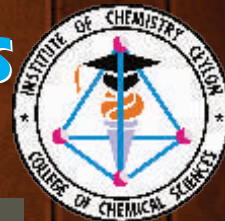


College of Chemical Sciences

CCS NEWS LETTER



Vol. 15 No. 1

January - April 2016

A Government approved Charity, Founded 1971: Incorporated by Act of Parliament No: 15 of 1972, Successor to the Chemical Society of Ceylon, Founded 1941

Excerpts from the Twelfth Convocation Address



Professor Colvin Goonaratna

'Professionalism'

- Talking about bright and prosperous futures for you, brings me straightaway to the topic I have chosen for my Convocation Address, namely, Professionalism.
- Be ready to serve, and ready to safeguard your integrity and your professionalism
- If we do not identify who true professionals are, the word

will lose all meaning. Even more disconcerting, is the eventual degradation of the meaning and the concepts enshrined in the word "professionalism".

- The issues I have tried to emphasize are, that the once highly respected words "profession" and "professionalism" are under siege by many miscellaneous groups who do not deserve to be called professions by any criteria that will stand critical scrutiny, and that the concepts enshrined in the words "profession" and "professionalism" seem to have lost their meaning as a consequence of this siege.
- "A profession serves best in which people can place their trust." The Lancet



Prof. Sujatha Hewage

Inauguration of the Graduateship Programme

Inauguration of the **Graduateship Programme in Chemistry (GIC)** of the **38th batch** was held on **2nd January 2016**. A total of 225 students enrolled for the programme. **Professor Sujatha Hewage**, retired Professor, University of Colombo graced the occasion as the Chief Guest.

Inauguration of the DLTC Programme



Mr. Mahanil Perera

Ceremonial Inauguration of the **Diploma in Laboratory Technology in Chemistry (DLTC) Programme** of 43rd batch was held on **8th January 2016**. A record number of 162 students were enrolled this year. **Mr. Mahanil Perera**, Manager Operations Laboratory Services for Medical Centers Ceylon Hospitals PLC (Durdans Hospital) was the Chief Guest.

75 YEARS
1941-2016

1941 - Chemical Society of Ceylon
Institute of Chemistry Ceylon - 2016

45th Annual Session of the Institute to be held from June 15th - 17th

The inauguration of the Annual Sessions will be on **June 15th** at the Centre for Banking Studies, Rajagiriya. The theme for the current year at the Annual Session is **"Ethics and Responsibilities of Professional Chemists for the National Development"**; the Chief Guest is **Emeritus Professor E R Jansz**, Past President, Institute of Chemistry Ceylon and the Guest of Honour is **Mr. D C Dissanayake**, Secretary, Ministry of Higher Education and Highways. Theme seminar will be held on **June 16th** at the Sri Lanka Foundation Institute, Colombo 7, while on the third day Technical Sessions will be held at Adamantane House, Rajagiriya, where Chemists/Academics present their research findings.

Thanksgiving mass

The Annual Christian Thanksgiving Mass to mark the New Year was held on **2nd January 2016**. This was held for the eighth successive year at Adamantane House.

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33rd Batch of 98 Graduate Chemists at the Twelfth Convocation



College of Chemical Sciences (CCS) News in brief

'A Red Carpet Affair'

The Graduation Ball of the 33rd passing out batch of the College of Chemical Sciences was held on 6th February 2016 at the Kingsbury Hotel. It was a night of glitz and glamour filled with exciting games for both lecturers and the passing out students.



Installation of the Gavel Club of CCS

The charter installation ceremony of the Gavel Club of CCS was held on the 28th of January, 2016 at Adamantane House. Shabna Nazim was elected as the president of the Gavel Club of CCS along with her team of office bearers. DTM Sudash Liyanage was the Guest of Honour of the event and Mr. M R M Haniffa, Dean of CCS graced the occasion as the Chief Guest. The main focus of a Gavel club is to improve communication skills and critical aspects of leadership covering listening skills, time management, planning and implementation, organizing and delegating, mentoring and team building.



