

Preface

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Eutrophication and algal blooms are worldwide environmental issues in lakes. The eutrophication process and forming mechanisms of algal blooms are particularly complicated in shallow lakes due to the strong lake–land, air–water and water–sediment interactions.

In China there are more than 2,700 lakes, with a total area of 91,000 km², and one third of them are shallow lakes. In recent years, many shallow lakes in China have displayed rapid eutrophication and suffered from algal blooms. These problems have resulted in a shortage of drinking water supply and degradation of lake ecosystems. The control of eutrophication in shallow lakes is

one of the main issues with which the local people and Chinese governments are concerned today.

Lake Taihu is the third largest freshwater lake in China, with an area of about 2,338 km² and a mean depth of 1.9 m. Now its main function is supplying drinking water for the surrounding cities such as Shanghai, Suzhou and Wuxi. It is also very important in tourism, culture fisheries and navigation. However, with economic development and increased population in the lake basin, Lake Taihu is suffering from serious eutrophication, so research work on ecosystem restoration in the lake is receiving increasing attention.

The ‘International Symposium on the Eutrophication Process and Control in Large Shallow Lakes—With Special Reference to Lake Taihu, a Shallow Subtropical Chinese Lake’ was held in Nanjing during April 22–26, 2005, and provided a forum for discussion and exchange of ideas and information by scientists and environment managers on the issues of eutrophication process, control, and management of shallow lakes in general and Lake Taihu in particular. This special issue collects papers presented at the symposium. The editors and the authors of the papers in this special issue hope that it will make a significant contribution to the understanding and management of eutrophication in shallow lakes.

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Eutrophication of shallow lakes with special reference to Lake Taihu, China

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