



# NEWS LETTER

Institution of Incorporated Engineers, Sri Lanka

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## IIESL EMBRACED 2022 WITH COMMITMENT TO SUCCESS



The Ladies Circle and the Staff of IIESL arranged the New Year Celebration Ceremony on 1<sup>st</sup> of January 2022 at the IIESL Secretariat. Past Presidents, Members of the Council of Management for the Session 2021/2022, Members of the Ladies Circle, and the staff of IIESL participated in the event. Two minutes of silence was observed by the participants to remember the members and the staff members who have passed away.

The national flag, The Institution flag, and the Inco flag were hoisted, and the National anthem was sung. Eng. Wimal Jayawardena (President) & Mrs. Ramani Jayawardena were joined by Eng. (Mrs.) Pushpa Jinadasa (President Elect), Eng. E.A.U. Hemachandra (Hony. Secretary), Eng. W.D. Fonseka (Immediate Past President), Eng. B.S. Perera (Past President) and Ms. Samilka Mendis (Manager, Administration) in traditional lighting of the oil lamp. This was followed by the welcome speech delivered by the Hony. Secretary.

Eng. (Dr.) K.M.S.B. Rekogama (Past President) delivered a speech, and the President delivered the vote of thanks. On the invitation of the President-Elect, all participants enjoyed a traditional breakfast with milk rice and assorted kevilis.

## IIESL ESTABLISHES ITS POLICY ON ENGINEERING PRACTICE AND EDUCATION

The Council of Management approved a “National Policy on Engineering Practice and Education”, the proposed submission to the government of Sri Lanka by the IIESL, at its 7<sup>th</sup> meeting of the Session 2021/2022, held on the 14<sup>th</sup> of January 2022. This comprehensive and inclusive policy document, which identifies 16 broad policies - 8 on Engineering Practice and 8 on Engineering Education - could also be considered as an agreed contemporary baseline for the future direction of IIESL in related activities. The document also spells out a brief rationale on each identified policy and includes a separate chapter on possible implementation strategies. The complete document is comprised of two elaborative supporting articles as well.

Once implemented, these policies could be expected to alleviate several present-day concerns on the education, training and employment status of engineering practitioners, particularly of Incorporated Engineers, in the Sri Lankan engineering industry, both in the public and private sectors. The whole engineering sector would also reap the consequences in the form of not only vastly improved benefits to individuals, but also greater benefits to the entire nation.

This policy document has been prepared by the Committee on Engineering Technology Education. The IIESL records its gratitude to the dedicated team of experts of our own, who had engaged since late 2020 in the tasks of brain storming, deliberating and eventually producing a comprehensive all-purpose policy document, on this very important aspect.



**IMAGES FROM THE NEW YEAR CELEBRATIONS**



From page. 1 – Left: President IIESL lighting the oil lamp; Right: Attendees at the new year celebrations 2022

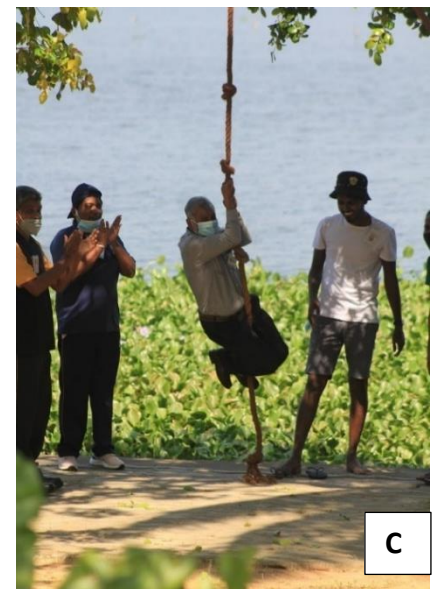
**IMAGES FROM THE IIESL TEAM BUILDING DAY**



**A**



**B**



**C**



**E**

We have captured some memories from the workshop for 'Team Building' for the office staff of IIESL.

A – Walking on the rope game

B - Participants walking into the venue

C- Another game with rope

D – Resource Person, Eng. Kamalnath Jinadasa (Past President) explaining a point.

E – Resource person, Eng. C. Wanasinghe (Past President) with President Elect, Hony. Treasurer and some of the office staff.

For details: See page 11.



**D**

## EDITORIAL

### UNDERSTANDING THE MISUNDERSTANDINGS!

Aren't we confused? It seems that the vast majority of humankind are mostly living in a confused state about one or more aspects of life. They either struggle to understand the confusions surrounding them, or blissfully ignore what is happening around them. Let's take the seemingly simple question of what is right and what is wrong? If you ponder deep enough, you will find that these questions are very complex in reality. Therefore, we have a plethora of tools to help us in decision-making: laws, by-laws, codes, accords, norms, standards, SoPs etc. Yet, we are confused, because it is the nature of the human mind: mine and yours. Once a belief is set in the mind, it creates a value which bonds with ego.

Let's look at the burning issue of Roles and Responsibilities of the Incorporated Engineer. The Sri Lankan engineering industry never knew the term 'Incorporated Engineer', despite the establishment of our institution over 20 years ago, simply because this term was not incorporated into the recruitment or promotion schemes. However, both public and private institutions of the sector were sustained well for many decades with the competencies of this special, responsible, experienced but silent and humble species of a limited number.

Are we going extinct? Yes, there is a looming threat that cannot be denied. Hence, the big picture must be understood well by the Incorporated Engineers themselves, as well as all other professionals and decision-makers in the engineering industry and relevant policy roles.

