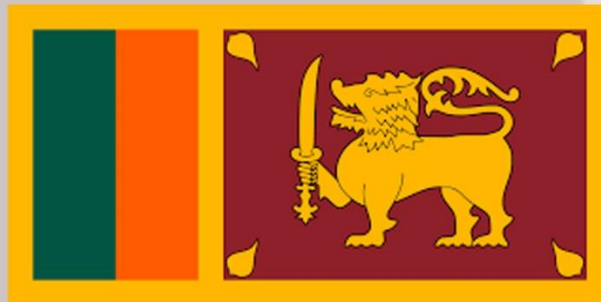


Improving the world through engineering

SRI LANKA NEWS LETTER

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IMechE Sri Lanka Group Executive Committee with Operational Committee 2016-2017

Chairman's Message

IMechE Sri Lanka (SL) group is having a history since 1997. The SL group grew in its size and activity levels over past few years. The current membership of the group is 530+ and counting. There are four active student chapters and one more to join in this year. There were many international events held in Sri Lanka. Engineering tomorrow event, Regional SOFE competition, SAR BOM meeting are some noteworthy events held in recent past.

We have our members serving in international committees. SAR chairmanship and International member of strategy board are two prominent position held by Sam Perera and Lucien Pereira respectively. Lucien Pereira is also a council member.

SL members have taken part in many events and have won some of them. Becoming the SOFE southern Asia regional winner and Asia pacific winner is one occasion. The icing of the cake is winning the design competition by Moratuwa university team in 2016.

The focus area of current board of management (BOM) is to attract more young members to the group. Hence many activities are planned focusing growth of student chapters. Similarly another key focus area is creating more activity to improve membership engagement.

To support above initiatives the BOM has created an operational committee to support them. This operational committee comprise with promising young volunteers who are in the succession plan of current BOM. This will be the growth path of SL group.

I would like to urge members to join hand with the current BOM to enhance mechanical engineering profession in Sri Lanka.



Chanaka Wanniarachchi

CEng, MEng, MBA, MIMechE, MIESL,

Chairman Sri Lanka Group

National Vocational Qualification (NVQ) Framework and its relevance to Engineers

The role of industry in development of Occupational Competency Standards, on the job training and assessments for award of NVQs was the essence of the lecture which held on 15th of May 2015 at IESL auditorium. It was focused how engineers could contribute and benefit by implementing the NVQ framework. This lecture was organized by IMechE (Sri Lanka Group), jointly with Mechanical Engineering Sectional Committee and Agricultural & Plantation Engineering Sectional Committee of the Institution of Engineers, Sri Lanka

Eng. B H Suraweera was the speaker of this presentation and he is a Chartered Engineer well experienced in all aspects of Vocational Training and skills development, dedicated to establish a Vocational Training system in Sri Lanka that meets youth aspirations and skills needs of the industry. He has 10 years' experience in Farm Mechanization and 20 years of experience in Vocational training and Skills development. And presently he is working as a Programme Reform Specialist of Skills Sector Development Programme, Ministry of Skills Development and Vocational Training. Both IMechE and IESL members attended this lecture.

Oil and Gas Exploration, Extraction and Processing in Canada's Oil Sands

The lecture was organized by IMechE (Sri Lanka Group), jointly with mechanical sectional committee of the Institution of Engineers, Sri Lanka on 9th of January 2015.

The speaker Eng. Mohan Rao is a Senior Project Engineer & Consultant with extensive experience in power generation, petrochemical, mining and chemical processing industries. Focus on project coordination, construction, planning, scheduling, costing, design, management, production and plant engineering. He is a fellow member of IMechE Canada Branch.

This presentation was focused on Alberta's Oil Sands Description, Steam Assisted Gravity Drainage Technology, Environmental Issues & Climate Change , Water Management , Consumption, Recycling ;Air - Air Quality – SO₂ , NO_x emissions, Volatile Organic Compounds, Land Reclamation, biodiversity , Renewable incentives like Ethanol production Spills and Releases , Spill Reporting and Emergency Response Plan, Environmentally Responsible Products Including Examples of products like lubricants, chemicals etc. Further this discussion was gone on Suncor Energy Brief description of their involvement, Tailings ponds reclamation; coke capping, Natural Gas Description and Natural Gas Exploration Schematic.

He briefed the social and political challenges confronting expansion of oil sands production, Diagrams, photographs and schematics of equipment and operations to facilitate visual understanding.



