Wednesday the 31st of May 2017

Daily News

Vidya

The Official Newspaper of the Ministry of Science, Technology and Research

CERN to assist Sri Lanka

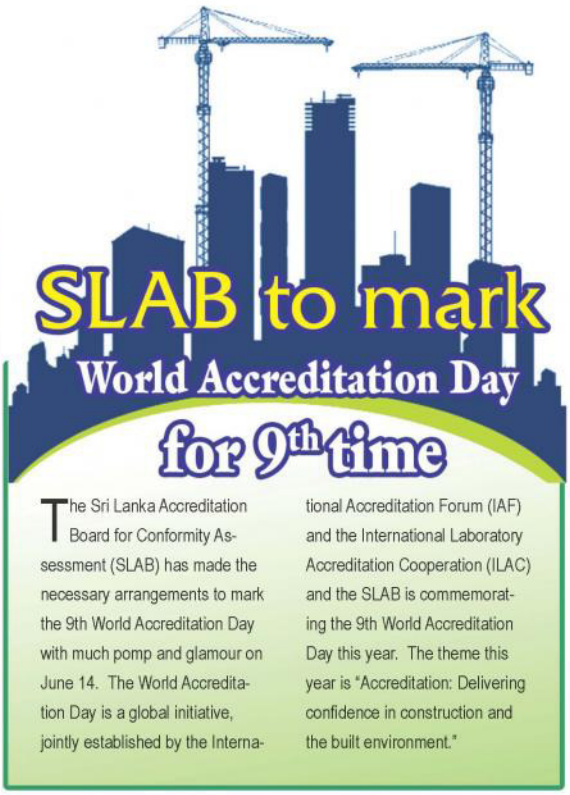
to develop Physics teaching and scientific collaboration

Mahesh Samarasekara
Media Secretary

Minister of Science, Technology and Research, Susil Premajaytha has announced that a Steering Committee will be established in Sri Lanka to develop physics education at the high school and university levels and to strengthen cooperation with the European Organization for Nuclear Research (CERN). The Committee would comprise of a core group drawn from universities and relevant agencies, such as the Ministry of Science, Technology and Research, COSTI, NSF, etc.

The Minister made this observation when he addressed an event on Wednesday 3 May 2017 in Geneva, to mark the visit to CERN by the first scientific delegation from Sri Lanka comprising 5 Sri Lankan physicists representing universities of Sri Lanka from 3-5 May 2017. Sri Lankan Permanent Representative to the UN in Geneva and Consul General to Switzerland Ravinatha Aryasinha and officials of the Mission who initiated the process were associated in the event.

Continued on page 03...



SLAB to mark World Accreditation Day for 9th time

The Sri Lanka Accreditation Board for Conformity Assessment (SLAB) has made the necessary arrangements to mark the 9th World Accreditation Day with much pomp and glamour on June 14. The World Accreditation Day is a global initiative, jointly established by the International Accreditation Forum (IAF) and the International Laboratory Accreditation Cooperation (ILAC) and the SLAB is commemorating the 9th World Accreditation Day this year. The theme this year is "Accreditation: Delivering confidence in construction and the built environment."

ITEX 2017

Sri Lanka bags Gold Medal

The International Invention, Innovation & Technology Exhibition (ITEX) was held from 11 – 13 this month at Kuala Lumpur Convention Centre, Malaysia. Four young inventors got the opportunity of participating in this exhibition with the full sponsorship of the Sri Lanka Inventors Commission (SLIC). At the exhibition, the "Light Stick" invented by Master Tharuka Dilshan Herath won the cup for Best Invention Award - Junior Category and Gold Medal from WYIE and Firi award of the 1st institute Inventors and Researchers in Iran for the Best Inventor presented by President of IFIA.

Continued on page 03...

Save the date!

SLAB Celebrates World Accreditation Day on 14th June 2017

On Wednesday, June 14, the Sri Lanka Accreditation Board will celebrate World Accreditation Day 2017 and raise awareness of the importance of accreditation.The celebrations include a certificate awarding ceremony and technical seminar on the theme.

9th of June 2017 marks World Accreditation Day as a global initiative, jointly established by the International Accreditation Forum (IAF) and the International Laboratory Accreditation Cooperation (ILAC), to raise awareness of the importance of accreditation.This is the 09th consecutive year, the SLAB is celebrating the World Accreditation Day. Each year, the International Accreditation Forum (IAF) and International Laboratory Accreditation Cooperation (ILAC), which are the apex bodies in the world for accreditation jointly, decide on a common theme.

This year's theme focuses on delivering confidence in construction and the built environment. In order to explain the use of accredited conformity assessment in the world, the Public Sector Assurance website www.publicsectorassurance.org has been established to showcase different global examples including examples from Sri Lanka where accreditation has been used to support construction and the built environment and implementation of regulations.

As in previous years, the day will be celebrated across the world with the hosting of major national events, seminars, and press and media coverage, to communicate the value of accreditation to those working in the sector including building owners, operators, contractors, manufacturers, designers, architects, and structural and engineers. As well as demonstrating how accreditation is used by policy makers, local authorities and regulators to support construction-based regulation, environmental protection, public safety, fraud prevention, public trust and innovation. Standards and accredited conformity assessment are market-based tools that can be used in the construction sector to cover construction products and materials, building techniques and practices onsite health and safety, environmental impact, to even the use of digital technology in smart buildings.

The Construction sector is complex and highly competitive, and provides challenges for companies seeking to improve margins, and reduce cost whilst improving quality and ensuring a safe environment on construction sites. Accreditation supports the construction sector to control risk, help drive efficiency, demonstrate regulatory compliance, and provide supply chain confidence.

The building sector is important for economic development, employment creation and the environment. The volume of construction output is forecast to grow by 85% to $ 15.5 trillion worldwide by 2030. Drastic change in Sri Lanka is also expected within few years asresult of the initiatives taken by the Ministry of Housing & Construction and Megapolis and Western Development.

