Preface

With people's attitudes and economic circumstances changing at unprecedented speed, modern society is seeking to transform itself as it faces various new challenges that are arising at different levels, including the corporate, community, city, and national levels. Along with the steps it is taking toward reforms based on its own perception of the issues, Hitachi is also focusing on developing its Social Innovation Business.

The Social Innovation Business is about more than the supply of equipment and systems. Rather, it involves working together with society and customers to identify the challenges they face and how these challenges can be overcome, and to offer solutions that combine infrastructure, information, and other technologies.

Possessing a depth of technical knowledge is a prerequisite for dialogue and collaboration with customers. When solving the identified problems, what is also essential is the accumulation of dependable technologies. It is on this basis that this issue of *Hitachi Review* presents articles about the various technologies that Hitachi has built up over time, and aspects of the research and development that underpins them. Along with the analysis and simulation techniques that support leading-edge developments, this includes the various technologies used to maximize energy efficiency and ensure security of supply, to maintain security and speed up information processing in the era of big data, and to improve the reliability and add value to devices and other products. In its leading-edge research, which it undertakes from both a medium to long-term perspective, Hitachi has also introduced initiatives in which scenarios for the future are identified based on trends in society and developed into research topics by debating and sharing visions for the future with customers.

All of these measures conform to Hitachi's key research and development (R&D) policies of adopting a customer-driven research approach, expanding service businesses, and strengthening "number one product" businesses. Hitachi believes that performing R&D on a wide range of business sectors brings numerous discoveries and opportunities for learning, leading to the development of applied technologies and ultimately to the achievement of global innovation.

I hope that you will enjoy the articles in this issue and that they prove useful to all readers.

Keiji Kojima

Vice President & Executive Officer
Chief Technology Officer
President & CEO, Research & Development Group
Hitachi, Ltd.