



Vidya

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Ministry of Science, Technology and Research



Solid Waste Management Seminar to Draft National Plan



The management of solid waste has become a major environmental issue faced by our country and lack of not obtaining the contribution of responsible institutional sectors and authorities to the decision-making processes of officials and lack of proper coordination among organizations and institutions working in connection with solid waste management have become impediments to work to solve this problem.

In such a background, the Minister of Science, Technology and Research Susil Premajayantha, made preparations to compile the National Solid Waste Management Action Plan in collaboration with the Ministry of Provincial Councils & Local Government and participation of stakeholders in a broad spectrum including over 250 scientists and researchers, seeking solutions to the abovementioned problem. To achieve this, a two-day seminar participated by Sri Lankan scientists, researchers and other stakeholders was held during the two days last 23rd - 24th.

Intel International Science and Engineering Fair Winners of Excellence feted



This year, three school students who participated in the Intel International Science and Engineering Fair (Intel ISEF) held at Los Angeles, United States of America, were able to achieve two awards of excellence and one special award. The Intel International Science and Engineering Fair is the world's largest competition based on science projects with the participation of over 1700 school students from 78 countries of the world. Shehan Kanishka and Sankalpa Perera

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SLAB marks World Accreditation Day 2017



Photos - Gayan Pushpika

Sri Lanka Accreditation Board for Conformity Assessments celebrated World Accreditation Day 2017 on 14th June 2014 in Hotel Galadari for the 9th Consecutive year. The chief guest of the event was R. Wijjaladchumi, Secretary, Ministry of Science, Technology and Research. World Accreditation day has been jointly announced

by the International Accreditation Forum (IAF) and International Laboratory Accreditation Cooperation (ILAC) and the theme for this year is "Accreditation: Delivering confidence in construction and the built environment".

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First Indo - Sri Lanka Joint Research Conference in Colombo

In the month of September of the year 2011, a Programme of Cooperation (PoC) was signed between the Ministry of Technology and Research of Sri Lanka and the Science and Technology Department of India for bilateral scientific collaboration. Under this PoC, allocations were made for two joint workshops and nine joint research projects. By now, Sri Lankan researchers have completed those joint research projects. The joint workshops were held in the year 2012.

On agreement of the Ministry and the Department in Sri Lanka and India, the first Indo-Sri Lanka Joint Research Symposium including the finished joint projects was held in Sri Lanka on 29th and 30th May. The symposium was launched under the aegis of the Minister of Science, Technology and Research Susil Premajayantha and the participation of the High Commissioner of India in Sri Lanka Tharanjith Singh Sandhu at the Water's Edge Hotel, Colombo. At the opening ceremony of this symposium, Prof. Vijaya Kumar from Sri Lanka and Dr. Sulakshana Jain from India made important lectures. The main objective of this symposium was disseminating the knowledge and findings of the completed projects for which the allocations were made by both

countries among Sri Lanka's scientific community. A large number of people including the Secretary of the Ministry of Science, Technology and Research R.Wijiludchumi, officials of the Ministry of Science, Technology and Research of Sri Lanka and the Science and Technology Department of India, researchers of research organizations, University lecturers, scientists and collaborating researchers participated in this symposium.

The symposium was conducted under three themes and they were:

1. Food, nutrition and health
2. Preparing for consequences of sea level rise
3. Gondwana geology of Sri Lanka and India

The above themes were chaired by Prof. Narada Warnasuriya, Prof. W.L. Sumathipala and Dr. A. Wijayananda respectively.

Six Sri Lankan and Indian research projects were presented on the theme 'Food, nutrition and health,' five research projects under the theme 'Preparing for consequences of sea level rise' and three research projects were presented under the

theme 'Gondwana geology of Sri Lanka and India.'

The above research projects were carried out by researchers of Industrial Technology Institute, National Institute of Fundamental Studies, University of Peradeniya, University of Ruhuna and University of Colombo.

As the final item of the symposium, an important discussion about issues and challenges at India - Sri Lanka research collaboration, how to mitigate them and ways and means of further enhancing the collaboration between the two countries took place.

