

*Session title: Water Pollution in Developing Countries*

**Innovative Sanitation Technology for Control of Water Pollution and Health Problems in  
Developing Countries**

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**Abstract**

Due to lack of access to sanitation facilities and improper management of wastewater and faecal sludge, the World Health Organization and the United Nations have reported that more than one billion people die every year mostly in developing countries. Solar septic tanks are considered to be an innovative sanitation technology which could adequately treat toilet wastewaters. Experiments were undertaken to investigate the technical feasibility of the solar septic tanks. By heating with solar-heated water to temperatures of 40-70 °C, there were more than 70 % removal of organic matter and 6 logs reduction of *E.coli* (a pathogenic indicator). The septic tank effluent was found to be hygienically safe for disposal or reuses. The potentials of solar septic tanks for treating of toilet wastewaters in urban poor areas to reduce environmental pollution and minimizing health risks are discussed.