The Cabinet of Ministers of Sri Lanka approved SLAB's proposals for making Accreditation Mandatory in taking Technical Decisions. This year's theme paves the way for implementation of proposals of Cabinet of Ministers in the Construction Industry. Sri Lanka Accreditation Board as the implementing institution, has taken necessary initiatives to implement proposals of Cabinet of Ministers in 08 major sectors namely as Food & Agriculture, Occupational Health & Safety, Constructions, Social care & security, Energy, Environment, Health and Trade & Consumer Protection.

Accreditation can support the Construction Sector to meet its need for smarter, cleaner and safer construction by providing assurance into the safety of the workforce on-site, the quality and origin of the construction product and raw materials, the energy efficiency of buildings, the quality of design and architecture, the safe installation of electrical and gas networks, protect environment and the long-term sustainability of buildings.

The picture also highlights the use of conformity assessments for different purposes Source :www.ilac.com

As shown, results are accomplished in part by requiring services of accredited laboratories, inspection bodies and certification bodies. Specifically, laboratories are used to determine the quality of raw materials and testing of certain parameters at different stages of constructions. Safety inspections are carried out on a range of activities associated with raw materials, construction process, and preparation of construction sites, installation & operation of machineries at construction sites, installation of equipment / facilities of buildings after completion of construction and regular maintenance and operation of facilities of completed projects. Certification of Quality Management Systems of Constructors provides assurance to regulators and stakeholders that the constructions are done in accordance with defined process and complying with regulatory requirements as well.

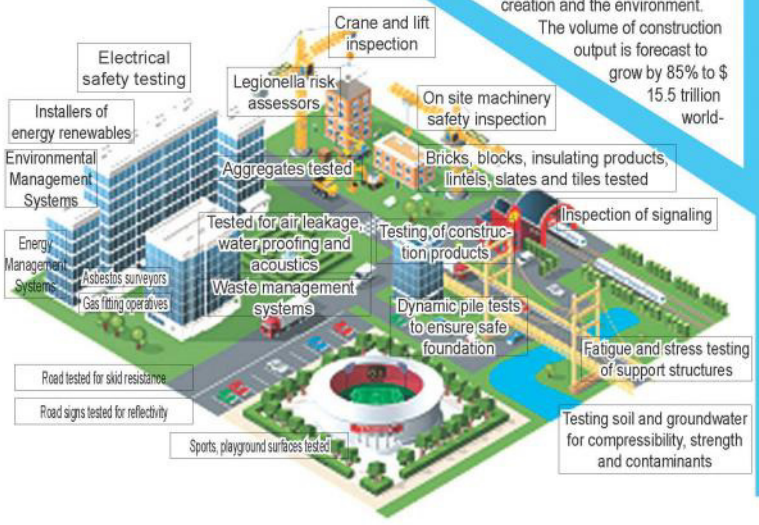
As the National Accreditation Authority of Sri Lanka, Sri Accreditation Board invites all stakeholders to take part in activities organized to celebrate the World Accreditation Day 2017. This National event will commence with inauguration session and Certificate Awarding Ceremony under the patronage of Hon. SusilPremajayantha, M.P, Minister of Science, Technology& Research. Technical seminar on Delivering Confidence in Construction and built environment will be started after the inauguration.The target group for the technical seminar may be construction companies, manufacturers of materials, service providers such as testing /calibration laboratories, inspection bodies & certification bodies, energy managers, civil engineers, quantity surveyors, architects, ministries & governmental departments, members associated with chambers, exporters & importers etc. About 200 participants are expected for the seminar.

The following topics will be discussed at this seminar by a panel composed of prominent speakers related to the subject of construction, economy, environment and conformity assessments.

- Implementation of National Construction Policy and Issues & challenges
- New Concepts in Building Designing
- Environmental Impact & long –term sustainability of construction projects
- Introduction of Green Building Certification Scheme
- How Construction Sector is important for Economic Development in Sri Lanka
- Use of Conformity Assessment Procedures and Accreditation Principles for the improvement of ConstructionIndustry in Sri Lanka

For registration & further details – slabwad2017@gmail.comand www.slab.lk

L.H.D. Bandusoma
Deputy Director
SLAB



CERN to assist Sri Lanka

to develop Physics teaching and scientific collaboration

Continued from page 01...

Minister Premajaytha noted that as a follow up to the visit, a Road-Map will be evolved to enhance scientific collaboration in High Energy Physics between the scientific community of Sri Lanka and CERN. This will include enabling Sri Lankan scientists to join the Compact Muon Solenoid (CMS) Experiment and other processes at CERN and thereby to be exposed to cutting edge technology and research in high energy physics. A delegation from CERN will also visit Sri Lanka later in the year to promote the education of Particle Physics in general, among high school students and teachers, undergraduates and scientists.

Welcoming the Minister and the Sri Lankan delegation to CERN, Director of International Relations of CERN Charlotte Warakaulle recalled the excellent relations between Sri Lanka and CERN, and particularly the intensity with which Sri Lanka had engaged with CERN over the past year. She commended the efforts of Minister Premajayantha in nurturing the young scientists of Sri Lanka, and assured CERN's continued support to developing scientific education in Sri Lanka at both the High School and University levels.

