. Dr. Lim was elected *for outstanding contributions in applying cell mechanics and designing innovative microfluidic technologies for disease diagnosis, prognosis and personalized treatment*.

A formal induction ceremony will be held during AIMBE's 25th Annual Meeting at the National Academy of

Sciences Great Hall in Washington, DC on April 4, 2016. For more information about the AIMBE Annual Meet, please visit www.aimbe.org.

AIMBE's mission is to recognize excellence in, and advocate for, the fields of medical and biological engineering in order to advance society. Since 1991, AIMBE's College of Fellows has lead the way for technological growth and advancement in the fields of medical and biological engineering. Fellows have helped revolutionize medicine and related fields in order to enhance and extend the lives of people all over the world. They have also successfully advocated for public policies that have enabled researchers and business-makers to further the interests of engineers, teachers, scientists, clinical practitioners, and ultimately, patients.

Congratulation to both of them!

Chwee Teck Lim listed in Asia's top 100 scientists

Prof Chwee Teck Lim has been listed as one of Asia's top 100 scientists in the Jan-Mar issue of Asian Scientist 2016. The 100 distinguished scientists, innovators and leaders on this annual list come from diverse sectors in industry and academia, ranging from the biomedical sciences to mathematics and engineering. Prof Lim is noted for his outstanding contributions to research in the field of medical and biological engineering for which he received the IFMBE Vladimir K. Zworykin Award in 2015.



WHO Publications on Medical Devices

WHO regularly publishes books in Medical Devices Technical Series to provide guidance to WHO Member States in order to increase access to appropriate medical devices.

Main domains include:

- Research and development
- Regulation
- Assessment
- Management

WHO is currently leading a global effort to draft a publication on the role of the biomedical engineer as part of the WHO Medical Device Technical Series.

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WHO discussion groups on medical devices
medicaldevices@who.int

Singapore will host 2021 World Congress of Medical Physics and Biomedical Engineering

Bimedical Engineering Society Singapore, together with Society of Medical Physics Singapore, won the bid to host the 2021 World Congress of Medical Physics and Biomedical Engineering. The other bid cities were Taipei and Mexico city.



BES SINGAPORE **SMP** SINGAPORE **Society of Medical Physicists (Singapore)** **Vote Singapore 2021** **YourSingapore**

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Medical devices

WHO publications on medical devices

Medical devices

- Policies and resolutions
 - Country information
 - Policy
 - Innovation
 - Regulation
 - Health technology assessment of medical devices
- Quality and safety regulations
- Health technology assessment
- Health technology management
- Innovation
- Country data
- Global collaborations
- Publications

Country information

Baseline country survey on medical devices 2011

First WHO Global Forum on Medical Devices: context, outcomes and future actions 2011

Policy

Development of Medical Device Policies 2011

Package WHO medical device technical series (8 documents) 2011

Innovation

Compendium of innovative health technologies for low-resource settings, 2011-2014. Assistive devices, eHealth solutions, medical devices, other technologies, technologies for outbreaks 2015

Compendium of Innovative Health Technologies for Low-resource Settings 2014

Medical Devices and eHealth Solutions 2013

Compendium of New and Emerging Health Technologies 2011

Innovative Technologies that Address Global Health Concerns 2010

Regulation

Aide Memoire on Strengthening National Regulatory Authorities 2003

Global Overview and Guiding Principles 2003

Aide-Memoire for National Medical Device Administrations 2002

A Guide for the Development of Medical Device Regulations 2002

A Model Regulatory Program For Medical Devices: An International Guide 2001

Health technology assessment of medical devices

Systematic Review of Needs for Medical Devices for Aging Population 2015

Health Technology Assessment of Medical Devices 2011

Priority medical and assistive devices

Priority Assistive Products List (APL) 2016

Interagency List of Medical Devices for Essential Interventions for Reproductive, Maternal, Newborn and Child Health 2015

Core Medical Equipment 2011

Medical Devices: Managing the Mismatch 2010

Health technology management of medical devices

WHO technical specifications of neonatal resuscitation devices 2016

WHO technical specifications for oxygen concentrators 2015

ESSENTIAL MEDICINES AND HEALTH PRODUCTS

- EMP home page
- Policy, Access and Use

Events

Publications and other resources

WHO Publications

Publications en Français

Biomedical engineering global resources

Technical specification

WHO discussion groups on medical devices pdf, 72kb

WHO catalogue of health technologies publications pdf, 907kb

Overview of WHO Medical Devices Publications pdf, 709kb

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Assistive Devices

Diagnostic Imaging

Health Technologies

IVDs

Medical Devices

Personal Protective Equipment

Yadin David: Building Connections in the Clinical Engineering World with an International Conference

Yadin David published a report on the first International Clinical Engineering and Health Technology Management Congress (ICEHTMC) that was recently held in Hangzhou, China. Also, during the opening ceremony of the Congress, he announced the creation of Global Clinical Engineering Day to be celebrated around the world every Oct. 21.

<https://aamiblog.org/2015/11/03/yadin-david-building-connections-in-the-clinical-engineering-world-with-an-international-conference/>

Announcements

La Ingeniería Biomédica y la Bioingeniería en la visión integral de la salud humana y ambiental

**VII Latin American Congress
On Biomedical Engineering
Claib 2016**

26 to 28 October 2016

Organized By: **ABIOIN**
Asociación Latinoamericana de Ingeniería Biomédica y Bioingeniería

Registrations: www.abioin.com

Supported By: IFMBE, Springer, IEEE, EMB, UNAB, Universidad Autónoma de Bucaramanga, FOSCAL, ICBME, etc.

