



UNIVERSITY OF
PERADENIYA

NEWS

A QUARTERLY UPDATE OF SIGNIFICANT EVENTS AT THE UNIVERSITY OF PERADENIYA

Volume 11 No. 02
ISSN 2012 - 5356
April to June 2019

Chathurangi Eddussuriya tops the world and brings fame to the University of Peradeniya with a massive investment prize

Chathurangi Edussuriya, a computer engineering undergraduate of the University of Peradeniya, has won the Construction Industry Solution Limited (COINS) Grand Challenge in the undergraduate category held in Manchester on the 12th of June, 2019



The challenge consisted of two entry categories, professional (Open) and the student (Undergraduate), with shortlisted ideas ranging from carbon negative building materials to autonomous land surveying marking drones. Six finalists in each category were invited to the UK for the final competition in which she managed to secure first place after competing with contestants from Edinburgh, Chicago, St. Carlo and India. Her "soil analyzer" with its on-location testing capability raised quite a few eyebrows which eventually granted her this great achievement. The winners were announced at a Gala Dinner and Awards Ceremony held at the Imperial War Museum North, Salford Quays in Manchester, UK.

Chathurangi's product was a solution to the construction industry where field soil testing can be done in situ using sensors connected to a mobile device like a smartphone.

Continued on Page 15

CVCD Excellence Award 2018

The Awards Ceremony of the Committee of Vice-Chancellors and Directors (CVCD) Excellence Awards was held on the 19th of March 2019 under the patronage of President Maithripala Sirisena at the President's House in Colombo. The CVCD Excellence Awards Ceremony organized by the Committee of Vice-Chancellors and Directors is held once every two years. The CVCD Excellence Awards recognize and honour the outstanding contributions and accomplishments of the academic staff in Sri Lankan Universities. The President presented awards pertaining to six (06) disciplines of study.



The University of Peradeniya received the highest number of awards for Senior Researchers:

- Most Outstanding Senior Researcher in the field of Technology and related Sciences including Engineering, Architecture, Quantity Surveying and Information Technology
Professor J.B. Ekanayake, Department of Electrical & Electronic Engineering, Faculty of Engineering
- Most Outstanding Senior Researcher in the field of Biological Sciences including Agriculture and Allied Sciences
Professor W.A.J.M De Costa, Department of Crop Science, Faculty of Agriculture
- Most Outstanding Senior Researcher in the field of Physical Sciences
Professor Rohana Chandrajith, Department of Geology, Faculty of Science



Editorial Board

Advisors : Prof. Upul B. Dissanayake
Prof. S.H.P.P. Karunaratne

Language Editor: Ms. Subhagya Liyanage
News Editor & Coordinator: Ms. Kanchana Atapattu

Graphic & Layout Designer : Mr. T.M. Dinesh Thennakoon
Mr. Nuwan Wijekoon

Photography by Mr. Mahinda Yapa



Contacts



Web www.pdn.ac.lk/uop/about/Newsletter/newsletter.html
www.pdn.ac.lk



Tel +94 (0)81 23 92 433 (Ext - 2433)



Fax +94 (0)81 238 8102



Email statofficer@pdn.ac.lk



Published by
Statistics & Information Division
Senate House
University of Peradeniya

Printed By
Sanduni Offset Printers (Pvt) Ltd,
No 4/1, Sarasaviyana Goodshed Road,
Sarasaviyana, Peradeniya. 081-2387777



Find us on:
facebook

University of Peradeniya
www.facebook.com/UniversityOfPeradeniya



RESEARCH on Wetlands; Water Quality Improvement

Continued on Page 19



What is a Nanosatellite ?

A nanosatellite, though small in size (Ravana-1 measures only 10cmx10cmx10cm), is a highly complex electronic system comprising of multiple subsystems which collectively handle a multitude of tasks such as data processing, power supply, communications, localization, controls, and image and payload handling. A minimal nanosatellite comprises of at least five subsystems; an on-board computer (OBC), an electrical power subsystem (EPS), a communication subsystem, an attitude determination and control subsystem (ADCS) and payloads (for example: imaging cameras). The on-board computer is the brain of the satellite and it coordinates the activities of all other systems. In addition to the above, nanosatellites have solar cells - which are the source of energy - and antennas to facilitate communication.



Continued on Page 12

Reappointment of the Dean /Faculty of Science



Professor Saluka R. Kodituwakku, Professor in the Department of Statistics & Computer Science, was reappointed as the Dean of the Faculty of Science, University of Peradeniya, for a period of three (03) years with effect from the 27th of April 2019.

Official Opening of the New Building for the Department of Statistics & Computer Science



The ceremonial opening of the new building of the Department of Statistics & Computer Science, Faculty of Science was held on the 10th of June, 2019. Professor Upul B. Dissanayake, Vice-Chancellor of the University was the chief guest at the ceremony. Professor S.H.P.P. Karunaratne, Deputy Vice-Chancellor; Professor Saluka R. Kodituwakku, Dean, Faculty of Science; Dr. Ruwan D. Navarathna, Head of the Department, Academic and Non-Academic Staff Members, and students were also present. The new building has lecture theaters, laboratories, staffrooms etc. for teaching, training and research activities.



Ceremony of Laying the Foundation Stone for the Administrative Building of the Faculty of Science



The Foundation Stone Laying Ceremony for the proposed Administrative Building of the Faculty of Science, University of Peradeniya was held on the 15th of May, 2019 at the auspicious time of 10.31 am. The Vice-Chancellor, Professor Upul B. Dissanayake, Deputy Vice-Chancellor, Professor S.H.P.P. Karunaratne, Dean of the Faculty of Science, Professor S.R. Kodituwakku, Heads of Departments, Academic and Non-Academic Staff members were present at the ceremony. The new building will provide more space to the administrative and welfare activities of the Faculty.

Towards sustainable Environment Management, University of Peradeniya



The Centre for Environmental Studies (CES) organized a workshop to share the good practices adapted by the Faculty of Science in relation to chemical waste management and waste paper recycling with the other Faculties on the 07th of May, 2019 at the PGIS. About seventy participants from the environmental subcommittees of different Faculties, representing academic, technical and administrative staff, attended the event. Dr. Atula Bandara, Dr. Thilanka Gunaratne and Mr. Saumya Bandara shared their experiences in improving environmental conservation of the Faculty of Science through a very active environmental management committee. Prof. Upul Dissanayake, Vice-Chancellor and the Deputy Vice-Chancellor, Prof. S.H.P.P. Karunaratne highlighted the University's commitments in getting the ISO14001 certification and upscaling the green matrix index. The Director, Prof. S.P. Nissanka and Deputy Director/Training, Prof. Parakrama Karunaratne of the CES, talked about the initiative taken by the CES in this regard and the Chief Medical Officer, Dr. P.M.A. Samarakkody explained the steps that should be taken to upgrade the green matrix index ranking.

