NSF strives to open the path for young science leaders

Research and innovations play a major role in socio-economic development of a country. The development of the innovative and investigative ability of the younger generation will lead to the generation of new knowledge that is essential for sustainable economic development of the country. Formal science education alone is not enough to cater to the growing demands of the dynamic world. Recognizing and uplifting their soft skills in science will help to enlighten their young minds towards innovation and logical thinking, and consequently make them good researchers as well as citizens with a good understanding of science. Hence it is vital to initiate programs addressing school children to identify, develop, and give practical aspects of training on science based education, to broaden their knowledge and skills to strengthen their understanding, and improve the ability to face any future challenges.

The National Science Foundation (NSF) being the premier driving force in promoting Science, Technology and Innovation for the country's economic and social prosperity, is dedicated to generate, disseminate, transfer and enhance the utilization of scientific knowledge towards the upliftment of the livelihoods of all Sri Lankans. To accomplish this vision, NSF conducts a wide array of programs targeting different categories of persons. Among these, the Science Research Projects Competitions (SRPC) is one of the annual events conducted by the Science Popularization Division of NSF. The prime objectives of SRPC is to identify and improve scientific thinking, investigative ability and creativity of school children, to enable them to become young budding researchers, and thereby help them to select the career path of a skilled professional researcher. Students of grades 09 – 13 of schools that have registered with NSF are eligible to apply for the above competition. Such potential candidates may enter the competition by submitting research proposals in their field of interest. The selected projects are subjected to continuous guidance and assistance under the supervision of experts in the relevant field as principal supervisors, and NSF monitors their progress at regular intervals.

The best ten projects of SRPC selected in competition among school science societies get the opportunity to participate in the "Sri Lanka Science and Engineering Fair" (SLSEF), along with the top ten finalists of the "Junior Inventor of the Year" competition, conducted by the

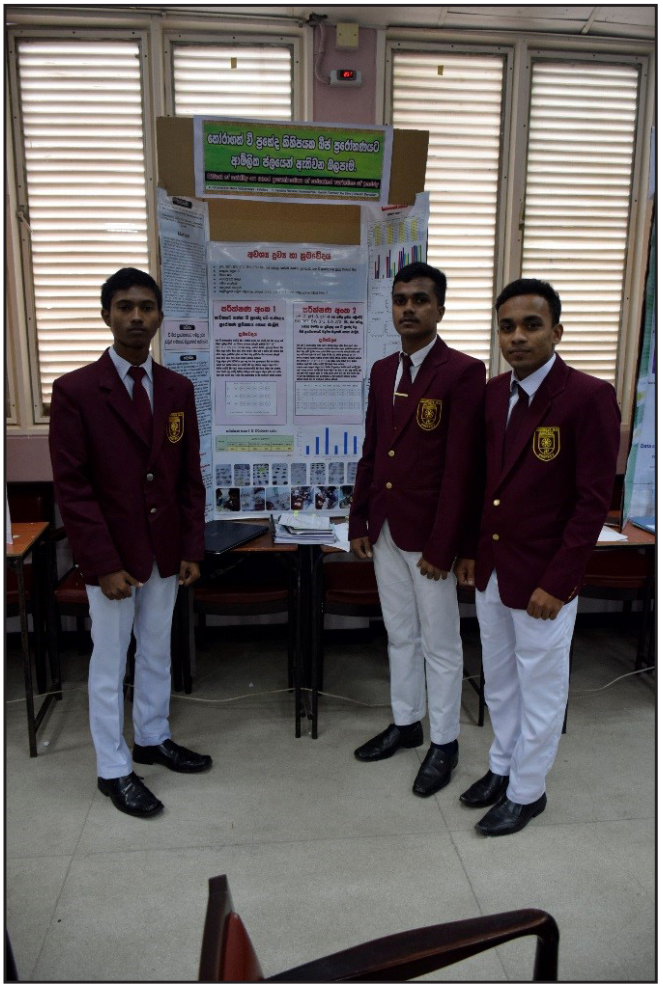

Fig 02 : Research team of Gnanodaya Maha Vidyalaya, Kalutara

Fig 01 : Sri Lanka Science and Engineering Fair 2019 – Panel of judges and participants

Institution of Engineers Sri Lanka (IESL). The details of the selected best ten projects are given in Table 01. The SLSEF is organized jointly with the cooperation of IESL, Intel and the Ministry of Education. The top three winners of SLSEF are eligible for participation and representing Sri Lanka at the Intel International Science and Engineering Fair (Intel ISEF).