Ambassador Ravinatha Aryasinha noted that cooperation between Sri Lanka and the European Organization for Nuclear Research (CERN) was formally initiated in June 2015, following the signing of an 'Expression of Interest' (EOI) Agreement between then Director General of CERN, Prof. Rolf-Dieter Heuer and himself. This enabled 2 Sri Lankan undergraduate students to join the CERN Summer Student Programme in June 2016, and also for Sri Lankan teachers to apply to participate in the CERN High School Physics Teachers Programme. Dr. Rüdiger Voss, Senior Advisor of CERN was a special invitee of the Government at the Science and Technology for Society Forum (STS Forum) held in September 2016 in Colombo. Relations between Sri Lanka and CERN was upgraded when in February 2017, Minister Premajayantha signed the International Cooperation Agreement concerning Scientific and Technical Cooperation in High Energy Physics with CERN Director for International Relations Charlotte Lindberg Warakaulle, and Sri Lanka became the 47th country to sign an ICA with CERN. At the time, Minister Premajayantha pledged to send a delegation of physicists to CERN to familiarize themselves with the research work underway and to scope out how the two scientific communities could collaborate effectively. He noted that this year, from among 943 global applicants, which included 25 from Sri Lanka, CERN selected 4 undergraduates who will participate in the 2017 Summer Student Programme next month. As the Chair of the Group of Fifteen (G-15), Sri Lanka has also signed an 'Expression of Interest' between CERN and the G-15 which actively seeks opportunities of cooperation, and under which CERN has agreed to host 40 teachers from G- 15 countries this year to participate in a CERN Teacher Programme.

The visiting Sri Lankan Physicists' delegation comprised of Prof. W.G.D. Dharmarathne, Senior Professor in Physics, Dean of the Faculty of Technology, University of Ruhuna, Prof. Upul J. Sonnandara, Senior Professor in Physics, University of Colombo, Prof. P. Ravirajan, Professor in Physics, University of Jaffna, Prof. S. Rexy Densil Rosa, Professor in Physics, University of Colombo, Dr. (Mrs) M. L. C. Attygalle, Senior Lecturer, Department of Physics, University of Sri Jayawardenepura. Counsellor Shashika Somaratne and Second Secretary Dilini Gunasekera of the Sri Lanka Permanent Mission were also associated in the sessions.

During their stay in Geneva, the Sri Lankan physicists familiarized themselves with the several facilities in CERN, including the CERN Data Centre, the Antiproton Decelerator, the Compact Muon Solenoid (CMS), the Gas Electron Multiplier (GEM) Lab and the S'Cool lab for High School students. The physicists also held extensive discussions with the Spokesperson team and Project Managers of the CMS facility on future collaboration between the universities in Sri Lanka and the CMS experiments. In addition, the delegation visited the Synchrocyclotron and the Large Hadron Collider (LHC) superconducting magnet test hall and the Microcosm and Globe exhibitions. The programme concluded with a discussion on follow-up action with the participation of the physicists, the officials from Permanent Mission of Sri Lanka led by Ambassador Ravinatha Aryasinha and the CERN officials led by Prof. Emmanuel Tsesmelis, the Head of Relations with Associate Members and Non-Member States of CERN. Mr. Joel Butler, Spokesperson of CMS, Dr. Archana Sharma, Senior Particle Physicist CMS, Dr Ana Godinho, Head, Education, Communication and Outreach Group and Dr Sasha Schmeling, Section Leader, Teacher and Student Programmes were associated in the discussions.

Agreement has been expressed to activate all clauses of the Basle, Rotterdam and Stockholm International Conventions. The fundamental objective of these three conventions is establishing proper management of chemicals and hazardous wastes. It is expected to construct the foundation to a pure future free of poisons and contaminants. Here, Minister of Science, Technology and Research Susil Premajayantha and his team that participated in an international high-profile official meeting in Geneva, Switzerland on the activation of the Basle, Rotterdam and Stockholm International Conventions.

ITEX 2017

Sri Lanka bags Gold Medal

Continued from page 01...

The "Sand Separator" invented by Master Shanmugarathnam Kajanan of Kokuwil Hindu Vidyalaya, Jaffna won the Junior Silver Medal and the Honor of Invention cup of World Intellectual Property Organization (WIPO) .

"Teaching Learning Material for Periodic Table" invented by Masters Mailwakanam Abishek and Master Koneshwaran Thanujan of Kumburupiti Tamil Central college won the Senior Silver Medal.

Why an Accreditation Body is required for a country ?

What is the role of SLAB in Sri Lanka?

Namal Rajapaksha, Chairman, Sri Lanka Accreditation Board for Conformity Assessment

The Sri Lanka Accreditation Board for Conformity Assessment (SLAB) is the National Accreditation Authority for Sri Lanka established under the Act No. 32 of 2005. The Board functions as an autonomous body under the purview of the Ministry of Science, Technology and Research. Strengthening of the Quality Infrastructure and conformity assessment procedures in Sri Lanka and enhancing the recognition and acceptance of products and services in international and domestic markets are the main objectives of SLAB activities.

This is a brief discussion with Namal Rajapaksha, Chairman, Sri Lanka Accreditation Board for Conformity Assessment.

Why we need conformity assessment accreditation procedures?

In the present global economy, competitiveness is determined by the requirements set by world markets. The present multilateral trading system, spearheaded by the World Trade Organisation (WTO), has established new legal ground rules for international trade. At the heart of these global rules for trade between nations are the WTO agreements, negotiated and signed by a large majority of the world's trading nations and ratified in their parliaments. Bilateral and regional trade agreements have to follow the same principles. At present 164 nations have signed the agreement.

The new ground rules of trade promote free movement of goods and require that safety of products be proven through transparent and reliable mandatory requirements and conformity assessment systems, thus bringing down technical barriers to trade. These practices therefore require that national legislative systems prepare and adopt technical regulations and hold governments responsible for their enforcement. Quality, food safety, public health, occupational health & safety and environment are few basic factors which are given prominence in assuring consumer protection and public safety in a country.

The most recent incident in Wellawatte is also an example for importance of effective conformity assessment procedures in the construction of buildings. The standard of building and approval process were questioned after this incident.