The late and sudden entry of the 'Incorporated Engineer' into the industry through the establishment of the Engineering Council of Sri Lanka is nothing to be feared; in fact, it is a blessing. One only needs to examine the whole issue without vested interests stemming from unwarranted fear, anxiety and ego.

There are many examples in the world. Take the example of USA, another late entrant, like Sri Lanka, to officially recognizing the profession 'Technologist (Incorporated Engineer)'. USA has recognized a separate role and a path for the progression of Technologists. This is an act supported by the traditional professional engineers.

Indeed, some changes are needed to the existing systems without further delay, for example, the names of qualifying academic programmes, as well as cadre positions providing progression pathways to individual Incorporated Engineers. Such changes may appear as daunting tasks to one side and seem like threats to the other side.

However, to the person who views this situation with unbiased, egoless wisdom (something really challenging in reality), it is crystal clear that the acceptance of Incorporated Engineers at his /her due place will not be a threat, but an invaluable asset to the economic development of Mother Lanka.

**Eng. Dr. Bhadrane Thoradeniya**  
**EDITOR**

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### HEAD OFFICE

No. 27/B, Udumulla Road,  
Battaramulla,  
Sri Lanka  
Tel+94112887734 Fax:+94112887737  
Email : iiesl@iie.lk , [editor@iie.lk](mailto:editor@iie.lk) ,  
Web. [www.iie.lk](http://www.iie.lk), [iiesl@iie.lk](mailto:iiesl@iie.lk)

### CITY OFFICE

Institution of Incorporated Engineers, Sri Lanka  
No. 490, Ocenica tower, 6th Floor,  
Galle Road, Colombo,  
Sri Lanka  
Tel :+94114736708 Fax : +94114734298  
Email :inco@sltnet.lk Web. [www.inco.lk](http://www.inco.lk)

### CENTRAL PROVINCE BRANCH

Institution of Incorporated Engineers, Sri Lanka  
115, D-S. Senanayake Veediya,  
Kandy.  
Tel : +94 81 2234129  
Fax : +94 81 2236938

### QATAR BRANCH

Institution of Incorporated Engineers, Sri Lanka  
Qatar Branch  
Tel :+97433068356  
Email: [nurawanasinghe@yahoo.com](mailto:nurawanasinghe@yahoo.com)

### UAE BRANCH

Institution of Incorporated Engineers, Sri Lanka  
c/o Consulate General of Sri Lanka  
P.O. Box 51528, Dubai, United Arab Emirates  
Email: [iiesluae@gmail.com](mailto:iiesluae@gmail.com)  
Web: [www.iiesluae.org](http://www.iiesluae.org)



# FUTURE OF ENGINEERS & ENGINEERING SECTOR OF SRI LANKA

Eng. Wimal Jayawardhana

President, Institution of Incorporated Engineers, Sri Lanka

Ceylon was known as the pearl of the Indian Ocean in ancient times. It was situated in an ancient as well as present, shipping route. Hence, it was known to other countries for centuries. We have 2500 years of written history as one of the developed civilizations in Asia.

The famous historical remains in our ancient cities such as Anuradhapura, Sigiriya, Polonnaruwa, Panduwasnuwara are the evidence of our ancient engineering practices. The Chaithya (ෛවනායක), stone bridges & buildings are examples of huge ancient constructions. The thousands of lakes connected with channels, show the developed irrigations systems and water management systems. We can imagine, the technologies and hard tools they used for stone cutting and carvings, everywhere in the ancient cities. We cannot even think about how they handled the large and very heavy stones.

I am sure those ancient “Wadauwan” (වඩුවන් - at present known as engineers), were well reputed and wealthy citizens in the country because the “kammala” (කම්මල), was very famous word in our history. They were involved in every aspect of development in that era.

Not only the present engineering practitioners, all professionals, exaggerate the creations and ability of our ancient engineers, but at present we are crying for the survival of our nation, as we are not developed in any field.

At present, the people representing the engineering sector are not recognized by or popular in society, as other professionals in our society. The consultation for engineering requirements of the citizens (not projects) is very rare. When constructing their buildings, they get approval from engineers as a requirement of authorities but build houses with the instructions of masons and skilled workers with trends of wastage of material and manpower of more than 20%.

Every day we can see professionals from the fields of medicine, law, architecture, astrology, military, politics, education, and religion in the electronic media, engaged in various types of discussions and programs, advising or providing instructions to the government and society- but rarely do we see practitioners from engineering fields.

Normally, engineering practitioners are not very interested in writing books and articles, or appearing in TV programs, films, teledramas, conferences, programs for providing expertise in engineering aspects. These are

the most important mediums for influencing and creating a name within society. A real example is how cooks (as previously known) become well recognized and popular chefs in society, especially through the electronic media and their publications aiming the society. The media can create or vanish a country, what is happening in our country?

In the British colonial era, our country was exposed to western engineering. They introduced the roads, railway lines, irrigation systems, agriculture with new plants, education, administration, legal systems and Christianity with the target of increasing their income.

The memorial structures in Figures 1 and 2 clearly show the reputation of Engineers in the British administration period.



FIGURE 1: 189-year-old memorial tower for Engineer Dawson and 127 year old memorial stone for Engineer Hendry Parker



FIGURE 2: Memorial Plaque of Engineer Capt. Dawson

In contrast, think of the present memorial stones which mostly carry long lists of politicians of several positions: this will be the history of future Sri Lanka.

