

## **Brief Background of Dr. Murlidhar Gupta**

Dr. Murlidhar Gupta is a Research Scientist at CanmetENERGY, Natural Resources Canada (NRCan). Prior to joining federal public service in 2002, he earned his doctorate in *Heat Transfer Modelling of Biomass Pyrolysis Reactors* from Université LAVAL, Canada. Dr. Gupta has diverse and versatile experience in a range of modern energy conversion systems. In the past, he has worked as a Process Engineer in a large and integrated gas cracker based petrochemicals complex. Between 2002 and 2010, Dr. Gupta's research in NRCan included development of carbon capture and storage technologies. He has played key role in developing *Canada's Clean Coal Technology Roadmap* and *Canada's CO<sub>2</sub> Capture and Storage Technology Roadmap*. Since 2010, Dr. Gupta has focused in advancing thermochemical conversion of biomass residues through integrated low emission bioenergy systems. He has spearheaded many fast pyrolysis activities including the development of a novel ablative fast pyrolysis technology, modelling of pyrolysis processes, and development of advanced approaches for stabilization of fast pyrolysis bio-oils.

Dr. Gupta is frequently invited as a reviewer in many international and national scientific forums to assess the submitted research papers and research proposals and grants. Dr. Gupta has contributed to numerous publications that include 2004 Inter-Government Panel on Climate Change (IPCC) Report on CO<sub>2</sub> Capture and Storage, IP disclosures/patent, and scientific journal papers.