Professor H M Chawla

Professor H M Chawla (born September 15, 1949) is a Ph.D. from University of Delhi(1974). Before joining IIT Delhi as Assistant Professor in 1982, he was lecturer in Delhi University from 1971-81 and a Fulbright Scholar at State University of New York, Bingahampton (1981-82). He became Associate Professor in 1991 and a Professor in 1995. He is Professor of Chemistry in Higher Administration Grade since 2009 at IIT Delhi. He has held various positions in and outside the Institute. He has been Head of the Chemistry Department (2001-2004), IIT Delhi and chairman of Environmental Health and Lab Safety Unit, the first such Unit in Institutions of higher learning in the country. He has been a Distinguished Visiting Professor at Indian institute of Environmental Management, Mumbai and a Visiting Professor at University of Missouri, Columbia, St Louis, USA and University of Victoria, British Columbia, Canada. He is a Visiting Research fellow of University of New South Wales (UNSW), Australia.
Post superannuation from IIT Delhi, Professor Chawla has been inducted as a National Adviser to Ministry of Health and Family Welfare, Govt of India since 2015. He is overseeing the establishment of National Tobacco Testing Laboratories at Mumbai, Guwahati and at National Institute for Cancer Prevention and Research, Noida, India. He is also heading the Technical Support Unit in the NTCP division of the MoHFW, Govt of India

He has guided more than 34 PhDs, 50 post doctoral workers, several M.Tech., M.Sc. and B.Tech. Students. He has collaborated with different Departments of IIT Delhi and different Institutes in the country and abroad and has developed several new interdisciplinary programs and projects. He is considered to be a pioneer in calixarene research in India and is the discoverer of about 16 new natural products which have been named and whose structures were determined by his group. Volubilin is the first C-rhamnoside reported by him in the literature and another compound named as Seshadrin as a tribute to his supervisor Professor T R Seshadri, the first FRS in organic chemistry from India. Professor Chawla has a passion to convert abstract research ideas into useful products and is the inventor of the first food product (Fruwash) form any of the Educational Institutions in India. This societal invention has become a house hold name and a favorite of the print and electronic media. Likewise his formulations for longevity and skin care have also hit the markets and are fetching good reviews. He is the founder of first chemistry oriented technology Business incubator the first unit on Environmental Health and Lab Safety in ---- of the Educational Institute in the country. He has presided over many technical meetings of the Industrial groups.

Professor Chawla has published over 205 original research Papers in respected research journals, ten patents, over 200 presentations at National and International symposia and conferences and over ten well recognized text books at UG, PG levels. He has edited two research monographs, two book Chapters in reputed reference works like a multivolume series on ‘Chemical Sensors’ (2011) and Flyash - propylene particulate composites, Development of New Composites edited by A. Hodzic and K. Kar (2013) (Momentum Press, New York).

Prof. Chawla is on organizing committees of numerous National and International Conferences. He has founded the Asian Network for Natural and Unnatural materials (ANNUM), a society working towards development of the Asian region in the chemical and food sector. ANNUM-3 was held at Punjab University Chandigarh in February 2015, ANNUM 4 at National University of Singapore, Singapore in 2016, ANNUM 5 was held at University of Gaja Mada(UGM), Yogyakarata, Indonesia while ANNUM 6 is being held at GIFU University, Japan in July 25-27, 2018.

He is a Member of the Governing body of various institutions of higher learning in India as well as a UGC nominee for different committees for several universities and Institutes as well as program advisory committees of DST, DBT, MOEF and CSIR etc He has been a member of the Research Council of a National Environmental Engineering & Research Institute, Nagpur and Chairman of review of text books published by NCERT for class XI and XII as well as a reviewer for many international research journals.

He has carried out 25 research projects worth more than 17 crores and 32 consulting projects worth more than 2 crores.

Several National awards and recognitions have acknowledged Professor Chawla's work. Notable amongst them are

- NRDC Meritorious Societal Invention National Award (2014)
- Dr. V. Krishnamoorthy Memorial Lecture Award, 2014
- Intellectual Ventures (USA) patent award (2009)
- Significant research awards (2010-11)
- Lockheed Martin Gold Medal for best innovation in the agriculture sector (2008)
- Professor T.R. Seshadri and Prof. V. Krishnamoorthy Memorial Lecture Award (2008).
- Recognition as the author of the most downloaded paper published in Tetrahedron (Science Direct 2007)
- Burhani Foundation-NEERI (CSIR) Award for significant contributions of socially relevant environmentally sound technologies (1998)
- Professor MN Desai National Award for Organic Chemistry, SPARCS award for outstanding contributions to Application research (2004)
- CosmoProf Asia Lecture Award, Hongkong (1999)
- Best paper awards for some of his research papers at national and International Conferences
- Fulbright Travel award
- First prize for standing first in MSc by Hans Raj College, University of Delhi, Delhi

He is actively involved in innovative research for process and product development in areas of relevance to chemical, cosmeceuticals and functional organic foods. He has introduced many new terms in the literature which have become accepted world over. Some of them are serumoids, suprcosmetics skin care, supracosmetology, active

nitrate, volubilin, volubilinin, seshadrin etc. His research on sun screens has resulted in elucidation of novel concepts of use of conformational analysis in real life situations.

His innovation on Fruwash, a natural shelf life extender for fruits and vegetables without refrigeration is now under large field trials. He is also the inventor of innovative technologies such as those of adhesive sealants, sunscreen actives for protection from UVA and UVB radiations, concept of Serumoids for enhancing personal sophistication through Natural Products of Indian origin. Some of these have found ways into the World markets. He has been consultant/advisor to different industries in India and abroad to resolve difficult issues of industrial importance.

Apart from academic research on calixarenes, Prof. Chawla's current passion is focused on research and development on functional Foods, Chemical Sensors, Standards for food and maintenance of freshness, Chemical process Development and Environmental Health and Lab Safety.