**Are we going to just ignore all of this with our eyes, ears and mouths shut?**

WHO ARE THE ENGINEERING PRACTITIONERS?

Engineers, as practitioners of engineering, are professionals who invent, design, analyze, build, test and maintain machines, systems, structures, gadgets and materials to fulfill functional objectives and requirements while considering the limitations imposed by practicality, regulation, safety and cost.

As we all know, at present, everything in every field is pivoted on Science, Technology & Engineering and it plays a wide role in the physical & economic development of a country and spiritual development of society through religions, rules & regulations, policies etc.

We could win the LTTE war because, especially the Army & Navy developed their engineering capabilities using knowledge of Sri Lankan Engineers. They manufactured war zone vehicles, hundreds of small sea-going boats, balancing platforms for heavy guns and multi barrel rocket launchers, connecting them to computers. Further, the first platoon that enters the war zone, was the Engineering platoon as they must repair the roads, bridges, installing the communication systems, make supply chain, to facilitate other troops. But unfortunately,

those engineers and frontiers are not popular and not highlighted as other war heroes.

Most of the governments of the developed and developing countries are using the knowledge of professionals in Engineering fields, for their development works, as well as political and administration activities. For example, 26% of the cabinet ministers in Singapore cabinet are Engineering professionals.

I personally noticed the respect given by high-ranking Politicians to the Engineering Professionals in Bangladesh, as those professionals are one of the advisory and effective pressure groups to the government. This scenario depicted the head office of Diplomate Association of Bangladesh in 2016 showing their ability, strength and power. It is the secret of the development of those countries.

After struggles for two decades, now all engineering practitioners are under one umbrella, which is the Engineering Council, Sri Lanka.

If we decide to be the “Most effective Advisory & Pressure group to the government of Sri Lanka”, we can make all changes to be a prosperous country within a short period. It is a very easy task as Engineering practitioners are in each and every field. Hence, if all the members under the ECSL umbrella, work together with an unbreakable unity to achieve the common goal, this will be a very easy target.

Before we invite others, we must consider our discipline and we must always think positively.

## TEAM BUILDING DAY FOR IIESL OFFICE STAFF

The IIESL held its first staff team building day on 29.12.2021 at Aqua Pearl Lake Resort, Bolgoda. The programme aimed to improve interpersonal communication and collaboration, boost mental and physical wellbeing of the employees, identify leadership traits for managerial grooming and achieve better employee confidence and creativity in solving problems. Further, it was expected to help the growth of trust, team bonds, respect, and agency among the employees.

Nine staff members and 5 office bearers - Eng. Wimal Jayawardena (President), Eng. (Mrs.) Pushpa Jinadasa (President Elect), Eng. Lalindra De Silva (Vice President), Eng. Upali Hemachandra, (Hony. Secretary) and Eng. Prabath Jayawardena (Hony. Treasurer), participated in the workshop and enjoyed the many activities conducted to achieve the aim.

The activities included an ice-breaker game, ways of greeting, introduction of a person, a round robin session, a trust building game, drama, communication relay, etc and ended with a short dancing session. Finally, a discussion was held where all the participants had to put forward their ideas, proposals, and requests. These ideas were gathered for further action, and finally all participants were presented with tokens of appreciation. The Hony. Treasurer delivered the vote of thanks.

Eng. Kamalnath Jinadasa (Past President), Eng. C. Wanasinghe (Past President) and Mr. Sanath Rohana (AMIIESL) were the resource persons. Eng. Damitha Abayakoon and Eng. Kamalnath Jinadasa sponsored the programme and Ranfer Marketing sponsored the gift items for the resource persons. (See picture on page 2).

# An innovative System of Central Oxygen Feed Installation

Eng. Nalin Bollegala

Head of Engineering, Matrix (Pvt) Limited

## Introduction

The Central Oxygen Feed System in a hospital usually has complications as most of them contain wall mounted Oxygen outlets. This paper discusses regarding a Central Oxygen System innovated and installed in hospitals which are equipped with wall mounted oxygen outlets and the use of wall mounted oxygen systems, average usage of oxygen gas, most common technics of oxygen supply for oxygen therapy for patients with breathing difficulties.

The system innovated is having a new technique of distributing oxygen through a centralized system which is different from the conventional system and can overcome the complications of the existing system. The text will further explain the specialties of the innovated system, the drawbacks of the conventional system over the proposed system and design concepts on the new system and future development.

## Existing Oxygen supply systems

### Oxygen Concentrators

An oxygen concentrator is an alternative to using oxygen cylinders, which are both used in the process of oxygen therapy to help people who fail to get suitable oxygen to breathe and for the proper functioning of the body. Oxygen concentrators work the same way in supplying good doses of oxygen needed by the body such as oxygen tanks, with the use of a cannula, oxygen masks or nasal tubes. However, while oxygen cylinders work for a finite amount of time (since they contain a limited supply of oxygen), oxygen concentrators recycle the oxygen by collecting it from the surrounding air, concentrating it and then delivering it. Such a process then cuts down the need for constant replacements or refilling,

Some of the drawbacks of an oxygen concentrator are meeting the demanding flow rate with the increasing number of patients, high maintenance cost and noise emission.

