Preface

International Conference. Enzymes in the Environment: Activity, Ecology and Applications

This special issue of Soil Biology & Biochemistry contains a selection of papers presented at the International Conference: Enzymes in the Environment held in Grenada, Spain in July 1999. The meeting was convened in recognition of the long history of soil and aquatic enzyme research and in response to the current explosion of interest in enzymes as key components of process diversity in natural systems.

Diversity measurements are viewed increasingly as important and sensitive indicators of ecosystem quality, sustainability, and the impact of and recovery from various organic, inorganic, climatic and management disruptions. The measurement of these processes requires a combination of conventional biochemical and microbiological techniques combined with an increasing number of powerful molecular, immunological and microscopical tools. There is little doubt that the next decade will see an enormous improvement in our understanding of transformation processes in soils, sediments and water and the complexity and significance of interactions involving microbes, enzymes and substrates in their physically- and chemically complex environments.

The conference attracted over 200 delegates from 34 countries and contained ten symposia devoted to the activities, ecology and applications of enzymes in soil and aquatic environments. Soil microbiologists, marine biochemists and molecular microbial ecologists met, exchanged ideas, set up collaborations, and found themselves sharing a common interest in the ways in which both intra- and extracellular enzymes function in the environment.

The Inaugural lecture, entitled ‘Biochemical Context of Enzymes in the Environment’, was given by one of the subject’s pioneers Jeff Ladd who was presented with a medal in recognition of his outstanding and prolonged contribution to our understanding of soil biochemistry and microbiology.

The meeting was expertly managed by an international committee lead by Richard Dick and the local organisation, in the hands of José Barea, was near-on perfect. Thanks to these and all the participants, both the scientific and social aspects of the meeting were unqualified successes. No surprise then that a 2nd conference in 2003 is already being planned.

Thanks are also due to the many sponsors of the meeting including the Federation of European Microbiological Societies, the International Union of Soil Sciences, the Soil Science Society of America and the International Association of Theoretical and Applied Limnology. The organisers also acknowledge the contributions of the Consejo Superior de Investigaciones Científicas, the Junta de Andalucia and Grenada University.

In addition to this SBB Special Issue, a book has sprung from the conference. Enzymes in the Environment, edited by Richard Burns and Richard Dick, will be published by Marcel Dekker in 2001.

R.G. Burns

Department of Biosciences,
University of Kent at Canterbury,
Canterbury, Kent CT2 7NJ, UK