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Preface

Batteries in Berlin

Just when you thought advances in lead-acid battery technology were slowing, along comes **9ELBC** in Berlin to reaffirm that that the world-wide lead battery industry is alive with new ideas and developments to meet the many challenges of the 21st century.

This year, the Conference programme included papers from 52 battery specialists from 18 countries. More than 450 delegates from 47 nations had the opportunity to hear about the wide diversity of achievements in battery technology and use, and to visit the 64 companies exhibiting their products on the 55 exhibition sites available.

The increasing pressure on the automotive industry to improve fuel efficiency, and to meet new environmental standards, is revolutionising vehicle drive systems. This is resulting in increasing demands on battery designers and manufacturers to develop batteries which can meet ever tighter specifications economically. Many of the contributions by battery experts dealt specifically with this aim and the recent progress towards advanced designs for 12 and 42 V electrical networks, hybrid powered vehicles and dual battery systems. In addition to the automotive developments, researchers reported on market conditions and trends with the welcome news that demand for industrial batteries has improved world-wide after several years of reduced sales, especially in telecom.

Lead-acid batteries are currently the premier and most widely used electric storage technology. This success has as its foundation performance, reliability, safety, progress and cost. An increasing concern within the industry at this time is the supply and price of lead. World-wide lead demand for battery making is strong and increasing, due partly to rapidly increasing car production in the key markets of China and India, coupled with earlier cutbacks in lead production in the West. As a result the price of lead has shown a rapid increase in recent times. Several speakers forecast that the lead price would remain high for the next few years.

Market influences on the non-automotive use of lead-acid batteries is a subject that always attracts interest. Delegates

were encouraged by the prospects for large renewable energy projects and the growth in motive power applications. Of particular interest to the Conference was the emergence of competitive battery systems. The presentation on the future of the hydrogen economy, about which we hear so much, aroused considerable interest. Whilst the technical improvements are impressive, the balance of the important factors—energy efficiency, cost, convenience and safety—suggest that the replacement of traditional battery storage by hydrogen-powered fuel cells is a worthy objective but with major obstacles yet to be overcome before they become commercially viable.

These proceedings report on many aspects of the lead—acid battery industry ranging from basic research to design and production, with contributions from researchers, battery makers, material and equipment suppliers. The Lead Development Association International (LDAI), the organisers and sponsors of the European Lead Battery Conferences, would like to thank the authors of the many papers presented in Berlin for the support of their companies and organisations. The purpose of LDAI is to promote the advancement of the lead—acid battery so that it maintains, and enlarges, its premier position within the field of electric storage. With the help of its many colleagues in the industry it is hoped that **9ELBC** contributed to this objective.

During the conference, Dr. Jerome Cole, past President of ILZRO was presented with the International Lead Award in recognition of his exceptional contributions to the lead and lead—acid battery industries worldwide.

Based on the excellence of the event in Berlin, it is planned to make **10ELBC** even more helpful for the industry. We look forward to meeting you at the 10th European Lead Battery Conference to be held at the Athens Hilton Hotel on 26–29 September 2006.

David Wilson

Lead Development Association International

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