Smart cities, urban mobility, and waste management in Bengaluru, India

Friday, January 5, 2018
12:00 p.m. – 1:00 pm
John A. Burns Hall, Room 3012 (3rd floor)

Given the rapid pace of development and urbanization, India faces several challenges that threaten achievement of the nation’s goal to create sustainable urban systems. The city of Bengaluru is at the forefront of India’s efforts to overcome problems of inadequate infrastructure, unsustainable transport, and management of municipal solid waste and waste water.

In this seminar, synthesis of these challenges and possible solutions for Bengaluru city are discussed in three short presentations:

1. Sustainable urban mobility using an indicator-based hierarchical benchmarking framework
2. Technologies to convert municipal solid waste (MSW) to refuse-derived fuel (RDF) for applications in small-scale electricity, heat generation, and liquid-fuel production
3. Redefining and rebuilding sustainable waste recovery and reuse systems through decentralized, robust, and participatory socio-technical options

Dr. P. Balachandra is an energy, environment, and sustainability specialist, ranked among the top 10 management researchers in India. In addition to IISc, he has worked at Harvard University in the USA, UNDP and AIT in Thailand and IGIDR in Mumbai, India. He has authored or co-authored six books and published about 130 papers and chapters in international and national journals, conference proceedings, and multi-author books.

Prof. S. Dasappa is a specialist in combustion of solid, liquid, and gaseous fuels with significant contributions to translational research. He has authored over 150 papers and chapters in international and national journals, conferences, and multi-author books, and he holds 18 patents. He has won several national and international awards. Over the past six years, he has investigated national and international projects worth $6 million.

Dr. H.N. Chanakya reimagines and designs sustainable S&T solutions that address resource shortages, minimize/recycle residues, and are socially acceptable. He has developed sustainable solutions for urban and rural residues through anaerobic digestion, creating value-added by-products, nutrient, and C recovery, including mixotrophic algal systems. He also advises several governmental bodies and ministries.