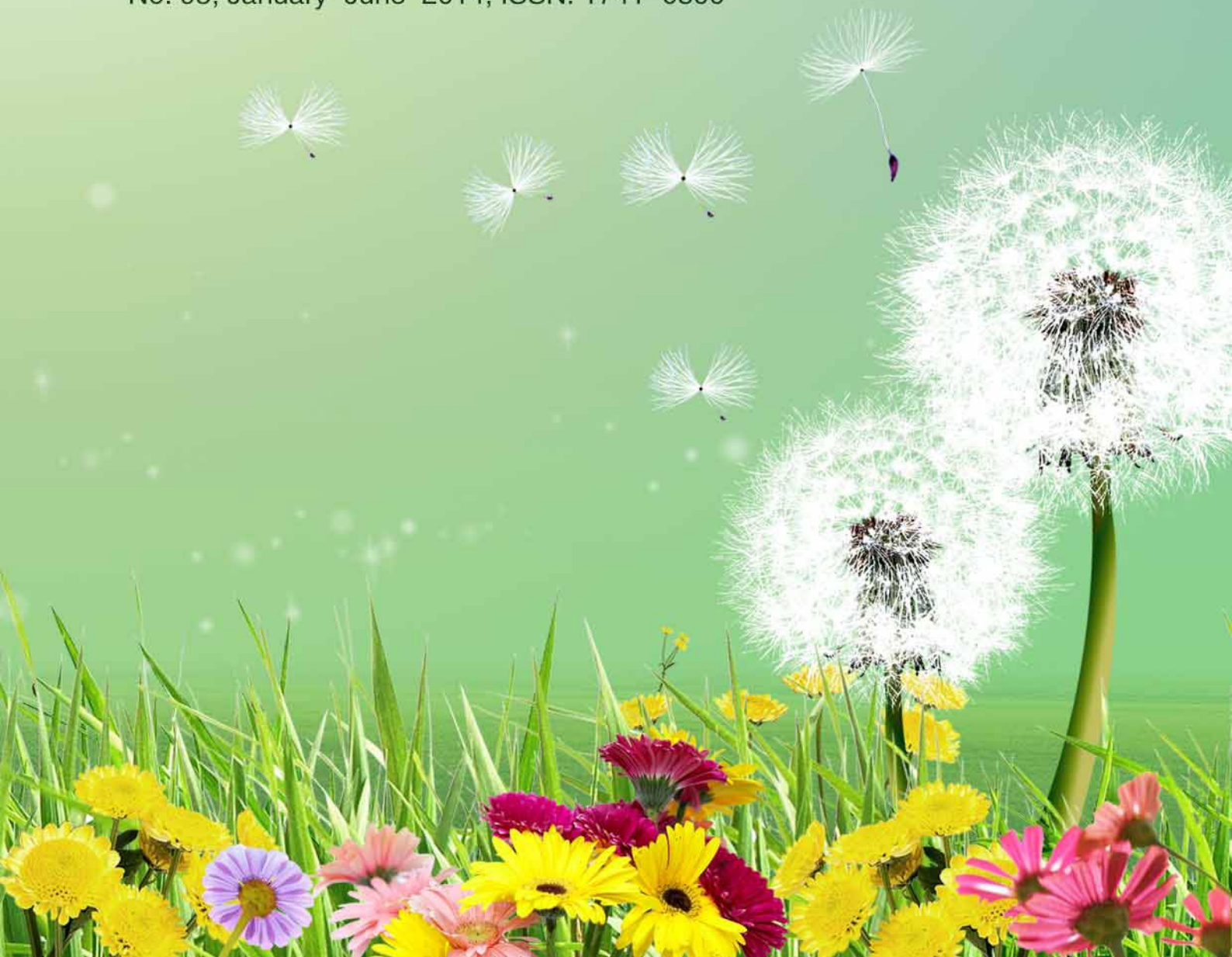
FOR LINKING UP

IFMBE NEWS

International Federation of Medical and Biological Engineering
No. 95, January–June 2014, ISSN: 1741–0800



IFMBE News
International Federation of Medical and Biological Engineering

CONTENT

IFMBE News
No. 95,
January-June 2014,
ISSN: 1741-0800

IFMBE News
International Federation of Medical and Biological Engineering

EDITORIAL

For Linking up

Kang Ping, Lin
NEWS EDITOR

IFMBE News has been committed to convey information among its members. From this spring to summer, we have collected news from Europe, Latin America, and Asia, as well as IFMBE officials. We expect that all the messages are just like dandelion seeds in search of fertile ground to land.

There is an important announcement from IFMBE Awards Committee, which two IFMBE awards are introduced. One is the Zworykin Award, named after the IFMBE Founder President Professor V. K. Zworykin, and the other is the Otto Schmitt Award. In addition, a new award - the IFMBE John A. Hopps Distinguished Service Award - will be presented during WC2015 in Toronto. Currently the Committee announced to start a program of call for nominations.

As one of the important and active IFMBE's committees, the Healthcare Technology Assessment Division (HTAD) aims to promote Healthcare Technology Assessment (HTA) within the biomedical and clinical engineering community. 2013 Annual Report from the HTAD published in the issue would bring you a quick look about its activities.

In addition, three good articles were obtained from the IFMBE affiliations. We are grateful that prof. Martha Zequera Diaz provided us good stories of BME activities in Latin America. Prof. Nicolas Pallikarakis in Greece contributed important news of a workshop on Biomedical Engineering Education in Europe held in this April. And finally thanks to Prof. Ratko Magjarevic, we have a chance to know about Association for Medical and Biological Engineering in Bosnia and Herzegovina.

For the coming events, we expect to share more conferences information with you, and looking forward to seeing you in our activities. more conferences information with you, and looking forward to seeing you in some of these activities.

Call for Nominations (Awards)

26th April 2014

IFMBE Awards Committee

Chair: James GOH

Co-Chairman: Ratko MAGJAREVIĆ

Members: Akos JOBBAGY, Susana LLANUSA, Monique FRIZE, Depei LIU, Murat FIRAT, Arthur MAK

Introduction

The IFMBE maintains an awards program to recognize every three years on the occasion of the World Congress individuals for their contributions to Biomedical Engineering. There are currently two awards: (1) the Zworykin Award, named after the IFMBE Founder President Professor V. K. Zworykin; (2) the Otto Schmitt Award. The selection of awardees is made by the IFMBE Awards Committee. A new award-the IFMBE John A. Hopps Distinguished Service Award - will be presented during WC2015 in Toronto.