Inter Level Chess Championship

IChemC Inter level Chess Championship was held on 7th January 2016 at Adamantane House. The Girl's and Boy's Championship was clinched by the Level 2 students.



'Rugby Rebellion'

The Inter level rugby tournament was held on 8th February 2016 at the Railway Grounds, Dematagoda. Team "Andi hathdena" of level 2 emerged as the boy's champions while team "Super Women" of level 2 clinched the Girl's Title.



Inter Level Badminton Tournament

The Inter Level Badminton tournament was held on 15th January 2016 at "Super Sports Badminton Courts" Nawala. Men's Championship was awarded to Alumni Team and the Women's Champions were Level 4 team.



Inter Level Debating Competition

This event was held on 17th January 2016 at Adamantane House. The Level 4 team was placed 1st while Level 3 and Level 2 was placed 2nd and 3rd respectively.

winning team



Blood Donation Campaign

The Annual Blood Donation Campaign was held on 5th February 2016 at Adamantane House.

Popular talk

A popular talk on 'Integration of Chemical Safety, Security and Sustainability' and 'Opportunities at the OPCW' by Dr. Rohan Perera, was held on 14th January 2016 at Adamantane House. He is the Senior International Cooperation Officer for Chemical Safety, Security and Chemical and Biological Threat Reduction at OPCW The Hague, Netherlands.

College of Chemical Sciences (CCS) News in brief

Sports Day

The Annual Sports Day was held on 23rd February 2016 at T B Ilangarathne Grounds, Angoda



CCS Wins the Inaugural BIG MATCH!

College of Chemical Sciences (CCS) claimed a 50 run victory at the inaugural cricket encounter of the Prof. J. N. O. Fernando Memorial Trophy with South Asian Institute for Technology and Medicine (SAITM), which was successfully held on 17th April 2016 at the Thurstan College Sports Complex, Colombo



Literature Survey and Seminar Presentation

The Literature Survey and Seminar presentations were held on 21st January 2016 and 11th and 12th of February 2016 respectively.

Upcoming events

Bakthi Geetha , Bana and Dansala

The Annual Bakthi Geetha and Bana of the College of Chemical Sciences will be held on 18th May and the "Dansala" will be held on 19th May 2016 at Adamantane House.

Aura

The annual talent show of the CCS students will be held on 10th July 2016 at Kularatne Hall, Ananda College, Colombo 10.

Australian National Chemistry Quiz 2016

The Australian National Chemistry Quiz 2016 organized by the Royal Australian Chemistry Institute (RACI) will be held on 23rd July 2016. This is coordinated and conducted by the Institute of Chemistry Ceylon.

Psycho-social Awareness and Capacity Building Programme

A Psycho-social Awareness and Capacity Building Programme conducted by the Counselling Division Ministry of Social Services was held on 17th March 2016 at Adamantane House. This Programme was conducted on our request for the benefit of the CCS students. 73 CCS Students participated in this programme.

Launch of the IChemC website

The launch of the new IChemC Website was held on 28th March 2016 at the PPGLS Auditorium. This was followed by a talk by Ms. Alexa Price, International Admission Coordinator on behalf of the Truman State University, USA.

Ms. Alexia Price launching the IChemC Website



Fresher's Night

The annual Fresher's night organized by the level 2 students of CCS was held on 26th February 2016 at the Arena Reception Hall, Kotikawatte. It was followed by the batch Queen and batch King Contests and other fun filled events.



Dr and Mrs Sentheshanmuganathan Family Bursary



Dr Sentheshanmuganathan

Dr Sentheshanmuganathan from Canada has donated US\$ 10,000 to award the 2nd bursary to College of Chemical Sciences students.

Criteria for the award: Students should be preferably from a lower income family with a single parent/guardian.

