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CHEMICAL & ENGINEERING

NEWS

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The Chemical

CHEMICAL SCIENCE SERIES

90 Laboratory synthesis of organophosphorus compounds has become an intensified activity during the past decade. Nucleophilic reactions—acid-catalyzed, base-catalyzed, and quaternary—have been especially fruitful areas.

CONCENTRATES

17 Industry & Business

19 Washington

39 Research & Technology

21 Development of breeder reactors should get more attention, according to the Atomic Energy Commission. In nuclear energy report to the President, AEC Chairman Seaborg says only breeders can meet future energy needs.

INDUSTRY & BUSINESS

23 Chemicals are likely to benefit from fast rising demand for fiber-foil cans, especially if plastic films win a share of the market for liners. Sales of aluminum-lined cans are expected to triple next year to about \$60 million.

25 Building and maintaining U.S. highways is a growing chemical market. This year it should reach \$239 million, John Mackie, Michigan's highway commissioner told the Chemical Market Research Association last week.

MARKETS

30 This year's increase in use of chrome chemicals is largely due to a brisk business in chrome plating for automobile parts, but producers don't expect a repeat any time soon. The best they can foresee is slight, steady growth.

RESEARCH

40 Increased yields of hydrazine result from the irradiation of gaseous ammonia in the presence of krypton or xenon. This is the first gaseous radiation process to give a G value above 2 for hydrazine formation.

42 Citric acid cross-links cellulose in cotton and rayon fibers. Other polycarboxylic acids do so, too, although some of the acids also decompose the fabrics. The cross-links improve crease resistance.

EDUCATION

44 The Intra-Science Research Foundation may be the first of a new kind of interuniversity research center. ISRF will supplement research activities of universities and other nonprofit institutions in southern California.

News magazine
of the
Chemical World



THE COVER: American Cyanamid's Dr. Clyde S. Scanley checks sequestration with phosphinic acid, a product of organophosphorus research

World This Week

DECEMBER 3, 1962

48 The National Science Foundation's academic year institutes for 1963-64 will include 57 schools and more than 1800 teachers. Cost of the program will be \$11.5 million for 58 grants, NSF says.

TECHNOLOGY 54 All-metal chamber incinerator designed by BuMinex handles low-level radioactive wastes. Prototype disposes of 30 lb. per hr. of rubbish and sawdust conveniently, economically, and safely. Plans are available.

55 Boron fibers for possible use in reinforced plastic rocket cases and spacecraft structures have been made by Texaco Experiment, Inc. Fibers are made by chemically depositing boron on a core filament.

ACS NEWS 70 All ACS divisions have elected officers for 1963. They will assume their duties on Jan. 1.

77 ACS will participate in a weekly hour-long television series on New York City's educational TV station, WNDT.

ASSOCIATIONS 79 ACS California Section will hold meeting-in-miniature Dec. 17 and 18 at Berkeley, Calif.

79 The 37th National Colloid Symposium of the ACS Division of Colloid and Surface Chemistry will be held in Ottawa, June 24 to 26, 1963.

PEOPLE 82 Ernest R. Kaswell of Fabric Research Laboratories has been elected president of American Association of Textile Chemists and Colorists.

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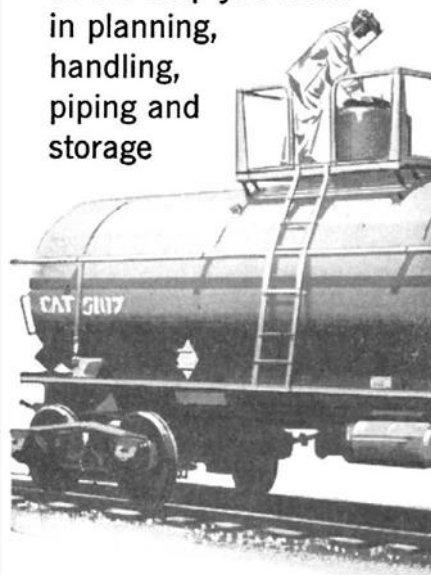
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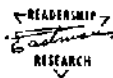
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