The Industrial Technology Institute (ITI) is practically carrying out its tasks with the objective of enhancing the technical development at a very high level with private sector organizations and working with great dedication towards the industrialists of Sri Lanka and giving a massive contribution to the Sri Lankan economy. To strengthen the path of the ITI equipped with ultramodern technical laboratories and an unmatched human resource, the assistance given by scientists and engineers with superior knowledge and experience in the international sphere is immeasurable.

Arrangements are being made to hold a staff appreciation ceremony for staff members that have dedicated their unwavering commitment for a period of over 23 years with the objective of encouraging the scholarly staff by appreciating their services to the institution and the country at the BMICH under the aegis of the President Maithripala Sirisena, parallel to the 60th anniversary celebrations, with much glamour.

The objective of our Government is uplifting local industries through strengthening local entrepreneurs. To achieve this, a sustainable industrial policy is essential for the country. The economic growth we are expecting could be achieved by uplifting the value chain of the product sphere from small scale productions to mega scale productions through a sustainable industrial policy. Utilizing modern technology through methodical research and development policies and introducing new methodologies is also essential. Action should be taken to grow and nurture small and medium scale enterprises and they should be facilitated to connect with large scale enterprises. While valuing the Industrial Technology Institute, that is celebrating their exalted mission of six decades, for their contribution to the promotion of the industrial sphere of our country overcoming new challenges of the new world with the experiences and maturity obtained from their sixty years existence, I hereby convey my felicitations to the Institution and its staff.

W.A.S. Nisansala Kumari

Research and Development Complex for Industrial Technology Institute

The Industrial Research Institute of Sri Lanka (ITI) that was created in the year 1955 as the Ceylon Institute of Scientific and Industrial Research (CISIR) by the Science and Technology Development Act No. 11 of 1994, is providing its continuous service productively giving technical assistance to local industries and helping to enhance production through production processes and upgrade the quality of products. Through this institution, the main research and development institution in Sri Lanka which is armed with a staff of intellectuals consisting of highly qualified and experienced Scientists, Engineers and Technicians is successfully assisting entrepreneurs in technical adaptation and commercialization, and the research and development projects for adding more value to local raw material are being operated. The Institution is successful in operating these research and development programmes through the sections production, processing and industrial planning and obtaining the highest results, and providing a silent but massive assistance to the economy of the country through commercialization. ITI in a long-term mission at the time of celebrating its 60th anniversary has established a Research and Development Complex with laboratory facilities of international level on a land of about 10 Acres in extent in Malambe with the objective of broadening the services of enhancing the research and industrial development of Sri Lanka more than ever with the experiences derived during the past. This Complex is due to be opened by the President Maithripala Sirisena in the near future. Through this Complex entrepreneurs will be able to overcome many challenges in planning their products and manufacturing processes at laboratory and broadening them to a large scale industrial process.

Prime Minister
Ranil Wickremasinghe

President
Maithripala Sirisena

The augmenta- tion of Sri Lankan owned organizations that employ Sri Lankans and utilize Sri Lankan resources, is vital towards the betterment of socio economic indicators that fulfill the requirements of sustainable development. Sri Lankan owned businesses and organizations must be encouraged and empowered to enter the global market place with confidence, priz- ing innovation, in marketing products of the highest quality to the world. Since its inception in 1995, CISIR has played a pivotal role in providing outstanding knowledge and expertise in Research and Development on new products that have enabled Sri Lankan owned organizations to showcase them globally. The CISIR, for over 60 years, has empowered and engaged with the task of developing world class products in Sri Lanka, using locally sourced raw material. As CISIR is due to embark upon a new and exciting journey into the next phase of Research and Development with a state of the art laboratory and cutting edge research facilities, we are certain that it would continue to develop better, more innovative products that would enable Sri Lankan organizations to present such products on the world stage with confidence and success. I take this opportunity to wish CISIR continuing success with their trail blazing research that undoubtedly is a feather in the cap of Sri Lanka. May they grow from strength to strength.

To read as an e-paper
visit www.dailynews.lk/vidya
What have you got to say about the Industrial Technology Institute (ITI)?