He/She will be awarded bursary to cover part of the Accommodation and Living expenses while pursuing their studies in rented accommodation in and around Colombo.

Upcoming Seminar

Seminar on "Chemical Handling & Laboratory Safety"

This seminar will be held on 6th May 2016 at Adamantane House. Resource persons for this seminar are Dr. U. S. K. Weliwegamage, Prof. K R R Mahanama, Dr. U. K. Jayasundara, Dr. Chamindri Witharana, Dr. Chandani Udawatte, Ms. Sarojinie Jayasekara. This is coordinated by Dr. U. S. K. Weliwegamage and Dr. U. K. Jayasundara.

CCS Alumni

The Alumni of the College of Chemical Sciences jointly celebrated the 'AGM and Annual Fellowship Dinner' on 27th February, 2016 at Berjaya Mount Royal Hotel, Mount Lavinia. The office bearers of the alumni were elected and the evening was filled with singing, dancing and the fellowship among many passed students of CCS.

The New Alumni President - Dr. M Infas



Dr. P Ariyananda

Dr. M Infas

Teaching Assistant Appointments

Ms. A V K Munasinghe, Ms. L A Wijesekera, Ms. H K C K Halloluwa, Ms. M S N Ranasinghe, Ms. A S N Kurian, Ms. J P S Vidyani, Ms. D S Yapa, Mr. K J P Kaviraj (our own Graduate Chemists) have been appointed as New Teaching Assistants from December 2015.

Opening of the Refurbished laboratory of President's College

The opening of the Refurbished laboratory of President's College in memory of late Emeritus Prof. J N O Fernando was held on 7th February at President's College, Rajagiriyaya. This was sponsored by the Alumni Association of CCS.



Madam Mandrupa Fernando, wife of late Prof. JNO Fernando along with Prof. S P Deraniyagala, Rector of CCS at the opening ceremony.

Mrs. Mandrupa Fernando

Prof. S P Deraniyagala

Resignation of Teaching Assistant to pursue post graduate studies

Mr. S. C. Dilanka Fernando, Graduate Chemist and Senior TA has received a full scholarship for post graduate studies leading to a PhD at the Department of Molecular and Translational Sciences, Faculty of Medicine, Monash University, Australia.

41st Batch of 105 DLTC Diplomates at the Twelfth Convocation



LEVEL 1 EXAMINATION RESULTS - 2015

First Prize & Nandawathie Jayaweera Memorial Scholarship Mr. N M H N Thilakarathne
 Second Prize & Charles Jayaweera Memorial Scholarship Ms. M A F Mushrifa
 Third Prize & Professor R.S. Ramakrishna Scholarship Mr. H M O K Herath
 Fourth Prize & Dr Dilanjan & Ms Gowrie Soysa Scholarship Mr. M R A Basith
Merit Bursaries (in order of merit): Ms. I L Hettige, Mr. R D U S Deshappriya, Ms. K K A Jayathilake, Ms. J A S Gayara, Ms. W S S Perera, Mr. M J M Afnan



Mr. N M H N Thilakarathne



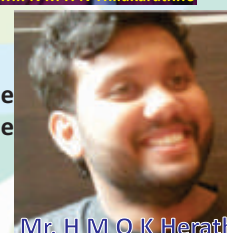
Ms. M A F Mushrifa

SUBJECT PRIZES

Graduate Chemists Alumini Prize for General Inorganic Chy
 Emerine Fernando Memorial Prize for Principles of Physical Chy

Bennett Prize for Mathematics for Chemists
 Somawathie Mathew Memorial Prize for Biology for Chemists
 Professor and Mrs Sotheeswaran Prize for Organic Chy
 Mr & Mrs Ranasinghe Banda Prize for Applications of Maths
 Prize for Fundamentals of Physics for Chemists
 Prize for Analog & Digital Electronics for Chemists
 Prize for Basic Concepts

