Comments on the Paper by A.V. Bukharin and S.M. Pershin entitled
THEORETICAL ANALYSIS OF AN EYE-SAFE LIDAR

In our paper entitled *Theoretical Analysis of an Eye-Safe Lidar* published in the journal *Atmos. Oceanic Opt.* **7**, No. 5, 276–283 (1994) we loosely used a term. As is well known, by the commonly accepted term *signal-to-noise ratio* is implied the ratio of the value of a signal to its rms deviation from the average. Unfortunately, in our paper we used the terms *noise* and *background* as well as the terms *signal-to-noise ratio* and *signal-to-background ratio* as equivalent ones. The last was defined as the ratio of the signal value to the value of noise background.

In this connection, we would like to emphasize that the term *signal-to-noise ratio* in our paper means the *signal-to-background ratio*, where background is due to both external photons from extraneous sources, recorded by a receiver, and intrinsic noise of a detector itself. At the same time, when the contribution from additional stochastic sources of noise was considered (see pp. 282–283), the term *noise* was used properly in the paper.

We are greatful to Dr. E.A. Vetrichenko, who revealed the indicated loosely use of the physical terms.

Yours sincerely, A.V. Bukharin and S.M. Pershin