The Industrial Technology Institute is the foremost research and development institution in Sri Lanka. Our laboratory facilities are of the highest quality, while our staff includes some of the most experienced scientists and technicians who hold both national and international qualifications. Our major laboratories have been accredited by relevant world authorities such as ISO and SWEDAC. Our Institute operates under two main divisions: Research and Development, and Technical Services.

The Research and Development Division invents new products, then processes, develops, and introduces them to entrepreneurs; this helps to uplift the country’s economy. Simultaneously, an enormous amount of research is ongoing at the ITI to add value to the natural resources of the country, to ensure food security and safety, and to enhance the nutritional value of food which is what Sri Lanka needs at present. In addition, we also provide the training and applications needed by Small and Medium Scale Entrepreneurs.

The Technical Services Division handles the task of testing and analysis. Our laboratories issue recognized certifications and test reports needed by industrialists and exporters when manufacturing or supplying goods for local or overseas markets. When health and safety issues arose in our country, such as when milk powder was contaminated with DCD, arsenic was found in water and the measuring of noise and vibration on the expressways was carried out, ITI provided the necessary knowledge and testing. Using ultra-modern laboratory equipment such as LC-MSMS we are capable of finding solutions and providing accurate and independent reports.

Furthermore, we also operate as Sri Lanka’s largest Science and Technology Information Services Center providing accurate, timely information for all, including industrialists, scientists and students.

Isn’t modern equipment necessary for testing and analysis services?

Yes, it certainly is. With the launch of the LC-MSMS last year, ITI can now analyse carbonic & chemicals residue. Hence, we have begun analysing food toxins, additives, and pesticide residue in food. We expect to begin analysing antibiotic residue and pharmaceuticals in the near future. Arrangements have also been made to purchase ICP-MS equipment to analyse metals. This equipment has the capability of analysing healthy metals as well as the heavy metals that are injurious to health. This equipment is so sensitive that even trace residue can be uncovered and confirmed.

How important is the Research and Development Complex at Malabe?

Concurrent to our 60th anniversary we expect to establish the Food Technology Section and the Herbal Technology Section at this Complex. A modern pilot plant has been established at Malabe to test the technology developed in laboratories at factory level. Problems arising during large-scale manufacturing can be solved through this ‘machine shop’. This feature can be used to give a prior understanding of the practicality of the enterprise and of the machinery and equipment required by up-and-coming entrepreneurs before they start their enterprises. The platform

What led to the launching of the Industrial Technology Institute (ITI)?

This institution was launched on 12th April 1955 under the Colombo Plan by the name of the Ceylon Institute of Scientific and Industrial Research (CISIR) as a research institute for the industrial development of the country under a Special Act of Parliament. The CISIR becomes the Industrial Technology Institute according to the Science and Technology Act of 1994. The mandate of the ITI is conducting research and development to uplift the industrial sector of the country. What is hoped for in those days, which is creating industries by conducting various research projects and manufacturing various products and providing those products to the entrepreneurs and conducting research and development to uplift the industries that existed in those days was carried out. Especially global level research was conducted in those days pertaining to Essential Oils. Even the necessary equipment and the relevant technology for the extraction of Essential Oils that is ongoing at present have been provided by this institution. At that time, the Government of the day established the Industrial Development Board parallel to this institution. Through this the technology was taken to the industrialists. Those tasks were conducted under sections.

Analytical Ability is at ITI to the maximum

Government institution for research and development activities. With the later diversification of the institution into many sectors, at present a large number of research and development projects are ongoing in many sectors. In this Institution there are two main divisions – one division dedicated to research and development and the other division for analytical work. At present, there are five research sections and three analytical sections under these main divisions. The Food Technology Section, the Herbal Technology Section, the Materials Technology Section, the Environmental Technology Section and the Biotechnology Unit are operating under the Research and Development Division.

What is the methodology of providing these services?

We have a Sales and Promotional Section for providing these services. We also have a Quality Control Section to conduct the technical and analytical matters at very high standards. Arrangements have been made to obtain internationally accepted standards to protect the quality of the research and development and analysis we conduct. Our industrialists have to face many problems if we do not have this analytical ability of international level. ITI has been internationally recognized as the main institution in Sri Lanka that has reached the level of issuing certifications of international level. In this process of providing technology, we have established a separate section to preserve its quality. We have made arrangements to provide these technologies to the people through the Sales and Promotion Section.