### Oxygen Cylinders

Oxygen tanks with compressed oxygen – these tanks contain oxygen which is compressed at high pressure. Because of this, the oxygen is delivered through a specialized regulator which ensures proper oxygen flow rate. oxygen tanks with compressed oxygen deliver oxygen at a 99.5% purity level (which is in line with the USP or Unites States Pharmacopoeia standards of 99% oxygen purity of such medical devices).

Oxygen tanks with liquid oxygen – these tanks contain liquid oxygen, a form of oxygen that is cooled at -297°F. Because of its form, the oxygen is stored in specialized vacuum insulated containers. This way the oxygen maintains its form and takes less space than compressed oxygen. So, the liquid oxygen tanks work by exposing the liquid oxygen to room temperature, where it takes a gaseous form and is ready to

be used by patients. Just like the compressed oxygen, liquid oxygen is also required to have a 99.5% purity level.

Currently used Oxygen system – The hospital uses potable compressed oxygen cylinders which are placed with the patients in an isolated environment where it has a very low running time and the patients have to control the individual cylinders by themselves according to doctor's instructions.

This type of operation becomes complicated when it comes to O2 regulation to the patient and also the staff of the hospital when it comes to the replacement of the O2 cylinders by accessing the isolated area.

## Commonly used Oxygen Systems

- Hospitals use portable compressed oxygen cylinders which are placed with the patients in an isolated environment. Where it has a very low running time and the patients have to control the individual cylinders by themselves according to doctor's instructions.
- This type of operation becomes complicated when it comes to oxygen regulation to the patient and also the staff of the hospital when it comes to the replacement of the oxygen cylinders by accessing the isolated area
- The next common oxygen supply system is the Central Oxygen System, with bulk oxygen cylinders usually installed in a remote location and distributed through a manifold and fixed pipelines. This technique is effective and safe but the conventional way of installing such system uses metal piping (commonly Copper) which is expensive and material availability is a fact for consideration. And the process of installation requires special skill and a number of supportive equipment during the entire process which makes the process complicated.

## Invented Oxygen supply system

The invented Oxygen system comprises of a central O2 manifold that is remotely located and fed by large gas cylinders. The manifold can accommodate a few large cylinders with pressure relief valves, pressure gauges, purge valves and provision for future expansion.

The used piping is categorized as heavy-duty which is capable of withstanding forces like compression, bending and vibration which makes it stand out from the conventional metal piping.

The O2 from the inlet manifold could be regulated using pressure regulators and sent out as low pressure O2 on a main line into the doctor's control room. The O2 supply will be branched as required to each bed which is equipped with a Mechanical Oxygen flow meter and secondary regulator with ball valves.



Each output is independently controllable from the Doctor's room, based on diagnostic data monitored from the patient.

### Installation

Installation is simple compared to the traditional copper tubes, the piping used here is a specially formulated plastic known as Polypropylene Random Copolymer (PPRC) which is

light weight, durable and very low resistance having a life span of five times higher than copper piping.

Installation is done with the medical officers' guidance from the hospital. The installation procedure generally takes three days which includes laying piping, installing valves and regulators, bracketing, fabrication of special attachments for medical grade equipment.



### Test Conditions

Testing of the system will be done under the following conditions.

- All pipelines will be tested with ultrasonic leak detectors at its working pressure.
- Valves will be tested for its proper functionality.
- All regulators will be tested at its functional set pressure at its full capacity flow.
- All lines will be purged to remove debris.



# GET TO KNOW KEY OFFICE BEARERS OF 2021 /2022 SESSION

(CONTINUED FROM OCTOBER 2021 ISSUE)

## VICE PRESEDENT



Eng. G.D.F.U. Perera (F0091) is a Fellow of the IIESL. He is a product of St. Sylvester's College, Kandy. He began his career at the Irrigation Department after obtaining the Diploma in Irrigation. Having completed prescribed examinations in Civil Engineering he became an Associate Member of IESL in 1991. In 1993 he was appointed as a Divisional Irrigation Engineer, and later served three and half years at Galgamuwa as an academic staff member. Then he served in the capacity of Divisional Irrigation Engineer for ten years in four irrigation divisions: Mapakadawewa, Kandeketiya, Anuradhapura and Matale. In 2010 he got an opportunity to work in Rwanda for one year as the Construction Manager of six hydro power projects.

After Obtaining his charter from IESL he was appointed as the Head of Land and Legal division from 2011 to 2016 at the irrigation department head office. During this period, he served the Ministry of Public Administration and Home Affairs too in the capacity of Ministry Engineer and Project Engineer and Project Consultant for CARE Project. Currently he is serving as the Head of the Institute and Senior Lecturer at International Training Institute of Irrigation and Water

Management - Kothmale. Eng. G.D.F.U. Perera is a Fellow member of the Institute of Chartered Professional Managers and corporate member of both IESL and Sri Lanka Institute of Training and Development. He is a visiting lecturer of SLIDA, ITUM and Rajarata University of Sri Lanka. Further he is a Distinguished Toastmaster.

## VICE PRESIDENT



Eng. Ananda Gunawardana (F0115) is a fellow of IIESL and a product of Wellassa Central Collage, Bibile. He began his professional carrier after obtaining NDT in Civil Engineering from University of Moratuwa in 1987. In 1995, he obtained Executive Diploma in Business Administration from University of Colombo. In 1998 he gained Advanced Diploma in Industrial Engineering from National Institute of Business Management and in 2007 he achieved a Master of Business Administration Degree from University of Rajarata.