Mr. N M H N Thilakarathne
 Mr. N M H N Thilakarathne
 Mr. M S D Fernando
 Ms. I L Hettige
 Ms. K K A Jayathilake
 Ms. L L J De Silva
 Mr. H M O K Herath
 Mr. M S V Costa
 Mr. R D U S Deshappriya
 Ms. M A F Mushrifa



Mr. H M O K Herath



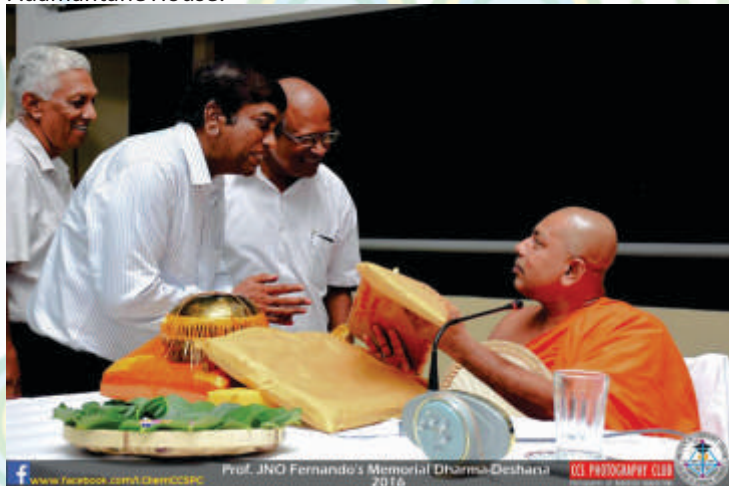
Mr. M R A Basith

First Death Anniversary Commemoration of late Prof. J N O Fernando

A service to remember and to celebrate the life of late Prof. J N O Fernando was held at Holy Emmanuel Church, Moratuwa on 29th February 2016. This was organized by Mrs Mandrupa Fernando, wife of late Professor Fernando. The staff and students of CCS were present for this event.

The Institute of Chemistry along with the staff and students of the College of Chemical Sciences organized a series of events comprising of Dharma Deshanaya on 1st March followed by Almsgiving on 2nd March 2016.

A special Christian Prayer Service was followed by the Launch of Professor J N O Fernando Memorial Scholarship Fund on the same day at Adamantane House.



Dharma Deshanaya at the roof top of Adamantane House



Alms Giving on 2nd March 2016 at the Sri Gnanawasa Thripitaka Vidyayathanaya, Rajagiriya



Christian Prayer Service



Launch of Professor J N O Fernando Memorial Scholarship Fund

Seminar on 'Enhancement of Quality and Productivity in Laboratories and Lab. Techniques'

This seminar was held on 29th February 2016 at Adamantane House. The Key note speaker for this seminar was Mr. T Wickremasinghe, Director General, Sri Lanka Accreditation Board. This was coordinated by Dr. L S R Arambewela and Mr. J M R Banda.





Natural Product Research for Sustainable Development in Sri Lanka; Innovative strategies, Multidisciplinary approach, Challenges and Barriers

Professor Priyani A Paranagama

Senior Visiting Professor, College of Chemical Sciences, Institute of Chemistry Ceylon

Sri Lanka is one of the smallest countries that could be identified as biodiversity rich hotspots in Asia. It may be also mentioned that natural product research is moving forward impressively here due to the increase in interest in the exploration of natural resources and by the fact that plants and microbes are essential for sustainable development of bioactive compounds. However, humankind is not sufficiently aware that natural product drug discovery is important for the new generations as a tool for their health care.

We all know that natural products have served as a major source of drugs for centuries and a large number of bioactive molecules have already been isolated and characterized from natural products of Sri Lankan origin. Potentially, however, many more are yet to be discovered. What we have is only the *tip of the iceberg*.

