

**Annual General Meeting Report of
Hong Kong Society of Theoretical and Applied Mechanics
March 23, 2013**

1 Main Activities (Since March 2012)

1.1 Distinguished Lectures

There were four Distinguished Lectures before the HKSTAM conference, and another four Distinguished Lectures are organized in the HKSTAM annual conference. Therefore, a total of **8 Distinguished Lectures** were organized in this year.

The four Distinguished Lectures organized before the HKSTAM conference are:

1. Distinguished Lecture 1 by Prof. Xiaoyu Luo (University of Glasgow, UK) on 1 Aug 2012
2. Distinguished Lecture 2 by Prof. Qingwen Li (Division of Nanodevices & Materials) on 22 Sep 2012
3. Distinguished Lecture 3 by Prof. Huajian Gao (Brown University, USA) on 20 Dec 2013
4. Distinguished Lecture 4 by Prof. Leonard J. Gray (Oak Ridge National Laboratory, USA) on 15 Jan 2013

A total of **over 110 participants** attended the lectures. Please find detail report of each lecture in the following sub-sections.

1.1.1 Distinguished Lecture 1: Structure-based finite strain modelling of the human left ventricle in diastole (Prof. Xiaoyu LUO)

Prof. Xiaoyu Luo is from the School of Mathematics and Statistics, University of Glasgow, Scotland, UK. The seminar started at 11:00am on 1 August 2012 (Wednesday) in Room B6605. The seminar was chaired by Prof. Jane Lu (see Photo 1), and there were **11 participants**. The seminar was well organized and informative. There were a lot of discussions after the presentation. The seminar completed at 12:15pm.



Photo 1: Prof Jane Lu is introducing Prof Luo at the beginning of the seminar.

1.1.2 Distinguished Lecture 2: Assembling Carbon Nanotubes into Strong and Multifunctional Fibers and Composites (Prof. Qingwen Li)

Prof. Qingwen Li is the Director of the Division of Nanodevices & Materials, SINANO, CAS. The seminar started at 11:00am on 22 September 2012 (Saturday) in Room B6605. The seminar was chaired by Dr. Paul Lam. There were **33 participants** at the beginning and more people joined during the seminar (see Photo 2). The total number of participants is 40. The seminar completed at 12:05pm, and it follows the HKSTAM EC meeting. During the lunch with Prof. Li, Prof Jian Lu presented the honorarium together with a souvenir to Prof Li (see Photo 3).



Photo 2: During Prof Li's seminar.



Photo 3: Prof Lu presents the honorarium and souvenir to Prof Li.

1.1.3 Distinguished Lecture 3: Ductile vs Brittle Fracture Behaviors in Nanostructured and Amorphous Materials (Prof. Huajian GAO)

Prof Huajian Gao is from the School of Engineering, Brown University. The seminar started at 10:30am on 20 December 2012 (Thursday) in Room B6605. The seminar was chaired by Dr. Paul Lam. There were more than **45 participants** in the seminar (see Photo 4). Many professors from the College of Science and Engineering joined the seminar and asked questions not only at the end but also during the seminar. The discussion was very enthusiastic. At the end of the seminar, Prof Lu presented the honorarium and souvenir to Prof Gao (see Photo 5).



Photo 4: During Prof Gao's seminar.



Photo 5: Prof Lu presents the honorarium and souvenir to Prof Gao.

1.1.4 Distinguished Lecture 4: Boundary Integral/Level Set Simulations of Fluid Break-up (Prof. Leonard J. GRAY)

Prof Leonard J. Gray is from the Computer Science and Mathematics Division, Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA. The seminar started at 2:30pm on 15 January 2013 (Tuesday) in Room B6605. The seminar was chaired by Prof Wenjing Ye and there were more than **20 participants** (see Photo 6). A group of participants from HKUST (sitting at the middle of the room) joined the seminar (see Photo 7). At the end of the seminar, Prof YK Lee presented the honorarium and souvenir to Prof Gray (see Photo 8).



Photo 6: Prof. Wenjing Ye is introducing Prof Gary.



Photo 7: During Prof Gary's seminar.



Photo 8: Prof YK Lee presents the honorarium and souvenir to Prof Gray.

1.2 HKSTAM Annual Conference

In this year, the HKSTAM annual conference is organized in conjunction with “the 9th Jiangsu–Hong Kong Forum on Mechanics and Its Application” and “the 3rd Symposium on the Development of Mechanics in Macau”. The conference is held on **March 22, 2013 at City University of Hong Kong (LT-9)** and **March 23, 2013 at University of Macau (Library)**. HKSTAM organized this conference together with the Jiangsu Society of Theoretical and Applied Mechanics (JSTAM), City University of Hong Kong and University of Macau. The two-day conference aims to provide a platform for all scientists, engineers, and mathematicians working on mechanics and related areas to share, communicate and exchange ideas, and to enhance co-operations within relevant parties.

