2015 Amgen Biochemical Engineering Award to Dr. Wei-Shou Hu

The Amgen Award (supported by Amgen, Inc., Thousand Oaks, California, USA), is given in memory of James E. Bailey to recognize research excellence and leadership in Biochemical Engineering. The Amgen Award Committee (Chair: Sang Yup Lee) is proud to announce that the 2015 Amgen Biochemical Engineering Award has been given to **Professor Wei-Shou Hu** for his extensive contributions to the field of biochemical engineering.

Wei-Shou Hu, Distinguished McKnight University Professor in the Department of Chemical Engineering and Materials Science, University of Minnesota, received his B.S. from National Taiwan University and Ph.D. from Massachusetts Institute of Technology. Dr. Hu has long impacted the field of cell culture bioprocessing since its infancy by steadfastly introducing quantitative and systematic analysis into this field. His insightful work spanning from modeling and controlling cell metabolism, modulating glycosylation, to process data mining, has helped shape the advances of biopharmaceutical process technology. He recently led an industrial consortium to embark on genomic research on Chinese hamster ovary cells, the main workhorse of biomanufacturing, and to promote post-genomic research in cell bioprocessing. His biochemical engineering research also led to clinical development of a bioartificial liver for treating liver failure patients that has inspired much process engineering research in cell therapy. His fondness of applying classical biochemical reaction engineering to study biological regulations led to an early illustration of pathway analysis in secondary metabolism and recent revelation of the first dual-signaling control in microbial communal sensing. He co-authored the textbook *Bioseparations*, authored a cell culture bioprocessing book and co-edited several monographs. His educational effort includes a widely known intensive course on cell technology that has trained thousands of bioprocess professionals in biotech industry around the world. He initiated the Engineering Foundation conference on cell culture engineering nearly three decades ago as the technology was emerging. This has become a key forum for the biochemical engineering profession and continues to thrive to this day under ECI.

He received the inaugural Merck Award on cell culture engineering and the Lifetime Achievement award from the Society of In Vitro Biology. He was also recognized for his contribution in biochemical engineering by the Marvin Johnson Award from the Biochemical Technology Division of the American Chemical Society, the distinguished service award of Society of Biological Engineers, a special award from Asia Pacific Biochemical Engineering Conference (2009), as well as both the distinguished service award and the Division award from Food, Pharmaceuticals and Bioengineering Division of the American Institute of Chemical Engineers.