## **Opening Remarks**

## Dear Readers:

The optical fiber industry, in which Furukawa is a leading player, is currently faced with a very unfavorable business situation following the collapse of the WDM bubbles in the overseas trunk market and saturation of demand for feeder optical cables in the domestic access market. On the other hand, the recent explosive increase in the number of FTTH subscribers is opening new business opportunities for the distribution, drop and intra-house wiring products which are deployed near or on the subscriber's premises. This new trend associated with stable growth in the per-subscriber transmission speed, is expected to continue for several years in light of the prevalence of broadband access services. As a matter of fact, we are observing a very rapid growth in internet traffic, with rates as high as almost 100 % annually. Consequently, demand for currently dormant trunk and feeder cable markets will eventually be reignited once total traffic approaches the capacity of existing systems.

Based on these recent business and market circumstances, Furukawa is pursuing its fiber optics R&D with four revised missions, namely:

- A. meet in a timely manner the currently exploding demand for access and metro networks;
- B. prepare for the coming revival of trunk networks;
- C. sustain the fundamental fiber optic technologies as a core platform; and
- D. apply and develop proprietary fiber optic technologies in non-telecom areas such as the industrial electronics and bio-medical markets.

This mini-special issue of the Furukawa Review carries five research papers dealing with A through D, and reports on two new products categorized under A and B. In closing, I would like to ask readers for continued support for our R&D activities.

Sincerely, Hisaharu Yanagawa Director of FITEL-Photonics Laboratory