He also holds GCGI (UK) in Civil Engineering. He has served as a Site Engineer for Descen Construction (Pvt) Ltd at Gamudawa Site Anamaduwa and thereafter, joined the Board of Investment of Sri Lanka in 1988. After serving in many positions, presently he serves as a Director at Seethawaka Export Processing Zone at BOI. He joined with ACEDA in 1989 as a life member. He has also acquired the status of Distinguish Toast Master (DTM) from Toast Masters International, USA, which is the highest rank to be obtained by a person who excels his carrier in communication and leadership.

## VICE PRESIDENT



K. Sanjeeva Nonis – (F0114) Is currently heading the IT Operations of Independent Television Network. He has over 25 years' experience in Broadcast industry and 12 years in digital media operations.

Eng. Nonis had his education at Royal College, Colombo. He obtained a Post Graduate Diploma in Engineering Management from City & Guilds UK and Bachelor of Technology (Electronics Engineering) degree from the Open University of Sri Lanka. He completed Advanced Professional Training in the field of **"Internet Broadcasting for Television"** at Deutsche Welle, DW-Akademie, Federal Republic of Germany. Further, he completed a Diploma in Digital Marketing from the Sri Lanka Institute of Marketing and a Diploma in Management from the Open University of Sri Lanka. He is currently reading for his MSc degree in Information Technology at Sri Lanka Institute of Information Technology.

He also holds the memberships of the City & Guilds of London Institute, Institute of Electrical Engineers, United Kingdom, Institute of Electrical & Electronic Engineers, USA, and Engineer's Guild in Sri Lanka. He is a Professional Member of the British Computer Society and an Associate Member of the Institution of Engineers, Sri Lanka.



# OF INSTITUTION OF INCORPORATED ENGINEERS, SRI LANKA

## VICE PRESIDENT



Eng. J. E. Lalindra De Silva (F0101) is a Fellow member of IIESL. He joined this institution in 2003 at the class of Member. He completed his education at Harischandra College - Negombo. He completed Government Technical Officers Exam Part I & II, was awarded NDET (Civil Engineering) by the National Institute of Technical Education of Sri Lanka. Later he obtained GCGI (UK) in Civil Engineering.

Eng. Lalindra worked at Sri Lanka Airlines for over 30 years and retired as a Facilities Manager. Prior to that he was employed by the Airport Authority of Sri Lanka as the Inspector of Works and as a Technical Officer in Local Government Services Department. He has also gained experience in a Highway Project in Nigeria. Eng. Lalindra was involved in a few CSR projects, including designing, and installing a drinking water facility at Kekuluwela Maha Vidyalaya in Polonnaruwa. After retirement, he worked in several leading construction companies in Sri Lanka in the capacities of Site Engineer, Project Manager and Consultant. Currently he is employed by CLC (Pvt) Ltd as a Consultant in their Negombo Office Project. He is married and blessed with two daughters.

## EDITOR



Eng. Dr. Bhadrani Thoradeniya (F0077) is a Senior Lecturer (G.1) at the Institute of Technology University of Moratuwa (ITUM) with over 40 years of experience. She was educated at Maliyadewa Girls' College, Kurunegala. At the completion of National Diploma in Technology (Civil Engineering), she joined the State Engineering Corporation in January 1981. Her keen interest in an academic career resulted in her permanently joining the University of Moratuwa as an Engineering Teaching Assistant in 1984. She is one of the pioneering academics of the ITUM when it was established in 2000. She has shouldered many important responsibilities during her career including the Head of the Division of Civil Engineering Technology for 7 years. Her academic achievements include two Post-Graduate Diplomas in Applied Hydrology and Hydraulics, M.Sc (Distinction) in Hydraulics from the IHE, Netherlands, M.Phil in Technical Education from the Open University of Sri Lanka and PhD in Civil Engineering from the University of Moratuwa.

She has served the IIESL in the capacity of Council Member, Editor, Hony. Secretary and a Vice President during the last 21 years. She is married to Major General (Rtd.) Asoka Thoradeniya and is blessed with a son and a daughter.

## ASSISTANT TREASURER



Eng. K.G.U.S. Jayasekara (M0288) is a Member of the Institute of Incorporated Engineers, Sri Lanka. (IIESL)

He completed his primary and secondary education from Nivitigala Maha Vidyalaya and Karawita Central Collage, Rathnapaura. He started his higher education in 1975 with National Diploma in Technology (Civil Engineering) of the Hardy Senior Technical College Ampara and the University of Moratuwa. He holds GCGI (UK) in Civil Engineering. He worked as an Engineering Assistant, Investigating Officer, Irrigation Engineer, and Block Manager at the Mahaweli Authority of Sri Lanka.

He was a member of ACEDA, and he served as Council Member, Hony. Assistance Treasurer, Editor, and Hony. Treasurer for several Council of Managements of IIESL. He lives with his wife and his son's family in Kalubowila.