In Sri Lanka too, regulations have been enacted under respective acts and monitoring and controlling mechanism has been entrusted to governmental departments and statutory bodies while complying to the international trade agreements namely as agreement on removing Technical Barriers to Trade (TBT) and Sanitary &Phytosanitory Agreements (SPS). Conformity Assessment and Accreditation procedures are now enforced all over the world and exporters and importers of Sri Lanka have encountered non -tariff barriers (NTB) due to unavailability of quality test reports, certification and inspection reports which require ensure quality of products and services.

The WTO agreements form the basis for the changes that are taking place in the world today with regard to trade principles and conformity assessment of products and services.

The legal text of the WTO agreements and the principles and objectives of the agreements form the basis for the present trade regime in the world. The Member States are obliged to follow these principles not only when acting within the framework of the agreements but also when doing other trade agreements on bilateral and multilateral bases.

The bilateral trade agreements contain specific chapters for TBT and SPS mechanisms in relation to products and services covered under the agreement. Exchanging goods and services between two countries would be in accordance with the agreed conditions and tariff limitations. However, the quality and compliance with specifications of each country are done though the use of accredited conformity assessment services. Availability of relevant accredited conformity assessment systems facilitate bilateral agreements and remove unnecessary barriers for the free movement of goods and services.

As we are aware, now Sri Lanka could enjoy benefits of re-approved GSP by the European Union. Despite of tax concessions for Sri Lankan products and services exports to EU, requirements related to conformity assessments and submission of accredited test reports and quality certificates are remained unchanged. Therefore, availability of internationally recognized and accredited conformity assessment services in Sri Lanka would be an advantage for getting maximum benefits from GSP and also from the Free Trade Agreements to be signed by the Sri Lankan Government with other countries.

As National Quality Infrastructure Institute, what are the functions of SLAB?

National Quality Infrastructure Institutions in any country require to play a major role to facilitate international and local trade. National Quality Policy approved by the Cabinet of Ministers has identified Sri Lanka Accreditation Board as one of the main institution which provides inputs to implement National Quality Policy of Sri Lanka. The Sri Lanka Accreditation Board for Conformity Assessment (SLAB) is the Accreditation Authority for Sri Lanka established under Act No. 32 of 2005. Sri Lanka Standards Institution (SLSI) and Measurement Units Standards & Services Department (MUSSD) have identified as other major NQIs in Sri Lanka.

In compliance with the Act, SLAB was entrusted to perform the following functions:

- Carrying out accreditation of CABs in accordance with International and National Standards.
  - Testing laboratories (ISO/IEC 17025)
  - Calibration laboratories (ISO/IEC 17025)
  - Medical laboratories (ISO 15189)
  - Certification bodies for systems (ISO/IEC 17021)
  - Certification bodies for products (ISO/IEC 17065)
  - Certification bodies for persons (ISO/IEC 17024)
  - Greenhouse gas (GHG) validation and verification bodies (ISO 14065)
  - Inspection bodies (ISO/IEC 17020)
  - Proficiency testing programmes (ISO/IEC 17043); and
  - Good laboratory practice (GLP).
- Promotion of accreditation activities in conformity with the guidelines laid down in the National Quality Policy.
- Conducting assessor training programmes, awareness programmes and seminars for the relevant stakeholders
- Acting as the national forum for co-operation and liaison in respect of conformity assessment.
- Establishing competence in accreditation practices and assessment procedures through promotion and dissemination of technical knowledge.
- Supporting and developing national systems for accreditation.
- Concluding agreements on mutual recognition with similar foreign and International bodies
- Organizing, managing and conducting conformity and surveillance assessments for the purpose of granting, extending, reducing, suspending or withdrawing accreditation.

What is expected from Regulators?

In the National Quality Infrastructure, the regulators with a national commitment should play a key role to safeguard and maintain good trade practice in a country in terms of public health, occupational safety, environmental protection, fraud prevention, fair trading etc. As accreditation services are provided voluntarily on the demand of stakeholders, the regulatory bodies have got a national obligation to continuously monitor the compliance of regulations and take necessary follow ups against established criteria. The above mentioned good practices will be effective, if the manufacturers or service providers comply with relevant standards and conformity assessment procedures, when products and services are delivered. This third party attestation is assured through accreditation made on relevant national and international standards.

The whole mechanism of accreditation assures the main principles of conformity assessment such as impartiality, competence, integrity, and credibility. These assessments are conducted by independent and competent assessors against established assessment procedures. When such conformity assessments are conducted in a transparent manner, it will be assured that conformity assessments are performed according to the internationally accepted accreditation principles and procedures. This will create ample market access and fair competition for goods and services. Finally, it delivers trust to customers and all other stakeholders.

How does SLAB support regulators?

As per the Cabinet Decision No 16/0070/716/003 of 2016-01-20, use of accreditation is mandatory for taking technical decisions. However, as recommended by the Cabinet of Ministers it is required to carry out detail analysis on existing regulations to identify the areas where we need conformity assessment procedures and also to identify new regulations required to facilitate the procedures for taking technical decisions. In addition, there is a common issue in the existing regulation due to lack of clear identification of implanting authorities as well as implementing mechanism.

"The proposals approved by the Cabinet of Ministers for making Accreditation Mandatory in Taking Technical Decisions consist three major activities; a) To use regulations and implement conformity assessment procedures such as testing, inspection and certification by regulators for controlling activities in relation to quality, environment, food safety, occupational health and safety, energy etc.

b) To update regulationsin which conformity assessment procedures are not mentioned and/or accreditation is not used as a means of acceptance and to include statement to reflect "not to use any facility that is not assessed and accredited".

c) To develop a conformity assessment framework which is composed of testing laboratories, inspection bodies and/or certification bodies as applicable, within and outside the regulatory bodies to facilitate accreditation."

In order to accomplish this task, SLAB has identified eight priority areas (Food & Agriculture, Occupational health & Safety, Construction, Social care & Security, Energy, Environment, Health, Trade & Consumer Protection). Implementation of proposals of Cabinet of Ministers is being done as per the Action Plan developed during the National Regulatory Conclave held in September 2016.