There are totally **54 presentations** in this conference including **4 Distinguished Lectures**. They are offered by **Prof. X. L. Wang** from City University of Hong Kong (CityU), **Prof. S. W. Hu** from Jiangsu Society of Theoretical and Applied Mechanics (JSTAM), **Prof. C. Y. Wen** from Hong Kong Polytechnic University (PolyU), and **Prof K. V. Yuen** from University of Macau (UMacau). The other 50 presentations are given in 9 parallel sessions: Five from the executive committee members of HKSTAM; Sixteen from members of JSTAM; Nine from researchers of local universities (e.g., Assistant Professors and Research Assistants); and Twenty from research students of universities in HK and Macau.

A total of **73 participants** in the conference including 19 EC members, 18 JSTAM participants, 4 invited speakers, 9 full registration participants, 6 students from Macau, and 17 students.

1.3 International Events

1.3.1 The 2nd Cross-Strait Symposium on Dynamical Systems and Vibration (SDSV2012)

Apart from the Annual Conference, HKSTAM organized the 2nd Cross-Strait Symposium on Dynamical Systems and Vibration (SDSV2012), 13-19 Dec 2012 (**13-16 Dec at Hong Kong and 17-19 Dec at Macau**). HKSTAM organized this conference together with the Working party on Dynamics and Control of CSTAM, and University of Macau.

The objective of this conference is to promote extensive research collaboration between cross-strait researchers from Mainland, Taiwan and Hong Kong/Macau. There were **41 participants** in this conference, and they are all **by invitation** (22 from Mainland, 5 from Taiwan, 9 from Hong Kong, 4 from Macau and 1 from Australia). The total number of presentations is 33.

Many EC members of HKSTAM contributed in the organizing committee of this conference. For example, Prof C.W. Lim is the symposium chairman, Prof L. Cheng and Prof J. Lu are Co-chairs, Prof C.W. Lim, Dr. Paul Lam, Dr. X.R. Niu, Dr. Y. Liu, and Dr. Ryan W.M. Yan are the local organizing committee members.

1.3.2 The 2nd Symposium on Fluid-Structure-Sound Interactions and Control (FSSIC2013)

In this year, HKSTAM also sponsored the 2nd Symposium on Fluid-Structure-Sound Interactions and Control (FSSIC2013), 20-23 May 2013 (20-21 May at Hong Kong and 22-23 May at Macau). Dr. Y. Liu is the secretary of the conference.

1.3.3 International Union of Theoretical and Applied Mechanics (IUTAM)

Prof. A.T.Y. Leung continues to serve as the representative of HKSTAM in the IUTAM general assembly. Furthermore, a group of HKSTAM EC members participated in the IUTAM 2012. They are: Li Cheng, YK Lee, Andrew Leung, CW Lim, Jeff Wang, Liu Yang and Jidong Zhao.

1.3.4 International Association of Computational Mechanics (IACM)

In this year, 11 HKSTAM members joined the International Association of Computational Mechanics (IACM). They are:

1. Jian LU

2. CW LIM
3. Jane LU
4. Jeff WANG
5. Paul LAM
6. CK CHAN
7. Wenjing YE
8. Yang LIU
9. YK LEE
10. Xinrui NIU
11. Andrew LEUNG

In the 5th EC meeting, HKSTAM decided to nominate **Prof. Kun Xu** (HKSTAM member) for the APACM Award for Computational Mechanics, and **Dr. Jeff Wang** (HKSTAM EC member) for the APACM Award for Young Investigators in Computational Mechanics.

Furthermore, Prof Leung joined the 10th World Congress on Computational Mechanics (WCCM2012) in Brazil on 8 – 13 July 2012. IACM is one of the organizers of this congress.

1.3.5 The 8th Jiangsu-Hong Kong Theoretical and Applied Mechanics Forum

Prof Andrew Leung and **Dr. Zhigang Li** joined the forum on **17 Nov 2012** (Saturday). There were 5 keynotes in this forum and 2 of them are from HKSTAM. Prof Leung and Dr Li gave **2 keynotes** in the morning session of the forum (see Photo 9). On behalf of HKSTAM, Prof Leung presented the souvenir to **Prof Hu Shaowei**, Vice-president, JSTAM (see Photo 10). Prof Hu also presented a souvenir to Prof Leung (see Photo 11).



Photo 9: The morning session of the forum.



Photo 10: Prof Leung presents the souvenir to JSTAM.



Photo 11: Prof Hu Shaowei presents the souvenir to HKSTAM.

