

consider that an abrupt change takes place in the syndrome when these exposures become intense enough to give rise to acute toxic symptoms. The incidence of chronic carbon monoxide poisoning has been found to be higher among persons with a medical history of frequent acute poisonings, but chronic poisoning may occur unpreceded by acute poisonings. Smoking and age have no relation to the incidence of chronic poisoning. The condition is far more common among producer gas workers than among other workers exposed to carbon monoxide. Animal experiments have demonstrated that chronic changes can be induced by low concentrations of carbon monoxide. It is impossible to assign a limit to the exposure required to induce chronic poisoning, since it depends on the intensity, duration and frequency of the exposures.

F. F. RUPERT [INDUST. HYG. DIGEST.]

FACTORS INFLUENCING THE MECHANISM OF LEAD POISONING. JAN MÜLLER, *Pracovní Lékařství* 2:49, 1950.

The ability of red blood cells to adsorb lead was studied. In nonexposed cells, the finding of Behrens and Pachur of a logarithmic relationship between lead added and lead adsorbed by a red cell was verified. Further it was shown that there are differences in the ability of red cells of different individuals to adsorb lead. It was assumed that the appearance of nonhematological symptoms of lead poisoning depended on the lead flowing into the interstitial fluid and that only lead not bound to red blood cells is available to reach the interstitial fluid. Therefore, persons whose red cells have a smaller ability to adsorb lead will show hematological signs of lead poisoning sooner than those whose red cells adsorb lead better. The ability of the individual cells to adsorb lead, therefore, can be used as a measure of individual resistance to lead poisoning.

In persons with adequate previous exposure a different shape of absorption curve was found. The shape of the curve gives an indication of immediate danger.

ADAPTATION OF AUTHOR'S SUMMARY.

Determination of Air-Borne Contaminants

MICRO-CLIMATIC FACTORS IN SMOKE POLLUTION FROM TALL STACKS. PHILLIP H. LOWRY, Atomic Energy Commission Unclassified Document—688, no date, 1 page.

The document is in abstract form; it is reproduced below in its entirety.

"The basic meteorological factors which affect the dispersion of effluent from tall stacks are discussed in terms of their utility in determining a pollution climatology. These factors include: wind speed, direction, and gustiness, and the vertical temperature gradient. It is shown that, for tall stacks, all of these factors can be approximated from the record of a single anemometer and vane mounted near the level of the stack-top.

"Using data collected at Upton, New York, an operational climatology is developed which combines the variables into a single pollution index. Examples are shown of such an index. The limitations of the index result both from the lack of a firm theory and from nonmeteorological factors such as local topography and the nature of the effluent."

NUCLEAR SCIENCE ABSTRACTS.

THE FORECASTING OF MICROMETEOROLOGICAL VARIABLES. MAYNARD E. SMITH, Atomic Energy Commission Unclassified Document—702, no date, 1 page.

The document is in abstract form; it is reproduced below in its entirety:

"The current status of the forecasting program developed for nuclear reactor operations at Brookhaven National Laboratory is discussed in some detail. In the examination of the forecasting method emphasis is placed on the use of relationships between synoptic and micrometeorological variables as they have been determined