Editorial

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The chemistry fraternity all over the world is celebrating the year 2011 as the International year of Chemistry. The decision to do so was taken by the IUPAC at its meeting held at Turin, Italy in 2007. After two and a half centuries of modern chemistry the IUPAC and the UNESCO felt naturally that "it is time to celebrate the achievements of chemistry and its contributions to the well-being of humankind". Through due process the UN General Assembly, in 2008, declared to organize the celebration. The motto for the occasion is "*Chemistry - our life, our future*", which succinctly puts forth the importance of chemistry for our existence. Chemistry has helped in meeting the world needs and it is essential in maintaining natural resource base. Chemistry is considered as the Central Science (see, G. Desiraju, *Resonance*, 2007, vol.12, p. 44-61) among the three branches of science.

Some of the objectives of the celebration are, (1) to increase the public appreciation and understanding of chemistry, (2) encourage the interest of young people in chemistry, (3) generate enthusiasm for the creative future of chemistry, and (4) celebrate the role of women in chemistry or major historical events in chemistry. The year 2011 is chosen to commemorate some of the events in chemistry which include the centenaries of Marie Curie winning the Nobel Prize in 1911, establishment of the International Association of Chemical Societies (the forerunner of the IUPAC) in 1911, Rutherford's discovery of the atomic nucleus in 1911, the bicentenary of publication of the Avogadro's hypothesis in 1811 and several others (e.g. the discovery of superconductivity in super cooled mercury by Heike Kammerling Onners in1911, Resolution of coordination complexes for the first time in 1911, etc.).

Resonance has been doing its bit in the cause of chemistry over the last sixteen years by publishing a variety of chemistry articles, which number close to two hundred and fifty. In order to do its part in the celebration of the IYC, *Resonance* has decided to bring out a special issue at the end of the year, which would have articles selected from those that appeared in the journal over the last fifteen years. Given the page constraint, Prof. K L Sebastian and I had a tough job in selecting them because they are all peer reviewed and well processed even before their publication and hence are of unquestionable quality. Therefore, we decided to follow some broad criteria for this purpose, which include – (1) Cover as many areas of chemistry as

possible, (2) The subject matter should be such that it had significant impact on human activities like social, economic, educational, political, environmental, etc, as also help scientific progress and arouse scientific curiosity, (3) Avoid series articles which discuss a single subject in multiple number of articles, (4) Avoid articles that describe Nobel Prize winning studies. In doing so, we have left out many articles which are undoubtedly as good as those which have been selected. Based on these considerations, some sixty articles were shortlisted and twenty-nine of them were eventually chosen. It is hoped that the selection would be received sympathetically by the valued readers of *Resonance*.

After having made the selection, it was even more difficult to arrange them in some meaningful sequence. In this regard, again, we had to evolve a norm. One of the principal objectives of the IYC celebration is "to increase interest of young people in chemistry". To fulfil this objective, who else would be a better chemist than Prof. C N R Rao? Fortunately, we had an article by him which perfectly fitted the objective. So, the issue starts with 'Chemistry of Materials – A Letter to a Young Friend'. How do we proceed further? Basically, chemistry is the study of the nature and properties of matter and we start learning that aspect early in our chemistry lessons. So, the second article deals with 'States of Matter', then comes 'The Concept of Atoms and Molecules' and then the sequence moves on in order of how chemistry developed and impacted various aspects of chemistry and our lives over the last one hundred and fifty years. However, it is not a collection of articles which describe historical developments in chemistry. Far from it, there are articles on synthesis, structure, properties, reaction mechanisms, applications of chemical principles and chemicals, and much else.

Chemistry is not a serious matter all the time. In fact, some great chemists considered that doing chemistry is fun (e.g., Irving Langmuir, by A K Rajvanshi, *Resonance*, 2008, Vol. 13, p. 619–626). Ayan Guha always finds the funny side even in very serious science. Many of his chemistry cartoons are interspersed among the articles.

We hope the current issue will give a good glimpse of what the journal is doing to bring home the flavour of chemistry to the students and teachers at all levels of their study. We hope they enjoy reading it and appreciate it as a source of useful chemistry. Let us remember that it is only the celebration of IYC that comes to an end with 2011, but chemistry and its celebration will be forever. *Resonance* will continue to be a part of it.