Donations to The Health Centre - University of Peradeniya



Two folding beds with mattresses and a blood box (Ice Box) were donated by the Centre for Distance and Continuing Education (CDCE), to the Health Centre, University of Peradeniya. These beds were handed over to Dr. P.M.A Samarakkody the Chief Medical Officer of the Health Centre on the 25th of March, 2019 by Prof. Mallika Pinnawala, Director/Centre for Distance and Continuing Education. Mr. Saman Rajapaksha, Acting Registrar/University of Peradeniya; Dr. H.M.C.L. Herath, Dr. W.D.K. Lenadora, and other staff members of the Health Centre and CDCE were also present at the event.

Teaching Methods workshops for B. Ed. Students

Several workshops were organized for students following the degree of the Bachelor of Education by the Department of Education on the 13th and 14th of June. The main intention of the workshops was to enhance the professional skills required for teaching.



A Programme on Team Building



On the 05th of June, 2019, the temporary staff of the Department of Psychology conducted a programme at the Department premises for students specializing in Psychology in order to develop their team building capacities. The programme was highly appreciated by the students. Working successfully in a team is a skill we all need to have in our lives and the workshop contributed greatly to developing this capacity in students.

Workshop on the Power of Body Language



A workshop on "Power of Body Language" was held on the 11th of June, 2019 at the Seminar Room of the Faculty of Arts by Mr. P.Y.O. Perera, an Assistant Lecturer of the Department. All students were invited and more than a hundred attended the workshop. It was aimed at increasing the awareness of human body language and its impact on our day-to-day activities as well as demonstrating how one can read a person's mind through his/her body language.

Workshop on "Traditional Healing"

Indigenous medicine and traditional methods used in psychological healing in Sri Lanka has a long history of practice. The final year undergraduates of the Department of Psychology conducted this programme on the 26th of June, 2019 with a dynamic mock devil dance many found remarkable at the University grounds. The programme was held under the guidance and supervision of Dr. Danesh Karunanayake.



'Talento 2019'

'Talento' is a competition organized by the Department of Marketing Management for the first time in its history. The purpose of 'Talento' was to create a platform for young, talented undergraduates in the Faculty of Management. After two competitive auditions, fifteen items – with more than twenty participants – were selected for the Grand Finale. The day of the performances was on the 09th of April, 2019 at the Auditorium of the Faculty of the Management. An unbiased and transparent judgment was made at the end by a respectable panel of judges including Dr. R.H. Kuruppuge, Senior Lecturer/Department of Operations Management, Faculty of Management; Mrs. A.V.K. Madhavie Herath, Senior Lecturer/Department of Economics and Statistics, Faculty of Arts and Ms. M. Chandrasena, Lecturer/Department of Fine Arts, Faculty of Arts, University of Peradeniya. The winners of this remarkable event were Mr. S. Niroshan and his team for a musical act (first place), Mr. M.K.M. Sakeer for his dancing item (second place) and Ms. Kaumadi Karunanayake for a singing item (third place).

Talk on 'Accelerating Scientific Research with Machine Learning and AI'

Dr. Rukshan Batuwita, Data Scientist at Google, conducted a talk on 'Accelerating Scientific Research with Machine Learning and AI' to the staff and students of UoP on the 11th of April, 2019 from 1.00 to 3.00 pm at the Chemistry Auditorium, Faculty of Science. The International Affairs Office (IAO) and the Faculty of Science organized the talk and the participation of more than 100 people marked the significance of the talk.

The talk provided a broad introduction on the interrelated fields of Machine Learning (ML), Artificial Intelligence (AI) and Data Science, covering major techniques/algorithms, recent advancements and major application areas, especially spotlighting accelerated scientific research in the areas of biology, medicine, chemistry, physics etc.

Furthermore, the assembly was informed on publicly available tools and platforms for ML, Data Science and AI, focusing on the Cloud platforms, and the best practices to consider in the process of applying ML to solve real-world problems.

Court Visit of Medical Students

- A group of medical students visited High Court, Colombo on the 10th of June, 2019 to witness the expert testimony of Prof. Sarathchandra Kodikara in a murder case. The students were able to get a look at court procedures and the role of the Judicial Medical Officer as an expert witness.
- The 2nd visit to the High Court, Kurunegala was on the 17th of June, 2019 to see the expert testimony of Prof. Sarathchandra Kodikara in an attempted murder case.

Undergraduate Internship and Research Symposium 2018 - Faculty of Management



The Internship and Research committees of the Faculty of Management of the University of Peradeniya successfully conducted the 'Undergraduate Internship and Research Symposium 2018' on the 04th of April, 2019. The event was graced with the presence of the chief guest, Prof. S.H.P. Parakrama Karunaratne, the Acting Vice-Chancellor of the University. The main objective of the symposium was to provide a platform for outgoing final year BBA and B.Com students of the Faculty to share their internship and research experiences with the participants who

included academic staff members, students and industry experts and other invitees. The symposium takes place as an annual event of the Faculty. Eng. M.K.D. Lawrence, Executive Director (Zones), Board of Investment of Sri Lanka, delivered the keynote speech of the symposium highlighting the talents of the graduates required by the industry. The Dean of the Faculty, Dr. M. Alfred, the Heads of Departments, the Chairman, Chairperson and members of the Faculty Internship and Research Committees, industry experts, academic and non-academic staff and students of the Faculty also participated in the event.



Opening of the New Canteen, Faculty of Engineering



The opening ceremony of the new canteen, Faculty of Engineering was held on the 06th of June 2019, at the Faculty premises. Professor Upul B. Dissanayake; Vice-Chancellor of the University, Professor S.H.P.P Karunaratne; Deputy Vice-Chancellor, Professor G.B.B. Herath; Dean, Faculty of Engineering, Academic and Non-Academic staff members and students of the Faculty of Engineering were present at this occasion.