Interest in the discovery of new bioactive compounds from natural sources has received great attention. It must be noted that use of natural products does not affect the biodiversity of the country. It has been reported that less than 10 % of the world's biodiversity has been evaluated for potential biological activity even though over 60 % of the approved drugs were of natural origin or derivatives of natural compounds. Therefore more attention should be focused on isolation of secondary metabolites from natural sources with fascinating biological activity.

Innovative strategies

Even though the last two decades has seen an extensive decline in natural product research, natural products have been a creative and unmatched source for new lead bioactive compounds. With the recent growing pressure for the discovery of bioactive natural products many researchers concentrate their research on diversity of chemical structures, biological activities, use of bioactive compounds as biochemicals / molecular probes and development of novel techniques to detect biologically active compounds etc. Therefore innovative research on natural sources has been improved with modern-day technology and better honed for natural product discovery. Recent innovative approaches for uncovering the target of new bioactive natural products have been identified as an important contribution for the national development of the country and the innovative methods respond to the country's needs and expectations. In Sri Lanka, many researchers who engage in research on natural products carryout fundamental research on natural products due to lack of resources. Nevertheless, discoveries of fundamental research of natural products should be able to transform into applications or technological innovations in order to strengthen the interaction between research and the public needs. Therefore it is necessary to identify major challenges and priorities of the research areas in order to assert the social value of research and innovation.

Multidisciplinary approach

Natural product research is not limited to identification of chemical constituents present in natural sources; rather it involves a multidisciplinary approach where research projects related to natural products are conducted by a team of diversely trained researchers from different disciplines. The natural product chemists could join hands with molecular and cellular biologist, synthetic and analytical chemists, biochemists and pharmacologists etc. in order to exploit the diversity of chemical structures and biological activity of natural products. Initiation of such collaborative research programs with a multidisciplinary approach is extremely important as it enables the

creation of innovative research strategies. It also enhances the consequent value of bioactive natural product research. However, for successful multidisciplinary collaborative research work, each researcher/member should have an understanding and appreciation of the intellectual and technical contribution of other team members of the project. In this context, many researchers in Sri Lanka have established several international collaborations. They are also working with local research institutes / industries to explore value added products / commercial products from bioactive natural resources.

Challenges and Barriers

Natural products have been a rich source of compounds in drug discovery. However, their use has diminished in the past two decades, partly due to technical barriers to screening natural products in high-throughput assays against molecular targets. Although well trained human resources are available to initiate natural product research in Sri Lanka, there are some challenges and barriers to overcome such as

- limitation in resources - lack of sophisticated equipment and state-of-the art laboratory in research institutions is one of the biggest challenge for the sustainable development of research.
- limitation in opportunities to establish multidisciplinary collaborations with other institutions in developing and developed countries due to distance, language, funding, lack of information, etc.
- limitation in funding: Funding agencies do not regularly cover all aspects of the proposed research projects.
- Most universities in Sri Lanka are not able to subscribe / access indexed journals.
- non-availability of awareness and dissemination of programs for research opportunities
- lack of defined exchange programs to train young researchers
- the lack of critical mass of PhD-qualified scientists poses significant constraints to conducting high quality research and attracting external funding.
- making frequent changes in government policies on research programs
- lack of incentives for the development of local pharmaceutical companies

The drug development process involves a series of lengthy steps, while the commercialization of modern drugs is a highly expensive process. Hence, only a privileged few private multinational drug companies in developed countries have the resources and technical facilities to sustain the drug/ pharmaceutical industry.

Most of the local (Sri Lankan) pharmaceutical companies are small and medium scale manufacturers. Therefore, the government of Sri Lanka should play a major role in the development of the natural product industry; it should support research, and development and, support the commercialization of natural medicinal products through the execution of carefully planned, workable strategies and policies. This should also involve the stakeholders such as the universities, research institutions and local manufacturing industries. Some potentially promising strategies have been put in place by a few pharmaceutical companies for the development of natural medicine industry. Given the enormous natural resources available in this country, the natural product researchers can convert this industry into an economically viable one and thus, contribute to the nation's economic and social growth.