Direct General - G.A.S. Premakumara

Chairman Niroshana Perera

life of processed food.
Going Forward in Modern World with Science and Technology

Technical Services Section

Science and technology perform a massive mission in the modern world to take a country forward and maintain the developed standards of its people at a higher level. The institutions in the spheres of science and technology actively support that journey by supplying research and testing services.

Research

Research helps in finding and developing various new inventions that is, goods and services production processes etc. Testing is used to find out whether the quality of the goods is conforming to the rules and regulations of the country of origin and whether they can cause any ill effect to the consumer or the environment. Especially in the goods have been manufactured for export, it has to be proved by acceptable testing reports that they have been manufactured according to the rules and regulation of the country of export.

Till recent times, in international trade, the exporter as well as the importer conducted the same research at two places to investigate the quality of the same product. The problem of conducting research this way is that if in an instance where the quality of the product is found to be inferior by the importer, it has to be returned to the country of origin. This is a very problematic situation.

Accreditation Reports

The rules and regulations of a country are only valid inside that country. So, internationally accepted testing reports are very important in exports and imports. The Single Point Testing Concept was introduced here.

The concepts of accreditation of laboratories and independent third party laboratories were introduced accordingly. The Accreditation Certificates are given not only for the process carried out in the laboratory but a certificate issued after also inspecting the various facets such as the technical ability and the ability of the personnel certifying that a particular test has been conducted independently and accurately in that laboratory. Separate Accreditation Reports should be obtained for various parameters done in a laboratory. For example, in order to obtain the Accreditation Certificate to test the vitamins in a particular food item, the laboratory should have several Accreditation Certificates, one for each vitamin. Accordingly, the largest laboratory complex with Accreditation Certificates belongs to the Technical Services Section of the Industrial Technology Institute (ITI). Furthermore, the Industrial Technology Institute is the first science and technology institution in Sri Lanka to be awarded an Accreditation Certificate.

Historic Record

The Industrial Technology Institute established this record after receiving an Accreditation Certificate from the Accreditation Institute of Sweden in the year 2002. The Technical Services Section of the ITI has also obtained the ISO 17025 Laboratory Quality Management Certificate. These certificates are updated annually. Laboratory audits are annually at international and local level to facilitate upgrading. Accordingly, the Technical Services Section is an internationally recognized third party independent laboratory. This is the largest laboratory of belonging to the ITI. Here, many things such as water, food items, agro-chemicals, drugs and medicines, beauty culture preparations, waste water and air quality is subjected to chemical and microbiological tests at this laboratory.

Through the very recently established Residual Analysis Unit has the facility of conducting laboratory tests to identify even miniscule quantities of unwanted compounds and waste matter in a food item, beauty culture preparation or medicinal preparation.

Chemical and Microbiology Laboratory

One of the national level services carried out by this section is the pinpointing and creation of noise barriers to minimize the noise pollution when the vehicles are passing through residential areas.

The ability of the Electronic Techni cal Laboratory to reduce the engine noise of ships and passenger boats and minimize vibrations through the ITI.

Electronic Technical Laboratory

The Electronic Technical Laboratory of the ITI has confirmed its expertise through various services such as the ETL Electronic Science and Acoustic Engineering. This section studies the vibrations and sound intensity of factories and large scale constructions such as Expressways and Metal Crushers.

This section also has the ability to predict the noise pollution etc. of a particular construction beforehand and solve those issues. The Weather Station equipment that is used by the National Building Research Organisation (NBRO) has also been introduced by the ITI.

ITI provided the solutions to minimize the disturbances to the people’s lives from the noise and vibrations when the Southern and Katunayake Expressways were being constructed.

Technical Services Section

As a properly organized quality control system is essential for an institute to issue test reports recognized at international level, a quality control section has been established at the ITI. The Quality Assurance Department (QAD) of the ITI has been responsible for ensuring that the high standards of the institute are upheld in all its products and services.

