

The Hong Kong Institution of Engineers
Biomedical Division
Chairman's Annual Report (Session 2012/2013)

1. Introduction

With the enthusiastic dedication and leadership and of our executive board members and keen participation of our members, the Biomedical Division (BMD) has been gone through a fruitful year of Session 2012/2013.

The global aging trend is noticeable locally and worldwide, coupling with the ever-increasing standard of living and healthcare, the past year had seen persistent growth and development of biomedical engineering. In view of such trend, the BMD has organised and co-organised numerous activities in collaboration with the industry, the academia and the government in:



1. supporting local biomedical engineering research and experimentation;
2. supporting product design, development and commercialisation;
3. running technical training, workshops and visits;
4. attracting and inspire more young students to pursue the profession.

The BMD has contributed best effort to serve our society, hospitals, medical centres, medical device industry, academia and all other related stakeholders.

During this Session, the BMD successfully completed the government funding under the Professional Services Development Assistance Scheme (PSDAS) of the Commerce and Economic Development Bureau (CEDB), which was the fifth successful PSDAS approved project of the Division. With the project titled “*To enhance the professional competence of biomedical engineers in medical device safety through the mastering of update knowledge on technology innovation, regulatory affairs and health technology assessment*”, new initiatives in research and technology, regulatory issues and quality management systems were introduced in order to enhance the competence of local biomedical engineers in commercialising research and development deliverables as well as design and manufacturing of high value-added medical and healthcare devices. Project deliverables were all successfully carried out, including: 3-day

BME2012 Biomedical Engineering International Conference at Headquarters of Hospital Authority and Hong Kong Productivity Council from 5 December 2012 to 7 December 2012 with conference theme “Improving Healthcare through Innovative Technology and Regulatory Affairs” and a series of conference sub-themes, paper presentations and Young Engineers’ Paper Competition; and 1-day Post-conference Technical Visit to The University of Hong Kong – Shenzhen Hospital and Shenzhen Testing Center of Medical Devices (STCMD) on 8 December 2012.

A series of CPD seminars were organised in this session, including: Vision Care Technology Platform for Amblyopia Treatment; Introduction on Essential Elements of ISO13485 Medical Device Quality Management System; Overview on Effective Engineering Techniques for the Verification of Optical Quality of Endoscopes; Advanced Automation Technologies for Medical Devices Tracking and Regulatory Compliances; Nanotechnology and Advanced Biomaterials for Medical and Healthcare Applications; and Technical Seminar of Medical Device Manufacturing and Technologies. The BMD also proactively embarked on membership drive to engineering undergraduates via various promotional events, namely: “Course Selection Seminar Series” for new 4-year undergraduates in HKU; Biomedical Engineering Careers Talk for HKIE Membership Promotion in PolyU; and Seminar on HKIE Membership Promotion and Biomedical Engineering Careers Talk in HKU. In addition, technical visits and certificated training courses were conducted, namely: Study Mission on Health and Beauty Care Technology to South Korea; Study Mission on Medical and Healthcare Device to Singapore; and a 3-day Medical Device Adverse Event Investigation and Management which was co-organised with ECRI Institute.

I would like to extend my gratitude to the dedicated support from the HKIE Headquarters and other Divisions, and particularly for the enthusiastic collaboration of all our Committee Members and relevant stakeholders, without their support and professional contribution, the BMD could not have organised these activities during the year. In the upcoming year, the BMD will continue to promote high quality continue professional training to existing biomedical engineers, to attract young talents to pursue the biomedical engineering profession, to provide excellent services to the clinical institutes, and ultimately to safe guard the general public’s benefit and interest. I step down with great confidence that the new Chairman and Committee members will lead the Division to the next era, with sustainable growth and a view of benefiting our biomedical engineering profession, industry and community.

Thank you all.

