

# IEM NEWSLETTER

P O BOX 28 QUATRE BORNES - [www.iemauritius.com](http://www.iemauritius.com)

September 2016

## Message from the President of IEM

Dear Colleagues,



It gives me great pleasure to inform you that IEM has been very busy on all fronts since I last wrote to you i.e. in the May 2016 edition of the Newsletter. IEM has availed itself of all the opportunities that have come its way to promote with dignity the profession of the Engineers. IEM representatives are providing very important inputs at the level of various technical committees at National level. Furthermore, IEM's training center is up and running and has already organised two CPD courses.

IEM has also set up a platform to promote innovative engineering practices. This platform will work with research institutions and the private sector practitioners and innovators to show case engineering practices that will be more effective and beneficial to our communities and the society in general. There is a need to challenge the "business as usual way"

Exciting Talks and Visits are regularly organised by the Events Committee and if so far you have not had the chance to participate in any of them, you can still catch up by reading on them on our revamped website. However, nothing can replace by being there in person, interacting with the presenters and enjoying the fellowship.

IEM has raised a couple of important issues at the Court of The University of Mauritius with regard to (1) the need to produce accredited engineers of international class benchmarked by the Washington Accord and (2) working with University of Mauritius for the accreditation process which is ongoing between UOM and Engineering Council of South Africa..

I would kindly urge you to get involved in the various activities organised by IEM. I shall be pleased to see you at the forthcoming IEM Annual Dinner on 13th September 2016. On this occasion, IEM will be launching its Annual Journal on the theme of Engineering for 2050.

**Raj H Prayag PDSM**  
*President*

## Membership and Welfare

### Ghunshyam Parsan, *Chair*

In many industries, and especially in the private sector, graduate engineers face difficulty in completing their registration process with the CRPE. One of the main reasons is the lack of access to mentors to supervise them. Although remote mentorship is permitted by the CRPE, having access to mentors remains a problem. As part of its service to the profession, IEM is currently setting up a register of mentors who would like to volunteer to act as mentors to assist these graduate engineers. Already, there are half a dozen senior engineers who have volunteered to assist, and we have started receiving requests from graduate engineers. To register as a mentor, please contact IEM by email at [iem@intnet.mu](mailto:iem@intnet.mu).

Since the beginning of this year, there have been 15 applications to join IEM, 13 of which have been admitted as follows: 8 Associate Members, 3 Corporate Members, and 2 Student Members.

Application form to join IEM can be downloaded from the IEM's website which is [www.iemauritius.com](http://www.iemauritius.com)

## Education Committee

### Dr. Andre Chan Chin Yuk, *Chair*

As you may be aware, IEM is registered with MQA for offering approved continuing professional development (CPD) courses. Our aim is to offer a wide range of courses in engineering and related



fields. For 2016, the third course offered on 31st August 2016 was conducted by Mrs Nadia DABY SEESARAM, *EUR ING, MIEM, RPEM, Environmental Engineer* on "*Environmental Compliance in the Construction Industry*". It is to be noted that compliant IEM members are eligible for a discount of 20% on the CPD courses.

In August 2016, a CPD Needs Survey was carried out with the aim of providing us with guidance for identifying requirement for CPD resources and for planning future courses. The first responses indicated the following priority areas, amongst many others: Concrete technology and Testing, Contract Law, Engineering and Project Management, Conditions of Contract, Safety and Health, Eurocodes and various topics in Structural Engineering. We thank all those who have given us their feedbacks and look forward to receiving further suggestions so that we can better serve the engineering community.

## Events committee

Vikram Gunnoo, *Chair*

### Site Visits

#### United Basalt Products UBP

Around seventeen IEM participants attended a half day visit on Saturday 28 July 2016 at the UBP manufacturing plant at Geoffroy/Bambous and the innovating Eco Building System Test House at Gros Cailloux.



They had the opportunity to see the R&D by UBP whereby its new eco-blocks and products are being monitored and measured 'in situ' within two similar Test Houses. They also visited the manufacturing process of aggregates (from Primary Rocks to Aggregates/sand) and the New Block Construction



Technology and High Strength Bricks Technology, which are utilised for Port-Project.

### Omnicanne

On the 29th of July 2016, 'Omnicanne Thermal Energy Operations' OTEO welcomed a delegation of IEM at its cogeneration Plant at la Baraque. Mr. Pierre Sagnier, Project Development Manager gave a short detailed presentation of the Integrated Flow Chart - Bagasse and Coal Fired Thermal Plant and the process of waste recycling of Omnicanne Flexi-Factory, and the 'Carbon Burn Out' CBO Unit project, the second of its kind in the world, presently under construction. The group had the opportunity to visit the Bagasse and Coal Cogeneration Plant (2 X 45 MW) which currently supplies 20% of the electricity on the CEB national grid, the small cogeneration plant burning coal and wood chips supplying power and steam to the distillery, the refinery and the CBO Unit. Residues (coal fly ash and bottom ash) collected from the Co-Generation Power Plants will be processed by the CBO Unit for cement additives and concrete aggregates.

The commissioning of the CBO Unit is planned during October/November 2016.

The group also visited the new Bioethanol Distillery which is able to supply 22,000,000 litres/year.



### IEM House

The IEM house and yard is being revamped. The roof screeding has been completed by Contractor Onix Ltd. The internal false ceiling in the lecture room will be upgraded and works are in progress. A new boundary wall will be constructed with 2 separate gates for entrance and exit. The blocks for the wall is being sponsored by UBP. The latter will be using the innovative concrete block 20.15; the blocks have the added advantage of its easy application, elimination of formwork step during construction,

reduce time-consumption and resources. IEM will use this opportunity as a showcase for the construction industry. Dry Mix Products Ltd will be providing masons for the laying of the block walls, thus providing different type of rendering finishes. Contractor Jaufferally will be carrying out the excavation works, casting blinding and the strip footing. Consultant GIBB has kindly provided its services for the survey, design and working drawings. Works will start during the first week of September 2016.