In addition to its own awards program, IFMBE also participates in the IUPESM awards program. IUPESM honors individuals with its IUPESM Awards of Merit which recognize every three years a Medical Physicist and a Biomedical Engineer who have established distinguished careers in Medical Physics and Biomedical Engineering, respectively. The IFMBE Awards Committee acts as IFMBE Sub-committee of the IUPESM Awards Committee and is responsible for the selection of the Biomedical Engineer to receive the award.

Call for Nominations

1. Otto Schmitt Award

The Otto Schmitt Award is given to a Biomedical Engineer for exceptional contributions to the advancement of the field of medical and biological engineering. The criteria for nominations include leadership and seminal contributions to medical and biological engineering. The awardee will receive prize money of 2500 euros as well as travel funds to attend the World Congress 2015 in Toronto where the award will be presented. The awardee will be required to make a scientific presentation in the area of the awardee's expertise at the World Congress.

Nominations may be made by IFMBE

entities, affiliated member societies, or any individual member of the constituent societies. Nominees must be members of an IFMBE affiliated organization. A Curriculum Vitae is to be submitted together with a half-page biography, a photo, and a one-page write-up on the significant contributions made in relation to the criteria stated above.

2. Vladimir K. Zworykin Award

The Vladimir K. Zworykin Award is given to a Biomedical Engineer for outstanding research contributions in the field of medical and biological engineering. The criteria for nominations include innovation and outstanding research contributions to medical and biological engineering. The awardee will receive prize money of 2500 euros as well as travel funds to attend the World Congress 2015 in Toronto where the award will be presented. The awardee will be required to make a scientific presentation in the area of the awardee's expertise at the World Congress.

Nominations may be made by IFMBE entities, affiliated member societies, or any individual member of the constituent societies. Nominees must be members of an IFMBE affiliated organization. A Curriculum Vitae is to be submitted together with a half-page biography, a photo, and a one-page write-up of the significant contributions made in relation to the criteria stated above.

3. John A. Hopps Distinguished Service Award

The John A. Hopps Distinguished Service Award winner is given to a Biomedical Engineer who has made significant contributions to the professional, technical, promotional, educational and/or scientific activities of the IFMBE, or of a regional organization of societies affiliated to the IFMBE. The awardee will receive prize money of 2500 euros as well as travel funds to attend the World Congress 2015 in Toronto where the award will be presented. The awardee will be required to make a presentation on the awardee's contributions to IFMBE and BME at the World Congress.

Nominations may be made by IFMBE entities, affiliated member societies, or a group of at least five distinguished IFMBE members. Nominees must be members of an IFMBE affiliated organization. A Curriculum Vitae is to be submitted together

with a half-page biography, a photo, and a one-page write-up on the significant contributions made in relation to the criteria stated above.

4. IUPESM Awards of Merit

The IUPESM Awards of Merit (Biomedical Engineering) is given to a Biomedical Engineer who has made significant impact in the science and scientific practice of Biomedical Engineering. The awardee would have participated meritoriously in national and international organizations for Biomedical Engineering and have significantly influenced the development of the profession of Biomedical Engineering.

The awardee will receive prize money of 2500 euros as well as travel funds to attend the World Congress 2015 in Toronto where the award will be presented. The awardee will be required to make a presentation on the awardee's scientific and professional contributions to BME at the World Congress.

Nominations may be made by IFMBE entities, affiliated member societies, or a group of at least five distinguished IFMBE members. Nominees must be members of an IFMBE affiliated organization. A Curriculum Vitae is to be submitted together with a half-page biography, a photo, and a one-page write-up of the significant contributions made in relation to the criteria stated above.

Closing Date for Nominations: 15th November 2014

Submit all nominations to:

Prof James Goh, IFMBE Vice-President
Chair, IFMBE Awards Committee
Email address: biegohj@nus.edu.sg

IFMBE EXPRESS

Annual Report of IFMBE-HTAD Activities in 2013

Introduction

The IFMBE's Healthcare Technology Assessment Division (HTAD) aimsto promote Healthcare Technology Assessment (HTA) within the biomedical and clinical engineering community. Health technology refers to the application of organized knowledge and skills in the form of devices, medicines, vaccines, procedures and systems developed to solve a health problem and improve quality of lives (WHO). Healthcare technology is defined as prevention, care and rehabilitation, vaccines, pharmaceuticals and devices, medical and surgical procedures, and the systems within which health is protected and maintained. Health Technology Assessment is a multidisciplinary field of policy analysis. It evaluates the medical, social, ethical, and economic implications of the development, diffusion, and use of health technology, according to the International Network of Agencies for Health Technology Assessment (INAHTA).

It is clear from this definition that the scope of HTA is very broad. The HTAD focuses mainly on the medical devices, the procedures, and the systems used in healthcare delivery, excluding vaccines, pharmaceuticals and clinical interventions. The purpose of HTA is to support the process of decision-making in health care at policy, clinician and management levels by providing reliable and timely information on some or all of the evaluative dimensions mentioned earlier. In this respect, HTA has been compared to a bridge between the world of research and the world of decision-making since assessment of currently adopted technologies can inform both research and adoption strategies. HTA provides a unique input into the decision-making processes of the healthcare system. In accordance with the broad concept of health technology, the principles and scope of HTA can be applied in order to assess the potential consequences not only of medical interventions but also of organizational interventions. The thorough assessment of the potential effects on public health that the adoption of a new technology may have, and its consequences on the healthcare

system itself and its economy, is what HTA can offer to decision-makers. As a result, this could allow evidence-based decisions depending on particular conditions of economic and health priorities and factors, but also influencing the acceleration or slowing down of the diffusion of the technology in question at different levels of care and/or in different sectors of the health system. The role of Biomedical- and Clinical Engineers in many aspects of HTA fields, especially those directly addressing medical devices, is essential due to their active involvement in healthcare technology development, evaluation, procurement, maintenance and user-support. HTAD seeks to identify the synergies between HTA and BME/CE and to promote the role of HTA and its contribution to quality, safe and cost-effective healthcare.

The main objectives of the HTAD are therefore:

i. To highlight the importance of the role of biomedical and clinical engineers in many aspects of HTA and stimulate collaboration and professional development and growth.

ii. To improve co-operation between biomedical engineers working in the field of HTA in different countries and promote collaboration with medical and other health professionals and their associations at international, regional and national levels.

iii. To facilitate information sharing, technical and professional guidelines for the practices within the HTA field and to promote capacity building.