SLAB is willing to cooperate with regulatory bodies by providing necessary awareness on accreditation and conformity assessment procedures and expertise, provide training to regulatory bodies, assist to review existing regulations and analyze need for new regulations and introduction of effective implementation mechanisms.

What is SLAB's contribution for economic development?

As we aware, the Government of Sri Lanka has declared 2017 as the year of elimination of poverty. SLAB could facilitate to achieve set goals of the government through establishment of a network of internationally recognized accredited conformity assessment bodies to provide conformity assessment services to SME's at affordable cost.

Availability of Internationally recognized accredited services within the country at affordable cost is very much important for the SME sector to demonstrate that their products and services meet the international specifications.

Establishment of network of accredited conformity assessments encourage foreign investments. As usual prior to start business any investor in Sri Lanka, availability of quality infrastructure facilities would be considered as absence of such facilities increases the cost of production due to higher expenditures to be paid to obtain quality certificates from foreign conformity assessment bodies.

While retaining the capabilities and volume of limited large scale existing manufacturing and exports of goods and services, export development through Small & Medium Entrepreneurship (SME) is identified one of the major goal of the Government. There are major projects already started to develop SME sector to uplift their products and service in far with international requirements.

Increasing exports of Value added products and services and providing required infrastructure facilities for foreign investments would be opportunity to achieve intended results of the Government.

International Recognition for SLAB Accreditation

SLAB has been a signatory to the Mutual Recognition Arrengement (MRA) of the Asia Pacific Laboratory Accreditation Corporation (APLAC) and International Laboratory Accreditation Corporation (ILAC) for testing, medical testing and calibration. In 2015, SLAB was evaluated by an APLAC peer team for admitting into the APLAC MRA for inspection and become APLAC and ILAC MRA signatory for inspection in 2016.

SLAB has also been a signatory of the Multilateral Recognition Arrangement (MLA) of Pacific Accreditation Corporation (PAC) and International Accreditation Forum (IAF) for accreditation of ISO 9001 (QMS), ISO 14001 (EMS), ISO 22000 (FSMS) and product certification. In 2015, SLAB was evaluated by a PAC peer team for admitting into the PAC MLA for Greenhouse Gas (GHG) validation and verification bodies and become PAC MLA Signatory as the first SAARC Country admitted to PAC MLA for GHG Verification/Validation.

At present, SLAB has eight (08) International recognitions and it is expected to extend the recognition status for Proficiency Testing Provider Accreditation and Accreditation of Personnel certification bodies by 2020.

Such international and regional recognition is necessary for industries to promote their products and services in the international market and to facilitate trade on mutual grounds. In order to maintain signatory status, SLAB quality management system is to be maintained and improved to comply with the requirements of relevant international standards (ISO/IEC 17011) and rules and guidelines of the above international/regional organizations.

Peer Evaluations by APLAC and PAC are conducted once in every four year with the participation of Peer Evaluators from different accreditation bodies and comprehensive report with deficiencies is issued at the end of five days evaluation. SLAB is required to rectify deficiencies associated with the management system of SLAB prior to become as APLAC MRA /PAC MLA signatory.

As an internationally recognized accreditation body, the main challenge with SLAB was to maintain updated accreditation criteria and procedures acceptable to the international principles. In this regard, reviewing, understanding, and continuous monitoring of international accreditation needs and updating national guidelines were necessary.

What are the new areas for consideration?

Introduction of National Accreditation Schemes for Training Institutions

Promotion of GLP Recognition Scheme

Accreditation of Proficiency Testing Providers

Accreditation of Reference Materials Manufactures

Accreditation of Universities

What are the challenges?

Competence development of staff and assessors is a challenging task when the size and scope of conformity assessments get broadened. In the past, SLAB managed to maintain a competent and credible resource base despite physical limitations and financial constraints. Revisions to existing standards are being done by the Internal Standard Organizations with the introduction of new requirements for competence of personnel which require SLAB to extend the capabilities of existing experts and to identify new experts.

Metrological Infrastructure in the country is not developed as expected and in accordance with international requirements. The accreditation scheme for testing and calibration laboratories continued to be the main activity area. This scheme penetrated into many scope sectors such as chemical products, pesticides, forensic testing, food and agriculture, textile products, electrical products, soil and fertilizers etc. In the past, more efforts were taken to build and provide metrological and quality assurance support as necessary for smooth functioning of testing laboratories in the country.

Accreditation of medical laboratories was another area of concern since 2010. SLAB worked in close co-operation with the Ministry of Health in developing medical laboratory services in the country. The support given by the Ministry of Health in the medical laboratory accreditation scheme was necessaryas they are the regulatory authority for patient care and public health. Ministry of Health continued to working on upgrading laboratories in government hospitals. Competence development of staff of medical laboratories on conformity assessment was another major activity undertaken by SLAB.

SLAB intends to work closely with the Ministry of Health to introduce National Recognition Scheme for Government and Private Sector Medical Laboratories based on National Recognition Criteria developed with the involvement of stakeholders.

Introduction of effective quality assurance programme for medical laboratories facilitate the gradual upgrading of laboratories under a phased programme within defined period. Final phase is accreditation and considered as voluntary phase.

The certification of systems is the key area, as far as exports and imports are concerned, in which third party assurance for quality of products and services is sought in a systematic manner at all stages of preparation, production, delivery and clearance. Although there was a slight tendency for local accreditation, buyers at the receiving end were yet to be more concerned on internationally accepted quality certificates. Another weakness is that local manufacturers still prefer to foreign certification affiliated to foreign accreditation bodies. The locally operated certification bodies were still compelled to face heavy competition from foreign based certification bodies despite large sums of foreign expenses.

