

cyclic compounds having the same number of carbon atoms, reactivity toward oxidation probably decreases according to the sequence. (5) The most active single oxide catalysts were found to be the oxides of cobalt, nickel, manganese, chromium, cerium, titanium, and iron. It is conceivable that different forms or preparations of the same oxide would have different activities. Impregnating these oxides on various supports may also produce large changes in activity. (6) The microcatalytic-chromatographic technique has proved to be a very convenient means for rapid screening in oxidation studies. It is to be recommended where a large number of catalysts or reactants are to be investigated or where a wide range of temperatures is to be used

-- Authors' summary

- 1023 Obnoxious Odors. A. Turk. Ind. Wastes 4, 140-145 (Sept. 1959).

Air pollution may manifest itself in particulate matter, chemical effects or noxious odors. When the elimination or control of odors is the principal aim of air pollution control, the problem involved is primarily one of abatement of gases and vapors and the ultimate goal is the reduction of atmospheric concentrations of these materials below the odor threshold concentration. Since odor threshold concentrations are usually several orders lower than those of toxicity, irritation and plant damage, odor control usually involves concentrations which are fairly low but still require further reduction by efficient methods of removal. Among these methods of removal are: combustion, adsorption, absorption and modification. The limitations and applications of each are described.

-- Author's summary

- 1024 Chronic Bronchitis: An Approach to the Problem of Prevention Together with an Assessment of the Health and Social Cost. J. L. Burn. Public Health (London) 74, 131-138 (Jan. 1960).

The figures for deaths from bronchitis of all forms in England and Wales for 1953-1957 and provisionally for 1958 and 1959, are in the range of 26,000 to 30,000, with those for chronic bronchitis being 20,000 to 24,000. It appears to be a peculiarly "English" disease since the death rate would seem to be 3 times that of Belgium, 6 of Germany, 10 of France, 20-30 of Scandinavia, and 36 of the United States. Despite the many fallacies inherent in the international comparisons, such as assignment of death to heart disease or pneumonia instead of bronchitis, the total is still very high. In England and Wales the mortality from bronchitis of males is twice that of females. In a chart relating deaths to social and occupational factors in 5 groupings, the mortality rate in the unskilled workers of the lowest group was 5 times that of the top group composed of managerial and professional personnel. It was noted that the incidence of morbidity and mortality was decidedly increased for those engaged in unhealthy occupations, such as dusty ones or heavy manual labor, particularly in an industrial urban area. Other chronic respiratory diseases, such as lung cancer, pneumonia, and tuberculosis, show an increase in the death rates from rural to urban areas but the gradient is not as steep as that of bronchitis. Among the unsolved problems in this complex disease is to be considered the relative importance of a long list of possible causative factors including air pollution. Health education methods are needed to warn people with chronic bronchitis to keep indoors and to keep warm in times of smog.

-- Cond. from APCA Absts.

- 1025 Cancer of the Lung—A Public Health Problem? J. Cuthbert. Public Health (London) 74, 123-130 (Jan. 1960).

The diagnosis, treatment, and prognosis of lung cancer are discussed in detail. Apart from an aging trend in the population there appears to be 2 main causative factors, those of tobacco smoking and of air pollution. The smoking habit is widespread in the British Isles, yet the cancer rate is definitely higher in the large industrial cities than it is in rural areas. The chronic bronchitis rate is also higher in those cities. Therefore, air pollution is considered an etiological factor in lung cancer although the dangers from the atmosphere are not as clearly defined as those from smoking. Motor traffic is another potent factor in air pollution and eventually the question of exhaust fumes will have to be faced. In highly industrialized cities as much as 300 tons of deposited matter is found per square mile annually while in rural areas the figure is 50 tons or less. Sulfur dioxide seems to be the pollutant which