1.4 Current Status of HKSTAM

Referring to the discussion in the 4th EC meeting, HKSTAM has 144 members including 36 life members. In this year, HKSTAM has 15 institutional members. They are:

1. Department of Civil and Architectural Engineering, City University of Hong Kong
2. Department of Mathematics, City University of Hong Kong
3. Department of Mechanical and Biomedical Engineering, City University of Hong Kong
4. Department of Physics and Materials Science, City University of Hong Kong
5. Department of Mechanical and Automation Engineering, The Chinese University of Hong Kong
6. Department of Applied Mathematics, The Hong Kong Polytechnic University
7. Department of Civil and Structural Engineering, The Hong Kong Polytechnic University
8. Department of Industrial and Systems Engineering, The Hong Kong Polytechnic University
9. Department of Mechanical Engineering, The Hong Kong Polytechnic University
10. Institute of Textiles & Clothing, The Hong Kong Polytechnic University
11. Department of Civil and Environmental Engineering, The Hong Kong University of Science and Technology
12. Department of Mechanical Engineering, The Hong Kong University of Science and Technology
13. Department of Mechanical Engineering, The University of Hong Kong
14. Department of Civil and Environmental Engineering, University of Macau
15. Department of Electromechanical Engineering, University of Macau

2 Executive Committee of HKSTAM for 2012-2014

President	Prof. Jian LU (呂堅), College of Science and Engineering, City University of Hong Kong (Email: jianlu@cityu.edu.hk, Tel: 34429811)
Vice President	Dr. Y. K. LEE (李貽昆), Department of Mechanical Engineering, Hong Kong University of Science and Technology (Email: meyklee@ust.hk, Tel: 23588663)
Secretary	Dr. Paul H. F. LAM (林向暉), Department of Civil and Architectural Engineering, City University of Hong Kong (Email: paullam@cityu.edu.hk, Tel: 34427303)
Treasurer	Dr. Yang LIU (劉陽), Department of Mechanical Engineering, The Hong Kong Polytechnic University (Email: mmyliu@polyu.edu.hk, Tel: 27667814)
Immediate Past President	Dr. Jane W. Z. LU (盧偉真), Department of Civil and Architectural Engineering, City University of Hong Kong (Email: bcwzlu@cityu.edu.hk, Tel: 34424316)
Members-at-large	Dr. Xinrui NIU (牛鑫端), Department of Mechanical and Biomedical Engineering, City University of Hong Kong (Email: xinrui.niu@cityu.edu.hk, Tel: 34428432)
	Dr. C. W. LIM (林志華), Department of Civil and Architectural Engineering, City University of Hong Kong (Email: bccwlim@cityu.edu.hk, Tel: 34427285)
	Dr. Jeff J. F. WANG (王劍鋒), Department of Civil and Architectural Engineering, City University of Hong Kong (Email: jefwang@cityu.edu.hk, Tel: 34426787)
	Dr. Zhigang LI (李志剛), Department of Mechanical Engineering, Hong Kong University of Science and Technology (Email: mezli@ust.hk, Tel: 23587186)
	Dr. Xuhuai YAO (姚舒懷), Department of Mechanical Engineering, Hong Kong University of Science and Technology (Email: meshyao@ust.hk, Tel: 23587205)
	Dr. Wenjing YE (葉文菁), Department of Mechanical Engineering, Hong Kong University of Science and Technology (Email: mewye@ust.hk, Tel: 23587194)
	Dr. Jidong ZHAO (趙吉東), Department of Civil and Environmental Engineering, Hong Kong University of Science and Technology (Email: jzhao@ust.hk, Tel: 23588481)
	Prof. K. Q. XIA (夏克青), Department of Physics, The Chinese University of Hong Kong (Email: kxia@phy.cuhk.edu.hk, Tel: 62202962)
	Dr. Z. Q. SU (蘇眾慶), Department of Mechanical Engineering, The Hong Kong Polytechnic University (Email: mmsu@polyu.edu.hk, Tel: 67476317)
	Prof. C. K. CHAN (陳昌麒), Department of Applied Mathematics, Faculty of Applied Science and Textiles, The Hong Kong Polytechnic University (Email: ck.chan@polyu.edu.hk, Tel: 27666919)
	Prof. K. W. CHOW (周國榮), Department of Mechanical Engineering, The University of Hong Kong (Email: kwchow@hku.hk, Tel: 28592641)
	Dr. Yuan LIN (林原), Department of Mechanical Engineering, The University of Hong Kong (Email: ylin@hku.hk, Tel: 28597955)
	Dr. Ryan W. M. YAN (甄偉文), Department of Civil Engineering, The University of Hong Kong (Email: ryanyan@hku.hk, Tel: 28591974)
	Dr. Stephen W. M. QUACH (郭偉明), Department of Civil and Environmental Engineering, University of Macau (Email: wmquach@umac.mo, Tel: +853 66662785)
	Prof. Li CHENG (成利), Department of Mechanical Engineering, The Hong Kong Polytechnic University (Email: mmlcheng@polyu.edu.hk, Tel: 27666769)
IUTAM Representative	Prof. Andrew Y. T. LEUNG (梁以德), Department of Civil and Architectural Engineering, City University of Hong Kong (Email: andrew.leung@cityu.edu.hk, Tel: 34427600)

The President would like to express the sincere thanks to all EC members for their efforts and time to make the successfulness of HKSTAM activities during the past year.