The Engineering Institute of Canada

2019 Award Citation

K.Y. Lo Medal

(recognizes significant engineering contributions at the international level)

Digvir S. Jayas

Nominated by the Canadian Society for Bioengineering

Dr. Digvir Jayas is a Distinguished Professor of the University of Manitoba and has held a Tier-I Canada Research Chair in Stored-Grain Ecosystems. Over the past 30 years, he has devoted his working life to reducing grain storage losses to increase the availability of grains to feed the growing world population. He leads the globe in the development of three-dimensional mathematical models to predict heat, moisture and gas transfer and movement of insects in stored bulk grain. These models are used to design efficient storage systems and to manage various types of storage structures containing grains in a multitude of climatic regions around the globe.

Digvir pioneered the concept of drying grain by forcing air horizontally rather than vertically to reduce energy costs during the drying process, resulting in more uniformly dried grains. Such systems conceptualized by Dr. Jayas are now sold worldwide. He has also designed a "Grain-o-bot" to assist in the automation of grain handling without cross-contamination of grains. These are some of the examples of multi-disciplinary research, a characteristic of the work of Dr. Digvir Jayas.

Ladies and gentlemen, and Mr. President, as a very worthy Recipient of the K.Y. Lo Medal, please welcome Dr. Digvir Jayas.