

Sankar Bhattacharya
Professor & Acting Head
Dept. Chemical Engineering
Monash University



Biography

Professor Sankar Bhattacharya has a strong background in industry and academia. Having started his career in India as a design and commissioning engineer for coal-fired power stations, he then worked in Thailand on the utilisation of agro-forestry residues for gaseous fuels production. Professor Bhattacharya came to Australia as a Principal Research Engineer with Lignite CRC and then as a Principal Process Engineer with Anglo Coal Australia. He then moved to France as a Senior Energy Analyst with the International Energy Agency in Paris managing their Cleaner Fossil Fuels program.

At Monash University, Professor Bhattacharya's research area includes advanced coal and biomass utilisation for power and fuels production through gasification and combustion and biofuels including algae. He leads a group of 16 PhD students and two research fellows, and through his career has supervised 12 PhD students to completion.

He advises the Japanese Ministry of Economics, Trade and Industry (METI) on low-rank coal utilisation and Clean Coal Victoria. He also advises and contributes to the International Energy Agency's flagship publications and Intergovernmental Panel on Climate Change (IPCC) as an expert reviewer. He also acts as a reviewer on refereed journals including Jülich - Germany and the South Africa Research Council. He is a Fellow of the Australian Institute of Energy and a Member of the American Chemical Society.

Research interests

Professor Bhattacharya's research interests includes advanced coal and biomass utilisation for power and fuels production through gasification and combustion, and the production of biofuels utilising biomass algae.

His research group is currently investigating:

- Entrained flow gasification - brown coal/biomass/algae/MSW and ash viscosity
- Liquid fuels and chemicals from brown coal
- Coal drying

Monash teaching commitment

ENE3048 - Energy and the environment

CHE5299 – Biorefinery Processes – MS level

CHE5188 - Advanced Reaction Engineering – MS level