<http://www.abioin.com/convocatory.html>

2016

**XIV MEDITERRANEAN
CONFERENCE ON MEDICAL
AND BIOLOGICAL
ENGINEERING AND
COMPUTING**

March 31st - April 2nd 2016

PAPHOS, CYPRUS

<http://www.medicon2016.org/>

ICBME 2016

7th – 10th December 2016
SINGAPORE

For more information, please visit
www.icbme.org

Jointly Organized by: NUS, Department of Biomedical Engineering, Faculty of Engineering, BES, Biomedical Engineering Society (Singapore), IFMBE

<http://www.icbme.org/>

BMT 2016

4-6 OCTOBER 2016
BASEL [CH]
CONGRESS CENTER

«DREILÄNDERTAGUNG»
SWISS, AUSTRIAN
AND GERMAN SOCIETIES OF
BIOMEDICAL ENGINEERING

www.bmt2016.ch

<http://www.bmt2016.ch/>

Joint conference of

EMBEC'17 Tampere **NBC'17 Finland**

European Medical and Biological Engineering Conference (EMBEC)
Nordic-Baltic Conference on Biomedical Engineering and Medical Physics (NBC)

11-15 June 2017 in Tampere, Finland

<http://embec2017.org/>





<http://www.iupesm2018.org/>

Calendar

BHI 2016

2016 IEEE International Conference on Biomedical and Health Informatics

<http://bhi.embs.org/2016/>

24 – 27 Feb 2016

Westin Hotel & Spas, Las Vegas, USA

CMBEC39

Annual Conference of the CMBES

http://www.cmbes.ca/index.php?option=com_content&view=article&id=335&Itemid=284ICDBE%202016

24 – 27 May 2016

Hyatt Regency, Calgary, Canada

ICDBE 2016

The 6th International Conference on the Development of Biomedical Engineering in Vietnam

<http://csc.hcmiu.edu.vn/bmeconf/bme2016/>

27 – 29 Jun 2016

Ho Chi Minh City, Vietnam

EMedic Global 2016

2016 Engineering Medical Innovation Global Competition

<http://www.emedicglobal.org/>

18 – 20 Aug 2016

CUHK and Hong Kong Science & Technology Park, Hong Kong

EMedi Summit 2016

Engineering Medical Innovation Summit: Medicine for the Future 2016

http://tcim.cuhk.edu.hk/en/events_details.php?id=16

20 – 21 Aug 2016

Hong Kong Science Park, Hong Kong

MoHE2016

3rd International Conference on Movement, Health and Exercise

<http://www.mohe2016.com/>

28 – 30 Sep 2016

Swiss Garden Hotel, Malacca, Malaysia

ICDBEM 2016

First International Conference on the Development of Biomedical Engineering in Mongolia

<http://www.mohe2016.com/>

30 Sep – 02 Oct 2016

Ulaanbaatar, Mongolia

BIOMAG2016

The 20th International Conference on Biomagnetism

<http://www.biomag2016.org/>

01 – 06 Oct 2016

Seoul, South Korea

MediTech 2016

International Conference on Advancements of Medicine and Health Care through Technology

<http://www.meditech.utcluj.ro/>

12 – 15 Oct 2016

Grand Hotel Napoca, Cluj Napoca, Romania

AFROBIOMEDIC 2016

1st African Conference on Medical Physics, Biomedical Engineering & Sciences

<http://www.afrobiomedic2016.org/>

17 – 21 Oct 2016

Abuja, Nigeria

CLAIB 2016

VII Latin American Congress on Biomedical Engineering

<http://www.abioin.com/convocatory.html>

26-28 Oct 2016

Bucaramanga, Colombia

BSI2016

The Eighth International Workshop on Biosignal Interpretation

<http://www.p.u-tokyo.ac.jp/~bsi2016/home.php>

01 – 03 Nov 2016

Osaka, Japan

CASEIB2016

XXXIV Congreso Anual de la Sociedad Española de Ingeniería Biomédica

<http://caseib16.es/>

23 – 25 Nov 2016

Valencia, Spain

ICBME 2016

The 16th International Conference on Biomedical Engineering

<http://www.icbme.org/>

07 – 10 Dec 2016

Singapore



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The newsletter appears on the web page <http://www.ifmbe.org> in downloadable PDF format. Articles and announcements for **IFMBE News** should be sent to Prof. Igor Lackovic, Faculty of Electrical Engineering and Computing, University of Zagreb, Unska 3, HR-10000 Zagreb, Croatia, Phone: +385 1 6129 808, Fax: +385 1 6129 652, E-mail: igor.lackovic@fer.hr. Please include „IFMBE News“ when e-mailing materials.

Submission guidelines

Text may be submitted via e-mail (to igor.lackovic@fer.hr) as either an ASCII (unformatted text) file in the body of the message or as an attachment in its native word processor format, which is preferable. Microsoft Word is the preferred format (doc or rtf). Please do not embed your photos in your document file. Instead submit them as separate attachments (TIF, JPEG, ...) at high enough resolution. When in doubt just send the image in the full size that your camera captured it. Along with your photos, please submit suggestions for captions. Captions can be provided via a text document with a list of filenames and captions. Usually, the article can be around 3 to 4 pages in regular single space Microsoft Words format with 2 to 6 high resolution photos.