Programme Conducted by the Career Guidance Unit of the University of Peradeniya

The Career Guidance Unit Serving the Wider Community



The Career Guidance Unit conducted a workshop for A/L students of Mahanama College, Getambe, Kandy, based on a request made by the principle. This programme is classified as a service rendered to the community by the University. The programme was held on the 25th of June, 2019 from 9.00 a.m. to 12.00 noon at the Career Guidance Unit. The main purpose of this workshop was to provide career orientation to students for focusing on their Advanced Level exam. Forty-two students participated in the programme.

Communication Skills Development Programme



The Career Guidance Unit (CGU) started a series of training programmes on communication skills for undergraduates. After conducting an internet-based survey on the demand for such a training for undergraduates for career development, it was found that more than 350 students were looking for such training. The CGU planned and conducted training sessions jointly with the Alumni Association of UOP for interested students. The programmes were held on the 04th, 06th, 11th, 13th, 18th and the 20th of June, 2019 at the Career Guidance Unit. The programme was conducted after the working hours of weekdays to facilitate participation. Thirty students participated in the training sessions.

Undergraduate Research Symposium 2019



The first Undergraduate Research Symposium of the Faculty of Dental Sciences was held on the 15th of June, 2019 at the K. Bambaradeniya Auditorium of the Faculty, with the participation of Professor Upul B. Dissanayake, the Vice-Chancellor of the University of Peradeniya, as the chief guest. The guest speech was delivered by Prof. S.A.M. Kularatne, Professor of Medicine from the Faculty of Medicine, University of

Peradeniya, on the importance and the relevance of clinical research.

Research projects conducted by final year dental undergraduates were presented at the event and the 3 best presenters were chosen. Certificates were awarded to all presenters for their participation. Dr. J.A.V.P. Jayasinghe, Dean/Faculty of Dental Sciences, academic and Non-Academic staff and a large



Classics Trivia Tournament 2019



Classics Trivia Tournament is the newest addition to the events organized by the Classics Students' Association, Department of Classical Languages, Faculty of Arts. Organized in the form of a group competition, the Trivia Tournament was open to all undergraduates, past students, and staff members of the University of Peradeniya. This year's event was held on the 13th of June, at the Faculty of Arts, with the participation of a great number of enthusiasts of the Graeco-Roman world.

One of the aims of the tournament was to show the timeless influence of Greek and Roman civilizations on the 21st century. The event became a vibrant space for the enthusiasts of Graeco-Roman mythology, history and popular culture to meet others who share their passion in a friendly atmosphere whilst allowing them to test their knowledge of the classical world.

Thirteen (13) teams of four (52 participants) competed along with an eager audience to cheer them on. Thus the event brought together like-minded people, and allowed them to showcase their expertise in this field outside the standard test papers.

The tournament consisted of several question rounds with the competing teams leading to a final round. The event was concluded with an intense final round with team "Nemo" from the Faculty of Arts winning the tournament against the team "1st Order" from the Faculty of Science.

The Classics Trivia Tournament which started off as an experimental idea of a few ended up being a hot topic of discussion in many Faculties, amongst students and staff alike. It is the wish of the Classics Students' Association to continue the event in the years to come.



Programme on Inter-religious Solidarity and the Collective Responsibility of the Citizenry



A programme on inter-religious solidarity and the collective responsibility of the citizenry was held at the Department of Law on the 10th of June, 2019. The event was organized by the Law Students

Association of the University of Peradeniya. The event was moderated by Dr. Kalana Senaratne (Senior Lecturer/Department of Law) while the main speaker of the event was Mr. Nalin Dissanayake, the President of the Peradeniya Students Union (PSU), who updated and conveyed views on confronting the relationships between different ethnic and religious communities following the Easter attacks. The programme can be regarded as a successful attempt to promote open discussions aimed at fostering greater inter-religious and multi-cultural understanding within the student community of the University of Peradeniya.

DEPARTMENT OF PALI AND BUDDHIST STUDIES

Workshops



- The Department of Pali and Buddhist Studies International Committee of the Red Cross (ICRC) organized an international conference on the theme of International Human Law (IHL) and Buddhism on 03rd of April 2019 in collaboration with the Department of Pali and Buddhist Studies.
- The research component is a compulsory course of Honors Degree Programme of the Faculty of Arts, University of Peradeniya. The Department of Pali and Buddhist Studies organizes an Annual Workshop on Research Methodology with the intention of facilitating final year students in Humanities and this year, it was held on the 8th of April, 2019 at the Seminar Room, Faculty of Arts. There were 135 participants at the workshop.



Kick-off Meeting of "Toolkit" Project

The kick-off meeting of the Toolkit Project was held from 07th to the 12th of April, 2019 at the University of Bologna, Italy. Representing UoP, the Vice-Chancellor and Acting Director, International Affairs Office (IAO), took part in the meeting and the implementation process of internationalization at UoP was taken into consideration.

TOOLKIT is a multinational Erasmus project co-funded by the European Union with the University of Peradeniya as one of its partners. The project is in the frame of Key Action 2; capacity building in the field of higher education. The main aim of the project is the enhancement and modernization of the internationalization strategies undertaken by Universities in Asian Countries. This will happen through the mutual exchange of expertise and practices of internationalization in Asia and Europe.

Certification Awarding Ceremony of the Short Course on Industrial Safety, Emergency Preparedness and Environmental Management

The Centre for Environmental Studies offers a certificate course on Industrial Safety, Emergency Preparedness and Environmental Management with the collaboration of the National Authority for the Implementation of the Chemical Weapons Convention, Ministry of Industry and Commerce. The awarding of certificates for the short course (Saturdays for four months) conducted for the 4th time, was held on the 06th of April, 2019 at the Faculty of Engineering, University of Peradeniya. 27 participants from key stakeholder institutes including the security forces, chemical industries, building construction companies, tourism industries, pharmaceuticals, heavy machinery manufacturers, private sector organizations and government departments followed the course. Prof. Upul B. Dissanayake, Vice-Chancellor of the University of Peradeniya and Mr. K.D.N. Ranjith Asoka Secretary to the Ministry of Industry and Commerce were the chief guest and the guest of honour respectively at the ceremony.

Workshop on Sports for Life Well-being

The fourth year students of the Department of Psychology of the Faculty of Arts, along with Dr. Danesh Karunanayake, conducted a workshop on "Sports for life well-being" on the 29th of May, 2019 in collaboration with the University Gymnasium. The main goal of this workshop was to develop the physical well-being of students which, in return, results in psychological well-being as well. Thirty-two fourth year students of the Department participated at the workshop.