The activities planned by the Healthcare Technology Assessment Division are:

a) Planning, promoting and organizing specialized meetings, educational courses, and publications in HTA.

b) Preparing or participating in the preparation of international documents such as guidelines, specifications, procedures and standards.

c) Promoting the exchange of specialists between HTA-related research groups.

d) Creating links and collaborating with the other HTA organizations and the Medical Devices Unit of WHO.

e) Identifying the knowledge and competencies that Biomedical Engineers need to master in order to be successfully engaged in HTA projects and integrated in BME education.

f) Promoting international recognition of the role of Biomedical Engineers in HTA.

g) Disseminating the HTA Division's work

worldwide while identifying region-specific initiatives, resources and opportunities for partnership.
During 2013 the HTAD has worked towards achieving many of the above objectives and planned activities, as stated in its annual report.

Accomplished and ongoing activities of the HTAD

▲ A Round Table entitled "**THE ROLE OF BIOMEDICAL ENGINEERS IN HEALTH CARE TECHNOLOGY ASSESSMENT**" was organized at **MEDICON2013**: Mediterranean Conference on Medical and Biological Engineering and Computing, 25-28 September 2013, Seville, Spain.
The Round Table focused on the mission and needs of healthcare technology assessment today. This Round Table emphasized on the significant role that biomedical engineers should play in HTA. Following an overview of the current state of the art of HTA, this round table focused on medical device design and usability aspects and was followed by concrete examples where the involvement of biomedical engineers is essential.
Prof. Nicolas Pallikarakis (Chairman of IFMBE-HTAD) opened the Round Table and welcomed the panel of experts and then presented an introduction to the role of BMEs in HTA.

Following that, Mr Eduardo Briones (PublicHealthUnitSeville, Spain) focused on the value of multidisciplinary approach of HTA in healthcare organizations and hospitals.

Assist. Prof.Patricia Trbovich (Univ. of Toronto, Canada, Member of the HTAD Board) stressed the importance of design and usability in Health Technology Assessment.

IFMBE EXPRESS

Assist. Prof. Leandro Pecchia (University of Warwick, UK, Member of the HTAD Board) made a presentation on Tools for early stage Health Technology Assessment.

The last presentation was on HTA in Developing Countries: An HTTG Perspective on the Role of the Biomedical Engineer, made by Assist. Prof.CariBorrás (George Washington University, USA).

Finally, the workshop closed with comments and questions from the audience to the panel of experts.

▲ A report on the “Role of biomedical engineers in healthcare technology assessment”, based on the MEDICON Round Table presentations (above) is scheduled to be published by the HTAD in March 2014.

▲ Nicolas Pallikarakis was an invited speaker at the Workshop: Chronic diseases and telemedicine tools and innovative models for prevention in Europe, 29-30 November 2013, Rome, Italy and made a presentation entitled: “The contribution of Health Technology Assessment – HTA”.

▲ HTAD participated at the Second Global Forum on Medical Devices, organised by WHO, 22-24 November 2013, Geneva, Switzerland, in different ways:

i. During the session Health Technology Assessment: Networks and Societies Around the Globe, Nicolas Pallikarakis made a presentation entitled “International

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Federation of Medical and Biological Engineering, Health Technology Assessment Division, (IFMBE-HTAD)".

ii. During the session How to Prioritize Medical Devices Leandro Pecchia also presented a paper on "A web tool to support the user need elicitation for the Health technology assessment (HTA) in emerging countries". iii. HTAD και CED participated actively in the workshop organised by INBIT on 'A new generation web-based medical technology management system'.

▲ Another joint collaboration between CED and HTAD has been the development of a handbook on Human Factors for Clinical Engineers.

▲ Additionally, initial steps have been accomplished for the establishment of the "International Journal of Clinical Engineering and Healthcare Technology Assessment", a collaboration between the two respective Divisions of the IFMBE. The Journal is expected to start its publication with a first issue in spring 2014.

▲ An international inventory of BMEs active in HTA worldwide has been initiated.

These activities are expected to enhance the visibility of the BMEs role and create a good basis for more involvement and recognition.

TECHNICAL EVENTS IN LATIN AMERICA TO PROMOTE AND STRENGTHEN EMBS CHAPTERS BY EMBS-DLT PROGRAM

Herbert Voigt, Ph.D.,
AIMBE Fellow
Professor of Biomedical Engineering
Boston University
Technical areas:
Biosystem modeling and biosignal processing

Dorin Panescu,Ph.D.,
IEEE Fellow
Senior Director, New Product Development
Intuitive Surgical, Inc.
Technical areas:
Medical devices

Metin Akay, Ph.D.,
IEEE Fellow
Founding Chair, John S Dunn Endowed Chair Professor
University of Houston
Department of Biomedical Engineering
Technical areas:
Neurological Engineering

Atam Dhawan,Ph.D.,
IEEE Fellow Distinguished Professor of Electrical & Computer Engineering Associate Dean,Albert Dorman Honors College
New Jersey Institute of Technology Technical areas:
Biomedical imaging and image processing

According to the proposed plan of activities for the first semester 2013 in Region 9 as Latin American Representative, the priority was to promote the Distinguished Lecture Program, DLT in our region, professor Voigt, professor Panescu, professor Akay, and professor Darwha, were attending the following activities in Region 9, as Distinguished Lectures:

ACTIVITIES IN PERU

The Peruvian Congress of Biomedical Engineering, TUMI II, 2013, which was held from 22nd to 30th of May, 2013. The Congress TUMI II 2013 was held in Lima, Perú, and it is organized by the Master Program in Biomedical Engineering and Health Technopole CENGETS of the Pontifical Catholic University of Peru PUCP, with the support of the Peruvian Chapter EMBS – IEEE, Regional Council of Biomedical Engineering to Latin America CORAL, the Peruvian Ministry of Health, Social Security Company EsSalud, the Peruvian National Institute of Health NIH, National Institute Perinatal Maternal INMP, College of Engineers of Peru, Peruvian Medical Societies, the Peruvian Association of Bioengineering APBIO and the participation of research papers, conference speakers

REPORT FROM IFMBE: Regions and Affiliated Societies

and Fair of products, services and Human Resources of Health. All this for a specialized audience related to the health sector. http://congreso.pucp.edu.pe/tumi. 300 people, delegates for more than 15 countries, EMBS chapter chairs, and National Biomedical Engineering Societies chairs were attended the annual meeting of CORAL – ADCOM, during TUMI Congress.

