

Guest Editorial:

THIS TRULY UNIQUE AND OUTSTANDING RECORD OF ACHIEVEMENT NEEDS ADEQUATE HUMAN RESOURCES TO BE CONTINUED INTO THE FUTURE

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I am deeply thankful to the Editor for this opportunity to write yet another Guest Editorial for the Chemistry in Sri Lanka, which is a publication of our beloved Institute.

Additionally, I am delighted to have the wonderful feeling that this present opportunity is the most satisfying of all previous such opportunities, since this January 2008 issue of Chemistry in Sri Lanka heralds and commemorates the 25th year of its publication and coincidentally it also appears as the pre-convocation issue in connection with the passing out of the 25th (Silver Jubilee) Batch of our own Graduate Chemists. The College of Chemical Sciences actively involves itself in this joint celebration, *inter alia*, by sponsoring the entire cost of this issue of Chemistry in Sri Lanka.

Chemistry in Sri Lanka

When I took over the Presidency of the Institute of Chemistry Ceylon in July 1984, I recognized that the only worthwhile and regular publication we had was the **Proceedings of the Annual Session** in two parts: Part I (abstracts of papers to be presented at the Annual Session) in the month of May followed by Part II (full texts of all the Principal Addresses & Award Lectures of the preceding Annual Session) towards the end of each year. As a member of the (then) Royal Institute of Chemistry (now Royal Society of Chemistry) since 1969, I was a regular reader of its monthly publication, Chemistry in Britain; the Institute of Chemistry Ceylon also received complimentary copies of Chemistry in Australia (the monthly publication of the Royal Australian Chemical Institute). It therefore seemed logical for me to suggest to the Institute of Chemistry Council to venture forward with a more dignified publication titled "**Chemistry in Sri Lanka**" on the lines of our British and Australian counterparts. It was anticipated that this publication will incorporate the said proceedings, include other academic articles & papers as well as function as a news magazine of the Institute & its members. Perhaps it could also become the fore runner for the publication of an Institute Journal sometime in the future! Since we had very little funds at the Institute's disposal, we were compelled at that time to limit Chemistry in Sri Lanka to two issues per year and also sought financial sponsorships through advertisements.

With the ready support & blessings of the Council of the Institute of Chemistry and the very active support and cooperation of the then Editor (Ms Dilmani Warnasuriya) and Secretary (Mr Mevan Pieris), we were able to bring out the first issue (Vol 1) of Chemistry in Sri Lanka in November 1984. That indeed was a spectacular achievement for an Institute that was still very small in most respects and also at a time when the Educational Programmes were still in their relative infancy!

I am more than delighted and gratified to note that our Institute is bringing out Vol 25 No 1 of Chemistry in Sri Lanka in its 25th year of publication in January 2008 and thereby recording another achievement in the life & times of our professional body! Over the years, Chemistry in Sri Lanka has grown in stature and has improved its content, both in quality and quantity with an enhanced readership that includes over 500 of the Institute's own students. Modern technological developments in publishing, including the areas of off-set printing, computer word processing and digital & colour photography have enabled Chemistry in Sri Lanka to become more attractive, readable, informative and newsworthy for its diverse readers. Bringing out such a publication regularly and on time is no easy task particularly when not much support is extended to the Editors by members. The Institute of Chemistry is therefore beholden to all the Editors who have held office over the past 25 years for what they have done & achieved as a labour of love for and on behalf of our Institute, namely Ms. Dilmani Warnasuriya, Ms. Roberta Kaluarchchi, Ms. Malani Mallawarachchi, Ms. Shakunthala Durairatnam, Ms. Dhamitha Rajapaksa, Prof. Sriyanthie Deraniyagala, Prof. Neelakanthi Gunawardene, Prof. Sujatha Hewage, Prof. Siromi Samarasinghe, Dr Janitha Liyanage, Dr Sudantha Liyanaga & Prof. Sukumal Wimalasena.