QAD maintains contact with the external assessment bodies for Conformity Assessment (SWEDAC, SLAB & SLSI) to secure and maintain their respective accreditations/certifications for ITI laboratories/sections. QAD assures that the performance of the QMS is maintained through regular technical audits, training programmes, external quality assurance schemes, reviews, etc.

QAD conducts monthly internal audits on ISO/IEC 17025:2005 to ensure the testing laboratories of ITI are complying to the standard requirements and national regulatory requirements as well. Internal and external quality control activities are being planned on laboratory’s requests. ISO 9001:2008 certified sections are also being monitored on quality management systems through monthly audit cycles. Annual management reviews on both systems are being held to review the continual improvement and the effectiveness of the quality management systems of the accredited laboratories. R&D sections and the ISC ITI have an auditor pool to serve in monthly internal audits the members of which have been trained on auditing and both standard requirements by QAD.

A.S. Pannila
Addisonal Director General
Technical Services

Friday, January 29, 2016
Eggs with Omega 3 Fatty Acids

Omega 3 fatty acid has been identified as a key factor in reducing inflammation and improving overall health. Eggs from chickens that consume omega 3 rich ingredients have been found to be a good source of these fatty acids.

Brand Name of Sri Lanka Cotton

Several brands of cotton are available in Sri Lanka. Some of these brands have been specifically developed to cater to the needs of the local market. These include brands such as "Cotton Fresh" and "Cotton Pure".

KASER for splitting the Kithul industry

Kithul has a long history of use in traditional Sri Lankan cuisine. It is used in various dishes and is known for its health benefits. The KASER project is aimed at developing new technologies for splitting Kithul into its constituent parts, making it more accessible and versatile for use in cooking.

Isotonic Drink

The ITI has developed an isotonic drink that is suitable for sports and physical activity. This drink is designed to replace lost fluids and electrolytes during exercise, helping to prevent dehydration and fatigue.

Enzymes

Enzymes are used in various industries, including food, pharmaceuticals, and bioengineering. The ITI is working on developing enzymes that can be used in a variety of applications, such as in the production of biofuels and in the manufacture of biodegradable plastics.

Flavours

The ITI is also working on developing new flavours that can be used in beverages, cosmetics, and other products. These flavours are designed to be safe and natural, with no artificial preservatives or additives.
The Research and Development Division of the Industrial Technology Institute (ITI) that is carrying out a pioneering mission in the scientific research and development sphere of Sri Lanka was awarded the ISO 9001:2008 Quality Certification in the year 2009. This is the first such research and development institution in Sri Lanka to be awarded this Quality Certification. At present, the Additional Director General Dr. Radhika Samarasekera is giving leadership to the Sri Lankan mission of the Research and Development Division.

The Research and Development Division of the ITI consists of five main sections:

- Food Technology Section (FTS)
- Herbal Technology Section (HTS)
- Materials Technology Section (MTS)
- Environment Technology Section (ETS)
- Biotechnology Unit (BTU)

This institution conducts these research activities and provides scientific new inventions and technology to the country with the foremost State corporate responsibility objective of further enhancing the economic development of the country and providing more internationally competitive technology to the country. The Research and Development Division also carries out research and projects to fast-track the technical development of Sri Lankan industries, working in cooperation with Government Departments, Corporations, Universities, and private sector organizations and other entities and prevention and observation of environmental pollution.

Technical Projects

Furthermore, this Division is handles technology transfer, supplying consultancy services, carrying out Contract Projects, supplying Customized Test Services, and holding training programmes in parallel to the experiences of the Industrial Technology Institute. The Research and Development Division operates various researches and development projects under three categories.

Projects carried out with international cooperation

- The project of enhancing the preservation of fruit funded by IDRC of the Canadian Government.
- The project of maintaining health protection of humans and food and nutrition protection through Prebiotics and Probiotics obtained from cereals and fruit under the Indo-Sri Lanka Accord
- The research on Sri Lankan sea algae conducted in collaboration with The Korea Institute of Ocean Science and Technology

Furthermore, under the International Cooperation Programme, the Industrial Technology Institute has made arrangements to construct a research laboratory complex and a technology exchange centre.