The Distinguished Professor Herbert Voigt, professor at University of Boston USA, was the main speaker of the congress and its presentation was on: "Current Developments and Impacts of Biomedical Engineering".In addition, the following speakers joined the TUMI II 2013 congress:

PhD. Ratko Magjarevic, President of International Federation of Medical and Biological Engineering IFMBE. Universidad de Zagreb. Croacia.

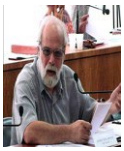
PhD. Shankar M. Krishnan, Presidente Electo del IFMBE - Federación Internacional de Ingeniería Médica y Biológica. EE.UU.

PhD. Herbert Voigt, Ex presidente del Federación Internacional de Ingeniería Médica y Biológica - IFMBE. Ex Decano de la Facultad de Ingeniería Biomédica- Universidad de Boston. EE.UU.

PhD. André Linnenbank, Laboratorio de Física Médica (ACL), Centro Médico Académico, Universidad de Amsterdam. Países Bajos.

PhD. Martha Zequera, Profesora. En Biomecánica de Pie Diabético. Pontificia Universidad Javeriana – Colombia.

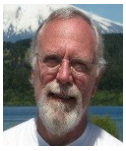
PhD. Renato Garcia, Profesor. Ingeniería Clínica y Adquisición de Tecnología. Presidente CORAL. Presidente Instituto de Ingeniería Biomédica. Universidad Federal de Santa Catarina. Brasil



PhD. Antonio Infantosi, Profesor. Neurociencias. Universidad Federal de Rio de Janeiro. Brasil.

PhD. Emilio Sacristán, Profesor. Instrumentación en Anestesiología. Director del Centro Nacional de Investigación en Instrumentación e Imagenología Médica, UAM-Iztapalapa. México.

REPORT FROM IFMBE: Regions and Affiliated Societies



PhD. Sergio Santos, Profesor. Efecto Biológico de Campos Electromagnéticos. UNICAMP, Representante Sociedad Brasileña de Ingeniería Biomédica. Brasil.

PhD. Eric Laciar. Profesor. Procesamiento de Señales Cardiovasculares. Universidad Nacional de San Juan UNSJ. Argentina.

PhD. Arturo Vega, Profesor. Cronobiología y Salud. Presidente Sociedad Mexicana de Ingeniería Biomédica. México.

PhD. Ariel Andrés Braidot, Profesor. Modelamiento Biomecánico y Rehabilitación. Presidente Sociedad Argentina de Ingeniería Biomédica SABI. Argentina.

MSc. Guillermo Avendaño, Profesor. Instrumentación en Cardiología. Universidad de Valparaiso. Chile.

PhD Miguel Cadena, Universidad Autónoma Metropolitana-Unidad Iztapalapa (UAM-I) Departamento de Ing. Eléctrica en el Área de investigación en Ing. Biomédica y Centro de Investigación en Instrumentación e Imagenología Médica. México.

PhD Ernesto Suaste, Profesor. Departamento de Ingeniería Eléctrica del CINVESTAV IPN de la Sección de Bioelectrónica. Nivel II del Sistema Nacional de Investigadores (SNI). México.

PhD Ricardo Silva. Responsable en Unidad de Gestión de Tecnología en Salud. Biociencias Integradas. Universidad de Pensilvania, Magister en Ingeniería Biomédica. Universidad Simón Bolívar. Venezuela.

PhD. Pierre Vieyres. Universidad de Orleans. Laboratoire Vision et Robotique – Bourges. Francia

PhD. Cyril Novales. Universidad de Orleans – Bourges. Laboratoire Vision et Robotique Francia

PhD. Isnardo Torres. Presidente Asociación Colombiana de

REPORT FROM IFMBE: Regions and Affiliated Societies

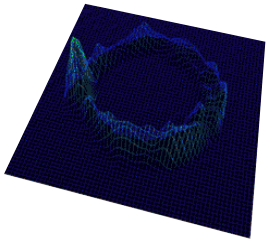
Bioingeniería y Electrónica Médica. Colombia

MSc. Rossana Rivas. Profesora Maestría en Ingeniería Biomédica. Tecnopolo Salud CENGETS PUCP. Perú

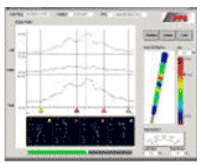
MSc. Luis Vilcahuamán. Director Maestría en Ingeniería Biomédica, Tecnopolo Salud CENGETS PUCP. Perú

Academic and social activities held during TUMI II, 2013.

The Distinguished Professor Herbert Voigt, professor at University of Boston USA, presented: “Current Developments and Impacts of Biomedical Engineering”.



High pressure seal Interface



Custom software for golf grip

The XXIII Annual AdCom CORAL (Consejo Regional de Ingeniería Biomédica para América Latina) Meeting, was held during TUMI Congress, as EMBS Latin American Representative I attended and presented the technical activities of EMBS Chapters. (Attendants: National Society Members, EMBS Chapter Chairs and IFMBE officers).

REPORT FROM IFMBE: Regions and Affiliated Societies

OTHER ACTIVITIES

PROMOTING EMBS SOCIETY (EMBS CHAPTER CHAIR MEETING)

To meet the new Peruvian Chapter Chair and potential members, in order to renew and promote technical activities.

To meet volunteers who would like to establish new student Chapters in different Universities in Peru and strengthen the student Chapter at Pontificia Universidad Catolica del Peru, who organized the logistic of TUMI II Congress.

ACTIVITIES IN MEDELLIN, COLOMBIA

The Eighth Pan American Health Care Exchanges Conference - PAHCE 2013 and the V Colombian Conference on Bioengineering and Biomedical Engineering V-CCBIO, was held in Medellín, Colombia between April 29 and May 4. The two events were dedicated to technology-oriented medical practices, recent advances in biomedical and bioengineering research, and state-of-the-art techniques and applications in the medical field.

V CONGRESO COLOMBIANO DE BIOINGENIERÍA E INGENIERÍA BIOMÉDICA

REPORT FROM IFMBE: Regions and Affiliated Societies

VIII PANAMERICAN HEALTH CARE EXCHANGES CONFERENCE PAHCE

The Distinguished Professor Dorin Panescu, Ph.D., Fellow IEEE, IEEE - Distinguished Lecturer, Senior Director, New Product Development, Intuitive Surgical, Inc., Sunnyvale, California, USA, was the main speaker of the congress and its presentation was on: “Robotics and Minimal Invasive Surgery”. 500 people and delegates from more than 20 countries attended, and students from 4 prestigious universities organized the logistics of the event.