What of the future? Seven years ago we were able to increase the frequency of publication of Chemistry in Sri Lanka from 2 to 3. However, efforts to bring out a formal Journal with research papers, which is an essential duty of a professional body, have not been successful and that not because of lack of funds since a ready source of funding was assured by the College of Chemical Sciences! Of course there are numerous issues to be cleared before such an important activity is launched with adequate planning & foresight but we must continue to pursue the possibilities! Meanwhile, is the time not ripe to increase the regularity of the issue of Chemistry in Sri Lanka from 3 to 4 as a distinct commemoration of the 25th year of

its publication? However we should remember that all such activity requires a great deal of effort & cost and also bear in mind that we already have three issues of the CCS Newsletter coming out as well. It is also worthwhile to note that our sister publication Chemistry in Britain has over the years changed its complexion and now comes out in a different form as Chemistry World and RSC News.

My heartiest Congratulations and Best Wishes for many more years of CHEMISTRY IN SRI LANKA!
Ad multos annos!

Silver Jubilee Batch of Graduate Chemists to be produced by our Institute

It was indeed my pleasant privilege and pride to preside over the first felicitation ceremony to our first successful batch of 4 (out of an initial enrollment of 72) Graduate Chemists in August 1984 with the late Professor Stanley Kalpage, the then Chairman/UGC, as the Chief Guest. I also happily recall presiding over the Kandiah Memorial Award Lecture for post-graduate (MPhil) research delivered by Mr S J Sarath Kumara (from that first batch) in June 2006. However, in those pioneering years our initial products had much difficulty in even making the scientific community and prospective employers aware of our Graduateship Programme. It was a daunting task to even make the new professional qualifications obtained by them known, let alone getting them convinced to recognize it. In fact it would not be wrong to even say that, as often happens in such situations, our qualification was initially more recognized abroad than locally. Many local bodies & individuals viewed our pioneering efforts with scepticism rather than taking a pragmatic view of new developments. Some of the historical reflections written by such Graduate Chemists in succeeding issues of our Convocation Souvenirs provide adequate evidence in support of the above.

In such a context and scenario, I do not think that any of the I Chem C officials would at that time in the eighties ever have dreamt or visualised that our Graduateship Programme would ever reach the status or obtain the recognition and acceptance that exists today! In this connection, the Institute owes a debt of gratitude & should thank its initial products, small in numbers but not in quality, for proving experimentally to the country & the world through action & deeds that the qualification they had obtained was well worthwhile and worthy of acceptance! In this connection we have to view with great concern the current questionable situation in the Sri Lankan University system in which the UGC has become compelled to recognize that the degrees to be awarded by newly established Universities are equivalent in all respects with existing degrees the moment their establishment is published by the Minister in the Government Gazette. Ironically quality assurance is belatedly attempted, very unsuccessfully though, much

later after much damage has been already caused. As a responsible professional body (that has as one of its aims & objectives in the Act of incorporation "to establish and enhance the status of the profession of Chemistry in Sri Lanka") our Institute too has been consequently compelled to critically and seriously consider each such new University Degree in Chemistry on its own merits for the purpose of enrollment of such graduates as I Chem C members.

Over the 30 years since 1979, (when our Graduateship Programme commenced) and the 25 years since 1984, (when the first batch passed out), our Institute has been able to learn from past experiences and the contemporary world scenario to make even more extensive changes and improvements to the Graduateship Programme including its philosophy, clientele, structure, course content and relevant matters in order to upgrade, modernize and advance the programme even further. For example, we note that our students are increasingly school leavers; like all other tertiary programmes many students are concurrently following other educational programmes; quite a number of them are following other University programmes in all parts of the country; today's students are from a "tuition culture" and have to be veered away from such an examination oriented approach. We have been offering increasing amounts of financial support through bursaries & scholarships both on need & merit. We have offered all students who answer all questions correctly in the senior grade at the annual National Australian Chemistry Quiz Competition conducted by us free scholarships to pursue the entire Graduateship Programme free of charge. This is done in order to entice at least a few brilliant students to become Graduate Chemists, the first three of such students who firmly accepted the offer are expected to graduate in 2008. It is worthwhile on the occasion of this Silver Jubilee Anniversary to pause, recollect and reflect on some of these changes; it is also worthwhile to consider how & why our programme was able to prosper and become today an integral part of the tertiary educational scenario in Sri Lanka; what are our weak points should be strengthened; The availability of a wide range of expertise amongst our membership, employed in diverse institutions and vocations, for the conduct of lectures & obtaining academic advice has been a significant plus point and has been much appreciated and acknowledged by our students. I have to acknowledge with thanks the services rendered by many of my colleagues who have rendered yeoman expert services in conducting lectures, practicals & in other ways. In particular I must mention the names of Professors E R Jansz & H D Gunawardhana who continue with their unbroken, loyal & efficient services on to the 30th successive year.

