



NERDC NEWS

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National Engineering Research Symposium 2022

The National Engineering Research Symposium 2022 was held for the third time at the National Engineering Research and Development Center, the foremost national institute for engineering research and development (NERS 2022). This was held concurrently with the National Science Week, which was started by the Ministry of Education, on November 17, 2022, at the NERD Center.

The National Engineering Research Symposium's 2022 theme was "Driving the nation through engineering solutions towards self-reliance". The inaugural ceremony of the symposium was held at Kulasinghe Auditorium in NERDC, and the chief guest as well as the key note speaker was Prof. (Mrs.) Meththika Vithanage, the Director of the Ecosphere Resilience Research Center at the University of Sri Jayewardenepura. Mrs. Kumarie Meegahakotuwa, Director General (Planning), Ministry of Education, the Chairman of NERDC, Prof. S.U. Adikary, and Mrs. K.N. Wataliyadda, Mr. Jayamanna representing the members of the Director Board, participated in the inaugural ceremony. The Director General of NERDC, Dr. Jayathu G. Samarawickrama,

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NERDC Supports to Agriculture machinery inventors in improving their inventions

Ministry of Agriculture has initiated a special programme with a vision of empowering agriculture related machinery inventors on successful entrepreneurship, with the support of multi-disciplinary stake holders during past two years. Eng. K.Y.H.D. Shantha, the Director of Agricultural Engineering & Machine Development Department (AE&MD) of NERDC had been appointed as a panel member of this program. Being a stake holder of this programme, NERDC Centre organized this training programme on the topic of “Manufacturing of high efficiency agriculture machinery & equipment by reducing costs” during month of October 2022. This was specially designed with series of lectures & demonstrations as well.

The inaugural session of the programme was held with the participation of Mrs. K.A.R. Dharmasena, Director (Policy & Project assessments) of Ministry of Agriculture & Eng. K.Y.H.D. Shantha, the Director of AE&MD of NERDC. During this two days’ workshop, participants were made aware & given practical exposure on designing manufacturing of agriculture machinery, how to improve the productivity in workshops, maintenance of machineries and basic CNC knowledge.


These lectures were delivered by Eng. K.Y.H.D. Shantha, the Director of AE& of MD of NERDC, Eng. A.J. G.S. Dahanayake: Principle Research Engineer, Eng. S.A.P.S. Silva: Senior Research Engineer and Eng. A.R.C. Salgado: Principle Research Engineer. The demonstrations & practical sessions were handled by the staff of Agriculture Engineering & Machine Development Department of NERDC with the guidance of panel of lecturers. All together there were 20 participants from different provinces island wide.




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NERDC collaborates with SLIC to organize a workshop for inventors to advocate them



A one-day workshop on "Technological Trends in Future Inventions" was jointly organised by the Sri Lanka Inventors Commission (SLIC) and NERDC for inventors who are registered with SLIC. This session was held in the technological incubator and included a number of presentations and hands-on exercises. After an opening ceremony at Kulasinghe Auditorium, workshops started. The Ministry of Education's Director General for Research and Innovation MOE, Mr. P.M. Dharmathilake,

and Director General for Planning MOE, Mrs. Kumarie Meegahakotuwa, as well as Director Developments MOE, Dr. Uthpala Alahakoon, were invited as special guests. The invitees included the Director/CEO of the Sri Lanka Inventors Commission, Eng. Nalin Dolawatta; Director General of the NERDC, Dr. Jayathu G. Samarawickrama; Dr. Anjana Liyanage, Deputy Director General (R&D); and Deputy Director General (Services), CEng. Shantha Jayasinghe.

The first lecture was given by Research Fellow Eng. Kapila Peiris on "The Direction of Inventions Based on Science and Technology," which gave knowledge of new dimensions of inventions and the path inventors should take to be successful. Ms. Dilrukshi Pathirana, Assistant Director-Marketing of the NERDC, delivered the second lecture on the subject of "How to Market Inventions." Fifteen inventors from various parts of the country attended the session, some of whom already had patents.

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the Deputy Director General (R&D) Dr. Anjana Liyanage, the Deputy Director General (Services) Eng. A.A.S.P. Jayasinghe, all the Directors and HoDs, engineers, executives, and technical staff participated in the inaugural ceremony. Following the official opening, technical discussions using a virtual platform were held in four parallel sessions. 26 peer-reviewed research papers in a variety of engineering disciplines, including agricultural and mechanical engineering, civil engineering and social impact assessment, energy engineering and process improvements, electrical and electronics engineering, and computing engineering, were presented by researchers from universities, R&D organizations, and government institutions. The given papers were published as an electronic version in the NERS 2022 proceeding under the ISBN number 978-624-5505-02-9.

Transformative learning: For Mathematics teachers

At the Maths Cafe in the NERDC Technology Park, a practical teaching skills development programme for mathematics school teachers in the national curriculum was organized. The Ministry of Education organised this unique session as part of a campaign to inspire aspiring teachers to sharpen their abilities and consider alternative career paths in the field of education. This workshop was sponsored by the Commercial Bank of Ceylon PLC. The programme was run by Mr. Darmasiri Hengamage, the creator of the Maths Cafe Program, with assistance from the Technology Park staff as needed. 37 school teachers participated in total, and over the course of two 6-days workshops, they learned new techniques and methods for instructing mathematics in a way that encourages greater student engagement.



