results concerning nine of these stars are given in Acker, Lundstrom, Stenholm (1987). Other objects are galaxies (19), HII regions (22), plate faults (10), reflexion nebulae, late-type stars, emission-line stars, etc.

The misclassified objects are found mainly in the following discovery lists: Kohoutek (43 objects), Henize (He –2: 31 objects), ESO (30 objects), Wray (23), Haro (H2: 15 objects).

Figure 2 presents some objects compared to a classical planetary nebula.

2. Determination of Physical Properties of the Planetary Nebulae
(in collaboration with J. Köppen and G. Jasniewicz)

Some of the measured line ratios allow, after reddening correction, the determination of the electronic temperature and density ([OIII] 4363/5007, [NII] 6583/5755, [SII] 6716/6731). In addition, if a sufficient number of lines are available, it is possible to estimate ionic abundances, computed through a theoretical model. J. Köppen has written a programme called "HOPPLA", used on the IBM 3081 K computer at the "Centre de Calcul de Strasbourg, CNRS".

Table 3:

Lines	Theoretical line ratio	Observed line ratio
[OIII] 5007/4959	2.88	3.04 ± 0.27 (185 PN)
[NII] 6583/6548	2.94	2.9 ± 0.5 (146 PN)

From the first sample of about 200 spectra, it seems that for 27 objects the abundances are well determined; for 46, the data could be better, and for the other spectra, the parameters are poorly determined. Say one third of all observed objects can be used for further work.

This very homogeneous and reliable material will be treated statistically, with the collaboration of G. Jasniewicz, regarding galactic gradients and problems of stellar evolution. The first results of this kind will be be presented at IAU Symposium 131, devoted to planetary nebulae, and held in Mexico in October 1987.

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ESO Exhibition in Brussels Visited by King Baudouin

An exhibition about the European Southern Observatory was organized in a collaboration between ESO, the Brussels Planetarium and the Belgian National ESO Committee. It was shown on television and was visited by a large public. The exhibition was originally scheduled to last from June 6 to 15, 1987, but due to the large interest (more than 1,500 visitors in two days!), it was prolongated until June 26.

It was a particular honour to receive a visit on June 9 by the Belgian Head of State, King Baudouin I, and by the Belgian Ministers of Education, Messrs. D. Coens and A. Duquesne. They were shown around by Prof. C. de Loore, President of the Belgian National ESO Committee. The King, who since long takes an active interest in astronomy, was informed about ESO and its future projects, especially about the Very Large Telescope, and expressed appreciation of the pictures and models on display. The King was presented with some large colour pictures of spectacular objects in the southern sky which had been specially prepared by ESO for this occasion. The King's visit was given wide coverage in the media.

The exhibition was opened by two delegates of the Belgium Ministry of Education on Friday, June 5, in the presence of the members of the ESO Coun-

Dr. J.-P. Swings and Prof. C. de Loore explain the ESO VLT model to King Baudouin and the Belgian Ministers of Education, Messrs. D. Coens and A. Duquesne.

cil, who had met in Brugge the day before. The brief ceremony, with presentations by the delegates, by the Director-General of ESO, Prof. L. Woltjer, and by Prof. C. de Loore, was followed by a well-attended Press Conference.

More than 100 large colour photos (including many beautiful exposures of nebulae, galaxies, etc.) illustrated the scientific and technical activities of ESO and were accompanied by comprehensive texts. Recent results were shown, including Comet Halley and, not the least, the bright supernova in the Large Magellanic Cloud. The exhibition also featured large-scale models of ESO's NTT and VLT projects.

This year marks the 25th anniversary of the European Southern Observatory, which was founded in 1962 to foster cooperation in astronomy and to provide European scientists with a major modern observatory.

OPTOPUS Observations of Quasar Candidates

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1. Introduction

OPTOPUS is a fiber-optic instrument for multiple-object spectroscopy with the Boller & Chivens spectrograph and a CCD detector at the 3.6-m telescope. The system has been described in detail by the Optical Instrumentation Group (1985, *The Messenger* **41,** 25). Its application for observing Halley's comet has been reported by Lund and Surdej (1986, *The Messenger* **43,** 1). Here another "classical" use of multiple-object spectroscopy is presented: follow-up observations of quasar candidates.

