Research Projects at the Institute for Perception RVO-TNO

M.A.

Bouman

Soesterberg

Some results of investigations recently carried out at the Institute are presented. Essential properties of the retinal system with respect to the pupillomotor reflex are reported, and a psychodiagnostic approach of the variability of reflex sensitivity added. An account is given of experiments on the instability of the colours of signal lights, and on the correlation between the scores of pseudo-isochromatic tests and the ability in practical colour vision tasks.

A description is given of recent results of a study revising current theories on glare, photographic measurements of scatter light in the media of the eye, discernibility of letters and figures depending on shape, size and colour, measurement of the visual acuity in connection with the optical properties of the ocular lens and correcting glasses, etc.

Discussion.

Colenbrander: After-images are perceived with closed eyes at 25 cm. It is possible that the static convergence is reduced in the empty field of vision, and that therefore the accommodative convergence has to assist in controlling the threatening heterophoria.

Roelofs pointed out that in complete darkness the subjective grey and in a dense fog the grey mist are localized at a relatively short distance (e. g. 60 cm.). He asked whether this phenomenon might be related with the tendency to accommodation in an empty visual field.