Having been continuously and actively involved with the running of the Graduateship Programme over the past 30 years I can say with great confidence,

happiness and boldness that the very wise and prudent policy decision made by the Council in July 1981 that enabled the use of Educational money in general and Graduateship money in particular (including interest) as decided by the Educational Committee, subject however to the approval of the Council, is perhaps the most significant, crucial and invaluable turning point that led to the resounding success of the Graduateship Programme. Council members at that time very wisely and intelligently recognised that the funds collected as part of the Graduateship Programme has to be used for the benefit of the Programme and its students rather than, for example, to fund grandiose Institute events such as holding of International Conferences. At that time, nobody thought it fit to unnecessarily and undiplomatically remind the Educational Committee the obvious fact that the Council is supreme and has the over riding power and responsibility on all Institute matters. The Educational Committee, in its turn, always recognized that it was nothing but correct that the Institute activities needed financial and infrastructural support from the apparent "prosperity" of the Graduateship Programme. The very delegation and devolution of the management and conduct of the educational programmes on to the Educational Committee from the very inception of the Graduateship Programme enabled a very fine and useful division of labour: the Council did not have to waste its precious time on mundane and routine educational matters which were best handled by educational experts; on the other hand, a substantial portion of the funds collected were transferred and left to the sole discretion of the Council; such contributions today comprise about 70% of the total revenue for general activities conducted by the Council. This has become very significant in a year when for the first time no Government Grant has been given through the Ministry of Science & Technology to any of the scientific bodies, including our Institute for their general activities. I am also happy to note that the Institute itself has been able to generate much funding for activities such as the holding of conferences in recent times so that it has not been necessary to accept offers of further financial assistance from educational funds.

Another significant decision in the history of our educational programmes was the establishment of the **College of Chemical Sciences (CCS)** in 2001 with the transfer of the duties and functions of the Educational Committee to a more independent Academic Board; this reinforced the financial discretion and gave more academic discretion as well. The ability of the Academic Board of the CCS to further the educational activities without unnecessary intervention of the Council on a more devolved and delegated basis has proved to be a further impetus to the rapid progress and development of the Graduateship Programme over the past seven years. It is hoped that

in an age when even the national scene requires & demands increased devolution in order to solve problems, we will be wise to recognize that the solution to problems when organizations get bigger is not centralisation but even more delegation & devolution with responsibility & adequate accountability!

Let us not forget that our Institute did not have any staff or a semblance of an office until the commencement of our Graduateship Programme. After many years of trying and waiting we at long last were able to move in 2005 into our own building, Adamantane House, constructed on land given to us by the UDA on a 30 year lease. We were able to construct this building (incorporating *inter alia*, laboratories, lecture halls, air conditioned library, computer laboratory and an instrumentation centre) and furnish it completely at a cost of over Rs 35 million without the need to resort to any type of loan but largely through the utilisation of educational funds; this would however never have been possible if not for the prudent decision of the Council referred to above that gave *de facto* financial independence to its educational arm. The physical centralisation of all Institute activity into Adamantane House has now enabled the students to take utmost pride in studying in a location that one can be proud to be part of; the shift of the Diploma in Laboratory Technology Programme to our own premises after conducting it for 32 years at Aquinas College of Higher Studies was another significant development consequent to the occupation of Adamantane House. We have consequently recorded very big increases in our student numbers to unexpectedly record levels so that we are already short of adequate space; However, we are now in a position to go boldly forward to construct an extension to the existing premises. **Adamantane House will stand as a lasting monument & testament to the type of contribution an educational programme can make towards improving the infrastructure of a professional body!**