## ECSL REGISTRATION FOR THE YEAR 2022

Payments can be made through a bank in favor of "Institution of Incorporated Engineers, Sri Lanka" Account No. 208-1001-8-1101173 of People's Bank, Battaramulla. Give your reference with your membership number. E.g., Associate Members - EC-AM-5054; Members - EC-M-3025; Fellows - EC-F-0150



# IIESL TOASTMASTERS CLUB 15TH ANNIVERSARY & 16TH INSTALLATION CEREMONY

**Eng. (Mrs) L.V.C. Gunathilaka**  
Quality Assurance & Quality Control (Civil) Engineer, Hyundai E&C

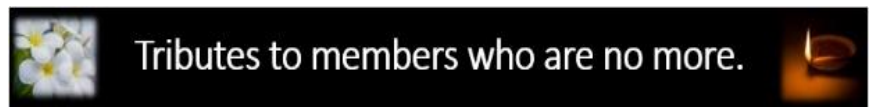
IIESL Toastmasters Club completed the 15th year in Toastmasters journey. In commemoration of its 15th anniversary and installation of 16th Executive Committee, a ceremony was held at the IIESL Auditorium on 13th December 2021 from 6.00 pm onwards. By Considering the country's prevailing situation hybrid type ceremony was conducted. The key persons attended physically. All other members and guests were connected via the zoom platform.

The event was adorned by the presence of IIESL President TM Wimal Jayawardana as the Chief Guest, 2017-2018 International president Balraj Arunasalam, DTM as the Guest of Honor, Division E Director Gunasekara Rathnayaka, DTM and Leaders of the Toastmasters Fraternity who were present.

A heart-touching moment was the recognition of Past Presidents and Charter Members of the Club who were the pillars of this success and also the tribute paid to late Toastmasters.



Chief Guest, President IIESL  
TM Eng. Wimal Jayawardana



Director – Area E2  
Gunasekara Rathnayake, DTM



Eng. Shantha Senarath, DTM  
Inducing new members

Memories of 2020/2021 and achievements were presented by TM Chathurani Gunathilaka. The Achievers of the past year were also acknowledged by TM Wimal Jayawardane President –IIESL

The audience was entertained by a song. The installation of the Executive committee was conducted by Area E2 Director Gunasekara Rathnayaka, DTM, and the EXCO was pinned by Shantha Senarath, DTM.

New Member induction ceremony was conducted by Shantha Senarath, DTM. Immediate Past President TM K. Ariyawansa. pinned them.

The incumbent President, TM Rukman Chaminda in his acceptance speech, stated that his ambition during his tenure of the presidency is to enhance the quality of the Club.

[Continued at page 15 ..]



## NEW APPROACHES FROM MEMBERSHIP FUNCTIONAL COMMITTEE

The requirement by the engineering practitioners to register themselves at the Engineering Council of Sri Lanka, has resulted in large numbers of applications received for different membership classes of the institution. The membership committee under the able leadership of Eng. Mrs. Pushpa Jinadasa (President Elect) has been re-visiting the procedures that have been adopted so far, in order to introduce efficient mechanisms where necessary.

As a result, the procedures on Professional Reviews have been updated. A major area under scrutiny is the procedure on Mature Route Candidates. Several related documents are being prepared by the Special Advisory Committee. The leading role played by Eng. Anton Peiris (Past President) in this regard is highly appreciated by the chairperson of the membership committee. The Membership Committee is also hopeful of arranging special membership drives in the near future for the class of 'Associate Member' for diploma holders from the Institute of Technology, University of Moratuwa (ITUM), Homagama; Institute of Engineering Technology (IET), Katunayake; and Advanced Technical Institutes (ATI) of Colombo, Galle and Jaffna under the Sri Lanka Institute of Advanced Technological Education (SLIATE).

## IMPORTANT FACTS THAT SHOULD BE KNOWN BY ALL INCORPORATED ENGINEERS

The times have changed. Many changes have happened during the past two decades in the international arena relevant to the positioning of different qualifications molding persons for the whole spectrum of employment in the engineering sector. Such developments which have occurred so far and are still occurring have resulted in three well-known accords: Washington Accord, Sydney Accord, and Dublin Accord. These are managed by the International Engineering Alliance (IEA). They specify the attributes and professional competencies of each category for the understanding of concerned parties.

Parallely, the Ministry of Education has set up the Sri Lanka Qualification Framework for 12 levels of learning from GCE (O/L) to doctoral degrees. It describes how to name a qualification, what attributes a qualification holder should possess, Admission criteria for a level, volume of learning and progression pathways.

Therefore, it has become very important for all Incorporated Engineers, Associate Members of the IIESL, and those who aspire to become associate members to be thoroughly aware of the national and international developments. For more details refer to (1)IEA website - <https://www.ieagrements.org/>  
(2) Sri Lanka Qualification Framework (SLQF) - [https://www.ugc.ac.lk/attachments/1156\\_SLQF\\_2016\\_en.pdf](https://www.ugc.ac.lk/attachments/1156_SLQF_2016_en.pdf)

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## TRIBUTES TO MEMBERS WHO ARE NO MORE

Many of the IIESL members who were strengths to IIESL lost their lives in the recent past. We at the IIESL greatly appreciate their valuable service, views and knowledge shared with our community. We remember them with gratitude.

### ENG. K. N. GUNAWARDENA



Eng. Gunawardena was born on 13th September 1940 and had his education at Sri Palee Collage Horana. He Completed his JTO-1 in Electrical & Mechanical Engineering at the Institute of Practical Technology, Katubedda (IPTK) 1959-61 (Presently University of Moratuwa).

He began his Engineering career in 1961 with the Department of Broadcasting. He was the Engineer In charge of training at SLBC in 1978. In 1979 he was appointed as the First Engineer TV Operations for ITN. In 1982 he was selected to be the first Director of Production Services newly setup Rupavahini Corporation.

