



Newsletters

Chairman's Message



I am honoured to be the Chairman of the Mechanical, Marine, Naval Architecture and Chemical (MC) Division, looking after the interest of our around 3,000 members in the aforementioned four areas. I have been serving in different committees of the HKIE for more than 10 years. By coincidence, it is also the 10th anniversary of my chairmanship in the HKIE Young Members Committee (YMC). I believe my prolonged experience in the Institution will help me to provide the demanded services to satisfy the needs of our members. At the same time, I would be most pleased to have your active participation in both the organisation and participation of our activities, provision of suggestions and feedback for our services enhancement and joining me to promote the positive image of MC engineers.

My vision and plan for Session 2007/2008 focuses on three major elements, namely:

- To foster close links with other learned societies, both local and overseas;
- To enhance the image of engineers in the society; and
- To develop young engineers as our next generation

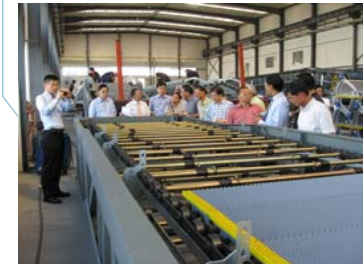
Ir Alex W H LEUNG
Chairman, MMNC Division

China Delegation to Nanjing and Anhui Province



Chairman of the MC Division, Ir Alex Leung, was interviewed by the local mass media in Tongling of Anhui Province during the visit

The MC Division has successfully organized its China Delegation to Nanjing and Anhui Province in the period 12-16 September 2007, in collaboration with the IMechE Hong Kong Branch and ASME Hong Kong Section. On the day of arrival in Nanjing, the group of delegates led by Ir Alex Leung, Chairman of the MC Division was warmly welcomed by the Jiangsu Association for Science and Technology (JAST). The JAST's leaders Prof Xu Yaoxin and Mr Zhao Yong Jin, as well as other representatives greeted the group. Ideas were exchanged among the institutions on matters related to the engineering profession and industry in Jiangsu and Hong Kong. The link between JAST and MC Division was enhanced after the interflow.



Delegates visited the escalator manufacturing plant

The Delegation had a very compacted programme and the delegates have visited various plants throughout the trip. The group first visited the lift & escalator manufacturing facility of ANLEV. The lift testing tower was inspected in addition to the visit to the escalator manufacturing plant. It was followed by a visit to the air-conditioning equipment plant CANATAL. The management of the two plants presented special features of their products which attracted the interest of the delegates.

The group then visited a commercial and domestic water heater manufacturing plant of AO Smith. Engineers of the plant led the group in walking through their production line, and explaining the characteristics of their products.

The delegates have also visited a water supply plant (Hua Yan Water) and a gas company (Bauhinia), which the Hong Kong & China Gas Co Ltd is a key shareholder. The management of the plants greeted the group and presented the operation of the plant and the company. The synergy of cooperation between the enterprises in Hong Kong and the local Mainland entities was revealed.

Lastly the group visited a raw copper plant in Tongling of Anhui Province. The manager of the plant delivered a thorough presentation about the organization, operation and financial aspects of the plant. The delegates also visited the plant and were impressed by its scale of operation. At the end of the visit, our Chairman Ir Alex Leung was interviewed by the local Mainland mass media on the purpose and result of the Delegation trip. The response is positive and it is hoped that more interflow between the engineering profession from Hong Kong and the learned societies, companies and plants in the Mainland could be arranged.

Throughout the visit, the delegates enriched their understanding of the technological and economical progress in Nanjing and Anhui Province. It would be beneficial to their career planning, market demand evaluation and business strategies formulation. The MC Division would like to express sincere thanks to the JAST, the visited organizations, the collaborated professional institutions and the delegates who have joined our Delegation to make it a success.