“Engineering Tomorrow 2014” Inspiring the Next Generation

‘Engineering Tomorrow’, an event for young engineers from Asia Pacific, on 7 and 8 November 2014 which was held at the Ozo Hotel in Colombo. The event was graced by British High Commissioner to Sri Lanka and the Maldives John Rankin, who addressed the gathering and also took part in a panel discussion. The countries which participated in the event were Hong Kong, Malaysia, Singapore, Australia, Pakistan, India, UK and Sri Lanka. The ‘Young Member Conference’, ‘Learned Society Talks’ and ‘Speak Out for Engineering’ were



included for this event. The topic of the panel discussion which High Commissioner Rankin took part in is entitled ‘IMechE Diversified: From machines to music’, and the panelists were the IMechE Southern Asia Regional Board member Newton Wickramasuriya, IMechE Young Member Board Chair Ruth Shilston and IMechE Academic Assessment Committee member T.S Sangha . The panel discussion was moderated by IMechE Young Visionary of the Year 2014, Siddhartha Khastgir. It was followed by ‘Learned Society Talks’ and ‘Young Member Conference’ which focused on inspiring the younger generation to pursue engineering as a career. On 7 November 2014, the Asia-Oceania finals for ‘Speak Out for Engineering’, an IMechE marquee event, was held. Following this, the IMechE Sri Lanka group hosted all attendees and its members at the Group Annual Dinner at the Galadari Hotel, Colombo. Southern Asia Chair Sam Perera was the chief organizer of these events with Sri Lanka Group Chair Lucien Pereira assisting with an able committee.



Brainstorming Session 2015

The Brain Storming session was the most important event in IMechE Sri Lanka group calendar. This year event was held at City Hotel, Colombo-04 on 14th of November, 2015 under the patronage of IMechE Sri Lanka Group Ex-co members. This year the main point of concern was to make the action plan for the group activities for the next year to way forward. All members who participated agreed to pay great attention for membership enhancement. Under this program, they agreed to talk to the potential engineering industries across the country and Eng. Abeykoon requested to come to the Lakwijaya coal power plant in Norochcholi.

Mr. Lucein Pereira, the Group Chair, stressed the strategies to provide services, activities that encourage membership growth and development and also he invited active volunteers who are in 30 -35 age group for their commitments to develop the engineering through IMechE. He also highlighted the need to build up a resource base for the group activities and to set targets for 2015 and work towards these goals.

Other members also shared their thoughts to encourage the young engineers to become members in IMechE and the strategies to retain them through enhancing the network and mentoring them to develop their knowledge.

Mentoring Program for University students

IMechE Sri Lanka Group has planned to start a mentoring program for the University chapter students. And these days they are listing out the mentoring program elements to increase understanding the effective practices for their potential benefits and will focus selecting indicators of program implementation viability and volunteer fidelity, such as training hours, meeting frequency and relationship duration for all groups. ImechE Sri Lanka Group has planned to use their own resource team to conduct this program to increase the programs accountable to the entities that support them.

The first program will be started at the University of Moratuwa and co-coordinators of this program are the members of the executive committee. And IMechE Sri Lanka hopes to get the support from headquarters to success this program.



The Annual General Meeting (AGM) 2015- Ruhuna Student Chapter

The AGM of IMechE Ruhuna Student's Chapter was held in 11th of June 2015 at the IS Seminar room of The Faculty of Engineering University of Ruhuna. The AGM was held along with the Welcoming Ceremony for the new students who are entering the Department of Mechanical & Manufacturing Engineering. The beginning of the ceremony was signified by lighting the traditional oil lamp. The gathering was addressed by Mr. Sam Pereira followed by Dr. Pushpakumara and Mr. Lasantha Kurukularachchi. The gathering was entertained by few songs sung by the 3rd and 2nd year students. In Mr. Lasantha Kurukularachchi's address he described about the IMechE Institution and the value of being a member of the organization. Then Mr. Herath delivered the speech about the Alumni established in the Department. Next it was time to elect office bearers for Mechanical & Manufacturing Engineering Student's Society (MMESS) as well as for the IMechE Ruhuna Student's Chapter 2015. Both the newly appointed presidents delivered their speeches accordingly and brought the meeting to an end by making the vote of thanks by former Field Representative of the 3rd year students.

Panel Discussion on the Current State of the Engineering Industry

This discussion was based on identifying the reasons for the lack of growth in these sectors which are the main areas which should spur industrial development of the country and also provide gainful, challenging and remunerative employment to our future crop of young engineers. Forum was held on 18th July 2015 at Hotel Janaki Colombo. 20 engineers from various industries participated in this discussion and they expressed their views.



