

## Professor S. P. Singh



### A tribute

#### From the Desk of Guest Editor

**This special issue is dedicated to Professor S. P. Singh on the occasion of his 80th birthday to acknowledge his contribution to chemistry.**

It is my honour to open the special issue of *Indian Journal of Heterocyclic Chemistry* dedicated to Dr. S. P. Singh on the occasion of his 80th birthday. It has been my undoubted pleasure to know him for over 30 years. I first met Dr. Singh in 1986 when I joined Chemistry Department, Kurukshetra University (KU) as an M. Sc. student. He has been my teacher, research mentor, colleague and a constant source of inspiration during all these years. I always found him ready to share his experience with young colleagues and collaborators and his advice was of great value to many scientific careers. I will always remember his efforts to arrange Ph.D. defense of my doctoral thesis at Cambridge in 1993; his calm and kindness helped me to survive. Now, after his retirement, Dr. Singh remains very active as an author, reviewer and expert. For him, chemistry has not been just a profession, but also a life's passion. Now, since he does not have to take care of administrative duties, he has more time for family and other favourite activities including travelling.

Born on April 5, 1938 in village Banthara, Distt. Etawah of U.P. Dr. Singh had his early schooling in S.D. High School, Etawah and Govt. Inter College Saharanpur. He entered University of Lucknow and passed his M.Sc. Examination in 1961, standing First in order of merit in the University. He subsequently joined research group of Prof. A. B. Sen and worked on medicinal plants in the laboratories of the University and CDRI, Lucknow. He was awarded Ph.D. degree in 1964 and after a post-doctoral stint, joined Kurukshetra University (KU) as Lecturer in 1965. He served the Dept. of Chemistry, KU as Lecturer, Reader, Professor and Chairman of the Dept. He retired from K.U. in 1998 and was then appointed as Professor Emeritus for life with membership of all the academic bodies of the University.

During his active service of 33 years at KU, Dr. Singh was involved in research in several areas of organic chemistry such as chemistry of pyrazoles particularly involving structural revisions of a large number of molecules which were assigned seven-membered structures, synthesis of potential phototoxic compounds, mass spectral analysis of many heterocyclic molecules and application of hypervalent iodine reagents in the synthesis of heterocyclic compounds. He has authored about 200 research papers and review articles and has supervised M. Phil and Ph. D. theses of large number of students. Many of his former students are occupying high academic positions in India and U.S.A.

Dr. Singh had worked as a post-doctoral fellow in the laboratory of Prof. J. Kagan at the University of Illinois at Chicago, (UIC) U.S.A. during 1968-70 and then again visited UIC as senior Fulbright scholar in 1979-80 and as a visiting Research Professor in 1989. He had visited University of Bath, UK as INSA - Royal Society Fellow twice (1993 and 2002) in the laboratory of Prof. M. D. Threadgill and CSIC, Madrid, Spain for establishing a very fruitful collaboration with Prof. José Elguero in 1990.

His curriculum vitae reflects his capacity, tenacity and boldness to achieve and maintain a top tier scientific research activity through 55 years of dedication to Science in India, including collaboration with many foreign universities.

In the early years of his career, Dr. Singh noted that there are no books available to the students for conceptual topics in chemistry such as reaction mechanism. He conceptualized and authored the book *Reaction Mechanism in Organic Chemistry* with Prof. S.M. Mukherji (Macmillan 1976) which received

overwhelming response all over the country. The book has since been revised (with Prof. Om Prakash as the co-author) in 2015 with a grant from the DST under USERS programme. Subsequently he co-authored a three volume treatise on Organic Chemistry (New Age International) and more recently, a book on Pericyclic Reactions (Academic Press, London 2016).

Dr. Singh was also involved in the formulation of national policy of chemistry. He was nominated as a member and then as the Convener of the UGC Panel in Chemistry. He was nominated as the Nodal Person of the UGC Committee on the Curriculum Development in Chemistry for drafting a Model syllabus for undergraduate and post-graduate students. This model syllabus has now been adopted by most of the universities.

Dr. Singh was elected as the President of the section of Chemical Sciences of the Indian Science Congress Association (ISCA) in 2001 and then as the General Secretary for a three year term. He represented ISCA in the Festival of Science organized by the British Association for the Advancement of Science (BAAS) held at the University of Exeter in 2004 and explored the areas for further strengthening of the ties between ISCA and BAAS. In 2006, he visited China on the invitation of Beijing Association for the Advancement of Science and Technology (BAAST) and signed a MoU between ISCA and BAAST. He is now actively involved in ISCA as a permanent member of its Council.

Dr. Singh was always concerned about the growth of science in India and felt that outstanding contributions of scientists need to be recognized. Fortunately he discussed his plan with his friend, the late Mr. Ram S. Goyal, an NRI settled in the US. Mr. Goyal readily offered financial help for this noble cause and thus Goyal Prizes were established in 1990s. He handled these prizes for a decade and later persuaded Mr. Goyal to institutionalize them by giving sufficient endowment money to KU in 2000. In the span of 25 years Goyal prizes, conferred on more than 100 eminent scientists of the country, are considered a hallmark of excellence in Indian science. He is the permanent Co-chairman of the Organizing Committee of Goyal Prizes as the donor's nominee.

Dr. Singh is the recipient of Acharya P.C. Ray Memorial Award and Life-time Achievement Award of the Indian Chemical Society. He had received Millennium Plaque of Honour by the Prime Minister in the inaugural function of ISCA in 2014. Dr. Singh was nominated by the MHRD as a Trustee of the National Book Trust, India and also a member of the Board of Governors in T.T.T.I. Chandigarh.

On a personal level, he enjoys an accomplished life. His wife, Mrs. Prabha Singh, is an acknowledged educationist. They have two sons, Shubhendu, Executive Engineer, U.P. Power Corporation Ltd. and Hemendu, settled in USA. Dr. Singh enjoys spending time with his grandchildren. He reads a lot and loves to have long discussions on political and social issues. Amongst his numerous skills, I would emphasize on his creativity, optimism, tenacity and overall his exceptional humane qualities. I hope he continues to promote the development of science and remains a role model for all the scientists who admire his contributions.

I would like to convey my sincere thanks and appreciation to all the authors of this Commemorative Issue who contributed enthusiastically to show their love and respect to Dr. Singh.

**Dr. Ranjana Aggarwal**

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*(Ranjana Aggarwal received her Masters in 1988 with academic distinction and Ph. D. in 1993 from Kurukshetra University under the supervision of Prof. S. P. Singh on the synthesis of azole compounds as potential phototoxic agents. After two years of post-doctoral research with Prof. James Saunton at Cambridge University she joined her alma mater as Lecturer in 1995. She joined Prof. Fabio Benedetti research group as research associate at Università degli Studi di Trieste, Italy in 1998 and in 2003 she was awarded Commonwealth Fellowship by the Association of Commonwealth Universities, UK to work again at Cambridge University. At present, she is Professor of Chemistry at KU and her research group is engaged in the study of synthetic, mechanistic and spectral aspects of heterocyclic compounds of medicinal interest. She has been the recipient of Basudev Banerjee award by Indian Chemical Society, Kolkata and Prof. S. S. Katiyar Endowment award by Indian Science Congress, Kolkata.)*