Friendly Soccer Match, HKPU ME Department vs MMNC Division

In the rainy evening of 8 June 2007, the members from MMNC Division (MMNC team) played an exciting but friendly soccer match with the staff members of the Mechanical Engineering Department (ME team) of the Hong Kong Polytechnic University (HKPU). This friendly match was held on a yearly basis in last three consecutive years with the aim of providing MMNC members a chance of having exercise and fun together in a causal social gathering event. Ir C.Y. Fong, captain of the MMNC team, scored two spectacular goals in the first half to make the MMNC team a lead before taking the break. Unfortunately the MMNC team lost two goals in just two minutes in the early part of the second half. Ir K.K. Lo, captain of the ME team, scored the second goal for ME team to level off. The match was ended up with a 2-2 draw and all players enjoyed the dynamic but exhausting game very much.

Any members, who are interested to join the future soccer matches, please notify Ir Fong of the MMNC team (cyfong@atal.com.hk).



Prof. Jian Lu, Chair Professor and Head of Mechanical Engineering Department of HKPU and Ir Alex Leung, Chairman of MMNC Division (2007/2008) took a group photo with the ME team (red-blue stripe shirt) and MMNC team (white shirt) before the encounter.

Fun Corner

How to run a project smoothly and effectively? – Project Management

By Karen Lie

The seminar was divided into two presentations. The first presentation was on Total Safety Solution – Black Point Power Station CW Intake Culvert Project given by Ir W K Chow from CLP. The second presentation was on Shenzhen Metro Network Development – Project Management given by Ir Alex Leung from PBA. Each presentation was followed by a question and answer session.

The background of the Black Point Power Station CW Intake Culvert Project was first given. Key project risk drivers, such as safety and health, procurement and O & M expectations, were considered. Vulnerability analysis on risk description and consequence, risk rank and control measure was conducted. One of the challenges of the project was the hazard associated with underwater works. A careful evaluation process on contractor selection was gone through before the award of contract. Then, a safe work plan was developed. Safety quality was ensured at works by carrying out extensive test and competent demonstration conducted at factory to the satisfactory of the project team. The presentation was concluded with the critical success factors in the project, and they were the clear definitions of the project scope and constraints, live contingency plans, competent collaborative contractor and good team work.

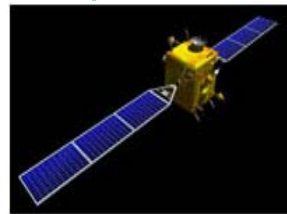


Group photo of speakers, mc and helpers

The second presentation began with a background on the development of Phase 1 and 2 in Shenzhen Metro Network. The key project management skills of significant values to PRC clients were given. Also, the design management and design checking in project management were elaborated in the presentation. The ultimate goal of the design checking was to add value to design and hence the project. Four key challenges of project management in PRC were given, and they were the understanding the situation in mainland China, scope change, programme and project risk, and contract strategy. Suggested solutions for each challenge were mentioned. The presentation was concluded in reminding the audience be always well equipped to face the challenges.

Chang'e 1 Flying Chinese to the Moon
By Gary Yu

Chang'e 1 is the first of what is planned to be a series of Chinese missions to the Moon. The spacecraft launched on 24 October 2007 on a CZ-3A booster and will orbit the Moon for a year to test the technology for future missions and to study the lunar environment and surface regolith. The payload includes a stereo camera system to map the lunar surface, an altimeter to measure the distance between the spacecraft and the surface, a gamma/X-ray spectrometer to study the overall composition and radioactive components of the Moon, a microwave radiometer to map the thickness of the lunar regolith, and a system of space environment monitors to collect data on the solar wind and near-lunar region. The Chang'e program is named for a Chinese legend about a young goddess who flies to the Moon. Missions of "Chang'e 1"



Since the 1960s, more than 100 lunar exploration missions, over half of which or so were successful ones, have been carried out by countries all over the world. As a result, a great deal of scientific data about the Moon has been obtained. Being China's first spacecraft for lunar exploration, "Chang'e 1" not only represents the breakthrough of China's remote satellite technology and detection of the Earth-Moon space environment, but also serves as an initiative to fill the gaps of previous lunar exploration missions. There are four major science objectives for the "Orbiting (Chang'e 1) Phase" of the lunar exploration programme:

Producing 3-dimensional images of the whole lunar surface

Detecting the composition of the lunar surface

Probing the lunar soil

Exploring the cislunar space environment

According to the plan, the program will go through three milestones:

Chang'e 1 is a lunar orbiting spacecraft. The object of phase 1 is research and development of a prototype probe and relevant testing of the probe was finished before the end of 2005.