IMechE Introductory session and industrial safety program in University of Peradeniya

The IMechE Introduction Session & Industrial Safety Programme which was organized by the IMechE Student Chapter of University of Peradeniya was held on 9th of August 2015 at the Seminar Room 1 of The Faculty of Engineering, University of Peradeniya with the participation of Executive members of the IMechE Sri Lanka Group. Prof. Leelananda Rajapaksha, Dean, Faculty of Engineering, University of Peradeniya, Mrs. Lecka Bakmeedeniya and Mr. Ubaya Higgoda, staff members from the department of mechanical engineering and students from the departments of mechanical engineering, production engineering and chemical & processes engineering participated at the event. The Introduction session about IMechE was conducted by Mr. Lasantha Kurukularachchi who is the Chairman of the Young Members section and the Editor of the IMechE Sri Lanka Group followed by a questioning session. Then the Industrial Safety Programme was conducted by Mr. Chanaka Wanniarachchi who is the Chairman of the Member Development of the IMechE Sri Lanka Group.



From the WEB

Call for Articles-

Please send your articles for IMechE SLN to ka_lasantha@sltnet.lk

Symposium of Engineering Industries in Srilanka

A symposium on engineering industries of Srilanka was organized by The IMechE Sri Lanka Branch. The final review was held on 4th of April 2016 at Hotel Galadari Colombo. A questionnaire was circulated amongst the companies which were invited on the day, prior to the event for them to prepare themselves to talk in the forum.

Alcobronz PVT LTD, Colombo Dockyard PLC, ITANG Group PVT LTD, St. Theresa's Industries, Dockyard General Engineering Services, Polypak Seco Ltd, EMP Holdings and few other SME's were presented in the evening.

The discussion was kick started at 6.30 PM with a welcome speech of Mr. Lucien Perera (Chairman IMechE Sri Lanka Group). Mr. Newton Wickramasuriya (Vice-Chairman IMechE Srilanka Group) along with Mr. Lucien Perera headed the forum as moderators.

Initially the forum began by discussing the contribution of engineers towards the organization and the growth of the industry. Then it moved towards a requirement of a professional engineer, and recruiting more engineers to the organization. Different views from different perspectives were expressed. Representative from Alcobronz PVT LTD said that motivating the engineers to be object driven rather than being an office hour's person. General Manager (Production) of Colombo Dockyard PLC said that the engineers complete their post graduate studies such as MSc or MBA and looking forward to promotions as soon as possible which is not viable. Representative of ITANG group mentioned that innovative thinking amongst engineers should be increased by special training and etc. Engineers should be more practical and should have an outgoing personality rather looking at the computer screens for hours since apart from knowledge the attitude which makes the difference he said. Head of Engineering of Polypak seco claimed that the young engineers are losing their path due to financial attractions. Therefore in order to succeed the passion and experience is vital he furthermore expressed.



Industrial Survey Visit to Tokyo Cement Trincomalee

IMechE Sri Lanka Group executive committee made a visit to the Tokyo Cement Plant in Trincomalee on December 2015. The cement factory which declared open since 1982 is situated near a dockyard to make the raw material transport from ship to store straightforward. They remain as the largest manufacturer and supplier of cement in Sri Lanka.



The company also consists of 10 Mega Watt biomass power plants in Trincomalee. It frees the company's operation by acting as a source of ecofriendly electricity generator instead of relying on fossil fuel power generations.

The cement manufacturing plant also becomes the first local corporate to achieve the ISO 14001 Environmental Management System and the first manufacturer to achieve the ISO 9000 QMS certification.

The main objective of the visit to the plant by the executive committee members was to survey the factory and also to analyze the engineers' role in the manufacturing plant. 15 Engineers are assigned to carry out the operations and the maintenance of the plant. A brief introduction on IMechE and the benefits of becoming an associate member and so on were also emphasized by the IMechE team to the plant engineers.



Engineering Tomorrow 2015

IMechE South Asia Region organized the "Engineering Tomorrow 2015" at Colombo Sri Lanka on the 21st and 22nd of November 2015. The event consisted of SOFE southern Asia regional finals, Southern Asia Region Design Competition, Global Engineering Debate, Learned Society Talk and Young Members Conference.