Researchers, government officials and scientists of both countries participated in this

Sri Lanka Accreditation Board, which was established in 2005 is being involved in accreditation of Conformity Assessment Bodies in various fields: Testing laboratories, Certification bodies, Inspection bodies, GHG verification and validation bodies, Research Laboratories, etc and is Internationally recognized by International Accreditation Forum (IAF), International Laboratory Accreditation Cooperation (ILAC), Asia Pacific Laboratory Accreditation Cooperation (APLAC) and Pacific Accreditation Cooperation (PAC).

Accreditation certificates were awarded to the Conformity Assessment Bodies that were accredited during the last year and they were:

1. Ultratech Cement Lanka (Pvt) Ltd for Chemical and Mechanical Testing
2. Central Quality Control Laboratory of ATG Lanka (Pvt) Ltd for Chemical and Mechanical Testing
3. IGBU Quality Control Laboratory of Ansell Textile Lanka (Pvt) Ltd for Mechanical Testing
4. Control Union Inspections (Pvt) Ltd for Energy Management System Certification as per ISO 50001: 2011

Inauguration session of the World Accreditation Day was followed by the



important discussion. It was decided to utilize the results of this discussion next. At the end of this symposium which was held most successfully, researchers of both countries pledged to further enhance the collaboration among themselves and their institutions in the future.

Continued from page 01... SLAB marks...

Importance of improving quality and safety in constructions has been discussed frequently in with the recent accidents of the buildings (eg. Wellawatta building collapse) happened in Sri Lanka. Further,

with the massive constructions projects happening in Sri Lanka currently it is really important to emphasize the importance of improving quality and safety aspects of the construction sector. Hence, World Accreditation Day theme for this year is very important to Sri Lanka.



Technical Seminar on "Accreditation: Delivering confidence in construction and the built environment". Experts in Construction sector has shared their knowledge on Implementation of National Construction Policy Issues & Challenges, Importance of Construction Sector for Economic Development in Sri Lanka, New Concepts in Building Designing, Environmental Impact & long-term sustainability of construction projects, Introduction of Green Building Certification Scheme & Use of Conformity Assessment Procedures and Accreditation Principles for the improvement of Construction Industry in Sri Lanka.



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The opportunity to participate in the international competition arose when they won the award at the Sri Lanka Science and Engineering Fair (SLSEF) 2017 competition organized by the National Science Foundation operating under the Ministry of Science, Technology and Research. Further to that, G.K.N.M. Gangodawila from Narammala Mayurapada Central College won the fourth award in the Engineering Mechanics category



at the Grand Award Ceremony for his project titled 'Systematic Wall Constructing Tool'. These three school students that have secured international victories came into the appreciation of the Minister of Science, Technology and Research Susil Premajayantha. The Minister, while wishing them, presented them with a modern laptop computer each. Furthermore, teacher Gayani Samarasinghe of S.De. S. Jayasinghe Central College, Dehiwala, who was in charge of the science project of students Shehan and Sankalpa and Dr. Meththika Withanage who was the Chief Supervisor who guided them to up-

grade the project also came into the Minister's appreciation. School children being drawn to inventing is very important and students who are not from National Schools

While some students at present are just wasting their school time, students like these directing their hearts and minds to this sort of school projects can be shown as a major reason for the future of the country being excellent.

and having a lower level of facilities securing international victories have to be much appreciated. While some students at present are just wasting their school time, stu-



School students being directed to inventions very important

Susil Premajayantha
Minister of Science, Technology and Research

dents like these directing their hearts and minds to this sort of school projects can be shown as a major reason for the future of the country being excellent. The contributions of institutions such as the National Science Foundation under our Ministry to select such students, train them and take them to the international level should be appreciated. But, the endeavours of their parents at home, and the Principal and the staff at school to generate such bright students should not be forgotten. In students

who are stepping into the world of tomorrow being armed with inventiveness will have an influence on more and more students being directed towards it. The attention of the Ministry has been drawn towards modernizing all the laboratories in the school system of the Island in collaboration with the Ministry of Education to generate more bright students filled with new ideas.

