Presdent’s Message

Eng. (Mr) A W Gamage
President (ACESL)

It is my priviledge and honour to be elected as the President for 2019/2020 session of the Association and I take this opportunity to thank the Council and the Members for availing this opportunity to me to serve the consulting engineering community in Sri Lanka. Together with my colleagues of the Council, we will strive to raise the standards of the Association to serve and uphold the Association’s objectives and contribute to the progress of our Membership and the society at large.

While continuing the current activities initiated by previous Councils we are planning to embark on new projects and activities that will enhance the image of the Association and provide opportunities for all our Members to reap benefits. Some salient features of our plan for the year include the increase of our membership substantially and aim to reach 500 mark by the end of the year, continue the process to establish a permanent office for the Association, conduct training and professional development programmes for the members and the wider consulting community and encourage younger professionals to take to consulting by enhancing membership and activities of the Young Professionals Forum.

We as consulting engineers should get more involved in nation building activities and work with the government in ensuring all development funds are utilized economically and to benefit the country and there should be policies in place to ensure that foreign experts are to be engaged only when there is no local expertise available. In this regard we intend to lobby the government and the industry including funding agencies by highlighting capabilities of our engineers and allied professionals.

I take this opportunity to request the assistance of all members by way of active participation in the activities of the Association, feedback and constructive criticism and their valuable suggestions.

From the Editor....

I submit my first newsletter with great pleasure in my second council session as the Editor of the year 2019/2020 and also thanks for the former secretary Eng. A W Gamage to proposing me as the Editor for the new year.

After assuming duties, I have been working, rendering services to the best of my ability to achieve the goals of the society. I am happy to state that, I have been motivated to implement new concepts and ideas with the assistance of other council members and I also would like to highlight some important views in the forthcoming news.

Further, I extend my thanks to the colleagues who responded by sending emails and articles on time, in all forms to make this newsletter a success.

In conclusion I would like to mention that we would be able to achieve the aims of the association by working together as a team sharing ideas experiences and knowledge andalso accomplish the general objectives of ACESL by determining resolutions for national and international issues that influence our profession.

Your feedback to the newsletters of ACESL will be highly valued and appreciated. I consider this as an opportunity to invite you all to forward your contributions in different ways.

Eng. P Dhammika Dharmaratne
Editor/ (ACESL)

Calling Nominations to the New Council for the Session 2019/2020

Six (6) nominations from the membership for the Council of the year 2019/2020 were collected with all requirements. The detailed list was summeried as follows.
Name of Nominee | Name of Proposer | Name of Seconder
--- | --- | ---

The vacancies for the Council for the year 2019/2020 was only four and the contestants were six and therefore, a voting system had to be arranged. The voting was held through the postal service and casting votes into the ballet box which was at the Hon. Secretray’s office No.35/17, obawatta Road, Madiwela, kotte.

Summary of the votes at the Election for the Session 2019/2020

| Total No. of voting Registered | - 169 |
| Total No. of votes cast | - 88 |
| Total No. of votes rejected | - 04 |
| Total No. of valid votes | - 84 |

Summary of Votes of the Contestants to the Council for the Session 2019/2020

<table>
<thead>
<tr>
<th>Membership No.</th>
<th>Candidate’s Name</th>
<th>Nos. of votes received</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP 165</td>
<td>Eng. U C Wickramaratna</td>
<td>65</td>
<td>Elected</td>
</tr>
<tr>
<td>MP 135</td>
<td>Eng. K G Dayananda</td>
<td>63</td>
<td>Elected</td>
</tr>
<tr>
<td>MP 067</td>
<td>Eng. I Karunarathna</td>
<td>60</td>
<td>Elected</td>
</tr>
<tr>
<td>P 084</td>
<td>Eng. I R P Gunathilaka</td>
<td>59</td>
<td>Elected</td>
</tr>
<tr>
<td>MP 060</td>
<td>Eng. K L S Sahabandu</td>
<td>31</td>
<td>Not Elected</td>
</tr>
<tr>
<td>MP 111</td>
<td>Eng. Gihan Jayathilaka</td>
<td>25</td>
<td>Not Elected</td>
</tr>
</tbody>
</table>

Introducing a Neck Tie for the ACESL Members

Council decided to introduce a neck tie for the ACESL members and a sponsorship was received for 200 neck ties.

Office Space for ACESL
This matter has been looked into and Chamber of Construction Industry (CCI) has given a green light for a discussion relating to the office space for the ACESL. Council agreed on it and follow up actions are in the go.

Annual General Meeting

The Annual General Meeting was held on 4th December, 2019 at Cinnamon Lakeside Colombo, Sri Lanka, with an attendance of 58 individual members including 5 member firms.

Highlights of AGM 2019 at 4th December, at Cinnamon Lakeside, Colombo

President’s Speech

Hon. Secretary’s Speech

Handing over of Membership Certificates
Refreshment

Participants

Council for the Year 2019/2020

The 1st Council Meeting was held on the 20th December at CECB board room for the Session 2019/2020 and President (Ms) K. Gunawardena was at the chair.