Workshop to train Dental students on Tobacco and Arecanut Cessation



Oral cancer is ranked as the number one cancer affecting males of Sri Lanka. The majority of them occur as a result of smokeless tobacco (SLT) and arecanut use. The Centre for research in Oral Cancer with the help of Ministry of Health, Presidential Task Force on Drug Prevention and National Authority on Tobacco and Alcohol, have launched an island wide programme to train dental surgeons and other

relevant professionals on SLT and arecanut cessation. The same programme was conducted to train dental students on the 18th of August, 2019 at the K. Bambaradeniya Auditorium in the Faculty of Dental Sciences, University of Peradeniya. Resource persons for the programme were Dr. Hemantha Amarasinghe, Prof. W.M. Tilakaratne and Prof. Ruwan Jayasinghe. Dr. J.A.V.P Jayasinghe, Dean/Faculty of Dental Sciences, also addressed the students.



What is a Nanosatellite ?

(from page 02)



SRI-LANKAN, RAVAANA 1

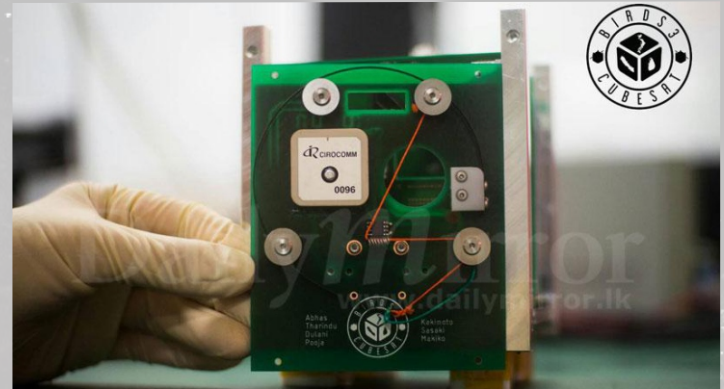
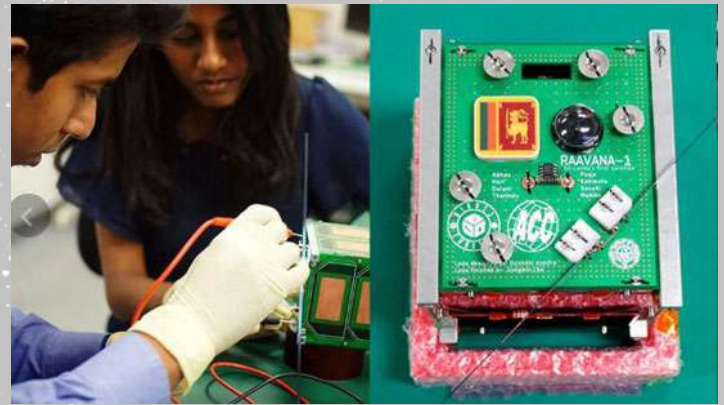
FLIES INTO ORBIT FOR THE FIRST TIME:
17 JUNE, 2019, THE FIRST FLIGHT AND A LANDMARK MOMENT.



A satellite can be viewed as an intelligent robot orbiting the earth. Although satellites orbit at a distance of hundreds of kilometers from the earth at incredible speeds (Ravana-1 orbits at a speed of 25,200 km per hour at an altitude of 400 km), they can listen to and instantly act upon commands transmitted from a ground station. For example, an operator at a ground control station can type a command to reboot the OBS of a satellite orbiting hundreds of km from the earth just as you reboot a computer in front of you! A good insight into how a satellite functions can be obtained by considering how a satellite records an image. To record an image, the camera on-board the satellite must face the side of the earth illuminated by the sun. How does the satellite find this information? The answer to this is that every satellite is equipped with a device called a "sun sensor". Signals from the sun sensor are interpreted by the OBS and the satellite can verify whether it is in the shadowed region of the earth or not. Moreover, to record an image, the satellite camera must be pointed accurately towards the earth. This means that the satellite should be free of any rotational movements. This is ensured by the ADCS circuitry. The rotations of the satellite are measured by on-board gyroscopes. As nanosatellites do not use any liquid or solid fuel, the satellite is controlled by sending currents through a system of coil which crosses the magnetic field of the earth at very high speeds (25,200 km per hour in the case of Ravana-1). The calculation of currents to the coils to correct any rotations is based on the gyroscope and sun sensor readings. This is done by the ADCS using a control algorithm. Designing electronic circuits for satellites faces 4 unique challenges:

- The circuits must be able to function under extreme temperatures. Nanosatellites are subjected to temperatures as cold as -200 C when under the shadow of the earth and to temperatures as high as +1000 C when facing the Sun.
- The circuits must withstand extremely high vibrations. The vibrations during the launch of a satellite usually range around 10 times the gravitational acceleration.
- The ordinary electronic circuits use heat sinks which rely on thermal convection to carry excess heat generated in electronic components. As nanosatellites operate in a near vacuum, special techniques are needed for thermal management.
- Radiation issues - this is less of an issue for nanosatellites as these satellites operate at low altitudes.

Therefore, the development of a satellite demands not only unique design approaches but also test procedures to confirm performance prior to launch.



Nanosatellites can be used to monitor activities such as deforestation.

Nanosatellites provide a reliable communication link that can be used for telemetry applications. For example, nanosatellites can be combined with ground based sensors to monitor and control floods.



The impact of project Ravana-I marks the successful completion of the 1st stage of a long-term project of the Arthur C Clarke Institute for Modern Technology (ACCIMT), Sri Lanka. The project was carried out in collaboration with the Kyushu Institute of Technology, Japan resulting in a direct technology transfer. Although technically advanced, the design of nanosatellites provides a low cost path to acquire space technology. At present, the cost of a nanosatellite stands around US\$ 50,000/= which is within the reach of a developing country. However, the benefits of designing a nanosatellite are many. A few of these potential benefits are listed below.

The level of advanced training received by the design team can be used to improve the quality of products developed in Sri Lanka; this will have a direct impact on our local and export markets. For example, the technical know-how acquired in designing satellite circuitry to withstand extreme conditions can be used to produce robust products.

The products of a country capable of producing space qualified equipment have more recognition in the international market.