Projects carried out conjointly with the Government and funding agencies

- The project of inventing a bio-insecticide with the Bacillus thuringiensis Bacteria endemic to Sri Lanka to control insects harming paddy and vegetable cultivations under the funding of the National Science Foundation (NSF) of Sri Lanka.
- A project to attempt to control Gastritis using the medicinal herb Dummalla (Trichosanthus cucumerina Linn) is being carried by the Herbal Technology Section with the funding from the National Research Council of Sri Lanka.
- The Fruit Fly is one cause of Sri Lanka’s fruits going to waste. It also creates problems in the export of fruits. In this research project, using the insecticide manufactured with Para-Pheromones of the Ocimum tenuiflorum (Maduruthala) plant to control the Fruit Fly was researched. This Pheromone very successfully controls the Fruit Fly. This technology is to be produced for exchange in the near future.

Self-examination for Dengue Fever

- At present, the most serious disease affecting Sri Lankans is Dengue Fever. The best way to control Dengue Fever is the control of the vector. In this research project, control of the vectors of various diseases, invention of a set of diagnosis kit to diagnose Dengue Fever and the ability of manufacturing treated mosquito nets is measured.
- With the use of this Dengue diagnosis kit, a specialized invention, a person can test whether he or she has contracted Dengue Fever at home without going to a hospital at very low cost using a body fluid such as blood, urine and saliva.
- At present the Sri Lankan Graphite is sold for very low prices. The largest market in the world is for value-added Graphite. The Materials Technology Section is manufacturing 99.99% pure Graphite using Graphite purification methodology. This project is operated under the funding from the National Science Foundation.
We, as human, have already been succumbed to globalization as a result of limitless competition in the quest for acquiring new knowledge, which comes through carrying out experimentation and tests hypothesis, noting observations and making conclusions – adhering to the fundamental principle of scientific research. As Sri Lankans, we were not far behind in that competition to support research and development by inaugurating an Institute dedicated for the development of Science and Technology in the year 1955, which has become the present-day Industrial Technology Institute that has won worldwide acclaim of its 60 years of existence with steady progress. We, going forward on that path, have already reached the foremost position among local research institutions. Furthermore, we have strengthened our ties with the European Economic Community, the United Nations Development programme and other international research organizations to embrace standardized approaches towards establishing uniformity in products and services catering to local and export business.

In pursuit of these goals, our institute is equipped with the world recognized state-of-the-art laboratories that are staffed with well-experienced and talented members. The Chemical and Microbiological Laboratory, Material Laboratory, Industrial Metrology Laboratory Electro Technology Laboratory and the United Nations Development Programme are some of the main laboratories of our institution. This laboratory, along with the institute’s Quality Assurance Department conducts its research and testing under the accreditation of ISO 17025 and ISO 9001:2008 to produce quality certifications according to the accepted guidelines. The foremost task of our institution is to provide test reports required for all industries that intend to introduce new technologies and products.

Efforts from our institute to expand and introduce a bacterium to potentially eliminate the mosquito that harbors the Dengue virus, a fatal and persistent endemic in Sri Lanka is a prime example that led to the savings of foreign exchange to the country. Another key invention is the development of a domestic water filtering apparatus to remove heavy metals and other toxic constituents from drinking water that have been shown to cause the Chronic Kidney Disease, which is rapidly spreading in the North Central Province. Research efforts are also currently underway to find approaches to potentially eradicate the Chronic Kidney Disease form the Sri-Lankan society.

Standardization testing

The institute also provides a battery of tests to analyze imported foods, cosmetics, agro chemical fertilizers and pesticides to ensure their consistency with respect to international standards along with their compositions to regulate the approval of their use and consumption to Sri Lankan citizens. Using novel technologies, the Chemical and Microbiological Sections at TII perform analytical research on technical sectors such as nano technology, food, gene and tissue culture technologies. The institute also provides services at the level of supervision and planning of operations at the Colombo Dockyard Limited, multiple expressways and all other large-scale road development projects.