Mahesh Samarasekera
Media Secretary



National Workshop on "Sri Lankan Lichens"

The 4th National Lichen Workshop 2017 was held at the National Institute of Fundamental Studies (NIFS) from 24th to 26th of May 2017 with the collaboration of Dilmah Conservation in

was conducted by an eminent team of scientists which consisted of Dr. Pat Wolseley (Natural History Museum of UK), Dr. Gothamie Weerakoon (Visiting

creating a deeper understanding about lichens among young scientists encouraging them towards new areas of study and exploration. The three day workshop

Scientist, NIFS) along with Prof. Siril Wijesundara (Research Professor, NIFS) shared knowledge for a better understanding of the unexplored world of lichens. Moreover, International Documentary artist of the National Geographic

Society, Mathew Cicanese, and Erika Reiter gave their contributions to fulfill the goals of the activity.



Let's win the world with Nanotechnology

In a country to develop, that country's national income should increase through innovation. In our country, Sri Lanka, we are still earning income through traditional methods. There is no much learning in Sri Lanka towards innovation and only a very small amount of them are created. Even though inventions are generated, only a very limited number of them reach the market. There are very limited opportunities for this in our educational pattern but well-developed countries such as Japan and the United States of America have given a very special place for this. Obtaining patent licenses to protect inventions is no easy matter. If the country's development is considered, the direct intervention of science and technology has become the need of the era.

There are many instances where Sri Lanka has lost the science and technology waves that engulfed the world in the latter part of the 20th Century. Among them, there were huge growths in Information Technology, Biotechnology and Genotechnology in separate instances but we were unable to acquire them and develop through them. Even though the population of 21 million in Sri Lanka is using 27 million mobile phones, our country has not endeavored to manufacture even a small part for them. Such examples could be seen in other technological waves.

We have stepped into a special era now. The recent technological waves in the world is nanotechnology. The inventions that resulted from the technological waves that swept the world before developed those fields separately. But a development in all fields in science and technology could be expected from nanotechnology. What is so very special is that all technology was developed in the western countries in the past but, in nanotechnology, there is a great awakening in Asia.

Nanotechnology is producing the necessary highly technological material through the innovation of matter

in nanometer quantities. What is of special importance here is the manipulation of matter very close to molecular and atomic levels. A nanometer is one part of a billionth of a meter. Materials with all matter in 1 - 100 nanometers belong to nanotechnology. We call these molecules nano particles. When a material is reduced to nano level, all its properties such as optical, magnetic, electrical and mechanical are changed. For example, though gold is a shiny metal, when it is turned into nano particles, gold nano particles with all the colours of the rainbow could be obtained according to the size of that nano particle.

The concepts that needed nanotechnology were first discussed in 1959 by renowned physicist Richard Feynman of the Caltech, USA. The invention of the scanning tunneling microscope in 1981 by IBM which provided unprecedented visualization of individual atoms and bonds confirmed his theory.

As our resources are limited, this is a very important concept environment friendly. As minimum resources are used in nano technology, they are not wasted. This technology is very important in conserving the environment because of this. This technology could give solutions to the several problems in the world at present such as clean energy sources, dearth of clean water, environmental pollution and medicines for cancer. According to the experiments so far conducted, there is a possibility of converting energy from sunlight to electricity by applying paint produced through using nano technology. Other than this, in the clean water problem, it is possible to remove harmful bacteria and viruses at room temperature by filtering water through nano filters. This technology also gives the possibility of manufacturing cloths that can be cleaned by exposing to sunlight.

Furthermore, this technology could be used to the development of engineering technology and computer technology. At present, research and experiments have confirmed that nano technology is included in some natural processes. If such research is being conducted in Sri Lanka, the Sri Lanka Institute of Nanotechnology (SLINTEC) has the ability of supporting such inventors.

Prof. K.M. Nalin De Silva
Science Team Leader
Sri Lanka Institute of Nanotechnology



Without New Technology and Research Development cannot be achieved

Prof. K.M. Nalin De Silva, Science Team Leader, Sri Lanka Institute of Nanotechnology

Sri Lanka is in a massive endeavour to achieve development through nanotechnology. In such a background, Prof. K.M. Nalin De Silva, Science Team Leader, Sri Lanka Institute of Nanotechnology gave his views to Vidya newspaper as follows:

● How can nanotechnology be utilized for Sri Lanka's development?