Ceremony of Laying the Foundation Stone for the proposed building of the Department of Pharmacy, Faculty of Allied Health Sciences



The Foundation Stone Laying Ceremony for the proposed building of the Department of Pharmacy, Faculty of Allied Health Sciences, University of Peradeniya was held on the 13th of June, 2019 at the auspicious time of 09.11 am. The Vice-Chancellor, Professor Upul B. Dissanayake; Deputy Vice-Chancellor, Professor S.H.P.P. Karunaratne; Dean, Faculty of AHS, Dr. M.A.J.C Marasinghe; Head of the Department, Dr. A.C.M. Fahim; Academic and Non-academic staff members and students were present at the event. The new building will provide more space for the Teaching, Research, Administrative and Welfare activities of the Department.

A Residential Workshop on Leadership, Teamwork, and Citizenship Development



The 5 day residential workshop on Leadership, Teamwork, and Citizenship Development for new entrants to the Faculty of Agriculture was held successfully from the 03rd to the 07th of June at the

Mahailluppallama Sub-Campus. The workshop covered various activities under the themes of career and future in focus, leadership and teamwork, citizenship in a diverse culture, and managing health & an active life through sports. Two hundred and thirty-four new entrants to the Faculty following degree programmes in Agricultural Technology and Management (ATM), Food Science and Technology (FST), and Animal Science and Fisheries (ASF) participated in the workshop. It was conducted by Dr. Chandana Jayawardena, Head/Department of Agricultural Extension, with the support of other staff members of the Faculty.



Programme on "Buddhist Psychotherapy"

There are different forms of psychological therapy that can influence human well-being. The fourth year undergraduates of the Department of Psychology conducted this programme on the 19th of June, 2019 at the Department premises under the guidance and supervision of Dr. Danesh Karunanayake.

Chathurangi Eddussuriya tops the world and brings fame to the University of Peradeniya with a massive investment prize (from page 01)



The device measures the electrical resistance of a tabular soil sample taken in situ and the results are obtained instantaneously by the programmed mobile device. This invention saves enormous expenditure in the construction industry. The massive investment prize money will help develop the product and make it ready for the market. Several leading UK construction companies have agreed to purchase her product and allow access to their lab facilities if she wishes.

It all started in a Hackathon (a software development competition) organized by the Department of Computer Engineering, University of Peradeniya. The engineering idea is based on a research conducted by Mr. Janaka Priyantha, a postgraduate researcher

under the guidance of Prof. S.B.S Abayakoon /Department of Civil Engineering.

Chathurangi wishes to thank the staff of the Geo-Technical Engineering Laboratory who assisted her with conducting the experiments. She further thanked Kasun Vithanage, Namila Bandara, Rasika Maduranga, Madushan Subash who helped her complete the project. She was also grateful for the encouragement given by the former and present Heads of the Department of Computer Engineering including Dr. Dhammika Elkaduwa and Dr. Kamalanath Samarakoon, Dean/Faculty of Engineering and the Vice Chancellor, University of Peradeniya.

The patent for Chaturangi's soil analyzing method and device is pending in Sri Lanka. Patent protection for foreign jurisdictions is in progress through PCT (Patent Cooperation Treaty) administered by WIPO (World Intellectual Property Organization). Dr. Manjula Sandirigama is currently providing legal advice to obtain patent protection for her product. More information can be accessed through the COINS web page: <https://www.coins-global.com/blog/winning-ideas-could-revolutionise-the-construction-industry-2019-coins-grand-challenge/bp448/>

Workshop on CV Writing and Facing Interviews



The Career Guidance Unit conducted a workshop on CV Writing and Interview Facing for the final year students of the Department of Nursing/Faculty of Allied Health Sciences, University of Peradeniya. The expected outcome of this workshop was to improve employability skills to satisfy the employer's expectations by graduates of the University. Twenty-two students participated in the workshop held on the 10th of April, 2019 from 8.00 a.m. to 2.30 p.m. at the Career Guidance Unit.

Accounting and Finance Industry Forum (AccFIN2) – 2019



The first-ever Accounting and Finance Industry Forum (AccFIN2) organized by the Department of Business Finance, Faculty of Management, University of Peradeniya was held on the 20th of June, 2019 at the Senate Room of the University of Peradeniya with a gathering of 150 people from the academia and the industry. This forum, which will be held as an annual event, aims to develop the link between the academia and the industry, and to discuss important issues in the economy/business with the participation of the academia and the industry experts. This academia-industry collaboration will be a platform to find solutions/provide recommendations for an issue identified in a particular year. In this year's forum, the Department of Business Finance collaborated with the National Economic Council of Sri Lanka to organize the Accounting and Finance Industry Forum – 2019 under the theme, "Sri Lankan Economy and Financial Markets: Issues and Challenges". Other collaborative partners of the event were the Colombo Stock Exchange, Sri Lanka Finance Association and the Association of Kandy Chartered Accountants.

The Vice-Chancellor, Professor Upul B. Dissanayake, graced the occasion as the chief guest, and the Deputy Vice-Chancellor, Professor S.H.P.P. Karunaratne and the Dean of the Faculty of Management, Dr. M. Alfred attended the event as special guests. The panelists for the forum were Professor Lalith P. Samarakoon, Secretary General and Chief Economist, National Economic Council of Sri Lanka, Senior Professor D.B.P. Hareendra Dissabandara, Deputy Secretary General – Financial Affairs, National Economic Council of Sri Lanka, Mr. C.J.P. Siriwardana, Deputy Secretary General – Economic Affairs, National Economic Council of Sri Lanka, Mr. Rajeeva Bandaranaike, Chief Executive Officer, Colombo Stock Exchange, and Mr. Angelo Ranasinghe, Executive Director, Bartleet Religare Securities (Pvt) Ltd. Dr. Suresh J.S. de Mel, Senior Lecturer, Department of Economics and Statistics, Faculty of Arts moderated the Panel Discussion session.

Workshop on 'Creative Thinking'



The Department of Marketing Management organized a workshop on 'Creative Thinking', which was held on the

02nd of April, 2019 at the University Gymnasium. The resource person for this workshop was Mr. Thumindu Dodanthenna, Lecturer/Department of Performing Arts, at Sripalee Campus, University of Colombo. He is a screenwriter, and a well-known actor in theatre, cinema & television. The purpose of the workshop was to provide students a hands-on experience in developing the necessary soft skills for the modern world of work. More than 50 BBA undergraduates participated at the workshop representing all the five Departments in the Faculty of Management.

