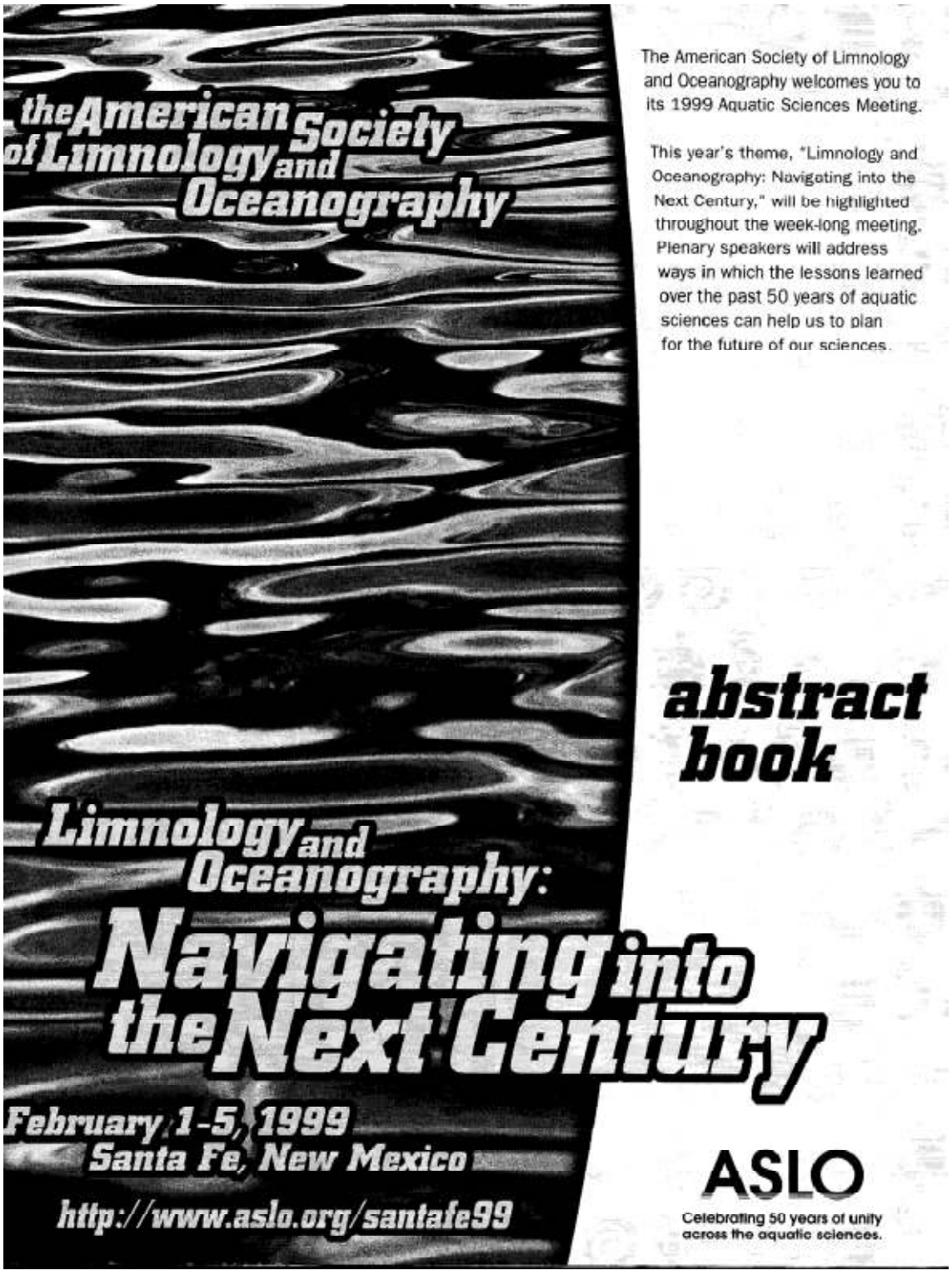

The American Society of Limnology and Oceanography welcomes you to its 1999 Aquatic Sciences Meeting.

This year's theme, "Limnology and Oceanography: Navigating into the Next Century," will be highlighted throughout the week-long meeting. Plenary speakers will address ways in which the lessons learned over the past 50 years of aquatic sciences can help us to plan for the future of our sciences.

abstract book

ASLO

Celebrating 50 years of unity across the aquatic sciences.

Pinto-Coelho, R. R., UFMG, Belo Horizonte, Brazil, rmpc@mono.icb.ufmg.br;
Mourthe, C., ECVMS, Belo Horizonte, Brazil, rmpc@mono.icb.ufmg.br;
Figueredo, C. C., ECMVS, Belo Horizonte, Brazil, rmpc@mono.icb.ufmg.br;
Boechat, I. I., ECMVS, Belo Horizonte, Brazil, rmpc@mono.icb.ufmg.br

A MODEL COMPARING THE EFFECTS OF PHOPHORUS LOAD (INTERNAL AND EXTERNAL) IN TEMPERATE AND TROPICAL RESERVOIRS AND LAKES.

The rapid eutrophication of lakes and reservoirs is one of the major environmental problems occurring in tropical areas worldwide. This is particularly true in Brazil, where the national dam building policy was very effective over the last three decades. Some reservoirs became hypereutrophic in less than 30 years. A simulation model was used trying to relate the temporal dynamics of planktonic community to external nutrient inputs, residence times as well as internal metabolic processes such as zooplankton grazing and excretion. The model showed that the higher internal metabolism typical of warm waters may be the key factor explaining the rapid eutrophication observed in these ecosystems. Furthermore, the model also suggests that increased input of external phosphorus is associated with instability of plankton community. Finally, model predictions were compared field data from Pampulha Reservoir, which has been suffering an intense eutrophication in the past decade.