We have been identifying Sri Lanka as a developing country from the days of yore. But, we have to distance ourselves from this position at least now. The factor 'How are we going to escape this condition?' is of utmost importance. Various governments used varied methodologies to achieve this. They worked through the spheres of tourism and crop export. Goods were exported in massive quantities during the past decades. But, they were exported as raw material. Tea was exported as just tea. We export rubber as raw rubber and import the tyres necessary for our use. This is the problem. But, if we look at Korea for example, in 1970, Korea is a poorer country than Sri Lanka. During that time we aver called the poorer sections of Sri Lanka as 'Koreas'. But, in the past 40 years, Korea achieved a fast-tracked development. Things we use today such as Samsung phones and Hyundai cars were imported from Korea. If our per capita income is \$ 3500 today, the per capita income of Korea is \$ 25,000. Those days Lee Kwan Yew came to Sri Lanka and said that he will turn Singapore into a Sri Lanka. But, now, we have to turn Sri Lanka into a Singapore. That means we have gone wrong somewhere. The main reason is that, from those days, we did not properly grasp science and technology. Sri Lanka had, and is still having, enough scientists, Professors, Doctors - everybody got together and conducted research. But, the most important factors science and technology did not come out through governments or universities. On the factor where

to begin this, in 2006 - 7, the dialogue about nanotechnology was built up under the aegis of Prof. Thissa Witharana, the then Minister of Science and Technology. In the 1950s, several technological waves swept the world. The wave of computer technology swept the world. But, as a country, we did not get close to that technology at that time. Today, even a small child can operate a smart phone or a laptop computer. But, none of them are manufactured in Sri Lanka. But, all these are imported from Singapore, Thailand, Korea and Taiwan. Those days, even Taiwan was a poorer country than us. But today, Taiwan's per capita income is \$ 8000. This technology was grabbed by other eastern countries. Taiwan has a population equal to Sri Lanka. But, see where Taiwan is today. We lost that technology at that time.

Then came biotechnology. We did not grab even that technology as a country. We are even importing the Bt bacteria used to eradicate dengue mosquitoes from Cuba. In the midst of several sanctions, Cuba has become a country in a highest position in biotechnology. In those days it happened on Cuba's National Policy. It is even one injection manufactured in our country? The concepts that needed nanotechnology were first discussed in 1959 by American physicist Richard Feynman. His idea was the possibility of synthesis via direct manipulation of atoms. Here, different qualities are added named matter. This was where nano technology began.

● How was nanotechnology launched in Sri Lanka?

When the idea of nanotechnology was being introduced to the society, there were several criticisms such as 'Who can see atoms?' and 'Who can touch atoms?' Truly, a nanometer is one part of a billionth of a meter. An atom is one tenth of that. But, having such technologies, the IBM Institute invented a scanning tunneling microscope in 1981 which provided unprecedented visualization of individual atoms and

bonds, and was successfully used to manipulate individual atoms and write the name 'IBM'. It took more than 20 years to prove what Richard Feynman said. Then, he began to go forward as a technology. America invested in this technology in about the year 2000. Accordingly, they expected about 500,000 nano technology scientists by the year 2010. But, we started this in 2008. Even then we were somewhat late. But, our idea was building a new institution connected with nanotechnology. There are experts in nanotechnology and biotechnology generated in our country. Over 200 Sri Lankan scientists are working at NASA. Accordingly, at that time, Prof. Thissa Witharana got down these nanotechnology scientists to Sri Lanka. Up to that time, what we had done was generating the human resource through universities. But, we had not paid any attention to inventions. Accordingly, the government of Sri Lanka, identifying the reason of less development and the opportunities offered by nano technology to construct that and acting on the neces-

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tured this message. Even though being a country with highest sanctions, Iran has today achieved the seventh place in nanotechnology. Only vision is needed for this. Accordingly, private companies were directed towards research. Universities were also directed towards research. This caused progress in all sectors. Along with this progress, the Sri Lanka Institute of Nanotechnology was shifted to a 50-acre land at Pitipana area in 2013, five years after its establishment. We get benefits throughout on our vision and activities. Accordingly, by the present, over Rs. two billion have been invested in the institution by the Government. The first patent license was sold for \$ one million was one connected with nano technological fertilizer. This year, we were able to achieve great progress in the textile and apparel industry. Accordingly, last year a patent license for sportswear was sold for MAS Activ. Furthermore a patent license on waterproof paint was sold to Lankem. We have about 13 patent licenses filed in America by now. We are working further on a patent license connected with MAS Holdings at present.