Since SLAB has earned international recognition in par with those reputed foreign accreditation bodies, in equal terms, the reliance on national accreditation, apart from the above, will be a cost effective measure. SLAB is now in the process of working with international certification bodies and accreditation bodies operating in Sri Lanka to ensure competence of activities of local offices of foreign certification bodies as per international procedures.

Product certification is another area which can be taken forward under many product and service categories. In addition to Tea and SLS mark, this can be applied to Ceylon cinnamon, health tourism, ayurveda products, agricultural products, organic products to protect Sri Lankan origin high quality products in the international and local market.

The accreditation scheme for inspection bodies continued to be slow moving, despite a wide coverage of applications for inspection in the industry. This low priority was due to the low response from regulatory authorities. Nevertheless, the ability of effective implementation of technical regulations through accreditation was highlighted as key strategy for ensuring public safety and consumer protection. In this respect, SLAB worked closely with regulatory authorities. Inspection of vehicle emission, NDT and amusement rides were the only accreditation schemes which kept on the moving. As a measure of addressing climatic controls, SLAB offered a new accreditation scheme for **greenhouse gas (GHG) validation** and verification bodies to be in line with ISO 14065. This will result in energy saving and provide solutions for controlling climatic changes to a certain extent. Across the world, accreditation bodies are taking measures to accredit GHG validation and verification bodies as per the national programmes and targets. Considering the importance of controlling climatic changes, SLAB is now ready to provide internationally recognized accreditation for GHG Validation/Verification Bodies.

Developing energy management systems is a new tool of management introduced through ISO 50001& ISO 50003. ISO 50001 will help industries to save energy and to reduce burden on the national economy as this approach reduces national fuel consumption remarkably.

> *"Quality, food safety, public health, occupational health & safety and environment are few basic factors which are given prominence in assuring consumer protection and public safety in a country."*

L.H.D. Bandusoma
Deputy Director
SLAB

Vidya
The Official Newspaper of the Ministry of Science, Technology and Research

New Accreditation Scheme for Good Laboratory Practice (GLP)

The Accreditation scheme for Good Laboratory Practice (GLP) of the Sri Lanka Accreditation Board (SLAB) refers to a quality system of management controls for research & development laboratories. GLP is based on OECD (Organisation for Economic Co-operation and Development) Series on Principals of Good Laboratory Practice and Compliance Monitoring as revised in 1997.

GLP is a managerial concept covering the organizational process and conditions under which laboratory studies are planned, performed, monitored, recorded, archived and reported. GLP principles are required to be followed by test facilities, carrying out studies to be submitted to national authorities for the purposes of assessment of chemicals and other uses relating to the protection of man and the environment.

In the early 70's FDA (United States Food and Drug Administration) became aware of cases of poor laboratory practices all over the United States. Examples of some of these poor lab practices found were; equipments not been calibrated to standard form and therefore giving wrong measurements, incorrect/ inaccurate accounts of the actual laboratory study, inadequate test systems etc.

In order to overcome these issues, OECD Principals on Good Laboratory Practice were first developed by Expert Group on GLP in 1978. The basis for the work of the Expert Group, which was led by the United States and comprised experts from the following countries and organisations: Australia, Austria, Belgium, Canada, Denmark, France, the Federal Republic of Germany, Greece, Italy, Japan, the Netherlands, New Zealand, Norway, Sweden, Switzerland, the United Kingdom, the United States, the Commission of the European Communities, the World Health Organisation and the International Organisation for Standardisation.

Complying to OECD guidelines means basically to certify that every step of the analysis is valid or not. The purpose of these Principles of Good Laboratory Practice is to promote the development of quality test data. GLPs have heavy emphasis on data recording, record and specimen retention. Test items may include pharmaceutical products, pesticide products, cosmetic products, veterinary drugs as well as food and feed additives and industrial chemicals or any other product materials.

Current Status in Sri Lanka

Though the GLP is widely used in most countries it is pre mature stage in Sri Lanka. There are many Research and Development Institutions in different fields and universities, but no GLP recognition is sought so far. Therefore, recognition of data/ results produced from studies do not recognized internationaly.

The SLAB has developed the accreditation scheme for Good Laboratory Practices (GLP) very recently based on the OECD principles. SLAB has adopted OECD requirements and guidleines directly with the after obtianng formal approval from the OECD.

The SLAB got application form Sri Lanka Institute of NanoTechnology (SLINTEC) and Initial assessment has been conducted on April and process is still on going. The SLAB has the capacity to expand the scheme for other research and development institutions in the country.

Proposal to funding agencies

At present research grants are awarded by different institutions for studies carried out by R & D Institutions, Universities and also individuals.

Sponsor means an entity which commissions, supports and/or submits a non-clinical health and environmental safety study." Sponsor can include an entity who initiates and support, by provision of financial or other resources, non-clinical health and environmental safety studies or an entity who submits non-clinical health and environmental safety studies to regulatory authorities in support of a product registration or other application for which GLP compliance is required.

The sponsor should understand the requirements of the Principles of Good Laboratory Practice, in particular those related to the responsibilities of the test facility management and the Study Director/Principal Investigator.

When commissioning a non-clinical health and environmental safety study, the sponsor should ensure that the test facility is able to conduct the study in compliance with GLP and that it is aware that the study is to be performed under GLP.

As per the above guidelines published by the OECD, it is high time to introduce requirements for research grants to consider the level of compliance with GLP requirements initially and availability of accredited GLP facilities for the use of research activities in future.

Future Perspectives

GLP could be applied for studies carried out in many fields. Therefore, SLAB is working on expansion of its assessor pool and capacity development of assors working with SLAB and its internal staff. With the expansion of local accreditation scheme, SLAB will be able to obtian international recognition for the GLP scheme which will facilitate to recognition of research outcome of Sri Lankan Research Institutions.

