Dr. Chandra P. Sharma was recognized by the Society with a distinguished Scientist award (1991) and the award subsequently is known as Chandra P. Sharma Award. Society recognizes the distinguished scientists working in the area of Biomaterials and Artificial Organs time to time with Chandra P. Sharma Award. Prof. Kam W. Leong, Samuel Y. Sheng Professor of Biomedical Engineering and Systems Biology at Columbia University, USA has been selected for the Chandra P. Sharma Award 2022 in recognition of his outstanding contributions in Biomaterials and Artificial Organs. He will receive the Award and deliver a plenary lecture during the BIO-Remedi 2022 at IIT Guwahati.

The award winners have been Late Professor P.K. Bajpai (1992) University of Dayton (USA); Mr. H. Vijayakumar (1994) SIDD Life Sciences, Chennai, India; Professor Erhan Piskin (1997), Hacettepe University, Turkey; Dr. Hideharu Shintani (1999), National Institute of Health Sciences, Japan; Professor Victor I. Sevastianov, (2000) Russian Research Centre for Biomaterials for Artificial Organs, Russia; Professor Subrata Saha, (2001), SUNY, USA; Professor Allan S. Hoffman (2002), University of Washington, USA; Dr. Leo Vroman (2003), Downstate Medical, USA; Professor Xingdong Zhang (2004), Sichuan University, China; Professor Robert E. Baier (2005), SUNY at Buffalo, USA, Dr. Avi Domb (2006), The Hebrew University of Jerusalem, Israel; Late Professor Larry L. Hench (2007) University Professor of Biomedical Engineering in the Florida Institute of Technology, USA; Professor David F. Williams (2008), Editor in Chief, Biomaterials; Professor Buddy D. Ratner (2009), University of Washington, Seattle, USA; Professor Young Ha Kim (2010), Gwangju Institute of Science and Technology, Korea; Professor Yasuhiko Tabata (2011), Institute for Frontier Medical Sciences, Kyoto University, Japan; Professor Sung Wan Kim (2012), University of Utah, USA; Professor Myron Spector (2013), Harvard-MIT Division of Health Sciences and Technology, Brigham and Women's Hospital, Boston, USA; Professor Seeram Ramakrishna (2014), Center for Nanofibers & Nanotechnology, NUS, Singapore; Professor John A. Ramshaw (2015), Chief Scientist, CSIRO Australia; Professor John L. Brash (2016), McMaster University, Canada; Professor Gilson Khang (2017), Chonbuk National University, South Korea and Professor Ashutosh Chilkoti (2018), Duke University, USA, Prof. Charles James Kirkpatrick (2019), Johannes Gutenberg University, Mainz and Prof. James M. Anderson (2021), Case Western Reserve University, USA.

Award Citation

Professor Kam W. Leong- Samuel Y. Sheng Professor of Biomedical Engineering and Systems Biology at Columbia University, USA has been selected by the Society for Biomaterials and Artificial Organs (India) for the Chandra P. Sharma Award 2022 in recognition of his distinguished contributions in Biomaterials and Artificial Organs with major focus of research towards Biomaterials for Tissue Engineering. Particularly his recognized contributions were towards innovative design of polymeric biomaterials and an effort to understand the mechanism of cellular interaction with nanomaterials, understanding and exploiting the interactions of cells with nanostructures for therapeutic applications, discrete nanostructures in the form of multi-functional nanoparticles applied for delivery of drug, antigen, protein, siRNA, and DNA to cells for drug, gene, and immunotherapy and continuous nanostructures in the form of electrospun nanofiber and imprinted nanopattern applied to influence cellular behaviour, including expansion of various stem cells.

Kam W. Leong formerly held the position of James B. Duke Professor of Biomedical Engineering in the Pratt School of Engineering of Duke University, as well as he was a joint appointee in the Department of Surgery of the School of Medicine. He received his undergraduate degree in Chemical Engineering from the University of California at Santa Barbara and his PhD, also in Chemical Engineering, from the University of Pennsylvania. He then ventured into drug delivery research as a postdoctoral fellow in the laboratory of Professor Robert Langer at MIT, where he helped develop the biodegradable polyanhydrides as a drug carrier for brain tumor therapy.

After his training at MIT, he joined the faculty in the Department of Biomedical Engineering at The Johns Hopkins School of Medicine, and rose through the rank to become a full professor in 1998. While based at Johns Hopkins, he served as a Program Director in the Institute of Materials Research and Engineering in Singapore to help develop biomaterials research in the Institute from 1998-2004. Around the same time, he also directed a lab in Johns Hopkins Singapore on Therapeutics and Tissue Engineering. He moved to Duke University in 2006 to join the Department of Biomedical Engineering, focusing on the development of nanotherapeutics. He moved to Columbia University in 2014, focusing on research directions of nonviral gene editing, oral delivery of biologics, biomaterials-mediated inflammation modulation, and iPSC-based tissue-on-a-chip. Kam W. Leong serves on the editorial boards of major journals in the fields of biomaterials, drug delivery, nanomedicine, and gene and cell therapy. He owns more than 60 issued patents, and has published over 400 peer-reviewed research manuscripts, has been cited over 61000 times and has an h-index of 128. His research was recognized by the Young Investigator Research Achievement Award of Controlled Release Society in 1994, and several awards by the same Society on Excellence in Guidance of Graduate Student Research. He also received the Stansell Family Distinguished Research Award from Duke University in 2010.