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Pramitha Randell Pabasara
W.A.S. Nisansala Kumari
Photos - Gayan Pushpika



National Research Development Framework joins Sri Lankan University System



The Ministry of Science, Technology and Research has organized several programmes parallel to the National Research Development Framework to be activated in collaboration with the Sri Lankan University System. Pictures show the group led by Minister of Science, Technology and Research Susil Premajayantha and consisting of the Ministry Secretary and Additional Secretary and other officials participating in the discussion held about that. Under this, programmes will be activated in the University of Sri Jayawardanapura, the Wayamba University, the Rajarata University, the University of Peradeniya, the Kotelawala Defence University and the University of Jaffna.



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Without New Technology...

● Can you tell our readers about research and development work?

The pride of place in our Institution is given to research. We have ultramodern laboratories and research equipment of the highest quality for that. We have over Rs. two billion worth of equipment at present.

Accordingly, we have an ability the other institutions do not have. All our research projects are operating through five areas. We are conducting only research needed by the country. One of our basic research areas is the textile and apparel industry. Furthermore, research on fertilizer, natural resources, rubber and nutraceuticals can be identified among them. At present we are conducting research on deriving Titanium from Ilmenite. We are exporting Ilmenite at \$ 200 a ton. But, a ton of Titanium Oxide is imported to Sri Lanka at \$ 4000. Furthermore, 99.99% pure graphite exists in Sri Lanka. But, it is exported at \$ 200 a ton. After it is turned into Graphene in Europe, a gram of it is sold to organizations such as Nokia and Sony for \$ 100. Why cannot we do this? The necessary research for these products is being conducted at present at the Sri Lanka Institute of Nanotechnology. Our problem is not making these products. Investors are needed to take this research forward. Investors should be encouraged for this. But, those products are exported as raw material due to convenience. This is a great loss for the country. In other countries, capsules with medicinal value have been manufactured from cinnamon. In Japan where tea does not grow, green tea biscuits are being manufactured. Even though we have these resources in our country, we have not identified them. Now we

are conducting research on these. Turmeric is a powerful remedy for cancer. Americans have got used to adding a teaspoonful of turmeric to a glass of water and drinking it. It is not shown quantity-wise even in Ayurveda. Science should be added to these. Everything is available in our country. But, value, knowledge and vision are needed.

● Shouldn't thinking develop on science, technology and these masses of knowledge?

Science and technology should be more disseminated. It is very important for us to construct a culture where a separate media time should be allocated for that. The awareness is not sufficient. Science and technology should be introduced to the society in simple terms. The SLINTEC Board of Directors consisting of the heads of the most powerful organizations in Sri Lanka. We have about 55 scientists. As a result of the society understanding of a certain level, this has become a suitable place for students to visit. Students and teachers from schools visit SLINTEC regularly. There is some understanding in many people. In countries such as Japan, there is always a team from the private sector before a Professor's desk, expecting an invention by that Professor. That culture is not there in our country. But, we are constructing that culture in our country. Now we are being asked for inventions. They have recognized that we are going towards inventions. Our young scientists are leaning towards research that can earn money. What I say is that, if you want to become rich, conduct research on inventions. We are always encouraging

them for inventions through proper funding. It is possible to become rich by doing science. Professors in Japan and America own companies of their own. Our Professors also should have opportunities to launch their own companies through their inventions. The birth of such a culture is of utmost importance. We have to invent a new product or process in the laboratory and take it to the market. Money has to be spent to take it practically to the large scale. In the laboratory, research that is conducted with 1 kilogram can go up to five and ten tons. Even after that, it can be refused at the market. A successful invention at the laboratory can fail at any time. That is the danger. In Korea, the laboratory to market success is 5%. The Korean Government granted a huge amount of money for research and development. In our country also three inventors are selected, sent abroad and subjected to appreciation annually. But, what happens after that? There is no investor to take the invention forward. The Korean Government gave loans on minimum interest to students. Once the research - invention culture is established, the Government reduces the investment and the private sector will take up the baton. After this culture is set up, it operates automatically and continuously. This is something with a long term vision. Now even the school students are very keen on this field. But, it is essential to prepare syllabi under the new vision. If students become bored with the subject, it is useless. The teacher also influences that. Recruitments to the teaching profession should be more powerful. Fulfilling qualifications with First Class and Second Class degrees is of utmost importance. The

teaching profession needs group conducting research, with updated knowledge and able to transfer knowledge in a simple manner.