Knowledge Management



The NERDC has established its own journal clubs with the goal of enhancing engineers' exposure to the engineering field and their identity. Following the presentation of the idea, engineers Sunil Karunawardana and Roshani Costa led a journal club discussion on "Rainwater Harvesting for Drinking Purposes in Sri Lanka" for engineers and interested technical professionals. On December 22, 2022, this presentation was made as part of the peer learning programme, and top management as well as other NERDC employees took part in the discussion.

Expert roundtable on construction industry: NERD Centre recognizes its' licensees by holding a forum to share views & expertise



The construction sector in Sri Lanka has been badly impacted by the nation's financial crisis more than any other industry. The NERDC held a forum on December 21, 2022, with a focus on its licensees who work in the construction and cremation industries, in an effort to reduce their problems by strengthening competence. All experts who deal with NERDC technology from the aforementioned sectors were brought together in this forum. Mr. Upali Jayasekara, the Chairman & CEO of Mega Heaters (Pvt) Ltd was the guest speaker for the event. He shared his life experiences as an established middle scale entrepreneur and the qualities that should be improved to be a good entrepreneur. He was awarded by a token of appreciation by the Chairman and Director General. Research Fellow Eng. Nandana Edirisinghe conducted a lecture on new developments in crematorium technology. CEng. Nuwan Amaradasa conducted an informative session on newly developed civil engineering technologies. These knowledge-sharing discussions, made up a fruitful half-day session.



The Christian Association of NERD Centre organizes a Christmas Mass



The Christian Association of NERD Centre organized a Christmas Mass at Kulasinghe auditorium on 20th December 2022. All staff members were invited to the event. The Mass was officiated by Rev. Priyanjana Perera and all members of the Christian Association of NERD Centre attended. The aim of having this was to constitute a formal expression of reverence for the Deity and celebrate Christmas. Director General of NERDC Dr. Jayathu G Samarawickrama & other senior officials also attended the mass.

Towards sustainable construction



The NERDC held a training session on "Cost-Effective Building Technology" at NERDC from October 25 to October 27, 2022. It was made up of a number of in-depth lectures followed by fully developed practical sessions in which participants actively participated. The practical session was directed by an engineering assistant and other employees, while the lectures were delivered by a panel of lecturers made up of civil engineering staff from the Civil Engineering Department. It was done for a selected group of individuals who wanted to launch a brand-new construction company to overcome today's industrial obstacles.

NERDC held training programme for job seekers in cement soil blocks manufacturing



National Engineering Research and Development Center held a training programme on cement soil blocks manufacturing aiming the job seekers in the industry. They were encouraged to start their own start-ups as soil block manufacturers. These all participants were the potential entrepreneurs who like to start their new businesses in the industry. This was a single day programme which included theory lecture & practical session. The theory session was conducted by Civil Engineer Mrs. Anurudhdhika Digala and the practical session was conducted by Mr. Chathuranga, the Engineering Assistant serves in Civil Engineering Department. The training program was coordinated by Techno Marketing Department and after the completion of the programme, certificates also awarded to the participants.

More than 1500 school students visit NERDC Technology Park during the National Science Week

There were more than 1500 school students visited Technology Park at NERD Centre, during the National Science Week (10th to 16th November), which was declared by the Ministry of Education.

Those students were of grades 6 to 11 from various schools in different districts, who studied Science as a subject in their schools.

During their visit there were demonstrations arranged to show how technologies work in practical scenarios. Some of the processes were also displayed. These programmes were arranged as a one-day plan & all students visited within a day were separated in to 4-5 groups for better exposure. Engineering Museum is better place to get the knowledge on evolution of engineering from traditional to modern engineering. Most of these schools visited NERDC as a result of the promotional campaign that was conducted aiming at the National Science Week on electronic & social media. One to one correspondents to schools were also effective in increasing the foot prints during the period.



NERD Centre pays farewell to its' former DG, DDG (R&D) and A Research Fellow

Eng. D.D.Ananda Namal, the former Director General of NERD Centre, went on his retirement recently, after 35 years of his tenure at NERD Centre. He has contributed an enormous service during the long period of his tenure at the NERD Centre. We wish him a healthy wealthy & happy retired life.

Eng. J.A.D.D. Jayasooriya, the former Deputy Director General (Research & Development) of NERD Centre, went on his retirement recently, after a long tenure of 35 years at NERD Centre. He has contributed various research projects, innovations & technological adaptations during the long period of his service at the NERD Centre. We wish him also a healthy wealthy & happy retirement.

Research Fellow Eng. (Mrs.) Nayana Wijesiriwardena, one of the former Research Fellow of NERD Centre, went on her retirement at the end of December 2022. She also had a long duration of tenure at NERDC. She has contributed in various research projects, new innovations & many technological interventions as well during her long period of service at the NERD Centre. We wish her a healthy wealthy retired life filled with happiness.



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