

Brief CV of Dr. Sanjay Kumar, Director CSIR-IHBT, Palampur

Dr. Sanjay Kumar obtained Master's degrees in Plant Physiology from G.B. Pant University of Agriculture and Technology, Pantnagar; pursued Ph.D. from Indian Agricultural Research Institute, New Delhi in Plant Physiology with Biochemistry and Molecular Biology. He joined CSIR-IHBT as "Scientist B" in 1990; received post-doctoral training at Texas Tech University, USA, Rothamsted Research, UK and Kansas State University, USA.



With a research interest on bioresource utilization for bioeconomy, key contributions to industry include development of a production technology of an autoclavable superoxide dismutase, which was transferred to M/s Phyto Biotech, Kolkata. Another technology on RNA Isolation Kit has also been commercialized.

Other major research contributions are on discovery of a novel carbon fixation pathway and transplantation thereafter in a heterologous system to reduce photorespiratory losses; plant adaptation mechanism in high altitude, deciphering the mechanisms of winter dormancy and drought stress in tea; metabolic engineering of catechins, picrosides, steviosides, shikonins and podophyllotoxin biosynthesis; bioprospecting genes, proteins and processes for plant tolerance under abiotic stresses.

With keen interest on medicinal and aromatic herbs, and nutraceuticals, he contributed immensely on transcriptome and genome sequencing of Himalayan plants. He has guided 20 Ph.D. students and has over 120 publications including an edited book. He has several patents to his credit, some of which are commercialized also.

Early in his career, he received Young Scientist Award by Indian National Science Academy, New Delhi. For his distinguished service to industry, he was awarded the prestigious VASVIK Industrial Research Award 2013 for Agricultural Science and Technology. He is recipient of R.D. Asana Endowment Award Lecture and Professor G.V. Joshi Memorial Lecture Award. In 2008, Dr Kumar was awarded Certificate of Merit in CSIR Leadership Programme. Currently, he is Fellow of the National Academy of Sciences, Allahabad, National Academy of Agricultural Sciences, New Delhi and Crop Improvement Society of India.

He is chairman/member of several Professional Committees and Task Forces at national level, and served Editorial Board of international journals.

He has been leading CSIR-IHBT as a Director since 11th June, 2015.