● Can you tell us about the specialties of this institution?

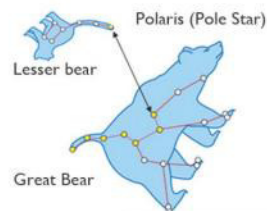
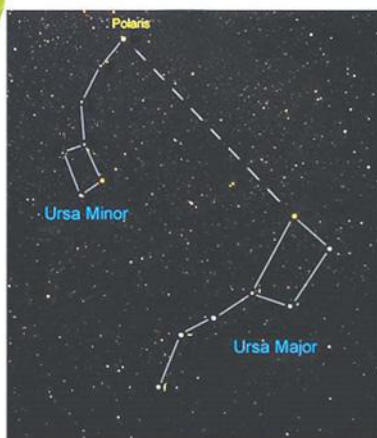
The Sri Lanka Institute of Nanotechnology is located inside the Technology City. The Science Park Concept is operating successfully here. This is a Nanotechnology Park. All equipment necessary for research is kept here in one place. Now we have allocated space for research centers for private organizations. It is the same for universities. Accordingly, those research centers could utilize out equipment and facilities. The Research Center of John Keells Holdings is located in the Nanotechnology Park. J.L. Morison also laid the foundation stone for their Research Center recently. We also have a Technology Incubation Center. Anybody can conduct their research there and commercialize their inventions. Furthermore, we have also established a trust fund. According to that, on the activities and his or her liking of the institution and the love of the subject, a person can legally donate his property. This was launched by the head of Delmege, Ricky Mendis, with Rs. 25 million. With such donations, a fund of about Rs. 32 million has accrued. We recently launched the SLINTEC Academy. It is operating as a degree-awarding institution with the approval of the University Grants Commission. The opportunity is here of following the Nanotechnology and Higher Technology Post Graduate Degree. From that, we are expecting to generate scientists necessary for the organization ourselves.



The planets and constellations that could be identified in the night sky at that time were discussed in the May issue of the 'Vidya' newspaper. They are the planets Jupiter and Saturn and the constellations Scorpio, Sagittarius and Leo. During these nights also those celestial objects could be observed in the sky and upon observation it will become clear to you that they have shifted towards the west.

In this article, let's attempt to identify some more constellations that can be observed in the northern night sky in the present. Accordingly, the largest constellation that can be observed in the northern

sky, the Great Bear (Ursa Major) constellation, can be clearly identified. Seven stars are situated in the shape of a plough and by mentally joining those bright stars with other stars in the vicinity you can visualize the Great Bear (Ursa Major) constellation. Furthermore, two bright stars in the Great Bear (Ursa Major) constellation point towards the North Star (Polaris). Accordingly, the northern direction could be identified using the Great Bear (Ursa Major) constellation. These constellations are also identified as "Navigation Constellations." In the north, along with the North Star, there is another constellation with seven stars. This constellation is named the "Lesser Bear" (Ursa Minor) and it resembles the plough-shaped part of the Great Bear constellation. The Great Bear constellation is larger in size than the Lesser Bear constellation and these two constellations could be differentiated by the positioning of stars. In the Lesser Bear constellation the stars at the end of the



Let's get to know the Night Sky – III

'tail' are bent upwards and the stars at the end of the 'tail' of the Great Bear constellation are bent downwards. Furthermore, the North Star (Pole Star – Polaris) situated at the tail end of the Great Bear constellation is a very special star. Although all other stars dawn in the East and set in the West the North Star can always be observed in the same place in the night sky, the reason being that the axis of the Earth is pointing at the North Star.

Other than these, another "navigation constellation" can be identified in the southern sky. This constellation comprises four stars and is in the shape of a cross. This constellation is called the "Southern Cross." South can be positively identified by length-



Southern Cross

In this article, let's attempt to identify some more constellations that can be observed in the night sky in the present. Accordingly, the largest constellation that can be observed in the eastern sky, the Great Bear (Ursa Major) constellation, can be clearly identified.

ening the line joining the two furthest stars in the Southern Cross towards the horizon.