SCIENTIFIC COMMITEE

President
John Bustamante, MD, Ph.D. Universidad Pontificia Bolivariana
Scientific Vice-President
Mauricio Hernández, Ph.D. Universidad de Antioquia
Executive Vice-President
Jesús María Soto, MD, Esp. Escuela de Ingeniería de Antioquia, Universidad CES
President PAHCE
Christopher Druzgalski, PhD.
President ABIOIN
Isnardo Torres, MSc.

Academic and social activities held during the. PAHCE 2013 and V-CCBIO:

The Distinguished Professor Dorin Panescu, Ph.D., Fellow IEEE, IEEE - Distinguished Lecturer, Senior Director, New Product Development, Intuitive Surgical, Inc., Sunnyvale, California, USA

Heart Failure:Transplant

MINISYMPOSIUMS

Symposium of Enterprise on Bioengineering and Biomedical Engineering
E-Health Symposium
Medical Robotics Symposium
Nanomedicine Symposium

Academic Programs in Bioengineering and Biomedical Engineering Symposium

SPECIAL SESSIONS

Bio-Instrumentation
Bio-Imaging
Bio-Signals
Bio-Materials
Modelling and Simulation
Nanotechnology
Biomechanics and Rehabilitation
Clinic Engineering
Bio-informatic

OTHER ACTIVITIES

PROMOTING EMBS SOCIETY (EMBS CHAPTER CHAIR MEETING)

An EMBS booth was exhibited with promotional materials such as IEEE – EMBS journals, EMBS registration forms, and promotional material

To meet volunteers who would like to establish new student Chapters in different Universities in Colombia, especially students from Pontificia Bolivariana, Escuela Colombiana de Ingeniería and Universidad de Antioquia, with the support of IEEE ANTIOQUIA SECTION.

Latin American scientific professors recognized in Biomedical and Clinical Engineering Research were awarded by Region 9 EMB Society.

ACTIVITIES IN BOGOTÁ, COLOMBIA

JAVERIANA STUDENT CHAPTER

The International Summer School Course in Biomedical Instrumentation and Image Processing, was held in Bogotá, Colombia between June 17 and July 12, at Pontificia Universidad Javeriana, with professor Ratko Magjarevic, President of International Federation of Medical and Biological Engineering IFMBE. Universty of Zagreb. Croacia, and organized by EMBS – Student Chapter of Pontificia Universidad Javeriana. 22 undergraduate, master and Ph.D students attended, and also 3 students from Ecuador attended the course.

As a result of this course, an academic will be signed between Pontificia Universidad Javeriana and New Jersey Institute of Technology.

The Distinguished Professor Atam Darwha, Ph.D., Fellow IEEE, IEEE - Distinguished Lecturer, Electrical & Computer Engineering,

REPORT FROM IFMBE: Regions and Affiliated Societies

Associate Dean, Albert Dorman Honors College, New Jersey Institute of Technology, was the speaker of the course on: “Biomedical Instrumentation and Image Processing”.

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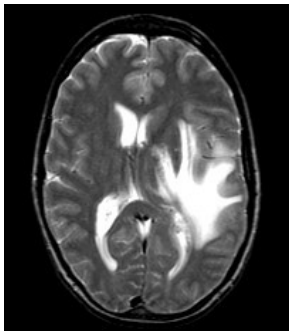
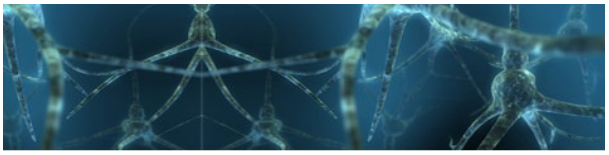




El Departamento de Electiónica,con el apoyo de IEEE-EMBS,ofrece el slgulente curso electlvo del Enfasis de Bioingeniera:

CURSO INTERSEMESTRAL

Instrumentación Biomédica

Patko Magjarevic Ph.D.
Presidente de la sociedad Europea IFMBE(International Federation in Engineering and Medicine).

Atam Dhawan Ph.D.
Profesor de Ingeniería Eléctrica y Computacional del Albert Dorman Honors College del Instituto de Instiruto de Tecnlolgía de New Jersey(NJIT)

Fecha:17 de junio al 12 de julio de 2013
Horario: Lunes a viernes de 9:00am a 12:00m
Lugar: Pontificia Universidad Javeriana·Bogotá D.C
Prerrequisito: Dispositivos Electrónicos
Más información:embs.javeriana@gmail.com

REPORT FROM IFMBE: Regions and Affiliated Societies

OTHER ACTIVITIES

PROMOTING EMBS SOCIETY (EMBS CHAPTER CHAIR MEETING)

To meet volunteers who would like to strengthen the student Chapters at Pontificia Universidad Javeriana.

A meeting was organized with the President and Vice-president of the Chapter, to plan future activities, such as Bioinnova 2014 (Innovation ITC technologies for improving health).

ACTIVITIES IN BOGOTÁ, COLOMBIA

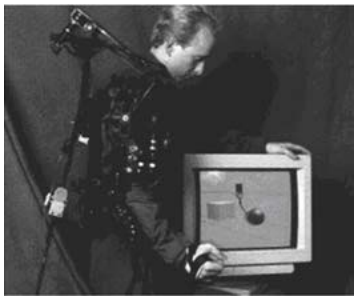
EMBS COLOMBIAN CHAPTER

The conference "Advances in Neural Engineering and Education and/or Global Healthcare Challenges and Opportunities", was held in Bogotá, Colombia between July 30th and August 2nd, at Pontificia Universidad Javeriana, and organized by EMBS Colombian Chapter, with the support of EMBS Student Chapter of Pontificia Universidad Javeriana. 20 undergraduate, master and Ph.D students attended.

As a result of this conference, an academic will be signed between Pontificia Universidad Javeriana and Houston University, for student and professor exchange and for research development in Bioengineering.

The Distinguished Professor Metin Akay, Ph.D., Fellow IEEE, Founding Chair, John S Dunn Endowed Chair Professor, University of Houston, Department of Biomedical Engineering, was the speaker of the conference on: "Advances in Neural Engineering and Education and/or Global Healthcare Challenges and Opportunities".

REHABILITATION



OTHER ACTIVITIES

PROMOTING EMBS SOCIETY (EMBS CHAPTER CHAIR MEETING)

To meet volunteers who would like to strengthen the student Chapters at Pontificia Universidad Javeriana.

To support the possibility of organized the first Summer School in Biomechanics in Latin America, that will be promoted in Bioinnova 2014, in November, at Pontificia Universidad Javeriana, Bogotá Colombia.

