Preface

These proceedings contain the full texts of the 29 papers presented at the Second European Lead Battery Conference (PbCa90). The Conference which was held in Brussels, September 19–20, 1990 was attended by over 330 delegates from 32 countries.

The Lead Development Association, with the support of both the Centre d'Information du Plomb and EUROBAT, was responsible for the technical programme and wishes to thank all those who contributed to the success of the Conference. Thanks are particularly due to Claus Zoellner of Hoppecke who opened the Conference, and to Claude Dreulle of Oldham (France) and David Rand of CSIRO (Australia) who were the Conference Chairmen.

PbCa90 covered in detail research, technology and developments in the use of maintenance-free lead/acid batteries for deep cycling applications. The technology and intricacies of the 'antimony-free effect' were a constant theme throughout the Conference. Understanding it, and solving its consequences, hold one, and perhaps the most vital, key to the design and manufacture of deep cycling, long life, value regulated lead/acid batteries.

In addition several papers reported on the battery needs of the new designs of automobiles.

The Third European Lead Battery Conference is being planned for 1992-93.

In closing the organizers would like to express their appreciation to the publishers who have so professionally edited and prepared these proceedings.

Michael Mayer Lead Development Association London October 30, 1990

Opening Address

On behalf of the European Battery Association and the Lead Development Association in London, I would like to welcome you to the Second European Lead Battery Conference here in Brussels.

The necessity and importance of this Conference is clearly demonstrated by the presence today of 338 delegates from 32 countries. I would like to express a special welcome to our 15 colleagues from the Soviet Union.