



CONVERSION OF MUNICIPAL SOLID WASTE TO GREEN ENERGY: A PARAMOUNT CONCERN OF THE WORLD

Moinuddin Sarker

Post Doctoral Fellowship (PDF), MCIC, FICER, MInstP, MRSC, FARSS. Chairman, CEO and CTO, Waste Technologies LLC (WTL); UK

Abstract:

The exponential growth of Municipal Solid Waste (MSW) along with its environmental impact is one of the most critical problems that large cities in developing countries face now-a-days. Solid Waste management in developing countries is characterized by highly inefficient waste collection practices, variable and inadequate levels of service due to limited resources, lack of environmental control systems, indiscriminate dumping, littering and scavenging and, most of all, poor environmental and waste awareness of the general public. In most urban areas in emerging/developing countries, solid waste management costs consume between 20% and 50% of municipal revenues. They need to run Municipalities, Puorashava and City Corporation Turning Municipal waste to energy is the best solution for waste management and waste can be turned into a valuable resource in this way. Waste Technology Limited is producing diesel and gas from solid waste.

Biography:

Moinuddin Sarker, PhD, MCIC, FICER, MInstP, has been working as the Vice President (VP) of Research and Development and Head of Science Team (VP and CTO), at the Natural State Research (NSR), Inc at Stamford, CT and the inventor of NSR's award winning technology to convert municipal waste plastics into liquid hydrocarbon fuel. He has a M. Sc (1992) and Ph. D. degree in Chemistry from University of Manchester Institute of Science and Technology (UMIST), Manchester, UK (1996). He has more than 23 years of professional research experience in different universities and research organizations all over the world including the US, Canada, the Netherlands, Germany, Taiwan, Bangladesh and the UK. During his research work, he carried out research in four different synchrotron radiation sources around the world: CRCL lab, Daresbury, Warrington, Cheshire, UK (1991-1996), Synchrotron Radiation Research Center (SRRC), Hsinchu, Taiwan, R.O.C (1996-1999), Berlin Electron Storage Ring Company for Synchrotron Radiation (BESSY II) (2000) and Advance Photon Sources (APS), Chicago, USA (2001-2004). He has three patent pending and 100 research publications to his credit in peer reviewed journals and conferences. Dr. Sarker is a distinguished member of 30 professional organizations such as American Association of Naval Engineer (ASNE), Association of Consumer Growth



(ACG), Society of Automobile International (SAE), American Chemical Society (ACS), American Physical Society (APS), American Institute of Chemical Engineering (AIChE), International Union of Pure and Applied Chemistry (IUPAC), Canadian Society for Chemistry (CSC), Chemical Institute of Canada (CIC), Canada and many more. Dr. Sarker has been invited speaker various conferences in around the USA and World. Dr. Sarker is the inventor of the technology and product entitled: "Method for converting waste plastics to lower molecular weight hydrocarbons, particularly hydrocarbon fuel materials and the hydrocarbon material produced thereby" (US and International Patent Pending). In 2010, Dr. Sarker has received, the International Renewable Energy Innovator of the year Awards 2010 at Washington DC and presented by Association of Energy Engineers (AEE), USA

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