In addition to its engagement in cutting edge research, the institute also conducts local and international training programmes, advising and consulting services to many areas of Science and Technology. During the past six decades, the Industrial Technology Institute was able to provide services to local Small and Medium Scale Entrepreneurs which enabled uplift of the quality of local products and their manufacturing processes. Our institution is also having strong ties with, not only the local Medium and Mega Scale Entrepreneurs but also with rural Small Scale Entrepreneurs. Another focus of our institution has been the research and development efforts to add value to local raw materials. Through these efforts, especially in the areas of product and process development as well as their commercialization, a large number of entrepreneurs have been generated across the country.

Impact to Sri Lankan society

The institution has a staff of intellects to successfully assist Large, Medium and Small Scale Entrepreneurs in technical adaption and commercialization. The Industrial Technology Institute is in good cooperation with all the communities of Sri Lanka. The propagation of any new technology invented and developed by our institution to the village level is done through the “Vidatha” centers established in almost all Divisional Secretaries’ Divisions island-wide.

It is no secret that Small and Medium Scale Enterprises make a considerable contribution to the economic development of our country.

Another contribution to be highlighted is the provision of entrepreneurship education and training to the public, especially to all school and university students and teachers to visit and learn from our institution, which will encourage Sri Lankan students to study science subjects and edify them of new opportunities. With the overall objective of developing an informed and educated society, our institution strongly emphasizes the importance and significance of their transformation into better health, nutritious food habits.

Utilizing Local Resources

Most enterprises dedicate a significant contribution to manufacture goods and services utilizing local human resources, as employees as well as local raw materials. The services offered towards boosting of the country’s economy during the past six decades by our institution through offering the required expertise and know-how to exporters to escalate their products to the international level through research and development is significant and should not be unnoticed. A large number of new technological methodologies have been introduced to the country to strengthen the quality of products from the local agriculturists to minimize about 40% loss experienced during storing and transporting of fresh vegetables and fruits. It is also further emphasized the positive impact made from our research to reduce or eliminate harmful environmental factors contributing to certain adverse effects on people as well as on food that they consume routinely.

Along with the celebration of the 60th anniversary of the Industrial Technology Institute, we are fortunate to vest the newly built Research and Development Complex at Malabe, which will be extremely important towards the enhancement of Science and Technology in our country.

In this new Malabe facility, entrepreneurs will get the opportunity for testing the viability and potential challenges associated with manufacturing processes of their products. In addition, at this new complex, entrepreneurs will have the opportunity to obtain expert opinions as well as solutions to potential challenges by our talented and experienced staff to transition specific processes from a small-scale proof-of-concept stage to large-scale manufacturing planned to sustain the local industries. If required, an opportunity also exists for industrialists to obtain required training for their staff at their workplace through our panel of experts.

Manori Wijemannage
Senior Deputy Director
Marketing and Business Development
011 2379808

Continued from Page 02

Our technology...

- What is the contribution of your institution towards the country’s development?

We are providing a massive contribution towards potentially resolving a plethora of economic and social issues of the country. We are enhancing our products based on local raw materials to introduce them to global markets through new inventions. For these efforts investments have been committed from manufacturers with products focused for the export markets. We have also not only issued clearance on basic requirements for establishing factories evaluating disposal of waste water without harming the environment but also provided an advisory role on their construction. We are providing a massive contribution to the progress of the country with several objectives of making science and technology contribute to it in our 60th year. We are ready for that. By the year 2025, if we could add value to almost every item exported from Sri Lanka that will be a great achievement for us. Furthermore, in the future, we might be able to produce solutions to alleviate deadly diseases. We have imported Stevia rebudiana, a plant, which is 300% sweeter than sugar and native to Paraguay. We have already completed its cultivation and identified ideal conditions for its proper growth. If we can use this, which is already being used in Japan, Australia and China with our tea as a sweetener, it will be of great benefit to Sri Lankans as it is a valuable alternative to Sugar that helps maintain healthy blood glucose levels.

Continued from Page 02

Analytical ability...