OTHER TECHNICAL ACTIVITIES PLANNED FOR SECOND SEMESTER 2014

To promote the Distinguish Lecture Program in other countries, such as Brazil, Chile and Argentina, in November 2014. The representative of Region 9 will visit the EMBS Chapters in these countries.

ACHIEVEMENTS

Promotion of both technical and scientific activities, as well as spreading information about the benefits provided by EMBS to the professional and student volunteers who attended the event.
It was carried out a presentation on the development of the Activities in Region 9 and about the growth and strengthening of the chapters, members of CORAL 2013 in Lima Ad Com meeting. and strategies were proposed to work in cooperation with each country, conducting activities by national societies and professional chapters working together to promote Biomedical Engineering in the Region, and specially to achieve the harmonization of an academic curriculum of the programs in the region and the role of the Biomedical Engineer in the working field.

It was voted unanimously that the EMBS Latin American Representative (Region 9) would also be recognized as CORAL representative to AdCom EMBS.

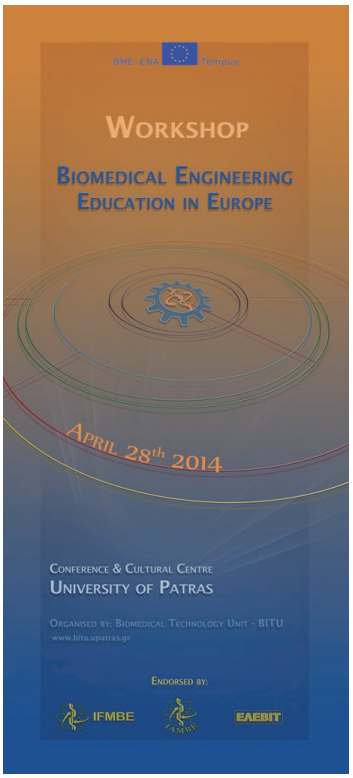
It was recommended to networking between CORAL, IEEE-EMBS and IFMBE, in order to strengthen the education, research and industry in Biomedical Engineering field, regarding to the local needs.

WORKSHOP

«Biomedical Engineering Education in Europe»

April 28th 2014, Conference and Cultural Centre, University of Patras, Greece

AWorkshop on «Biomedical Engineering Education in Europe», endorsed by the In-ternational Federation for Medical and Biological Engineering(**IFMBE**), theInternational Academy of Medical and Biological Engi-neering(**IAMBE**) and theHellenic Society for Biomedical Technology(**ELEVIT**), was held on **April 28th 2014** at theConference and Cultural Centre of the University of Patras, Greece.



This scientific event was organized with the occasion of the **Kick-off Meeting** of the **TEMPUS BME-ENA**Project (BiomedicalEng ineeringEducationTempusInitiativeinEaster nNeighbouringArea), which is implemented by a Consortium of 17 Univer-sities and coordinated by the Biomedical Technology Unit (BITU) of the University of Patras.

Welcome addresses were givenby Prof. Ratko Magjarević, IFMBE President, Mr. Panagiotis Malataras, Board Member of ELEVIT, Mr. Athanasios Giannadakis, Pres-ident of the Technical Chamber of Greece/ Regional Sector of Western Greece, and Mr. Pavlos Arnaoutis, President of the Hellenic Association of Health - Research and Biotechnology Industry. Prof. Venetsana Kyriazopoulou, Dean of the School of Health Sciences of the University of Patras, official-ly opened the Workshop.

The programconsisted of the following pres-entations:

REPORT FROM IFMBE: Regions and Affiliated Societies

■BME Programs in European Universities: Ratko Magjarević – Professor, University of Zagreb

Prof. Magjarevic outlined in presented in detail the biomedical engineering profession and the international perspectives offered. He quoted the report of the US Bureau of Labor Statistics on the jobs of the future, where the biomedical engineering profession holds the first place, with an expected growth of 72%. The speaker also presented the results of the study conducted in the framework of the TEMPUS CRH-BME Project, which showed that today there are more than 150 European Universities offering more than 300 study programs in Biomedical Engineering, while in 2000 the respective number of Universities was 50.

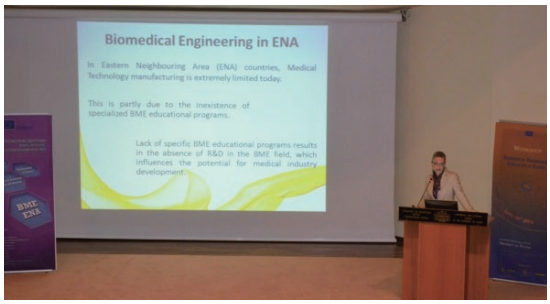
■Generic curriculum of BME postgraduate studies: Tomaz Jarm – Associate Professor, University of Ljubljana

The speaker presented the generic curriculum of BME studies, one of the outcomes of the collaboration of 23 Partner Universities in the framework of the CRH-BME Project that has already been applied in 12 of the participating academic institutions.

This generic curriculum established a group of core study areas and proposes at least 4 5 of them to be part of any 2nd cycle BME program. An extensive – but not exhaustive – list of elective topics is also provided, among which a selection can be made ac-cording to local expertise and needs.

■The TEMPUS BME-ENA Project: Anastassia Rodina-Theocharaki – PhD, BITU, University of Patras

REPORT FROM IFMBE: Regions and Affiliated Societies



This speech consisted of a detailed presentation of the TEMPUS BME-ENA Project (BiomedicalEngineeringEducationTempusInitiativeinEasternNeighbouringArea, 2013-2016). The main aim of this project is to create 4 Joint MSc programs on Biomedical Engineering in 4 ENA countries: Armenia, Georgia, Moldova and Ukraine. The curricula will be based on the CRH-BME recommendations.

■The Joint MSc Program on BME – UPAT & NTUA: Nicolas Pallikarakis – Professor, University of Patras

The Coordinator of the Interuniversity Post-graduate Program on Biomedical Engineer-ing, which is co-organized by the University of Patras (UPAT) and the National Technical University of Athens (NTUA), Greece, pre-sented an overview of this 25-year old MSc Program. Prof. Pallikarakis also stressed the need for all involved parties to collaborate in order to achieve the continuation of postgra-duate studies in this field through the rees-tablishment of this Joint BME Program, as required by the law on postgraduate studies in Greece.