Regulators such as National Medicinal Regulatory Authority (NMRA) will be able to recognized GLP studies carried out by accredited GLP institutions and may be linked with the Good CInical Pratices (GLP) enabling local pahrmaceutical manufacturing at lower cost.

Reference: OECD SERIES ON PRINCIPLES OF GOOD LABORATORY PRACTICE AND COMPLIANCE MONITORING
(http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?doclanguage=en&cote=env/mc/chem(98)16)

Hiruni Kumarathunga
Assistant Director - Accreditation
SLAB

The Young Scientists Forum (YSF) of National Science & Technology Commission (NASTEC) Sri Lanka , The pioneer forum for young minds

The young Scientists Forum (YSF) of Sri Lanka hosted by the National Science & Technology Commission (NASTEC), under the ministry of Science, Technology & Research was established in year 2000 as a result of the idea came out from the world conference on science for the 21st century held in Hungary in 1999. That conference was attended by a team led by Minister of Science & Technology and Chairman of NASTEC. The main objective of the YSF is to provide an opportunity for young scientists in Sri Lanka to voice their opinion on Science & Technology related issues. Science community strongly believe that young scientists should lead the development of the society as they are the most energetic group of scientists who are rich in innovative ideas. But how they can perform their role? YSF provides the platform for young scientists in Sri Lanka to voice their opinion on Science& Technology issues both within and outside their respective institutes and thereby actively participate in the decision making process. YSF currently consists of more than 700 members of young scientists in different disciplines.

Activities of YSF are coordinated by a Steering Committee elected at the YSF annual general meeting. The YSF Steering Committee consists of dynamic and multi-disciplinary experts in science and technology. YSF annually organizes different events which enable young scientists for networking, future collaborations and to enhance their skills. The major annual event conducts by YSF is the YSF Symposium. This national symposium provides an ideal opportunity for Sri Lankan young scientists to share their research outputs and encounters they face. Young scientists in different disciplines such as agriculture, food science, environmental science, engineering, IT, medicine, economics, health sciences, social sciences and biotechnology and molecular biology get valued opportunity to look for intradisciplinary collaborations and inter disciplinary collaborations. At the YSF symposium, Merit certificates have been awarded for the best presenters to appreciate talents of young scientists.

Other than the annual symposium, YSF annually conducts workshops, special seminars and lectures aiming young scientists.

What are the plans of YSF for 2017?

Moreover, in this year, YSF is planning to conduct a short course on B asic Statistics for researchers: Principles and Practices andNational school level competition on Science and Technology to select the 'Best Teen Scientist' . Moreover, in this year YSF is going to organize YSF Awards for the "Excellence in Science Research: Once in a life time" to recognize the achievements of YSF members and to motivate them to maintain high standard in their professional carrier. Thereby, YSF warmly welcomes all young scientists in Sri Lanka to be a part of YSF family to grow bigger and stronger where young scientist lead the sustainable development of Sri Lanka.

Pradeep Piyathilaka,
Steering committee member, Young Scientists Forum, NASTEC

Let's get to know the Night Sky - 02

The largest planet of the solar system, Jupiter (Brahaspathi), can be observed right overhead in May night sky. This planet can be observed to be larger than other stars and shining brightly in a whitish yellow colour. Furthermore, as planets do not twinkle like stars, you can easily identify it.

This gas giant takes 9 hours and 56 minutes to rotate around its axis.

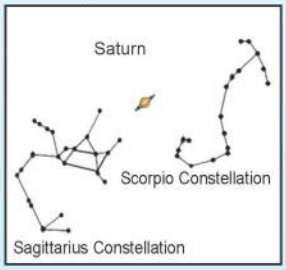
- It takes about 12 years for Jupiter to complete one orbit of the sun.

Planet Jupiter

- 67 moons orbit the Planet Jupiter. Out of them, the largest moons Ganymede, Europa, Calisto and Io can be observed through a telescope. The number of moons that can be observed at any one time can differ.

Planet Saturn

Furthermore, the most spectacular planet of the solar system, Saturn, can be observed these nights in the eastern quadrant of the sky and you can identify it at about 9.00 pm. Though this planet is not large like Jupiter, it is a little bigger than stars. Saturn being located between the constellations Scorpio and Sagittarius at present, making it more identifiable. The Scorpio Constellation is an easily recognized star pattern located towards the southern hemisphere. You can identify this constellation easily these nights at about 8.00 pm appearing as a slanted letter J or in the shape of a scorpion in the southern sky towards the east.

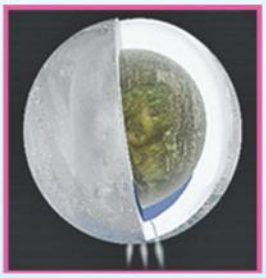


Furthermore, the constellation of Sagittarius is located near the tail of the constellation in the shape of a scorpion. It is a star pattern consisting of two trapeziums and two triangles. This star pattern can be observed after 9.00 pm and the planet Saturn can be recognized as located between constellations Scorpio and Sagittarius after identifying them.

The rings of Saturn can be observed very picturesquely when observed through a telescope.

- Saturn is the second largest planet in the solar system.
- Saturn takes 10 hours and 34 minutes to revolve around its axis.
- Saturn takes about 29 years and 06 months to complete one orbit of the sun.
- There are 62 moons orbiting Saturn.
- NASA's Cassini spacecraft has discovered that crust of Saturn's moon Enceladus contains water and hydrothermal vents spew water vapor and ice particles from an underground ocean beneath the icy crust of Enceladus.

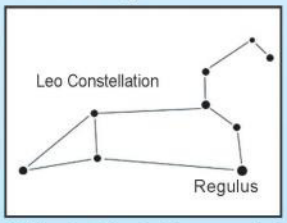
Enceladus



Leo Constellation

You can also identify the Leo Constellation at present.