The Members of the new Council and the Office Bearers elected at the 1st Council Meeting are:

<table>
<thead>
<tr>
<th>Post</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>President</td>
<td>Eng. A.W Gamage</td>
</tr>
<tr>
<td>Vice President</td>
<td>Eng. S.H.U. De Silva</td>
</tr>
<tr>
<td>Hon. Secretary</td>
<td>Eng. J. Karunarathne</td>
</tr>
<tr>
<td>Hon. Treasurer</td>
<td>Eng. S. S. C. H. Pietersz</td>
</tr>
<tr>
<td>Hon. Assistant Secretary</td>
<td>Eng. W. Thiyambarawatta</td>
</tr>
<tr>
<td>Hon. Assistant Treasurer</td>
<td>Eng. U. C Wickramaratne</td>
</tr>
<tr>
<td>Editor</td>
<td>Eng. P. D. Dharmaratne</td>
</tr>
<tr>
<td>Immediate Past President</td>
<td>Eng. (Mrs.) K Gunawardena</td>
</tr>
<tr>
<td>Coordinator of Young</td>
<td>Eng. K. G. Dayananda</td>
</tr>
<tr>
<td>Professional Forum</td>
<td></td>
</tr>
<tr>
<td>Council Member</td>
<td>Eng. H. M. A. M. Herath</td>
</tr>
<tr>
<td>Council Member</td>
<td>Eng. I. R. P. Gunathilaka</td>
</tr>
</tbody>
</table>

Field visit to New kelani Bridge

The first event according to the event calendar was the site visit to New Kelani Bridge and it was carried out on the 21st December 2019.
The first meeting for the year 2020 of the YPF was held on 23rd January at the Conference Room of the Centre for Banking studies of the Central Bank at Rajagiriya.

The Lecture on ‘Introduction to Standard Bidding Documents and FIDIC Conditions of Contracts’ was conducted by Eng. J Karunaratne and 38 members of Young Professional Forum were attended.

Mud-Concrete is a sustainable, novel earth-based walling material which was found in University of Moratuwa through a series of research work in the recent past. It is a mixture of soil, cement and water. The concept of Mud-Concrete is to develop a composite material out of soil which is similar to concrete. Currently, concrete is regarded as a popular and versatile construction material due to its strength and durability and is widely used in the building industry. Concrete is a composite construction material made of cement, sand, metal and water. Here, metal (coarse aggregate) governs the strength, cement acts as the binder and sand (fine aggregate) reduces the porosity and water acts as the reactor to cement. In Mud-Concrete, the intended functions of sand and metal of concrete are replaced by a fraction of the soil. The precise gravel percentage governs the strength of Mud-Concrete. The cement in this concrete is also used as a stabilizer in very less quantities. Most importantly the introduced self-compaction methods become magical solutions to remove the labour intensive construction methods and control the cost, quality and save the time during construction.

In this concept, the initial target is to design an in-situ cast load-bearing wall system through Mud-Concrete. Basically, the research design for load-bearing wall was started from the initial findings of the Mud-Concrete block. Unlike a masonry block, the invention of in-situ cast load bearing wall system could construct up to three stories without any reinforcement or column-beam structures. In this system, wall segment could lift to 1200mm height and the minimum thickness of the internal wall is 100mm and standard external wall thickness is 150mm. Further, depending on the load, the thickness of the wall could have adjusted, and reinforcement could use to increase carrying capacity of the wall segment. This will further help to lift the wall system up to a higher story. The best mix of Mud-Concrete load-bearing wall consists with minimum 4% of Cement, fine < 5% (≤ sieve size 0.425mm), sand 50% (sieve size 0.425mm ≤ sand ≤ 4.75 mm), and gravel 45% (sieve size 4.75mm ≤ gravel≤ 32mm) and optimum water requirement 20% from the dry mix.
This novel in-situ cast technology will result in series of advantages to the construction industry. In this technology, any type of soil could be improved up to the proposed proportions and easily make it as a “Well graded soil” which is ready for construction. Same as in the block construction gravel will govern the strength factor. In this system more, strength and stiffness could achieve than the Mud-Concrete block, because the system was capable enough to expand the usable gravel range as much space provided along the vertical boundaries in Mud-Concrete load-bearing wall system. Due to the self-compacting quality of the mix, there’s no need any compaction/ramming or vibration; mix will self-compact; just need to pour the mix into formwork and wall will obtain the strength with mix properties. Gravel particles will remain as it is in the mix because there is no ramming process and that will help not to crush the gravel in soil mixture and not to effect on strength of wall segment. Once the wall casting is completed simultaneously, the total building also gets completed. Thus, the novel technology will cater to the current demand for easy and quick construction technologies. Further, this system provides flexibility of adding electrical wiring and plumbing within the system due to no compaction; because of self-compaction, the structure has the provision of reinforcing it with timber or steel as desired. Reinforcement could use to increase carrying capacity of the wall segment further and use it in multi-storey building construction. The drying shrinkage of Mud-Concrete wall is 0.25% in 7days curing periods and it is almost below the maximum standards allowed for earth wall. This system is capable to cater for the different architectural requirement, maintaining its quality & flexibility. Wall thickness could adjust according to the architectural & structural requirements by simply adjusting the gap between the mould plates of formwork. Non-plastered smooth walling surface could achieve with high water content used in the workable mix. A variety of textural and colour finishes in a single wall could achieve through careful selection of raw materials.
Events Organized by ACESL

1.0 Field Visit

Field visit was arranged to “Kelani Bridge Project of Road Development Authority”

Date : 21st December 2019

2.0 Evening Lectures

Presentation on “Introduction to Conditions of Contracts”

Date : 23rd January 2020
Venue : Center for Banking Studies (CBS)
– Class room No-3
Resource Person : Eng J Karunarathne
Participants : Council and YPF members

Edited by:
Eng P Dhammika Dharmaratne
E-mail: acesl.editor@gmail.com

Published by:

The Association of Consulting Engineers, Central Engineering Consultancy Bureau, No. 415, Baudhaloka Mawatha, Colombo 07, Sri Lanka.

President :
Eng A. W. Gamage
E-mail: acesl.president@gmail.com

Hon. Secretary:
Eng. J Karunarathne
E-mail: acesl.secretary@gmail.com