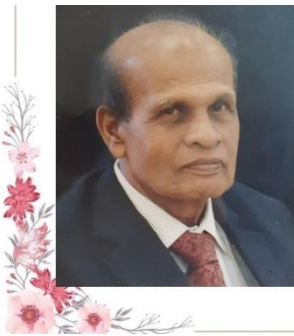
In 1984, Uni Walkers group — National/Panasonic agents in Sri Lanka, appointed him as the Engineering Manager and later promoted as a General Manager.

He was the honorary treasurer of the IET Sri Lanka Network (Formerly IEE, UK) SL Branch and a corporate member of the IEEE (USA). Eng. Gunawardena was also a CTM in Toastmaster International.

Mr. Gunawardena was the event organizer of the project that won the Institution of Engineering and Technology (IET – UK) 2008 Achievement Award for Sri Lanka.

Eng. K.N.Gunawardena (K.N) passed away peacefully at home on 04th December 2021, leaving his beloved wife and the only son Lasith Gunawardena. He had been ailing for some time due to a liver disease. He passed away at the age of 89 years. We wish him Noble Bliss of Nibbana.

### ENG. K. J. E FERNANDO



Eng. Fernando (M0124) was born on 29<sup>th</sup> May 1944 in a family of four brothers and one sister. He was married to Mrs. Shanthi Fernando and had a son, Vidura and a daughter, Dinusha.

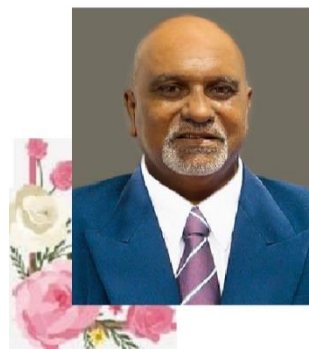
Eng. Fernando completed his primary and secondary education at St Mary's College, Negombo. He completed his NDT in Civil Engineering in 1970 and worked at Local Government Service & Power Station Kandy. Meantime he successfully

completed Institution of Engineers, Sri Lanka Examinations in Electrical Engineering in 1979. In 1981 he joined Sri Lanka Railways as an Electrical Engineer. While working in Sri Lanka Railways he completed Institution of Engineers Examinations, Sri Lanka, in Mechanical Engineering too in 1983.

Eng. K.J.E. Fernando was a Chartered Engineer, and he rendered his services as the Director of Ceylon German Technical Training Institute of Railway. He retired from the Government service as the Chief Electrical Engineer of Sri Lanka Railways. Eng. K.J.E. Fernando became a Member of IEDSL in 1989.

Eng. Fernando passed away on 8<sup>th</sup> August 2020 at the age of 78. May he rest in peace

### ENG. H D PREMASIRI



Eng. Premasiri was born on 25th August 1957 in Kaluthara, having 6 siblings, two brothers and 4 sisters. His family consisted of his wife, a son and a daughter.

Educated at Kalutara National School, he completed his NDT in Electrical Engineering at the University of Moratuwa (1983-1986). Thereafter, he completed IESL examinations and obtained his Chartership from Institution of Engineers, Sri Lanka and the Institution of Electrical Engineers, London.

Eng. Premasiri has worked as an Electrical Consultant to various clients such as, Synergy Engineering (Pvt) Ltd, Lanka

Oric Leasing Company Ltd., China Railway FSDI Group Ltd., and Oriental Consultant-Japan.

He had been working with Alfa Contractors & Engineering (PVT) Ltd as the Chairman/ CEO since 2005 where he was responsible for all the Engineering activities and administration. Prior to this he was working with, Majestic Electric Co. Ltd. as the Operations Manager/ Chief Engineer, Maxiaire (Pvt) Ltd as an Electrical Engineer, Shin Nippon Air Conditioning Engineering Co. Ltd. As an electrical Engineer, Lanka Electricity Company Ltd. As Electrical Engineer, Sultan's Airport at Brunei as a Maintenance Engineer and General Engineering & Business Services as an Electrical Engineer.

Eng. Premasiri passed away due to Covid-19 related complications on 16th February 2022 at the age of 55. May he attain Supreme Bliss of Nibbana.

This is a very short note to express my personal views on the process of Development that the man has been working on for many centuries to make the life easy and comfortable. I do not have a clear idea about the time this human development process was initiated, but even a glance on the human history provides many examples for the man's quest for development.

What do we expect as development? Simply a man who walks today, riding a bicycle next day is considered as a sign of development. If he could travel in a car the next day, it is considered a giant step in human development. Human is a creature made to do its works in the light. However, with the discovery of fire, he started to extend his work till the night with the help of the artificial light. After many centuries, now he is grumbling, saying the life is full of stress where he does not know that the major reason for stress is caused by over working.

Today we as a country are enjoying the negative effects of the so-called development. Our education was streamed towards job-oriented enterprise. The Technical education was given a prominence with the aim of breeding more competent humans to enhance the process of development. We engineers are products of that line. Here the human forgot the very basics of living. All beings need food the most for survival. He claims the credit by himself saying that human is the only creature on the planet who can cultivate his food. However, when the process of education is reviewed it can easily be seen that human has gone in the wrong direction. Simply think whether we can survive with technological knowledge or with technology alone. Someone can say YES. How You can do a technological job, earn money and buy the foods. This is what we all do the most.

It is seen that providing employment opportunities for the survival has become one of the major aspects of

the development process. That is why a majority of the human beings have been made to study something that helps to find a job.