In the past, ancient people have used these constellations to navigate in long desert treks and ocean journeys. Furthermore, various constellations have been used in agriculture to determine times for planting seeds, harvesting and time periods.

Presented by Sri Lanka Planetarium

Night Sky Observation Camp

Arrangements have been made to hold the next of the series of Night Sky Observation Camps organized by the Sri Lanka Planetarium to develop the astronomy knowledge of the gen-

eral public on Friday the 30th of June 2017. This night Sky Observation Camp will be held free of charge for general public from 7.00 pm to 10.00 pm. Please note that the camp will be cancelled if

the weather conditions are bad or the sky is obscured by clouds. So, if you are expecting to participate in this programme, please confirm the holding of the camp by calling the planetarium

after 5.00 pm on that day.

For further details about this programme, please contact telephone numbers. 011 – 2586499 or 077 – 2723283



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SLINTEC signs agreement with British Cosmetics to engage in cosmetics research



British Cosmetics and Sri Lanka Institute of Nanotechnology (SLINTEC) have signed a research agreement focusing on the development of a novel facial care product with scientifically proven benefits. SLINTEC is a public-private partnership between the Government of Sri Lanka and major players in the private sector; namely MAS Holdings, Brandix, Dialog, Hayleys, Loadstar and most recently Lankem. SLINTEC is committed to support the small-and-medium enter-

prises to improve and develop their products to meet the demands of the local and international markets using nanotechnology and advanced technology solutions. British Cosmetics is one of Sri Lanka's leading skin and beauty care distributors and manufacturers and has been a household name since its inception 16 years ago. The company is a distributor of top international brands and signature products and is also expanding its local manufacturing capability with a view to creating an export brand.

Rs. 48.5 million for Multi Disciplinary Research



The National Research Council (NRC) has awarded a Target Oriented Multidisciplinary Research Grant (Rs. 48.5 Million) to Department of Chemistry, University of Colombo, to develop advanced materials based filters for water purification. Dr. Rohini M. de Silva (Department of Chemistry) is leading this project as the Principal Investigator. The research team consists

with Prof. K.M. Nalin de Silva (Deputy Principal Investigator), Prof. Dhammike Dissanayake, Prof. Ranil Dassanayake, Prof. Nilmini Gunawardena, Dr. N.V. Chandrasekharan and Dr. Gareth Williams from the University College London. Picture shows the NRC Chairman, Prof Janaka de Silva is handing over the agreement to Dr. Rohini and Prof. Nalin de Silva.

John Keells Research relocates to SLINTEC Technology Incubation Center



SLINTEC successfully signed John Keells Research, the innovation and research arm of John Keells Holdings Plc, to become one of its tenants at SLINTEC's newly opened Technology Incubation Center located at the Nanotechnology and Science Park in Pitipana, Homagama. John Keells Research has relocated to the incubation facility in order to gain close access to SLINTEC's scientific human resources and equipment. In addition to being a tenant at the Incubation Centre, it is hoped that

the partnership between SLINTEC and John Keells Research will further strengthen future research and development between the two parties. SLINTEC is a public-private partnership between the Sri Lankan Government and major players in the private sector, namely MAS Holdings, Brandix, Dialog, Hayleys, Loadstar and most recently Lankem. SLINTEC is committed to supporting small and medium enterprises to improve and develop their products to meet the demands of the local and

international markets using nanotechnology and advanced technology solutions. John Keells Holdings Plc, Sri Lanka's largest listed conglomerate, launched John Keells Research in 2013 with an aim to create value through intellectual property. John Keells Research focus is on their core areas of nanotechnology and advanced materials, sustainable energy and energy storage, biotechnology and synthetic biology, food and water as well as physics and Internet of things (IoT).

Successors to J.L. Morison Join hands with SLINTEC

Hemas Holdings PLC, successors to J.L. Morison Company Limited, laid the foundation stone for an ultramodern drug manufac-

tures at Pitipana, Homagama, investing over Rs. 2 billion. The full commercial production of this manufactory is scheduled to start from year 2019.