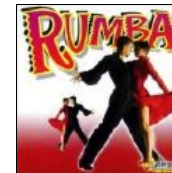
Chang'e 2 will be launched to deploy a lunar lander for surface exploration in a limited area on the moon. It is said that the second phase of the program would include the launch of at least two landers in 2008 or 2009 that will carry small remote-controlled Moon rovers to conduct an inspection of the moon's surface and probe the moon's resources. It would also provide data to determine the selection of a moon base.

Chang'e 3 is on the basis of the lander mission, a lunar sample return mission will be implemented. On the same date the manned program is expected to start.

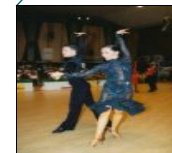
Leisure Session

By Miss Annie Chan

A drama from Television Broadcast called "Steps" was drew many people attention on Latin dance. Latin dance mainly divided into Rumba, Cha Cha, Samba, Paso Doble, and Jive. In order to understand more on the Latin dance, this article is going to introduce various dances one by one.



Rumba originating in African Negro slaves and imported into Cuba. Many people believe that the dance steps are derived from the way the slaves moved while carrying heavy burdens. In order to maintain the balance, shoulders must keep at steady level. Besides, the dances emphasized the movements of the body rather than the feet.



Cha Cha origin with Mexico, and is danced currently at about 120 beats per minute. The name of Cha Cha could have been derived from the Spanish 'Chacha', which means 'nursemaid'. The dance steps are taken on the beats with a relatively strong hip movement. The weight is kept well forward, with forward steps taken toe-flat, and it is danced with minimal upper-torso movement.



Samba originating in Cuba, and is danced currently at about 51 beats per minute. Sometimes, dancers form a circle and dance with steps like the Charleston done to hand clapping and percussion. Also, a solo couple may perform in the centre of the circle.



Paso Doble was stemmed from France and developed in Spain. The name 'Paso Doble' in Spanish means 'Two Step', which refers to the marching nature of the steps. Paso Doble is danced with a high chest, the shoulders wide and down, and with the head kept back but inclined slightly forward and down.



Jive originated with the Negroes in the South East of U.S.A. Jive has basic steps composed of a fast syncopated chasse to the left followed by another to the right followed by a slower break back and replace forward. The hips are moved after each of the steps, and the weight is kept well forward.

Then, what Latin dance benefits us? It gives us health, fun, confidence, friendship, and so on. In fact, Latin dance is one of aerobic exercises. It helps maintain healthy on circulatory system, weight control and overall fitness through calorie burn off. Since the dance is involved in the deepest emotional responses of our personalities, we can relief pressure and escape from the busy life. In addition, it opens a wide spectrum of social settings

Latin dance can become more than our hobbies, it will provide us with a new lifestyle, excitement and friendships. Enjoy ourselves in Latin dance.

BLOG: What is life like in Mechanical Engineering? What are the job duties of mechanical engineer? How about the working environment in Mainland China?

Check out our blog hosted by experienced engineers! Our blog offers you greater information and connections about mechanical engineering. Mechanical engineers will be invited to share their engineering life regularly. It provides great insight into life as an engineer and answers all of your questions!

Understanding the roles of engineers, knowing the career prospect of engineering and sharing the life as an engineer, that's what you can find in our blog! Clicking the following link gives you exposure to the real mechanical industry! Go and enjoy it!

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