Awareness Programme on Fire Safety



The General Services Division of the University of Peradeniya organized an Awareness Programme on Fire Safety under the guidance of the Deputy Vice-Chancellor, Prof. S.H.P.P. Karunaratne, and the Chairman, University Safety Committee. Safety officers were appointed from all the Faculties and Service Divisions to identify the safety needs of particular places and to take immediate action regarding current security challenges. The awareness training on fire safety was conducted for those who were appointed as Safety Officers as well as for the members of the safety committee who had not participated in the previous safety training

programme. The programme was held on the 16th of May, 2019 at the Arts Theater of the Faculty of Arts and was conducted by resource persons from the Fire Brigade of the Kandy Municipal Council. The inauguration of the programme was graced with the presence of the Deputy Vice-Chancellor of the University of Peradeniya. The main objective of the programme was to provide awareness on the steps that needed to be followed when at a fire. Both theoretical and practical knowledge was provided to all the participants, including a demonstration of how to use fire extinguishers in an emergency situation.



Teaching Practice - Mentor Training Programme



The Department of Education conducted a Mentor Training Programme on the 13th of June, 2019 for the first time in relation to teaching practices of the degree of Bachelor of Education. The purpose of the programme was to make mentors aware of the effective implementation of the teaching practice component in schools.

Science Practical Programmes for G.C.E. (A/L) Students



The Science Education Unit, Faculty of Science, University of Peradeniya conducted 2 one-day Science Practical programmes for 125 G.C.E. (A/L) Biological and Physical Science students at the Science Education Resource Centre. The schools that participated included Ibbagamuwa Central College, Ibbagamuwa (19.06.2019), R.G. Senanayake Maha Vidyalaya and Sandalanka Central College, Sandalankawa (26.06.2019). The above practical programmes consisted of sessions on biology, chemistry, physics and mathematics. The participants were greatly appreciative of the experience and knowledge received from these programmes.

Collaboration between the University of Peradeniya and Choonhae College of Health Sciences, South Korea



Dr. Rasika Illeperuma, Senior Lecturer, Department of Medical Laboratory Science, visited Prof. Hee Jin Kim, the President of the Choonghae College of Health Sciences, Ulsan, South Korea on invitation, to discuss the implementation of the student staff exchange programme between the two universities. Dr. Illeperuma, being the founder and the coordinator of this MOU, was invited to visit the Choonhae College of Health Sciences to discuss future endeavours as well as to deliver a lecture on the topic "Health System of Sri Lanka". The President and the staff of the Choonghae College of Health Sciences warmly welcomed Dr. Illeperuma

and had lengthy discussions on how to implement the staff student exchange programme. As an initiative, ten nursing students from the Choonghae College of Health Sciences will visit Sri Lanka (in July 2019) with a few staff members to participate in community based activities together with nursing students of the UOP. Two Nursing Department staff members from the Faculty of Allied Health Sciences will be invited to the Choonghae College of Health Sciences for a training programme. This project is supported by a KOICA grant received by the Nursing Department of the Choonghae College of Health Sciences, Ulsan, S. Korea.



Research on Wetlands; Water Quality Improvement (from page 02)



The discharge of poorly treated wastewater has polluted receiving water-bodies leading to a decline in their beneficial use. A major reason for such discharges is believed to be the lack of access to appropriate treatment technologies in terms of installation and operating costs, and ease of operation. Constructed wetlands are used for wastewater treatment throughout the world but have not received the attention they deserve as effective treatment systems. The technology is potentially low cost, requiring a relatively lower level of maintenance, and having an arguably smaller environmental footprint since it is a nature-based system. Plant uptake and conversion, and microbial processes are the major waste treatment mechanisms involved in constructed wetlands. Wetland systems are especially considered to be potentially more suited to tropical environments because, in such conditions, maximum biomass production and microbiological activities can be maintained throughout the year. Thus the potential of constructed wetlands as a low-cost intervention for water pollution issues in developing countries deserves greater consideration.

The project 'Wetlands for Tropical Applications' was initiated as a collaborative research of the University of Peradeniya with Nanyang Technological University, Singapore and Saitama University, Japan. Wetlands have been used to improve water quality in domestic wastewater, industrial wastewater, landfill leachate, polluted lake water as floating wetlands etc. Research findings have highlighted the selection of the best plant species for water quality improvement, plant management in wetland systems and the engineering design of wetland systems. With these findings, a team deployed floating wetlands at the Kandy Lake with a beautiful flowering plant – Cannas. These

ornamental flowers act like filters by bed trapping river sediment and absorbing lake pollutants. In 2017, the project "Mitigation of Pollution at Kandy Lake and Mid-Canal" was awarded the ASEAN Outstanding Engineering Achievement Award by the ASEAN Federation of Engineering Organizations (CAFEO) as well as the Prestigious Engineering Achievement Award (PEAA) by the Institute of Engineers, Singapore (IES). The project is led by Dr. K.B.S.N. Jinadasa, Prof. M.I.M. Mowjood, Prof. G.B.B. Herath, Dr. C.S. Kalpage, Dr. G.M.P.R. Weerakoon of University of Peradeniya in collaboration with Prof Ng WunJern (NTU), Prof. Norio Tanaka (SU) and Dr. S.K. Weragoda, National Water Supply and Drainage Board.

Recent publications proceeding from the project:

Wetlands for Tropical Applications, Wastewater Treatment by Constructed Wetlands (2011) Editors : Norio Tanaka, WunJern NG, K.B.S.N. Jinadasa, Publisher : Imperial College Press, ISBN : 13 978-184816-297-6, 10 1-84816-297-9

Book Chapter: Solid Waste(SW) Leachate Treatment using Constructed Wetland System (2018) Authors: K.B.S.N. Jinadasa, T.A.O.K. Meetiyagoda and WunJern Ng Publisher: John Wiley & Sons Ltd Contribution . <https://doi.org/10.1002/9781119268376.ch13>

G. Weerakoon, K.B.S.N. Jinadasa, G.B.B. Herath, M.I.M. Mowjood, J.J.A. Van Bruggen (2013), Impact of the hydraulic loading rate on pollutants removal in tropical horizontal subsurface flow constructed wetlands, Ecological engineering, 61, 154-160, DOI: 10.1016/j.ecoleng.2013.09.016



Library News - Achievements

Orientation of the Diploma in Management & Development Programme – 2018/2019



The CDCE organized an Orientation Programme for students who had registered for the Diploma in Management & Development Programme (special intake) – 2018/2019 on the 30th of May, 2019 at the Auditorium of the Faculty of Veterinary Medicine and Animal Science.