2. Division Activities

| <u>Date</u> | <u>Type of Activity</u> | <u>Topic(s)</u> | <u>Speaker(s)</u> |
|------------------------|-------------------------|---|---|
| 11 May 2012 | Seminar | Vision Care Technology Platform for Amblyopia Treatment | Ms. Alice CHOW Manager Bio-Medical Electronics, ASTRI |
| 4 - 5 July 2012 | Seminar | Introduction on Essential Elements of ISO13485 Medical Device Quality Management System | Multiple speakers |
| 14 -17 July 2012 | Visit | Study Mission on Health and Beauty Care Technology to South Korea | Multiple speakers |
| 10 September 2012 | Seminar | CPD Seminar - Overview on Effective Engineering Techniques for the Verification of Optical Quality of Endoscopes | Dr. Dennis C. LEINER Chief Technology Officer Lighthouse Imaging |
| 11 – 14 September 2012 | Visit | Study Mission on Medical and Healthcare Device to Singapore | Multiple speakers |
| 19 October 2012 | Seminar | Advanced Automation Technologies for Medical Devices Tracking and Regulatory Compliances | Multiple speakers |
| 3 - 11 November 2012 | Seminar | Technical Seminars at InnoCarnival | Multiple speakers |
| 5 December 2012 | Seminar | “Course Selection Seminar Series” for new 4-year undergraduates - Civil Engineering, Mechanical Engineering, Electrical, Manufacturing and Industrial, and Biomedical Engineering | Multiple speakers |
| 5 - 8 December 2012 | Conference | Biomedical Engineering International Conference 2012 | Multiple speakers |
| 26 January 2012 | Seminar | Nanotechnology and Advanced Biomaterials for Medical and Healthcare Applications | Multiple speakers |
| 2 February 2013 | Seminar | Technical Seminar of Medical Device Manufacturing and Technologies | Multiple speakers |
| 23 February 2013 | Seminar | Biomedical Engineering Careers Talk for HKIE Membership Promotion | Ir Albert POON Mr. Bryan SO |
| 18 March 2013 | Seminar | Seminar on HKIE Membership Promotion and Biomedical Engineering Careers Talk | Ir Albert POON Ir Tommy LAM |
| 26 – 28 March 2013 | Training Course | Medical Device Adverse Event Investigation and Management | Dr. Scott LUCAS Program Manager, Engineering Accident & Forensic Investigation, ECRI Institute |

3. List of Committee Members for Session 2012/2013

| <u>Post</u> | <u>Title</u> | <u>Name</u> |
|--|--------------|------------------------|
| Chairman | Ir Dr | CHAN Kwok Kwan |
| Immediate Past Chairman cum Ex-officio Member (Council Member (Division)) | Ir | Albert POON Ka Fat |
| Deputy Chairman | Ir Prof | ZHENG Yong Ping |
| Hon Secretary | Ir | Raymond POON Kwok Ying |
| Hon Treasurer | Ir | Moises CHU Yiu Mo |
| Committee Member (Public Relations Committee (PRC) Representative) | Ir Dr | Kelvin YEUNG Wai Kwok |
| Committee Member (Community Service Committee (CSC) Representative) | Ir | Richard LUN Chi Chung |
| Committee Member (Continuing Professional Development Committee (CPDC) Representative) | Ir | Yorkie CHOW Yuk Ki |
| Committee Member | Ir Dr | Peter CHIU Ping Kuen |
| Committee Member | Ir | Andy CHUNG Ki Tung |
| Committee Member | Ir | Raymond FU Kwok Fu |
| Committee Member | Ir Prof | Aaron HO Ho Pui |
| Committee Member | Ir | Ricky OR Kam Ming |
| Committee Member | Ir | SO Leng Chiu |
| Committee Member | Ir Dr | Eric TAM Wing Cheung |
| Committee Member | Ir Prof | Peter YU Kwan Ngok |
| Ex-officio Member (AMC Representative) | Mr | YUEN Lai Man |
| Ex-officio Member (YMC Representative) | Ms | Venice HUNG Chun Leung |
| Ex-officio Member (Discipline Representative) | Ir Prof | Daniel CHOW Hung Kay |
| Co-opted Member | Ir | Yuk Ho TAM |
| Co-opted Member | Mr | Bryan SO |
| Co-opted Member | Dr | Michael TO |