GRADUATESHIP (OVERALL) AWARDS

First Shireen Jayasuriya Memorial Gold Medal for the Best Performance
 Second Graduateship Silver Jubilee Commemoration Award
 Third Graduate Chemist (25th Batch) Silver Jubilee Award

Ms. A V K Munasinghe
 Ms. L A Wijesekara
 Ms. H K C K Halloluwa

AWARDS FOR OVERALL EXCELLENCE IN ALL LEVELS (THEORY)

Professor J K P Ariyaratne Memorial Award for Overall Excellence in Inorganic Chemistry
 Professor Leslie Gunathilake Award for Overall Excellence in Organic Chemistry
 Haniffa Award for Overall Excellence in Physical Chemistry
 Professors Saman & Asoka Pathirathna Award for Overall Excellence in Analytical Chemistry

Ms. A V K Munasinghe
 Ms. A V K Munasinghe
 Ms. A V K Munasinghe
 Ms. H K C K Halloluwa

AWARDS FOR OVERALL EXCELLENCE IN PRACTICALS

Prof. R. S. Ramakrishna Memorial Award Ms. A V K Munasinghe
 Mr. & Mrs. Sivarajah and Family Award Ms. D Senarath Yapa
 B A Jayasinghe Memorial Award Ms. H K C K Halloluwa
 Fourth best Performer: CCS Award Ms. L A Wijesekara
 Good Performer CCS Awards Mr. K J P Kaviraj, Ms. E T J Silva, Ms. L D D Madushani, Ms. R Usoof

LEVEL 3 & 4 OVERALL (THEORY) AWARDS

First Royal Society of Chemistry (Sri Lanka) Section Award
 Second Professor and Mrs. H.W Dias Award
 Third R Nayomi Jayathissa Memorial Prize

Ms. L A Wijesekara
 Ms. A S N Kurian
 Ms. M S N Ranasinghe

SUBJECT PRIZES FOR INDIVIDUAL COURSES

W R O Fernando Memorial Prize for Energetics and Kinetics
 Professor P P G L Siriwardene Prize for Further Topics in Inorganic Chemistry
 Dr. Sudath Kumarasinghe Prize for Physical Chemistry
 Dharmachandra & Thamarasa Gunawardhana Memorial Prize for Selected Topics in Analytical Chemistry
 Ms. Careen Manel Abeywardene Prize for Natural Product Chemistry
 Mr. & Mrs. H G Dias Prize for Electrochemical Technology
 Institute of Chemistry Ceylon Alumni Association North American Chapter Prize for Further Topics in Physical Chemistry

Ms. H K C K Halloluwa
 Ms. A S N Kurian
 Ms. A S N Kurian
 Ms. A S N Kurian
 Ms. A S N Kurian
 Ms. A S N Kurian

Mr. P R K Fernando Prize for Industrial Safety and Environmental Technology
 Dharmarathne Wasala Prize for Computational Chemistry
 N M S Hettigedara Family Prize for Pharmaceutical & Medicinal Chemistry
 Dr. Rohan Perera Prize for Chemical & Molecular Toxicology
 Dr. S Lakshman De Silva Prize for Physical Organic Chemistry
 CCS Prize for Particle Physics
 Mr. & Mrs. N I N S Nadarasa Prize for Ad Topics in Organic Chemistry
 Mevan Pieris Prize for Polymer Chemistry & Technology
 Dr. Lakshman Ponnampuruma Prize for Special Topics in Inorganic Chemistry
 E G Somapala Prize for Food Chemistry & Technology
 Mr & Mrs Suppiah & Seethadevi Prize for Analytical Industrial Biochemistry
 Lakshmi Award for Chemistry of Gem Minerals & Synthetic Gem Minerals
 Susila Jayaweera Memorial Prize for Advanced Biochemistry
 Denzil & Christobel Fernando Prize for Agro Industries
 Mr. Cyril Suduwela Prize for Petroleum & Petrochemicals
 Piyadasa & Kalyanawathi De Silva Prize for Quality Management
 Mr. & Mrs. H G Dias Prize for Green Chemistry & Sustainable Techno.
 A P De Silva Prize for Chemical Education
 Marina & R O B Wijesekara Prize for Molecular Biology & Biotechnology