Director, Prof. Mallika Pinnawala, Acting Registrar/University of Peradeniya, Mr. R.V.S.P. Rajapaksha, Deputy Director /Training, Dr. S Maheshwaran, Assistant Registrar, Ms. U.G.L.B. Jayasooriya, the staff of the CDCE and registered students participated in the Orientation Programme.

Fellowship by Achievement

Dr. (Ms.) Champa N. K. Alahakoon, Senior Assistant Librarian/University of Peradeniya, was awarded the Fellowship of the Sri Lanka Library Association in 2018/2019 which is a remarkable professional achievement a member can achieve in his/her career.

She was also selected for its Council of 2019/2020 as an Education Officer of the Sri Lanka Library Association.

Visit of Delegates from e-learning Centre, University of Hyderabad, India on the 05th of April, 2019



Prof. J. Prabhakara Rao, Director/e-learning Centre; Prof. R. Siva Prasad; and Prof. Vasuki Belavadi from University of Hyderabad, India visited the University of Peradeniya on the 05th of April, 2019 to meet the COL-CEMCA Project Team and to seek possible avenues for online learning through a collaboration between the University of Hyderabad and the University of Peradeniya. Prof. Parakrama Karunaratne, the Deputy Vice-Chancellor of the University; Prof. Mallika Pinnawala, Director/Centre for Distance and Continuing Education; Dr. W.D. Chandrasena, Deputy Director/Learning Resources, CDCE; Dr. S. Maheswaran, Deputy Director/Training, CDCE, of the University of Peradeniya participated in the discussion.

Details of Retired & Resigned Academic Employees**From 01.04.2019 to 30.06.2019**

Name	Designation	Faculty	Service Year
Prof. W.A.D.P Wanigasundara	Professor	Agriculture	25
Pro. V.A Sumanasinghe	Senior Professor	Agriculture	30
Mr. K.M.B.N Kouara	Assistant Library (Library Service)	Library	0.8

Appointments Made for Academic Posts**From 01.04.2019 to 30.06.2019**

Name	Designation	Faculty	Effective Date
Dr. L.A.A. Pradeepika	Lecturer(Probationary)	Faculty of Dental Sciences	05.04.2019
Dr. W.A.M.U.L Abeysinghe	Lecturer(Probationary)	Faculty of Dental Sciences	10.05.2019
Dr. N.H. Senerath	Lecturer(Probationary)	Faculty of Dental Sciences	10.06.2019
Ms. J.M.P.D Jayasundara	Lecturer(Probationary)	Faculty of Arts	17.04.2019
Mr. K.M.B.N Konara	Lecturer(Probationary)	Faculty of Arts	17.04.2019
Mr. L.A.S Wickramasinghe	Lecturer(Probationary)	Faculty of Arts	23.04.2019
Ms. H.M.D.K Ariyawansa	Lecturer(Probationary)	Faculty of Arts	02.05.2019
Dr. H.M.P.U Dematawa	Lecturer(Probationary)	Faculty of Medicine	15.05.2019
Dr. K.M.P.N Perera	Senior Lecturer	Faculty of Allied Health Sciences	03.06.2019
Mr. W.D Wickramasinghe	Lecturer(Probationary)	Faculty of Allied Health Sciences	02.05.2019
Rev. W Indanada	Lecturer(Probationary)	Faculty of Arts	09.06.2019

Details of Retired Non-Academic Employees**From 01.04.2019 to 30.06.2019**

Name	Designation	Place of Work	Service Year
Mr. O. Hallaldeen	Drawing Office Assistant (Grade I)	Faculty of Engineering	25
Mr. U.G. Tikiribanda	Labourer (Special Grade)	UES, Dodangolla	36
Mrs. K. J. Samarasekera	SPS to the Vice-Chancellor	Office of the Vice-Chancellor	35
Mr. K.V. Jayasinghe	Labourer (Grade I)	Maintenance Division	19
Ms. L.D. Dabare	Senior Staff Assistant	Main Telephone Exchange	31
Mr. D.G.S. Siriwardena	Technical Officer Grade I	Faculty of Engineering	32
Mrs. G.G. Kusumawathi	Labourer (Grade I)	Landscape Division	25
Mrs. V.W. Alawattagama	Senior Staff Assistant	Office of the Deputy Vice-Chancellor	40
Mr. M.G. Senaratne	Mason (Special Grade)	Maintenance Division	33
Mr. E.M.G. Abeykoon Banda	Fitter (Special Grade)	Maintenance Division	18
Mr. D.G. Yasaratna	Laboratory Attendant (Special Grade)	Faculty of Engineering	34

Appointments Made for Non-Academic Posts**from 01.04.2019 to 30.06.2019**

Name	Designation	Faculty	Effective Date
Ms. G.G.M.I. Jayaweera	Full-Time Sub-Warden (Grade II)	Sarasavi Medura Hostel	04.06.2019
Mr. N.M.A.N. Bandara	Mechanic (Grade II)	Faculty of Dental Sciences	03.06.2019
Mr. J.C. Jayasinghe	Mechanic (Grade II)	Faculty of Dental Sciences	03.06.2019
Mr. A. H. M. D. M. B. Abeyratna	Attendant (Health Services) (L. Grade)	Fac. of Vet. Medicine & Animal Science	20.06.2019
Mr. K. G. S. Jayaweera	Attendant (Health Services) (L. Grade)	Fac. of Vet. Medicine & Animal Science	20.06.2019

Resignations Received**for the Period from 01.04.2019 to 31.06.2019**

Name	Designation	Faculty	No. of Service Years
Mrs. K.M.S.U.S. Kumari	Nursing Officer (Dental) (Grade II)	Faculty of Dental Sciences	08
Mr. D. M. K. D. Ariyawansa	Carpenter (Grade II)	Faculty of Science	02

Closing Ceremony of the Induction Programme for Academic Staff – 2019



The Staff Development Centre of the University of Peradeniya completed the 16th Induction programme for probationary academic staff members on the 05th of April, 2019. The programme was held on the following days at the Staff Development Centre.

