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Preface

The lead – acid battery is a mature product with a distinguished history which goes back over 100 years. It has been a highly successful technology, but during this time there have been major challenges which have been faced and overcome. We have seen significant advances in the design, construction and materials of the battery, as well as the introduction of the true maintenance-free, valve-regulated lead – acid (VRLA) technology.

The world's demands are changing significantly as we move into the next Millennium. Opportunities and, of course, threats from competing technologies such as nickel – metal-hydride and lithium-ion are evident. There are, however, major opportunities for the lead – acid battery in areas such as:

- the change to higher voltage, dual-battery systems for automobiles
- the prospective huge new market for remote-area power supplies (RAPS)
- the great potential of hybrid electric vehicles as low-emission replacements for automobiles, and of pure electric vehicles for set-route vehicles, buses and bicycles
- telecommunications and uninterruptible power supply (UPS) applications.

Looking ahead, we as an industry must meet these challenges, and must move forward to ensure that the lead – acid battery is the power source of preference.

Further advances, particularly in VRLA technology, will greatly assist the industry to meet future market demands. Significant developments in the purity of lead and lead alloys will also ensure that performance targets will be met. Both these aspects featured heavily at the Eighth Asian Battery Conference — 8ABC — held in Bangkok in early September 1999.

Considering the attendance of over 400 delegates from 42 countries and the quality of the leading-edge papers presented at this highly successful Conference, the industry can have every confidence that the lead – acid battery is well placed for future successes.

Forums such as the Asian Battery Conference are an important component in sharing knowledge to ensure that all can participate in this bright future.

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