■The student experience: Evgenia Papavasileiou – Student of the Interuniver-sity MSc Program on BME

The student of the above MSc Program pre-sented the students' point of view and fo-cused on the numerous advantages of Bila-teral Agreements with European Universities, which enable both student and teaching staff mobility. As a result of this possibility offered to the BME Program's students, more than half of those that were enrolled during the academic year 2012-

REPORT FROM IFMBE: Regions and Affiliated Societies

2013 elaborated their Master's thesis in Collaborating EuropeanU-niversities.

AllWorkshop participants emphasized the need to promote BME Education in Europe through the creation, harmonization and up-datingof study programs, in order to prepare a new generation of skillful Biomedical Engi-neers, able to face challenges in this rapidly evolving field.

The Participants of the TEMPUS BME-ENA Project Kick-off Meeting
and the students of the Greek Joint MSc Program on BME

Useful links:
TEMPUS BME-ENA
www.bme-ena.net
BITU, UPAT, Greece
www.bitu.upatras.gr

TEMPUS CRH-BME
www.crhbme.upatras.gr
Greek Joint MSc Program on BME
www.bme.upatras.gr

The Participants of the TEMPUS BME-ENA Project Kick-off Meeting
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www.crhbme.upatras.gr

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www.bme.upatras.gr

PUBLIC ANNOUNCEMENT
Association for Medical and Biological Engineering in Bosnia and Herzegovina

Statutory meeting for medical and biological engineering in Bosnia and Herzegovina was held in Sarajevo on March 15th, 2014.

Statute of the Association defined general objectives:

-development, promotion and popularization of biomedical engineering in Bosnia and Herzegovina expansion and realization of ideas regarding the program orientation of the Association;

-public announcements, organizing meetings, knowledge promotion and implementing of international experience in the field of biomedical engineering;

organizing scientific and professional educational activities in order to inform the scientific community and the general public about the achievements in the field of biomedical engineering;

-publishing of books, magazines, newspapers and publications in accordance with applicable law;

-organization of scientific and technical presentations related to its causes;

-participation in the preparation and implementation of scientific research, development and professional educational programs, plans, as well as organizing and encouraging scientific and technical projects, organizing training courses to promote knowledge of biomedical engineering in Bosnia and Herzegovina;

-to encourage the participation of its members in scientific and professional conferences in the country and abroad;

-gathering of scientists, experts and everybody else who are willing with their efforts to achieve the purpose and mission MBIBIH's;

-active participation, monitoring the development and implementing of modern biomedical engineering and technology;

-promotion of the implementation of the results emerge from the research related to biomedical engineering;

REPORT FROM IFMBE: Regions and Affiliated Societies

-training of staff for the biomedical engineering through postgraduate classes, courses, professional seminars etc.

Association's establishers are reverend professors, engineers, physicians, managers, pharmacists, engineers genetics, biophysicists and other experts from across the country who are directly or indirectly related to the medical and biological engineering.

Special guest - lecturer at the Statutory meeting was Professor Ratko Magjarević, president of the International Federation for Medical and Biological Engineering (IFMBE), who held a plenary lecture on biomedical engineering and IFMBE community, and expressed full support for the accession to full membership IFMBE community and the Society for Medical and Biological Engineering in Bosnia and Herzegovina (MBIBIH).

For the President of the Associaotion was elected Dusanka Boskovic Ph.D. an assistant professor at the Faculty of Electrical Engineering, University of Sarajevo.

For the President of the Management Board was elected Ibrahim Omerhodžić MA., specialist neurosurgeon at the University Clinical Center in Sarajevo.

For the Executive Director of the company was elected mr. Almir Badnjevic, BSc, Director of the VERLAB ltd. Sarajevo and external collaborator of Electrical Engineering, University of Sarajevo, while for the deputy executive director was elected dr.sci. Samir Avdaković, employee of the EP Bosnia and Herzegovina.

Photo of the Statutory Meeting of the Society for Medical and Biological Engineering in Bosnia and Herzegovina

COMING EVENT

"Biomedical Engineers looking to the future"

The Australian Biomedical Engineering Conference (ABEC) will be taking place from the 20th to 22nd August 2014 at the National Convention Centre Canberra, Australia.

With the theme of "Health through Engineering" the conference aims to showcase the role engineers play in developing and delivering healthcare.

In 2014, ABEC will be presented in parallel with, and at the same time and venue as the Australian Rehabilitation & Assistive Technology Association (ARATA) conference. ARATA provides a forum for exploring issues in Assistive Technology for people with a disability.

How does ARATA fit into the scope of ABEC? Biomedical Engineering teams bring their skills to a broad range of fields ranging from Clinical Engineers right through to managing all aspects of the health/technology lifecycle.

We are please to have highly respected Key Note Speakers including **Professor James Goh**, Professor and Head, Department of Biomedical Engineering, National University of Singapore and **Professor Dawn M. Elliott Ph.D.**, Head of the Elliott Research

COMING EVENT

Group at the University of Delaware, USA and **Paul de Gelder** an Australian Navy Clearance Diver who lost two limbs in a frenzied shark attack in Sydney Harbour.

Detailed biographies for each Keynote Speaker can be found at the ABEC 2014 website, ABEC 2014

The **Call for Abstracts** is open for submissions and we wish to thank the University of Technology, Sydney who will be sponsoring the Best Oral Presentation for undergraduate and post graduate students presenting at this year's conference. So don't delay get your submissions in.

As part of this national conference, the Biomedical College awards will be formally presented during the conference dinner. These include the David Dewhurst Award, awarded for contribution to the profession, The Women in Biomedical Engineering Scholarship, for making an outstanding contribution to her profession and professional community and the Best Prize Paper, awarded to a Young Engineer for their presentation given in a dedicated session of the conference.

In conjunction with the learning experience of international and national experts in the field, and significant networking opportunities of the conference, we anticipate a large industry exhibition in support of on-going innovations and improvements in Biomedical Engineering.

So please join us at the conference to learn, share and collaborate on health through engineering in Canberra 2014.
We look forward to welcoming you in Canberra.

Mike Flood
BE FIEAust CPEng (Biomed)
Convener of ABEC 2014
Visit the website: abec2014.iamevents.com.au

Conference Endorsed by: IFMBE

Welcome to MBEC2014 website!

The 6th European Conference of the International Federation for Medical and Biological Engineering (MBEC 2014) will be held in Dubrovnik, Croatia, from 7th to 11th September 2014. This conference continues the series of well-known European IFMBE Conferences held in Budapest in 2011, Antwerp in 2008, Prague in 2005, and two times in Vienna in 2002 and 1999.