The question is "Has the human being able to create the expected easy comfortable life with the Technologically developed world?" The bold answer is NO. Instead, human has created burdens that are sometimes beyond his control with the Technological Advancement, that can be listed endlessly. With the technological mind strumming the pattern of thinking and planning has been made to go against the existence of all living beings.

Let me brief one such move that frequently happens in our country. When somebody wants to construct a house, many approvals are to be obtained from the local government. Obtaining the Street Line clearance is a vital part. Here the possible obstruction for future road expansion is evaluated and if it is found to be with the new construction, the permission would not be granted. However, the effect of the new construction on the Natural Water sources is not considered at all. As a result, many rich natural water sources have turned useless with the contamination caused by the septic tanks. Nonetheless, a solution is provided by giving a pipe borne water line that delivers very low-quality water in terms of Nutrition, compared with well-water.

What is the way out of this situation? Fundamentally we have to realize that the Human is the weakest creature on the planet. If we can implement anything keeping this in mind, the possibility of making mistakes or rather making well-planned mistakes can be minimized. The culture of learning to do a job to earn money to buy foods should be reevaluated. Basics of the human needs to be respected. These acts will help us to bring some relief from the own-made troubles that have made the living, Horrible.

## CONTINUING PROFESSIONAL DEVELOPMENT



Institution of Incorporated  
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CPD Series 2022-2023



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# EFFECTIVE PROJECT MANAGEMENT DURING PRE-CONTRACT PHASE

## Key Areas of Discussion

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## Conducted By



### Keerthi R. Hettiarachchi

BSc(Hons), MBA(PIM-USJ), AIQS(SL), MRICS(UK), ACI Arb(UK)  
Contracts & Commercial Management Specialist  
Project Management Consultant  
Chartered Quantity Surveyor

## FOR MORE INFORMATION



+94 11 2887734  
+94 76 8776642  
+94 71 7666642  
[info@iiesl.lk](mailto:info@iiesl.lk)

Date - 1<sup>st</sup> week of April 2022

Time [SL Time] - 6.30pm - 8.30pm (Q&A Session from 8.30pm - 9.00pm)

Venue - Online Platform / Zoom Webinar



## IIESL TOASTMASTERS CLUB 15TH ANNIVERSARY & 16TH INSTALLATION CEREMONY



**Front Row, Left to Right:** TM Thilak Malawaraarachchi (Past President) DTM Shantha Senarath (New Member Inducting Officer), DTM Gunasekara Rathnayaka (Area Director), TM Wimal Jayawardana (Chief Guest-IIESL Current President), TM K.Ariyawansa (Immediate Past President), TM Rukman Chaminda (President), TM Priyantha Waidyasekara (Master of Ceremony).

**Second Row, Left to Right:** TM Pradeep Fernando (sergeant at arms), TM Chaturani Gunathilaka (Treasurer), TM Lalyith Wickramasinghe (Secretary), TM Asela Kuluppuarachchi (Vice President Public Relations), TM Sanjeewa Nonis (Vice President Membership), TM Nuwan Siriwardene (Vice President Education).



Eng. Chaturani Gunathilaka, TM received Triple Crown Award from the Chief Guest



Master of Ceremony Eng. P. Waidyasekara, TM



Distinguished guests and members singing the National Anthem



Eng. Chaturani Gunathilaka, TM received Presentation Mastery Proficient Certificate



Eng. K Ariyawansa TM received Innovating Planning Proficient Certificate



New member Mr. Pradeep, pinned by Eng, K Ariyawansa, TM



Mr. Nuwan Siriwardena received Dynamic Leadership Proficient Certificate



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| 3      | 10.00%        | 3,227/-                    | 9.50%         | 3,204/-                    | 10.00%  | 3,201/-                    |
| 4      | 11.00%        | 2,175/-                    | 10.50%        | 2,150/-                    | 11.00%  | 2,159/-                    |
| 7      | 11.75%        | 1,752/-                    |               |                            | 11.75%  | 1,735/-                    |
| 10     | 12.00%        | 1,626/-                    | 11.75%        | 1,421/-                    |         |                            |

### Personal Loans

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| 3 Years                | 10.25%   | 3,239/-                              | 11.00%  | 3,274/-                              |
| 5 Years                | 11.25%   | 2,187/-                              | 12.00%  | 2,225/-                              |
| 7 Years                | 11.75%   | 1,752/-                              | 12.50%  | 1,793/-                              |
| 8 Years                | 12.25%   | 1,640/-                              | 13.00%  | 1,681/-                              |

### Home Loans

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|----------|--|--------------------------------------|---|--------------------------------------|
| 3 Years  | 9.50%  | 3,204/-                              | 10.25%  | 3,239/-                              |
| 5 Years  | 10.50%   | 2,150/-                              | 11.25%  | 2,187/-                              |
| 7 Years  | 11.25%   | 1,726/-                              | 11.75%  | 1,752/-                              |
| 10 Years | 11.75%   | 1,421/-                              | 12.25%  | 1,450/-                              |

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|--------------|--|------------------------------|
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| 6 Years      | 11.50%                                 | 1,911/-                      |
| 7 Years      | 11.75%                                 | 1,735/-                      |

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|----------|--------|----------------------------|
| 3 Years  | 10.00% | 3,227/-                    |
| 5 Years  | 11.00% | 2,175/-                    |
| 7 Years  | 11.75% | 1,752/-                    |
| 10 Years | 12.25% | 1,450/-                    |

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