The Intel ISEF is the world's biggest annual pre-college science competition, which is organized by the Society for Science and the Public, USA. Each year, around 1,800 high school students from more than 75 countries, regions, and territories get the opportunity to present their research findings and compete in Intel ISEF.

The SLSEF 2019 was successfully held on 11th of February this year at the Wimalasurendra Auditorium of Institute of Engineers Sri Lanka (IESL), Colombo. One SRPC Project which competed under the topic "Effect of acidity on seed germination of selected varieties of paddy", was selected as one of the best three projects of SLSEF 2019, and won the opportunity to take part in Intel ISEF 2019.

This research project was conducted by the students of Gnanodaya Maha Vidyalaya, Kalutara, under the guidance of Ms. Sanjeewani Udawatte and the team of students comprising R.S.R. Senavirathna, H.LC.D. Hashela and S.S.R. De Silva. This project was guided and supervised by Prof. Sudheera Ranwala, an expert in plant sciences and climate change, who is currently attached to the Department of Plant Sciences, Faculty of Science, University of Colombo. This project team, which is expected to participate

Table 01 : Science Research Projects Competition-2018
Selected competitors for the Sri Lanka Science and Engineering Fair

No	Name of the Student	School	Title of the research Project
01	A.U. Nidha Faatin N. Ann Dharahaa P. Ahanya	St. Cecilia's Girls College, Batticaloa	Monitoring the repetitive safety usage of various cooking oils used in Sri Lanka
02	T.Thinojan K.Abinaya K.Padanjaly	BT/ Paddirippu M.M.V., Nationa School, Kaluwanchikudy	Green synthesis of Iron oxide particles for the removal of cadmium ions in water
03	J. Indusara Dharmarathne	Nalanda College	Anti-diabetic related health food properties of selected traditional rice varieties of Sri Lanka
04	M.C.M. Vidumini Silva	Mahamaya Balika Vidyalaya	Destroying mealy bugs
05	M.D. Susiriwardana	Nalanda College	Investigation of the antibacterial properties in the root extract and leaf extract of the plant asparagus falcatus
06	W.A.B.G. Goonathilake D.M.H.S. Dissanayake S. Elabada Arachchige	Musaeus College, Colombo 07	A Microbial consortium to accelerate the decomposition of biodegradable polythene
07	Keshani Booso Helani Balasuriya Vinma Wettasinghe	Musaeus College, Colombo 07	The development of a risk assessment tool for the screening of non-communicable diseases among school children in Sri Lanka
08	Isumi Hettiarachchi Muthumalki Pragnaratne	Sirimavo Bandaranaike Vidyalaya, Colombo 07	Production of a lightweight and eco-friendly bricks using waste plastic
09	R.M.U.Ishan Rathnayke M.S. Dulshan Predeep	Thambuththegama Central College, Thambuththegama	Evaluation of repellent activity of botanicals for controlling red coconut weevil *(Rhynchophorous ferrugineus Olivier)*
10	S.S. Ravinath De Silva H.L.C. Denuwan Hashela R.S.Ransika Senevirathna	Gnanodaya Maha Vidyalaya, Kaluthara	Effect of acidity on seed germination of selected varieties of paddy

at the Intel ISEF to be held from 12th to 17th of May 2019, at Phoenix, Arizona, USA, will have the opportunity to compete with around 1800 students representing about 75 different countries of the world.

The NSF has now called for applications from schools for the SRPC 2019, continuing its mission to empower young research leaders of the country, and any school that had not applied yet to participate in the Science Research Project Competition is encourage to contact the Science Popularization Division of NSF as soon as possible for more information (www.nsf.gov.lk)
The winning three project of SLSEF will gain opportunity to participate in Intel ISEF. National Science Foundation is also in the process of looking for more opportunities for students to showcase their research projects in the international arena .

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