

Preface

Fourth International Symposium on Biological and Environmental Reference Materials (BERM-4)

Orlando, February 5–8, 1990

Increasing concerns about the consequences of both harmful and beneficial constituents in biological and environmental matrices lead to development of increasingly more complex analytical methodology and measurement systems. These systems can rapidly generate large amounts of data and a constant need and demand for improving and obtaining more accurate data. Extensive, highly accurate methodologies and techniques can be well developed and well documented, usually upon application of extensive time and effort by highly dedicated, highly skilled personnel at well equipped laboratory centers. The key role of reference materials in transferring this high analytical accuracy to other laboratories and in providing a common basis for generating and comparing data and information within accuracy based measurement systems is well understood. The need for these reference materials is recognized and much activity is underway to provide them. The major aim of this symposium series has been to encourage and focus information of on-going activities in production, characterization and application of these reference materials in the biological and environmental areas, particularly those relating to health. These activities are documented in this Proceedings of papers presented at BERM-4.

BERM-4 meeting sessions contained papers in a number of topical areas covered in past BERM symposia, including environmental, clinical, food/nutrition, trace elements, certification processes and reports updating activities of the major standards producing organizations. In addition, several new topical areas were covered, such as biotechnology, marine and second generation reference materials. These and other new areas will continue to receive focus in future BERM meetings. Over the four day meeting, a total of 70 oral and poster presentations covering a wide range of activities were presented, papers in this Proceedings being from both.

Continuing the tradition of this symposium series, the venue gave a very delightful and accommodating ambiance which facilitated much informal discussion and interaction among the participants. Many acquaintances were reestablished or established anew and much information and many ideas were exchanged.

The scientific committee, in a somewhat lengthy executive session, established a more formal organizational structure for the symposium series. This will allow for more efficient planning, organization and focus for the BERM meetings. It will also allow for more efficient gathering and responding to input on the rapid growth of truly international activities in this area. The BERM meetings will be held on a two year basis with the Fifth International

Symposium (BERM-5) to be convened in Jülich, Federal Republic of Germany in May 1992, hosted by the Research Center. The Sixth International Symposium (BERM-6) is tentatively scheduled for 1994 in the Netherlands.

Acknowledgement and credit for the success of BERM-4 must go to a number of people and sources of support. This includes the presenters of papers, whose obvious efforts in preparation of their oral presentations and posters led to an outstanding scientific forum, which was informative and thought provoking. The timely efforts to meet deadlines in submitting the written manuscripts are greatly appreciated. While we did not "demand" a manuscript from each of the presenters, a significant majority of the presentations are included in the Proceedings. In addition to cooperation of the authors, the continued excellent help of the editorial staff at Fresenius contributed greatly to the timely publication of these Proceedings. Special thanks to a successful meeting also must go to our colleagues who organized special sessions and acted as session chairpersons to help run the meeting.

Any meeting of this type is dependent upon support and sponsorship from a number of organizations and sources. Sponsorship, financial, administrative and organizational support were received from the following governmental and international organizations: National Institute of Standards and Technology, Gaithersburg, MD, USA; Commission of the European Communities, BCR, Brussels, Belgium; United States Department of Agriculture, ARS, Beltsville, Maryland; U.S. Food and Drug Administration, Washington DC.; Research Center, KFA, Jülich, FRG; and the International Union of Pure and Applied Chemistry. Also supporting the meeting were the private companies: Promochem GmbH, Wesel, FRG; Grün, Wetzlar, FRG, and Nycomed, Norway. We would like to thank all of these for their support, with special acknowledgement to those who have continued their support from previous meeting. We hope that they will remain as generous for future symposia.

We would also like to express our appreciation to the staff at the Sonesta Village Hotel in Orlando for their cooperation in making arrangements and facilities operate smoothly for the meeting. Special thanks must go to Patrice Boulanger and her staff from the Conference Management Group at NIST, Gaithersburg, MD for their highly professional handling of the administrative details in organizing the meeting, and their efficient and enthusiastic handling of the registration and administrative activities during the meeting.

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