



**“Gheorghe Asachi” Technical University of Iasi, Romania**



---

## **SURVEY ON TYPICAL ORGANIC POLLUTANTS AND HEALTH RISKS OF MAIN WATER SOURCES IN YELLOW RIVER BASIN**

**Jijun Gao, Xiaoru Liu, Hong Hao, Hao Yuan, Huaidong Zhou\***

*China Institute of Water Resources and Hydro-power Research, Yuyuantan Science and Technology Garden, Department of  
Water Environment, Haidian District, 100038 Beijing, China*

---

### **Abstract**

To understand the typical organic pollutant contamination status of the main source water in Yellow River basin, samples were collected from fifty source water points (including reservoir and river) in Yellow River basin. The samples were analyzed for the representative organic pollutants, including benzene homologous, chlorobenzene compounds, organophosphorous pesticides, and nitrobenzene compounds, total of 17 compounds. It was observed that all concentrations of the 17 compounds in the fifty source waters were less than the limits of Chinese surface water quality standards. Benzene, toluene, nitrobenzene, p-nitrochlorobenzene, 2,4-dinitrotoluene and 2,4-dinitrochlorobenzene, dichlorvos, demeton, dimethoate methyl parathion, malathion and parathion were more frequently detected in the main source water of Yellow River basin. The results of detection rate of target compounds suggested that the organic pollution had been popular in the source water of the Yellow River basin.

*Key words:* benzene, organic pollution, source water, Yellow River basin

*Received: August, 2012; Revised final: July, 2013; Accepted: August, 2013*

---

---

\*Author to whom all correspondence should be addressed: E-mail: [gaojj@iwhr.com](mailto:gaojj@iwhr.com)