## Water Pollution Reduction and Water Resources Reuse Using Natural Treatment Technology in Taiwan

## Shuh-Ren Jing<sup>1</sup> and Ying-Feng Lin<sup>1</sup>

<sup>1</sup>Professor, R&D Center of Ecological Engineering and Technology and Department of Environmental Engineering and Science, Chia-Nan University of Pharmacy and Science, Tainan, Taiwan, ROC

ABSTRACT: Some natural treatment technologies, such as constructed wetland (CW), can provide natural treatment mechanisms to enhance contaminant removal from polluted water. This type of natural treatment technology has been widely used in Taiwan because of sustainable policies and the environmental conditions. With about research and development work during last decade, there are several practical applications have been implemented and indicated acceptable results. These applications include wastewater treatment in rural areas, wastewater treatment of reuse in campuses, management of aquaculture wastewater, tertiary treatment, water quality improvement of polluted water bodies, wastewater treatment and reuse in ecological leisure areas, groundwater restoration, etc. Furthermore, many people either from academic or industries of various professions start paying attention to consider putting ecological technologies into their original master plans. This is a good trend for making practical projects being more economical and sustainable.