and new discoveries and not of killing and destruction. In the Kaiser Wilhelm Institute für physikalische Chemie, directed by the famous Friedrich Haber, I met Professor N. Freundlich, from whom we all more or less learned colloid chemistry. He invited me to remain and work awhile in Germany, but I was in a hurry to get home.

All this now seems to be a dream from long ago. Haber and Freundlich have died in exile. The Germany of to-day does not offer us joint scientific work but the destruction of our cities and the physical extermination of their populations. All our thoughts are turned to the assistance of our country. And in this fierce fight which we are waging for ourselves and for all humanity, we are glad to know that we have behind us all the might of the great American nation.

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NEON LIGHTS

IN the December 19, 1941, issue of SCIENCE, there appears a note entitled "Extra Strong Heliotropic Effect of Neon Lights." The writer points out that insects have been observed to collect around neon lights to a greater extent than around "white lights." He then suggests that the "neon lights may emanate invisible rays which connect with the antennae of various insects and pull them to its source." The belief is implied that the insect eye is sensitive only to visible radiation, that is, wave-lengths to which the human eye is sensitive (approximately 3,900 to 7,200A).

Experiments by Bertholf on the honey-bee[1] and *Drosophila*[2] show that in these two insects sensitivity to wave-lengths in the near ultraviolet is far greater than sensitivity to those wave-lengths visible to the human eye. The sensitivities of these insects have maxima near 3,600A several times the sensitivity to any wave-lengths in the visible; and there is general high sensitivity between 3,000 and 4,000A. The spectrum of neon shows a number of strong lines in this region, whereas the spectra of tungsten filament lamps, presumably the source referred to as "white lights" by the writer, is weak in this region. Even without an estimate of relative intensities one might expect that these insects, both of which are positively oriented by light, would collect in greater concentration about neon lamps than about tungsten filament lamps. It is reasonable to assume that the eyes of many other insects have spectral sensitivities similar to those of the honey-bee and *Drosophila* and would behave in similar fashion. Lacking complete knowledge on this point and with no estimate of the relative intensities of the sources, no final explanation of the writer's observation can be given, but there seems no reason to postulate that any organ other than the insect eye is involved.

It seems appropriate to call attention here to the fact that many interpretations of behavior of lower organisms have been based on the assumption that their light receptors are strictly comparable to the eyes of man. Accurate information on the photoreceptors of invertebrate organisms is more scanty than could be desired, but, nevertheless, many instances of mystifying behavior of organisms in light fields may be quite simply explained if spectral sensitivity and visual acuity are taken into account.

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[1] L. M. Bertholf, *J. Agric. Research* (1931) 42, 379; 43, 703.

[2] L. M. Bertholf, *Ztschr. vergleich. Physiol.* (1933) 18, 32.

GALENA IN CONCRETIONS OF POTTSVILLE AGE

THE writer is interested in the article written by Alfred C. Lane in the issue of SCIENCE of November 14, 1941, concerning the occurrence of galena in sedimentary rock. Lane calls our attention to the fact that sedimentary galena from Joplin, Mo., has a relatively high proportion of isotopes which may be of radiogenic origin. He urges that galenas from sedimentary formations be collected and kept for further scientific research, and the Committee on Measurement of Geologic Time be informed about it.

Near Marshallville, Ohio, in a railroad cut near that village, is an excellent exposure of the unconformity between the Mississippian sandstone and the basal Pennsylvanian, known as the Pottsville. Not far above the unconformity, in a black, bituminous, thinly laminated shale, occur numerous clay iron-stone concretions of the septarian type. These contain an association of minerals similar to that in the lead and zinc deposits of the Mississippi Valley. In addition to galena are found sphalerite, barite and pyrite. Sphalerite occurs in greatest abundance and barite is quite common. Galena is rare in occurrence and it required the cracking of large numbers of concretions to find one crystal, which is embedded in the concretion and measures about one quarter inch long and one eighth inch wide.

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A PURE NITROGEN NATURAL GAS WELL

WHAT is believed to be the first pure nitrogen natural gas well ever to be discovered in the United States, in so far as the writer has been able to ascertain, has been discovered at a shallow depth in eastern Wyoming, during the past season.

In the course of drilling a well for water on the