- 01st Segment – 21st to 25th January, 2019 and 28th January to 01st February, 2019
- 02nd Segment – 18th to 22nd February, 2019 and 25th February to 01st March, 2019
- 03rd Segment – 25th to 29th March, 2019 and 01st to 05th April, 2019

The closing ceremony of the above programme was held at the auditorium of the Staff Development Centre on the 05th of April, 2019 at

3.00 p.m. Prof. Upul B. Dissanayake, the Vice-Chancellor, Prof. Parakrama Karunaratne, the Deputy Vice-Chancellor, Prof. S.R. Kodituwakku, Dean/Faculty of Science, Dr. Vajira Jayasinghe, Dean/Faculty of Dental Sciences, Mr. Saman Rajapaksha, the Acting Registrar, University of Peradeniya and Mr. E.A.R.M. Edirisinghe, the Bursar, University of Peradeniya and a few resource persons graced the occasion. Thirty-three probationary academic staff members were awarded certificates for the successful completion of the induction programme. Thirty-five internal and external experts took part in the programme as resource persons.



Workshops on the Overview on Qualitative Research Methods and Data Analysis



Two half-day workshops titled Overview on Qualitative Research Methods and Data Analysis was held on the 24th of June, and the 1st of July, 2019 organized by the Medical Education Unit.

There were 23 participants including permanent academic staff and research assistants from Faculties of Medicine, Veterinary Medicine and Allied Health Sciences of the University of Peradeniya. These workshops were conducted with the assistance of resource persons in the Faculties of Medicine of the Universities of Peradeniya and Rajarata.

The sharing of experiences on the conduct and publication of qualitative research was highly appreciated by the enthusiastic participants.

DENTS Games 2019



The opening ceremony of the annual sports event of the Faculty of Dental Sciences, DENTS Games 2019, was held at the Faculty premises on the 17th of June, 2019. Dr. W.M.P.S.K. Wijekoon, Acting Dean of the Faculty of Dental Sciences and several other academic staff members and students were present at this occasion.

The events of DENTS games include badminton, table tennis, football, volleyball, cricket, basketball, weight lifting, marathon, chess, carrom, checkers and table tennis. This event brings together all students and academic and non-academic staff of the Faculty. The conclusion of DENTS Games will be marked by holding the DENTS night where awards and certificates will be awarded to the winners.

The University of Peradeniya wins the overall championship at the University Bioquest 2019

Mapping the unique biodiversity of Sri Lanka in a global contest involving 29 teams from leading Universities across the globe, the University of Peradeniya topped the University Bioquest 2019 competition with record scores. Through biodiversity spotting and identification, the team brought home two trophies winning the prestigious overall championship title for the year 2019. The Biology Guild of the Faculty of Agriculture in collaboration with the Zoologists' Association of the University of Peradeniya of the Faculty of Science, formed the winning team comprising of 75 members. The competition was organized by the QuestaGame© team to discover, identify and map biodiversity for research and conservation through the involvement of citizen scientists. Mr. Kumudu Wijesooriya (first runner-up in the Best Individual Spotter and Identifier categories of UniBioquest 2019) and Mr. Tharindhu Wickramahewa (Top Sighting of UniBioquest 2019) were individually recognized for their exceptional performance in the competition.



First Runner-up in Best Individual Spotter and Identifier categories of Uni Bioquest 2019

Mr. Kumudu Wijesooriya
Zoologists' Association of University of Peradeniya Faculty of Science



Top Sighting of Uni Bioquest 2019
Mr. Tharindhu Wickramahewa Biology Guild Member
Faculty of Agriculture



Mr. Anushka Tennakoon
Vice President – Biology Guild
Faculty of Agriculture



Dr. Dimanthi Jayatilake Senior Treasurer Biology Guild
Faculty of Agriculture



Dr. Suranga Kodituwakku
Senior Lecturer
Faculty of Agriculture

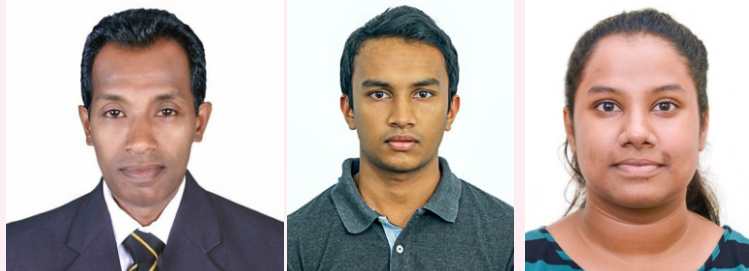


Peradeniya Soccerites Enter the Semi-finals of the FA Cup University League



The University of Peradeniya Football players won the 02nd round match with the University of Kelaniya by a comprehensive margin and entered the semi-final stage of the Sri Lanka Universities League of the FA Cup tournament. The final score was 2:0 and the match was played at the University of Kelaniya grounds on the 30th of June, 2019. The tournament is conducted by the Football Federation of Sri Lanka. The other selected teams for the semi-finals were the Universities of Moratuwa, Colombo, and Sabaragamuwa.

World University Games - 2019 Napoli, Italy



The World University Games – 2019, was scheduled to be held from the 03rd to the 14th of July, 2019 in Napoli, Italy. The International University Sports Federation (FISU) conducts this competition once every 2 years as an international multi-sports event for University athletes. This event is the largest multi-sports event in the world apart from the Olympic Games, which is the most prestigious sporting event for University Sportsmen in the world as well. The Sri Lanka Universities Sports Association (SLUSA), being a member of FISU, has selected 14 officials and 53 undergraduates from all the National Universities in Sri Lanka.

Mr. S.M.A.B. Samarakoon has been selected as the group leader of the athletic team in this tour, while Mr. T.D. Wickramanayake (M/17/191) and Miss T.D. Karunathilake (M/17/078) will participate in Table Tennis and Swimming championships respectively in this international competition.

Selected to the National Pool



Mr. Pasindu Malinda Perera, a student of Faculty of Management holding the student registration number MG/16/105, has been selected to the Sri Lanka National Baseball pool. Initially, Pasindu participated for the pool of 40 players along with Mr. Nimesh Chathuranga and Mr. Tharindu Jayarathna, representing the University of Peradeniya.

The final selection of the National Baseball team was held on the 18th and 19th of May. He was selected as one of the final 24 players to represent Sri Lanka in the upcoming West Asia Baseball Championships scheduled to be held from the 15th to the 20th of July at Diyagama, Japan Friendship Baseball Grounds, with the participation of 6 countries i.e. Sri Lanka, India, Pakistan, Iran, Nepal and Bangladesh.