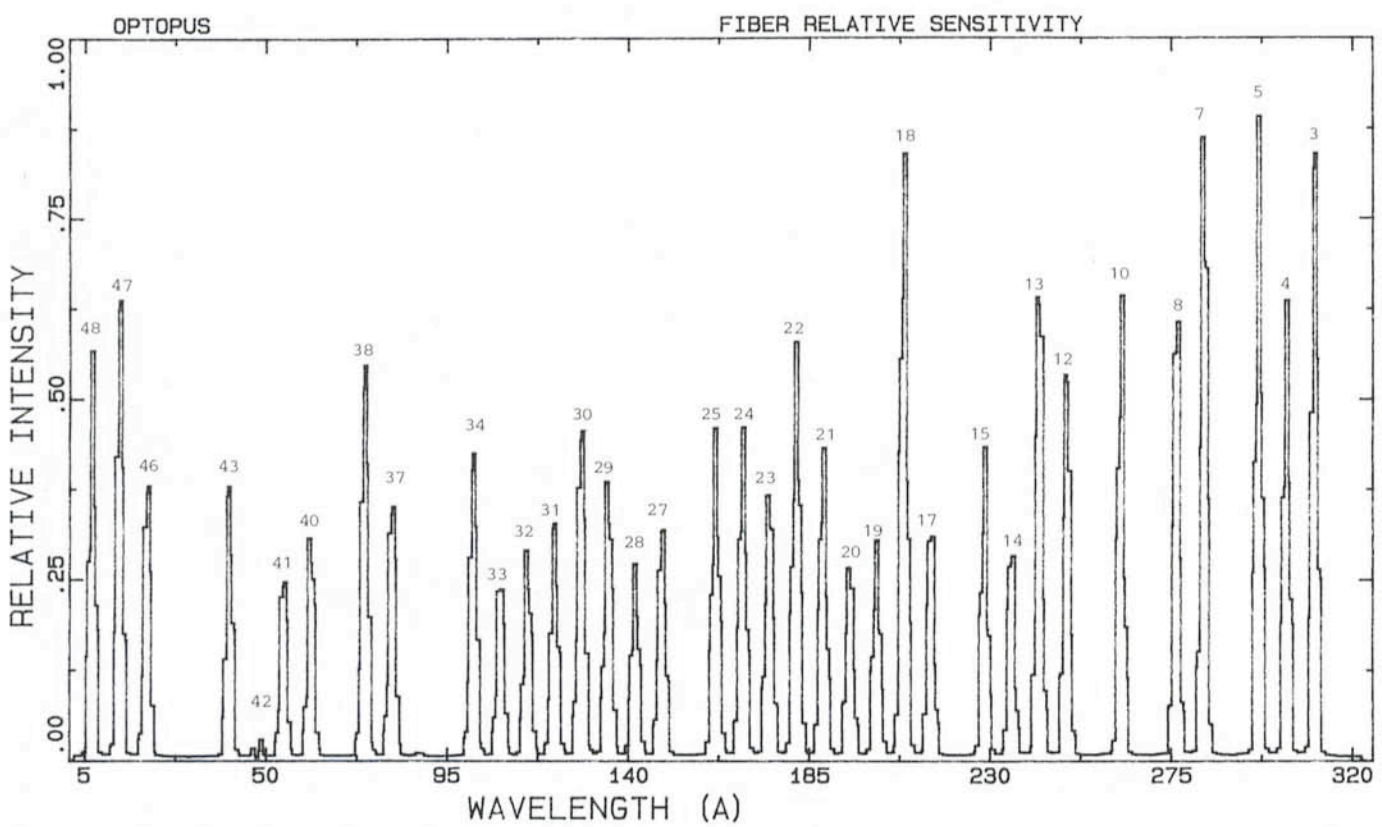

Figure 1: *A plot of the relative sensitivity of the fibers, as derived from flat field exposures. Fiber 41 corresponds to a "bad" column on CCD 3.*