At about 8.00 pm, six stars in the shape of a sickle, or an obverse question mark slightly to the west and three stars in a triangle a little to the east of those can be observed. When joined together these stars take the form of a lion making it easy for you to recognize the Leo constellation. The brightest star in this constellation is Regulus.



The Sri Lanka Planaterium expects to publish a series of articles on getting to know the night sky in the Vidya newspaper being issued with the Daily News every last Wednesday of the month.

Sri Lanka Planetarium

Vidya

Advice
R. Wijialudchumi
Secretary
Ministry of Science, Technology and Research

H.M.B.C. Herath
Additional Secretary
(Technical & Research Development)

Nandanie Samarawickrema
Additional Secretary
(Administration & Finance)

Guidance
P.M. Dharmatilake
Director
(Science and Research Development)

Himali W.K. Athaudage
Director – (Technology and International Relations)

Nazeema Ahamed
Director (Planning)

Nimali Kulathunga
Director (Planning)

A.K.P. Peiris
Chief Accountant

Co-editing
Mahesh Samarasekera
(Media Secretary)
0112-372288

B.H. Ishara Sudarshani
Dhammika Rathnayake
(Technology and Research Development Division)

Official Photographs
Dulip Nayanapriya
Ministry Media Unit

LAKE HOUSE
Government Relations Dept.

Coordination/Graphics and Creations Supervision
Samantha Karunasekera
Managing Editor – Government Relations (Lake House)
0112 429297 / 077 3493785

Editor
Jayasri Jayakody

Creations
Danushka Bandara / Ashani Jayawardana

Photo Editing
Lake House Production Graphic Department

Printing
Lake House Commercial Press

Vidya

Medical Laboratory Accreditation

Medical laboratory services areessentialin the diagnosis and assessment of the health of patients.Their services encompassarrangements for requisition,patient preparation,and patient identification,collection of samples,transportation,storage,processing and examination of clinical samples,together with subsequentresultvalidation,interpretation,report ingandadvice.

Today it has been a prevailing need and a frequently discussed issue in the country to improve quality and reliability of test reports issued by the medical and clinical laboratories and to upgrade their services to meet the International standards. Realizing this need in the medical sector, the Sri Lanka Accreditation Board(SLAB) has initiated an accreditation scheme to grant accreditation to medical and clinical laboratories based on the requirements of ISO 15189: 2012.

SLAB has accredited 17 Medical Laboratories in the country (By visiting the SLAB website anybody could search for accredited medical laboratories in Sri Lanka.) and closely working with the Ministry of Health to upgrade the quality of medical laboratories. A proposal has also been submitted to introduce a phase programme for the annual registration of medical laboratories by the Public Health Sector Regulatory Council (PHSRC)of the Ministry of Health. By visiting the SLAB website anybody could search for accredited medical laboratories in Sri Lanka.

AccreditationtoISO15189involvesanindependent SLAB assessment by specialistscientificandclinicalassessors,withexpertiseintherelevantdisciplineofpractice,conductathoroughevaluationofallfactorsinthelaboratorythataffecttheproductionoftestdata,including:

- Technicalcompetenceofstaff;
- Validityandappropriatenessoftestmethods,includingpre-examination and examinationelements-suchassamplecollectionandreporting;
- Samplequality,includingpatientidentification,handlingandtransporttomaintain sampleintegrity;
- areviewofthehistoryrelatingtopreviouspatientresultsandanyknownclinicaldiagnoses;
- Proceduresrelatingtotheuseof"referrallaboratories"suchasspecialisedtesting centresforspecificdiseases;
- traceabilityofmeasurementsandcalibrationstorelevantstandards;
- Suitability,calibrationandmaintenanceoftesteq uipment;
- testingenvironment;
- qualityassuranceoftestdata;
- acceptableturnaroundtime;
- applicationofappropriateethicalvalues.

To ensure continued compliance, accredited laboratories are regularly reassessed to check that they are maintaining their standards of technical expertise. These laboratories will also be required to participate in regular proficiency testing programs (known as external quality assurance programs or EQAS) as an on-going demonstration of their competence.

Benefits of SLAB Accreditation

Accreditation is an enabler of quality and a core component of good clinical management; it is patient-focused, impartial, objective, and operates within a peer review model. It provides many benefits such as those detailed below.

For Healthcare Regulators: The need to drive up the quality of care for patients, whilst delivering efficiency and productivity, is a key principle for regulators of healthcare services. Accreditation can be used as a tool to support the commissioning or specification of medical laboratory services that are technically competent, safe and reliable, and that continually improve the experience for patients by:

- providing an independent assurance of quality and safety that supports world-class decisions on how to deliver better care and value for patients;
- providing a mechanism for measuring quality improvement;
- supporting consistency in the quality of care; and
- encouraging innovation

For Patients

Accreditation requires that the laboratory assesses the value and relevance of the testing in relation to the patient's clinical management. It demonstrates that medical laboratories comply with an international standard, confirming that:

- there is consistency in the quality of care and that this service reflects the stability of the quality of test reports, up-to-date technical methodologies and methodical training
- that the staff providing the services are competent to undertake the tasks they perform.

Accreditation for Medical Laboratories

Accreditation provides proof that a laboratory complies with best practice. It also offers authoritative assurance of the technical competence of a laboratory to undertake specified analysis or measurements according to validated methods.

- provides an opportunity for external perspectives on the laboratory's practice;
- can prevent the unnecessary duplication of information gathering on performance often required by regulatory bodies;
- encourages the sharing of best practice;
- stimulates innovation;
- reduces risk; and
- provides international recognition.

Jeewani Karunasagara
Assistant Director - Accreditation
SLAB

Printed & Published by The Associated Newspapers of Ceylon Ltd., at No.35, D.R. Wijewardene Mawatha, Colombo 10 on Wednesday the 31st of May 2017