We are conducting education and training programmes to achieve this objective. Furthermore, we are taking our technical methodologies to the rural level through the “Vidatha” Programme. Responding to the requests at provincial level, we provide the required technology by getting the people that has to be trained to our institution or by going to the institution that has requested the request and conducting workshops. We new instructors are directed to us we also give them the required assistance and have provided the maximum opportunity for the ançal and re search projects of university students and school children. We conduct about 10 – 15 workshops per year. Our institution is having the largest technical library in Sri Lanka. The library is open to anybody requiring technical knowledge including industrialists. We also provide the opportunity for the researches of university students and Post – Graduate students. The specialty of our research projects is that they are not just confined to a Research Paper. There is an end result. Even if the student finishes his or her Research Paper and leaves, we take the research project forward. If the research project pertaining to Khithul is taken for example, the research was only done on the ingredients and the medicinal value. Only these two people have done a research on Khithul. Furthermore, there is going to be 15,000 Acres as a result of research conducted by us. Even though we have not been vested with authoritative power, the consumer is being protected through the introduction of products with medicinal value. When the DCD problem arose with milk powder the same thing happened. This is an institution with ability to research at the highest level.
Several sections performing numerous tasks

Engineering Services Section

The Engineering Services Section of the Industrial Technology Institute (ITI) comprises of an efficient, talented and professionally trained staff. The main role of the Engineering Services Section is to fulfill maintenance requirements of various sections across the institute, including those of all laboratories. In addition to its routine role, this section also supports necessary technical services to all new inventions conceived and brought to practice by ITI staff.

Herbal Technology Section

Staffed by a research team consisting of eight scientists at the Doctorate level and supported by a well-trained, talented and efficient staff, The Herbal Technology Section takes a premier position in the Research and Development (R&D) sector of the ITI. This Section provides invaluable research and development services to the herbal extract, aromatic oil and perfume industries. This section claims successful completion of 22 research projects in the year 2015 alone. In addition, this section has provided consumer services to approximately 350 research projects relevant to various industries, including Sri Lanka’s famous beauty culture industry focused on various herbal extracts that promote skin brightness, anti-aging and skin moisturizing derived from Cinnamon, Murunga and Aloe Vera. Furthermore, over the years, the Herbal Technology Section has helped entrepreneurs to develop and manufacture herbal-based hand sanitizers, lotions, soaps and perfumes. This Section also bears responsibilities such as benchmarking of species and the quality of Ceylon cinnamon and other spices, providing Quality Control Reports for capsules, tablets, syrups and other medications containing herbal extracts. A methodology has been developed to identify Wild laptop and its resins using GC/MS technology. Microscopic analysis combined with state-of-the-art genetic technologies provides correct identification and physical qualities of specific herbs to help promote their uses, conservation, medicinal values and chemical properties. The Herbal Technology Section also handles training programs and advisory services to various industries. Out of these services, the cosmetic industry and plant and tissue culture take premier positions. In addition to services offered by The Herbal Technology Section, it actively promotes the uses of unique and natural plant resources of our country which is priceless to improve Sri Lanka’s economy.

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Anura Hettiarachchi being awarded the international award

Materials Technology Section

Materials Technology Section carries out customized special projects and contract research projects. Specially conducts research on ceramic, minerals, wood and natural fiber (Ex: coconut fiber and banana fiber) specialized in analyzing material with Electronic Microscope, and highly technical equipment such as FTIR and XRD. Materials Technology Section specializes in material characterization. Carries out research services on analytical skills and specialized knowledge (on rubber & plastics, wood & cellulose, minerals & ceramics & advanced materials & nano materials.

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Food Technology Section

The Food Technology Section belongs to the Research and Development Division. Accordingly, the objective of the Food Technology Section is manufacturing new food items and conducting technical research on market requirements. Here, food technology knowledge is given to any market, whether small or large scale. The main tasks of the Food Technology Section are conducting research on new recipes, supplying advisory services, solving problems related to the production of food and holding training programmes. Government and non-Government institutions contribute to the research projects conducted by the Food Technology Section. Monetary contributions for research projects are made by overseas institutions such as IDRC of Canada, JICA of Japan and NORAD of Norway and local institutions such as the National Treasury, the National Science Foundation and the National Research Council (NRC). Other than these, new inventions are introduced through the connections built up with various parties in the market. The Food Technology Section is operating under seven main sections and laboratories to achieve these tasks. Those are post-harvest technology, processing fruit and vegetables, processing cereals. Processing sea food, Food Nutrition Unit, Microbiology Unit and the Pilot Factory.

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