EDITORIAL

Editorial

T K CHANDRASEKHAR^a, L GIRIBABU^b and CHIVUKULA V SASTRI^c

^aNational Institute of Science Education and Research, Jatni, Odisha, India

^bCSIR-Indian Institute of Chemical Technology, Hyderabad, India

^cIndian Institute of Technology, Guwahati, India

E-mail: tkc@niser.ac.in; giribabu@iict.res.in; sastricv@iitg.ac.in

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It is with great admiration that we write an editorial for the special issue in the Journal of Chemical Sciences on the theme of '*Beyond Classical Chemistry*'. This special issue is published in honour of Prof. (late) Bhaskar G Maiya, School of Chemistry, University of Hyderabad, and his influence on the development of chemical science. His original research work, coupled with his dynamism and charisma inspired many researchers throughout India. Prof. Maiya was born on 20th June 1956 in South Canara (Dakshina Kannada) district in Karnataka, India. He completed his school and college education in Udupi and he obtained his post-graduation from Manasagangotri, University of Mysore. He joined the prestigious Indian Institute of Science (IISc), Bangalore for his PhD degree under the mentorship of Prof. Krishnan in the Department of Inorganic and Physical Chemistry and graduated in 1986. In 1989, he joined as an Assistant Professor at the School of Chemistry, University of Hyderabad, after the completion of his different post-doctoral tenures at the Tata Institute of Fundamental Research (TIFR), the University of Houston & University of Austin in the USA. During this stint at the School of Chemistry, University of Hyderabad, he assumed the full professorship in 2000 and was destined to move

further in his academic career, until his untimely demise on 21st March 2004.

As a research scholar, post-doctoral research associate and independent researcher, Prof. Maiya made significant efforts in broadening the understanding of bio-inorganic and supramolecular chemistry, and photochemistry, for the scientific community. His contributions in understanding and tuning phenomena of electron and energy transfer in the molecules have been exemplary. Prof. Maiya started a career in chemistry during his stay at Prof. V Krishnan group working on supramolecular based porphyrin-crown ethers and their electrochemical studies. He later joined the research group of Prof. N Periasamy at Tata Institute of Fundamental Research (TIFR) as visiting fellow in 1987, where he explored excited state properties of porphyrins. Subsequently, he worked with Prof. Karl M Kadish at the University of Houston in 1988 and in 1989 with Prof. Jonathan Sessler at the University of Austin, USA.

Prof. Maiya started his independent academic career in 1989 as a lecturer (Assistant Professor), School of Chemistry at the University of Hyderabad. His initial chemistry was primarily on expanding his knowledge on supramolecular chemistry to bio-mimicking natural photosynthesis and photodynamic therapy. He made significant contributions to have a better understanding of photophysical and electrochemical properties of porphyrin and modified phenanthroline ligand-based metal complexes. One of the single out achievements were in developing porphyrin-based donor-acceptor systems by adopting an axial bonding approach in which he utilized axial position/s for the construction to avoid tedious synthetic protocols. Another interesting contribution of his is that the orientation depended on energy transfer, and very few examples are available in literature. Prof. Maiya also expanded his research outlook through various collaborative

*For correspondence

works. In collaboration with Prof. Goverdhan Mehta, he designed porphyrin hybrids to explore their utility in PDT applications. He also explored the NLO properties of porphyrins and their derivatives working with Prof. Narayana Rao at the School of Physics, University of Hyderabad. Prof. Maiya was highly approachable and his attitude to apply his porphyrin knowledge to other domains gained him several national and international collaborators. Working with the groups of Prof. A. Dattagupta, Prof. A Samanta, Prof. T P Radhakrishnan, Prof. M J Swamy, Prof. Sujit Roy, Prof. Madhava Rao, Prof. S Umapathy, Prof. Antony Harriman, Prof. J K M Sanders, and Prof. N Bampos, his work on porphyrins and metal complexes bearing phenothroline subunits saw their potential applications beyond their classical chemistry.

As a teacher, Prof. Maiya taught several inorganic courses like coordination chemistry, bio-inorganic chemistry and inorganic drugs, etc. to postgraduate students at the School of Chemistry. His classes have motivated young budding scientists to pursue a career in chemistry. He has also helped several students join PhD programs in several leading institutions, both in India and abroad. In his short career, Prof. Maiya officially mentored seven PhD students, Dr. Mallena Sirish, Dr. T Anita Rao, Dr. Arouna Giri, Dr. L Giribabu,

Dr. D Raghunath Reddy, Dr. A Ashok Kumar and Dr. Chivukula V Sastri. Students pursuing their PhDs under the mentorship of Prof. Maiya include Dr. M Mariappan, Dr. P Prasanth Kumar, Dr. Premalatha and Dr. Tamal Ghosh. His research has resulted in over 97 publications in reputed international, peer-reviewed journals. He also has three patents to his credit. His wide-ranging research career earned him several accolades too. These include the Fellowship of Indian Academy of Sciences, Bangalore, Fellowship of Andhra Pradesh Akademi of Sciences, Bronze medal by Chemical Research Society of India, etc. He was also an editorial member of Proceedings of the Indian Academy of Sciences (*Journal of Chemical Sciences*). He also served as an expert in many scientific body committees and was a regular reviewer for many bioinorganic, supramolecular chemistry and photochemistry journals of international repute.

Prof. Maiya's sudden demise on 21st March 2004 left a huge void in the scientific community. His contributions in supramolecular porphyrin chemistry and bioinorganic chemistry has inspired his friends, students and colleagues and continues to inspire many more. On the occasion of his 65th birth anniversary in 2021, we considered this special issue to be a good way to commemorate his work and contributions to the field of Chemistry.