Science Education International is the quarterly journal of the International Council of Associations for Science Education (ICASE). ICASE was established in 1973 to extend and improve education in science for all children and youth by assisting member associations throughout the world.

This journal provides a means for associations, institutions, centres, foundations, companies, and individuals concerned with science education to share perspectives, concerns, ideas, and information that will foster cooperative efforts to improve science education, and which will serve as a chronicle of the advancement of science education throughout the world.

Editor
Nicos Valanides, Cyprus

Associate Editor
Charoula Angeli, Cyprus

Section Editors
Adam Niculescu, USA
Daniel K. Lottis, Brazil
Ed van den Berg, Philippines
Jon Pedersen, USA
Ronald Bonnstedter, USA
Sue Dale Tunnicliffe, UK

Advisory Board
Lucille Gregorio, Thailand
Jack Holbrook, Cyprus
John Penick, USA

Correspondence
Nicos Valanides
Editor, ICASE Journal
P. O. Box 20537
Department of Educational Sciences
University of Cyprus
CY-1678 Nicosia, Cyprus
email: seiicase@ucy.ac.cy
nichri@ucy.ac.cy

Printing
Imprinta Ltd
P. O. Box 24105, CY-1701 Nicosia, Cyprus
e-mail: imprinta@cylink.com.cy

ISSN: 1450-104X

Science Education International
Volume 14, No. 4, December 2003

Contents

Science Teacher Education
Reasoning, Problem-solving and Reflections:
Participating WISE Project in Israel
Revital (Tali) Tal and Nurit Hochberg.......................... 3
The Influence of STL Teaching on Students' Creativity
Anne Laius and Mia Rannikmae............................... 21

Research on Curriculum, Teaching, and Learning
Assessment for Inquiry: Supporting Teaching and
Learning in Primary Science
Kendra McMahon and Dan Davies.............................. 29
Co-operative Curriculum Development in a Project of
Participatory Action Research within Chemical
Education: Teachers' Reflections
Ingo Elks......................................................... 41
The Effects of Process-skill Instruction on Secondary
School Students' Formal Reasoning Ability in Nigeria
Amos A. M. Shaibu and Jonathan S. Mari....................... 51

Science Education Around the World
Space Science Literacy
Pangratios Papacosta........................................... 55

Safe Science: Be Protected!
Revisiting Bloodborne Pathogens in the Laboratory!
Ken Roy............................................................. 61
Calendar............................................................ 64

Copyright © 2003 ICASE.

Unless otherwise stated, material published in Science Education International may be reproduced by associations, institutions, centres, foundations, and companies that are members of ICASE. Acknowledgement of both ICASE and Science Education International is requested. The opinions expressed in this publication are those of the authors and do not necessarily represent the official position of ICASE or ICASE members.