Speak Out For Engineering SAR Finals

South Asia region Speak out for engineering Competition was the initial event on the Engineering Tomorrow 2015 event. 3 Finalist each from Pakistan, India and Sri Lanka were selected from the preliminary rounds were competing each other to win the SAR SOFE 2015 Winner Title.

Shah Rukh from Pakistan was the first person to deliver her presentation on "Industrial Exhaust Air Energy Harvesting". She made the viewers to ponder about the ways of utilizing the industrial exhaust gas as a productive way.

Kusal Tennakoon had the opportunity to present after Shah Rukh. The topic of his presentation was quite fascinating which is "Into the heart of a heart." The presentation was well organized and well ordered.

Vipul Gar from India was the final presenter and his topic was "vehicle to vehicle communication (V2V)". His presentation gave the audience of an insight into the future of communication between vehicles which minimizes the road accidents.

Ms. Shah Rukh was awarded as the winner and Vijay Garg was declared as the 1st runner up of the competition.



SAR Design Competition Finals

SAR region design competition was held after the SOFE competition. A team from Pakistan and another from Sri Lanka competed in the finals. Ms. Sarah Ahmed and Abdul Hannan from NED university of Engineering and Technology Pakistan were the first team to present their design. They have designed a sign language to be converted into text messages which can assist a hearing disabled person to communicate with actions. 2nd Team to exhibit their product was a team comprising of Eranga De Silva, Peshan Sampath and Shakthi Rohanavansa

who represented the University of Moratuwa. They designed and fabricated the belt which gives out the vibrations in the direction that a particular sound is being generated and transmitted. The team from University of Moratuwa was awarded as winners. They also won the Asia pacific region design competition which was held on April in New Zealand.



Global Engineering Debate

"Which type of energy should Srilanka invest on its future" was the topic for the global engineering debate. 3 speakers who were invited to the debate delivered their speech on their own 3 solutions which are fossil fuel, Renewable Energy and Nuclear Energy. A survey carried out from the audience to find the majority of the favorable solution and it was found that 90 percentages of the audience prefer renewable energy than other sources of energy.



Learned Society Talks

A series of lecture were held on the 22nd of November 2015. Well experienced industrial key persons shared their own field of expertise in engineering. The first presentation was delivered by Prof. Alan Lau who's a professor at the Hong Kong Polytechnic University on "Product Engineering and Development".

2nd presentation was delivered by Mangala Yapa who's the Former CEO of Colombo Dockyard PLC on "Paradigm Shift in Engineering". He expressed his views on maritime industry perspective on shifting the engineering boundaries from Independence to Interdependence, Analysis to Synthesis, Isolation to Integration, and Simple to Complex, Predictive to Adaptive and Mechanistic to Systemic.

3rd presentation was delivered by Siddhartha Khastgir who's currently pursuing his PhD at WMG, University of Warwick, UK and presented on "Going Driverless" and Fourth presentation was delivered by Chanaka Wanniarachi (GSK head of operations, Dehiwala) on "Industrial Safety". The lecture was productive to the industrial engineers.

Young Member Conference

The young member conference encouraged young members of IMechE from SAR Region to participate in discussions thus sharing their experiences and expectations that they have from the IMechE. The conference had presentations made by the Young members representing India, Pakistan and Sri Lanka. These presentations gave the audience an idea about the kind of activities that each country conducted for the young members during the year 2015 and also the future events. A brainstorming session was held in groups which guided and reminded the members what IMechE can offer to the young members.



Facade Engineering

The New era of Engineering which is highly distinguished as a new art of engineering called Facade Engineering is the essence of the lecture which held on 26th of February 2016 at IESL Wimalasurendra auditorium. It was mainly focused how the facade engineering plays a vital role in modern engineering designs and how it contributes to the other engineers in the whole industry. And he mainly focused on the safety aspects as well as the new technologies which are currently using in developed countries to preserve the facades. This lecture was organized by IMechE (Sri Lanka Group), jointly with Building Services Engineering Sectional Committee of the Institution of Engineers, Sri Lanka

Eng. Kanthalingam Shivaskaran was the speaker of this presentation and he is a Board Of Member of IMechE Srilanka Group. He has 5 years' experience in façade Engineering and project management field and holding the Associate professional Consultation membership of Green Building council Srilanka. And presently he is working as a Technical Manager - Service Operation at United Tractors PVT Limited. Both IMechE and IESL members attended this lecture. And also he is a Certified Engineer of Monorails track installation and MHE Gondola Commissioning by MHE Demag, Malaysia

