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Preface

Everyone wants a better lead/acid battery. After all, the device is a cornerstone of modern life. Every car, truck and bus has one. Moreover, lead/acid batteries play a vital part in telecommunications, computer, emergency and other power systems. But, their most exciting use is yet to come... battery electric cars, vans and buses.

At the 4th European Lead Battery Conference (the proceedings of which you are about to read), the attention of world experts was focused on recent advances in lead/acid battery technology, as well as on modern techniques for advanced manufacture. Over 420 delegates from 34 countries came to 4ELBC to take part in this important biennial conference on the rechargeable battery system that is pre-eminent amongst those that are commercially available today.

Since the discovery by Gaston Planté in the late 19th century, progress in technology and materials has ensured that lead/acid batteries have steadily increased their use in established services. New concepts, such as the valve-regulated lead/acid (VRLA) design, have made it possible for lead/acid batteries to expand their markets and establish new ones. For example, in recent times, VRLAs have brought about a marked change in power systems within many important telephone and computer applications. They have also had, and are continuing to have, a major influence on emergency and stand-by power supplies that are so vital to many aspects of modern life.

As the world moves towards the next millennium, society is placing upon the lead/acid battery industry the greatest challenge that it has faced in its 150 year history, namely, a maintenance-free battery to power the electric car. The challenge is real. People want to buy electric vehicles. Risk capital and business skills are available to ensure that the electric car and its battery will give good financial rewards to the successful. The problem is: how to design and make a better/suitable lead/acid traction battery. 4ELBC is but one of several major initiatives under way to help identify the technology that will enable lead/acid batteries secure the lion's share of this most exciting commercial opportunity.

We must succeed. Widespread use of electric vehicles, in place of many internal-combustion-powered cars, is vital if adverse (and, possibly, irreversible) environmental pollution of Planet Earth is to be avoided.

Do come to 5ELBC in 1996. It cannot be promised of course, but the organizers are more than confident that new technology for the manufacture of even better lead/acid batteries will be discussed and unveiled at this conference.

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