

Benefits received attending Ozwater'11 Conference

The Ozwater'11 conference attendance on 9-11 May 2011 at Adelaide broadened my technical knowledge for water and wastewater treatment as I had the opportunity to attend most of the technical paper sessions of 'Healthy treatments and Processes'.

Before the conference I hoped to have the opportunity to attend the sessions for Manganese removal, Taste & Odour control, Algae & Cyanotoxin removal, Chlorination disinfection and Water quality issues, and so conference attendance opportunity helped me to attend the sessions containing these technical issues. I certainly have benefitted greatly from attending the paper presentation "*Catalytic Filtration and Manganese Removal : New Insights*, Barry Chiswell, Entox, QLD". From this paper I understand how chlorine can help to remove manganese, and using the idea I optimised the pre-chlorination of Raw water for Singleton Water Treatment Plant in last month (June'11) when huge soluble manganese started to be present in Raw water coming from Glennies Creek Dam as the dam started turnover. After the adjustment made for pre-chlorination I was able to reduce the soluble manganese concentration a lot and as an example of extreme case, on 14/06/2011 the soluble manganese was 275 µg/L in Offtake water (before chlorination) whereas after chlorination it was only 5 µg/L in Raw water.

The papers "*Case studies of UV/peroxide for taste and odor and algal toxin treatment in drinking water*, Adam Festger, Trojan Technologies", "*Towards sustainable chemical use for algae removal during water treatment*, Rita Henderson, UNSW", "*Retrofit of intermediate ozonation for taste and odour control and cyanotoxin removal*, Craig Jakubowski, Hunter Water Australia", benefitted me to better understand the algae & cyanotoxin removal processes and controlling the taste and odour in water treatment. But especially the poster paper "*Pre-chlorination of algal cells in raw water*, Jennifer Dreyfus SA Water - AWQC, SA" helped me to understand more in depth the relation of what chlorine dose required in proportion to cell counts to damage the Mycrocystis and Anabena cells.

The paper "*Selection of sustainable chlorination technologies*, John Poon, VIC" improved my knowledge for chlorination technology selection for disinfection purposes. On the last day of the conference the papers presentation in "*IWA Climate change*" sessions certainly enhanced my knowledge to control/reduce the Green House Gas emissions and environmental issues.

I would like to thank Water Directorate and AWA for granting me the conference attendance award and providing me the opportunity to attend the peak water conference Ozwater'11 which helped me a lot to develop my technical knowledge of the water treatment industry and allowed me to develop valuable contacts for my future work.