## Environmental problems · chemical approaches



CONTENTS



## Cover

lodine deficiency is a serious problem in many areas of the world. Seaweed, one of the best natural sources of iodine, has often been advocated for use as feed for livestock to increase the iodine concentration of our diets. In this issue, Lu et al. (pp. 338–344) describe their recent research into iodine metabolism in seaweed-eating sheep, a fundamental study for determining the feasibility of using meat to supplement iodine intake.

Cover image: North Ronaldsay sheep standing in its food source, seaweed. © J. Feldmann

## REVIEW

Modelling Nitrogen Deposition on a Local Scale—A Review of the Current State of the Art	
O. Hertel, C. A. Skjøth, P. Løfstrøm, C. Geels, L. M. Frohn, T. Ellermann, P. V. Madsen	317
<b>RESEARCH PAPERS</b> Iodine Excretion and Accumulation in Seaweed-Eating Sheep from Orkney, Scotland	220
Y. Lu, S. Suliman, H. R. Hansen, J. Feldmann	338
Olive Oil Mill Wastewater Treatment by the Electro-Fenton Process N. Bellakhal, M. A. Oturan, N. Oturan, M. Dachraoui	345
Mechanisms of Boron Removal with Electrocoagulation JQ. Jiang, Y. Xu, K. Quill, J. Simon, K. Shettle	350
Valence Bond Formulations of Mechanisms for the Formation and Decomposition of $N_2O_5$ <i>R. D. Harcourt, T. M. Klapötke</i>	355
Fitzroy River Basin, Queensland, Australia. I. Identification of Sediment Sources in Impoundments and Flood Events	
G. B. Douglas, P. W. Ford, M. Palmer, R. M. Noble, R. Packett	364
Fitzroy River, Queensland, Australia. II. Identification of Sources of Estuary Bottom Sediments	
G. B. Douglas, P. W. Ford, M. Palmer, R. M. Noble, R. Packett	377



Sediments and nutrients flow down in-land water bodies to the ocean where they have a profound influence on coastal and reef zones. In the Great Barrier Reef, increased sediment and nutrient loads degrade some reef systems and alter biodiversity. This issue features a two-part series by Douglas et al. (pp. 364–376 and 377–385) on the sources of sediments affecting the GBR.

**EARLY ALERT** Sign-up at **www.publish.csiro.au/journals/env** for our electronic early alert and receive the next table of contents **weeks in advance** of the print version.