Foreword

Foreword to Special Issue on Visible Optical Fiber Communication

Optical Device & Systems Lab.

Viroshi Ito



We will soon see the Japanese vehicle installed optical networks.

Only a few years ago, many people in the industry were of the opinion that there was no need for in-vehicle networks operating at rates in excess of 10 Mbps, let alone high-cost optical LANs. In fact, the very idea of in-vehicle optical LANs was generally ignored, with people saying the likes of "what good could they do me? (they won't bring any joy, will they?)" and "there's simply no need for an optical network in a car."

Now, however, with the appearance of environment recognition and other cameras, data rates of 500 Mbps are not enough and networks offering rates of 1 Gbps and even more are being discussed.

I believe that, whenever we are working towards something completely new, we can always reach our goal if our researchers continue to have the enthusiasm, time, and funding, assuming that our goal is theoretically attainable, of course.

In addition, I usually say:

"Researchers are apt to place their priorities on their own interests and that which attracts them, but corporate researchers should constantly strive to attain a balance between time and money expended, and the results obtained."

However, I'd like to add to and refine my words:

We need to consider some other aspects: A laboratory should adopt a timescale that is different from that followed by each production company in the group. Rather than evaluating technologies over a short period of time, as happens at production companies, it should work on a different timescale, and not merely follow whatever they tell.

Most important of all, I think, is to preserve the "researchers' enthusiasm."

This can be a challenge, as we have to do so in the face of severe time and funding constraints, as well as the other hindrances that are typical at a corporate laboratory.

A rare example of preserving the enthusiasms is seen in this special report of "visible optical fiber communication."