The introduction of the course named as "Research Methods in Chemistry" as an optional paper into the Graduateship Programme can be considered as one of the most important & crucial academic developments that have taken place coincidentally in the silver jubilee year. It has filled an important void in the Graduateship Programme. We are also moving more & more in the direction of a course unit system with many courses optional and students no longer required to repeat a paper they have passed at an earlier attempt. Examinations are now more distributed and held every year at all levels. Our small contribution to ethnic & social harmony arises from the introduction of a compulsory courses in Sinhala & Tamil for Tamil & Sinhala medium students respectively. Practical courses are now offered to students more meaningfully and much earlier so that formal practical courses are

generally completed by the third year of study. Results of students are released with minimal delay; under the new structure results are also available in the GPA format. In the seventies, when a warped and distorted idea of nationalism and patriotism resulted in an increasing change in the medium of teaching to the swabasha medium at the national level, we virtually swam against the tide: we commenced our Technician and Graduateship Programmes only in the English medium since it was clear Institute policy that tertiary level education in any scientific area should be provided only in an international language such as English. Today, three decades later, the tide has changed and even university students are demanding instruction in English. We can only sit back and take great pride that our pragmatic version of nationalism was different to that of the country and consequently all lectures of our students have been conducted in the English medium only with great benefit to students themselves.

The first batch of our students who were able to use our own library at Mt Lavinia for their entire programme passed out in 1996 and (with an annual average thereafter of over 30) we became since then the largest single producer of Graduate Chemists in Sri Lanka. With the recent passing out of the largest ever batch of 52 as the 25th (Silver Jubilee) Batch, the total number of Graduate Chemists produced has risen to 519. Over the past 6 years, the mean annual average has increased to over 37. It is estimated that we are today producing 40% of Sri Lanka's Graduate Chemists. This should bring pride and happiness to all Institute members! These Graduate Chemists are playing a very important part in national development both in Sri Lanka and abroad. We are also aware that a very large proportion of the Graduate Chemists produced by us have obtained or are pursuing postgraduate qualifications. More & more of our students and products are being attracted to pursue post-graduate programmes in Sri Lanka & abroad.

Cannot we be justly proud of the gigantic contribution our Institute has made towards human resource development in the area of Chemical Sciences over the past 25 years. Our endeavour is one more typical illustration of the manner in which tertiary education can be provided to a larger number of Sri Lankan students through concrete attempts outside the highly regimented and unnecessarily bureaucratic and fund starved state (university) system. **There is no doubt that the only practical way in which Sri**

Lanka can enhance its tertiary level output at the degree level is through broad basing of the provision of such tertiary level education outside the conventional state (university) sector. Indirectly, we have also been able to provide increasing numbers of both academic & non academic persons with permanent, temporary as well as casual employment and this consequence of productivity is worthy of note by all planners & economists!

Conclusion

The Institute of Chemistry Ceylon together with its College of Chemical Sciences has truly come of age as a result of the exponential enhancement of activities in recent decades. The membership of the Institute today includes its own Graduate Chemists who comprise about 45 % of its total membership. However, it is regrettable that a large number of our Graduate Chemists are not continuing to make any substantial contribution to shoulder the work of the Institute. This needs correction at a very early date. I wish to refer to the plea made by Professor Arjuna Aluwihare, who in his Convocation Address at our third Convocation last year called upon our Graduate Chemists to remember the Institute and the College as their **academic parent**. The future of our Institute will also depend to a large extent on the contribution that our own Graduate Chemists will make towards its academic parent!

Many of us who have been involved in these developments for a long time in the Institute of Chemistry Ceylon and the College of Chemical Sciences have retired or on the threshold of retirement. The future depends on the continuing participation and involvement of younger chemists whether produced by the Universities or by the College. In particular the Graduateship Programme of the College has produced a number of such young chemists. Unfortunately, only a few of them have put their shoulder to the wheel over the past 25 years. As a **very senior member and pioneer, let me appeal to every one of them to come forward and provide honorary service to enable the Institute to enhance its current activities and prosperity.** Chemistry is the Central Science and has a crucial role to play in the life of Sri Lanka. That can take place only if **younger chemists** provide the necessary human resources for its development. I am confident that such support and assistance would be forthcoming.

Prof. MUS Sultanbawa Award for Research in Chemistry 2007

Prof. MUS Sultanbawa Award for Research in Chemistry 2007 for the best presentation at the Annual Session of the Institute of Chemistry 2007 was won by Prof. Veranja Karunaratne and Dr. (Ms) Vinitha Thadani. The editor apologises for the error in the omission of Prof. Veranja Karunaratne's name on pages 51 and 53 of Chemistry in Sri Lanka, Vol 24(3) (September 2007).