# THINK TANK Committee

Shamshir Mukoon, *Chair*

**Round table # 1 debate organized by the Think Tank committee on Water Supply in Mauritius on 15th September 2016 at the University of Mauritius in conference room no. ELT1 . Time: 14h00- 16h00**

## WATER SUPPLY IN MAURITIUS

### Challenges and Remedies

Since years, responsible authorities responsible for the supply of water has recourse to water rationing in order to cater for potential water shortage and mitigate water cuts. It is a fact that the authority responsible for water management has the competent engineers who acquired the relevant experience. Various consultancies and master plans

have been prepared during the past decade, and all have identified the required engineering solutions for the sustainable management of the water resources in Mauritius. In principle the water that falls over Mauritius should be more than adequate for the demand. Why with an average of 2000 mm of annual rainfall we are still paining to forge ahead with a sustainable water resource development, management and supply plans. Government adopted a National Water Policy in 2014 which provided strategic guidance to all water related institutions. The CWA published its Strategic Plan 2015-2017, yet implementations of concrete projects to achieve the set objectives seems paining to take off. Our round table aims at churning engineering ideas and solutions applicable in our context and support the relevant authorities in their quest for the sustainable water development future.

## Round Table # 2 Debate

### Platform for Innovative Engineering

Ghunshyam Parsan, *Chair*

Despite having very able and competent engineers, there is a general consensus across most industries that the practice of engineering in Mauritius errs too much on the conservative side. Be it domestic construction or public infrastructure, construction practice has evolved only very little over the past decade. There are numerous hurdles to introduce new products, new methods, and a general culture on innovation that could potentially make the best of techniques latest already proven elsewhere. Such hurdles are not necessarily technical in nature. It may be commercial, administrative, a problem with the regulatory framework, or lack of skills and competencies. A PwC Pulse Survey of 246 CEOs worldwide reveals that 97% of CEOs see innovation as a top priority for their business.

The Institution of Engineers recognizes that innovation is key to giving Mauritius a competitive edge in this globalized world. IEM has decided to set up a Platform for Innovative Engineering to discuss in depth on specific topics related to engineering. The platform will bring together different stakeholders

and trades around a specific topic, which could range from a particular product, or say the problem of skills shortage in a specific industry, or the administrative or regulatory hurdles faced to introduce an innovative construction method, or a number of other such topics. Obviously, the concerned parties are not just engineers. Other trades could be architects, quantity surveyors, the legal profession or a number of other trades, depending on the topic being discussed.

The objective is to bring the top brains from the different trades, both public and private, to debate on a specific topic. The results could be in the form of a technical paper published, or a set-up of a committee to implement the recommendations of the Platform, or a dissemination program across the industry. This Platform is not a seminar or a workshop with no follow up. The objective from the onset is to come up with tangible recommendations and to contribute positively to the development of the country.

A Round Table comprising of various stakeholders will be organised under the aegis of 'IEM Platform for Innovative Engineering new products and methods available in the Construction Industry during the month of October 2016 .

## Upcoming Events

### Talks:

Mr Raj Prayag , IEM President and Chairman of the Oceanography Institute of Mauritius delivered a talk on 'Ocean Economy/ Blue Economy ( ocean industry) in the mauritian context at IEM house on Friday 22 July 2016. Around 40 participants attended the event.

Drymixed Products Ltd will carry out a talk on products on the market such as '**colle pour carrelage**' (Primefix), Rendering Mortars such as 'Crepifix', Screeds such as Screedfix on Friday the 23rd September 2016 at IEM House.

A site visit at Mauritius Ports Authority – Master Plan of the Port Louis harbour is proposed during the month of October 2016.

### Workshops:

Three delegates from IEM attended the CIDB workshop on construction contracts (special provisions) bill 2016 held on 28 July 2016. The proposed new legislation intends to introduce statutory adjudication of construction disputes and regulate the manner in which payment issues are dealt with in construction contracts.

## Invitation to Annual IEM Dinner

To celebrate the Engineer's Day, the IEM Council is pleased to invite its members to its Annual Dinner which will be held at "*Mauritius Gymkhana, Vacoas*" on **Tuesday 13th September 2016**.

This year the chief guest will be *His Excellency Barlen Vyapoory, the Acting Vice-President of the Republic of Mauritius*.

A pre-dinner cocktail will be served as from 19h00 and dinner at 20h00.

Dress code: Formal (*suit and tie*)

Rates:

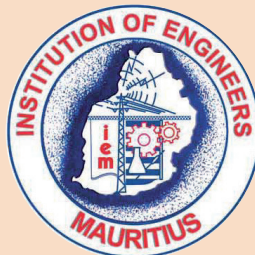
- Compliant Member (all grades) : Rs 1,200
- Compliant Member with Spouse : Rs 2,400
- Non-compliant member : Rs 1,400
- Guest : Rs 1,400

*(Non-compliant members are those who have not yet settled their annual subscription fee for the year 2015)*

Interested members are kindly requested to confirm their participation by contacting IEM House ( Tel 230 4543065 ) or by email at [iem@intnet.mu](mailto:iem@intnet.mu) . Payment, in favour of IEM, in the appropriate amount should be made by Friday 9th September 2016.

**IMPORTANT :** Please note that no payment will be accepted on the day of the dinner.

IEM Council appeals to its members and their guests to confirm their participation in time to avoid inconvenience and embarrassment that may result from Council's inability to accommodate any reservation.



**Institution of Engineers Mauritius,**

Corner of Ollier and Hitchcock Avenues, Quatre Bornes

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