Ms. A V K Munasinghe
 Ms. A V K Munasinghe
 Ms. L A Wijesekara
 Ms. L A Wijesekara
 Ms. L A Wijesekara
 Ms. M S N Ranasinghe
 Ms. M S N Ranasinghe
 Ms. D S Yapa
 Ms. D S Yapa
 Ms. N L Kothalawala
 Ms. S Gayathri
 Ms. S Gayathri
 Ms. S Gayathri
 Ms. Y M R De Silva
 Ms. Y M R De Silva
 Ms. Y M R De Silva
 Ms. Y M R De Silva
 Ms. Y M R De Silva & Ms. N N K Gallage
 Mr. A A D N Perera

Overall Award Winners at the Twelfth Convocation



Standing 1st row (L to R): Ms. Y M R De Silva, Mr. A A D N Perera, Mr. M M Shaik, Ms. L D D Madhushani, Mr. K J P Kaviraj, Mr. D S Yapa, Ms. R Usoof, Ms. N L Kothalawala, Ms. D S W M Mahaliyana, Ms. A S N Kurian

Standing 2nd row (L to R): Ms. M S N Ranasinghe, Ms. L A Wijesekara, Ms. N N K Gallage, Ms. E T J Silva, Ms. S Gayathri, Ms. S M Abdulla, Ms. A V K Munasinghe, Ms. H K C K Halloluwa

Twelfth Convocation – 98 Graduate Chemists and 105 DLTC Diplomates Pass Out

106 Graduate Chemists, 1 Licentiate Chemist, 3 Advanced Diplomates and 105 DLTC Diplomates who successfully completed their respective studies, received their certificates and medals at the 12th Convocation held at the Eagle's Lakeside on 27 January. The Chancellor of the Open University of Sri Lanka, **Professor Colvin Goonaratna** graced the occasion as the Chief Guest and delivered the Convocation Address on 'Professionalism'. Excerpts appear in Page 1. Associate Director, Science & Technology Relations, Sri Lanka Institute of Nanotechnology, **Prof. Veranja Karunaratne** was the Guest of Honour.

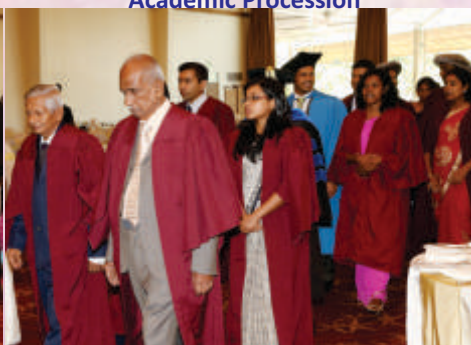


Head Table: Officers & Officials
Behind: Academic Staff

DLTC Diplomates in Procession



Academic Procession



Graduate Chemists in Procession



Shireen Jayasuriya Gold Medallist



Ms. A V K Munasinghe

Chief Guest

Dr. G C N Jayasuriya (DLTC) Awardee



Ms. A R Sappidin

Chief Guest

Yeoman Services to Educational Activities recognised



Guest of Honour,
Professor Veranja Karunaratne



Prof. S P Deraniyagala



Mr. J M Ranasinghe Banda

Graduate Chemists in Audience



Honorary Fellowship - Prof. Colvin Goonaratna



Guests and invitees



Institute of Chemistry Ceylon / College of Chemical Sciences

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