The general theme of MBEC 2014 is “Towards new horizons in biomedical engineering”. The conference program will consist of plenary/keynote lectures, symposia, workshops, invited sessions, oral and poster sessions, and exhibitions. MBEC 2014 will be a great opportunity for an exchange of ideas and presentation of the latest developments in all areas within the field of biomedical engineering. All papers will be peer reviewed; accepted full-length (4 page) papers will appear in the Conference Proceedings that will be published in IFMBE Proceedings Series.

Dubrovnik, the host city of the MBEC 2014, is considered to be one of the most beautiful tourist destinations in the world. Located at the far south of Croatia, Dubrovnik is known as “the pearl of the Adriatic” because of its unique beauty and outstanding architecture. A town of an exceptionally rich historical and cultural heritage and preserved monumental architecture, Dubrovnik was among the first sites to be included in the UNESCO World Heritage List in 1979.

The MBEC 2014 will take place in the newly renovated Hotel Dubrovnik Palace, the 5 star hotel that has it all: high-tech conference rooms, spectacular sea views from every room, superb gastronomy and a luxurious wellness and spa centre.

We are looking forward to hosting you in Dubrovnik in September 2014!

Important dates

1 April 2014

Proposal of special sessions

5 May 2014

Paper submission deadline

26 May 2014

Notification of paper acceptance

8 June 2014

Early registration deadline

Maria Teresa Arredondo
Universidad Politecnica de Madrid

Ilias Iakovidis
European Commission

Zhi-Pei Liang
University of Ilinios at Urbana-Champaign

Damijan Miklavcic
University of Ljubljana

Adriana Velazquez Berumen
World Health Organization

Jos Vander Sloten
Katholieke Universiteit Leuven

Yuan-Ting Zhang
Chinese University of Hong Kong

conference themes

■BIOMEDICAL SIGNAL PROCESSING

■BIOMEDICAL IMAGING AND IMAGE PROCESSING

■BIOSENSORS AND BIOINSTRUMENTATION

■BIO-MICRO/NANO TECHNOLOGIES

■BIOMATERIALS

■BIOMECHANICS, ROBOTICS AND MINIMALLY INVASIVE SURGERY

■CARDIOVASCULAR, RESPIRATORY AND ENDOCRINE SYSTEMS ENGINEERING

■NEURAL AND REHABILITATION ENGINEERING

■MOLECULAR, CELLULAR AND TISSUE ENGINEERING

■BIOINFORMATICS AND COMPUTATIONAL BIOLOGY

■CLINICAL ENGINEERING AND HEALTH TECHNOLOGY ASSESSMENT

■HEALTH INFORMATICS, E-HEALTH AND TELEMEDICINE

■BIOMEDICAL ENGINEERING EDUCATION

Welcome to Tainan, Taiwan and welcome to the 9th Asian-Pacific Conference on Medical and Biological Engineering (APCMBE 2014)

Oct. 9-12, 2014

The 9th Asian-Pacific Conference on Medical and Biological Engineering (APCMBE 2014) will be held in Tainan, Taiwan at National Cheng Kung University from October 9 to 12, 2014. The Taiwanese Society of Biomedical Engineering (TSBME) is privileged to organize this international conference affiliated with International Federation on Medical and Biological Engineering (IFMBE). The TSBME has continuously held the Annual Conference on Biomedical Engineering and Technologies (ACBET) in Taiwan since its founding in 1980. Each year, the ACBET has attracted over 1000 attendees. To further internationalize the ACBET, TSBME will commence the first biennial Global Conference on Biomedical Engineering and Technology (1st GCBMET) jointly with APCMBE 2014. It is our great hope that this joint conference will bring more closely together the researchers, students, and communities around the world in order to share their latest research works and innovative developments in biomedical engineering (BME).

Tainan is the oldest city in Taiwan. This city is full of Taiwanese culture and heritage and is especially famous for historical architecture and local delicacies. Previously, Taiwan was known to the Portuguese as *Ilha Formosa* which means "beautiful island." Therefore, in addition to gathering with academic researchers and scholars, we hope all attendees will have the opportunity to enjoy an island hiatus with beautiful beaches, mountains, cultural events and foods. Welcome to Tainan and welcome to APCMBE 2014.

Fong-Chin Su, General Chair
Shyh-Hau Wang, Secretary General
Ming-Long Yeh, Vice Secretary General

Conference Dates: October 9 - 12, 2014
Conference Venue: National Cheng Kung University, Tainan, TAIWAN
Language: English
Website: http://conf.ncku.edu.tw/apcmbe9/

Contact

Conference Secretariat:
APCMBE 2014 Secretariat,
Department of Biomedical Engineering,
National Cheng Kung University
1 University Road, Tainan 70101, Taiwan
TEL: +886-6-2760665
FAX: +886-6-2343270
E-mail: apcmbe9@conf.ncku.edu.tw

Host Institutions

Taiwanese Society of Biomedical Engineering
Medical Device Innovation Center, National Cheng Kung University
Department of Biomedical Engineering, National Cheng Kung University

Supporting Institution

National Cheng Kung University

Sponsors

Ministry of Education, TAIWAN
National Science Council, TAIWAN

APCMBE 2014 is an international conference affiliated with IFMBE

COMING EVENT

VI Latin American Conference on Biomedical Engineering CLAIB 2014

Paraná, Entre Ríos, Argentina 29, 30 & 31 October 2014

http://bioingenieria.edu.ar/eventos/claib2014/en/

The Organizing Committee, representing the Regional Council of Biomedical Engineering for Latin America (CORAL), is pleased to invite the Latin American and international scientific community to participate in the VI Latin American Conference on Biomedical Engineering (CLAIB2014).

This event, held since 1998, will have its next edition in Paraná, Entre Rios, Argentina.

American Conferences on Biomedical Engineering are sponsored by the International Federation for Medical and Biological Engineering (IFMBE), the Society for Engineering in Medicine and Biology (EMBS) and the Pan American Health Organization and the World Health Organization (PAHO-WHO), among other international organizations and agencies. The American Conferences on Biomedical Engineering bring together scientists, academics and biomedical engineers in Latin America and other continents in an environment conducive to the exchange and academic and professional growth.

CLAIB2014 provide forum to present research findings, share experiences and coordinate activities between institutions and universities in the region to develop Bioengineering, Biomedical Engineering and related sciences.

Previus meetings were held in Mazatlan (Mexico) in 1998, Havana (Cuba) in 2001; Joao Pessoa (Brazil) in 2004, Margarita Island (Venezuela) in 2007 and Havana (Cuba) in 2011.

The Conference program will be designed so as to cover topics of regional and international interest and to meet scientific expectations .