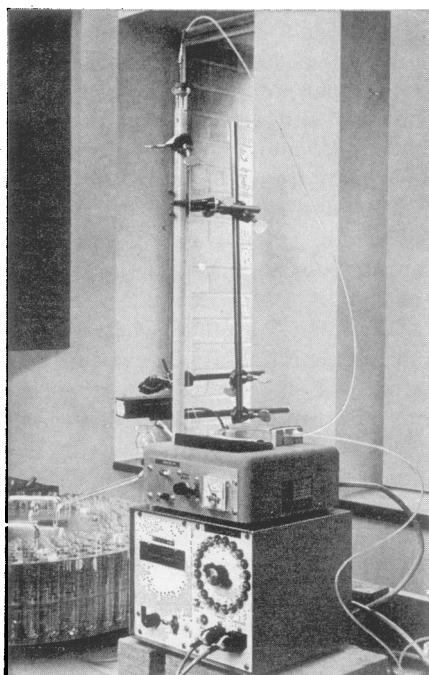


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that deposits of potential economic value be earmarked as such.

In the study of the mechanism and course of genetic and diagenetic changes, it was recommended that model reactions be studied in the laboratory; the investigator should start with pure, well-defined, simple systems and gradually increase the complexity of the system by adding more components. It was stressed that more laboratory work will be needed on synthesis at low temperatures and pressures.

Soils

The presence of amorphous materials in soils creates several problems. Because of the high reactivity of these materials and their large specific surface area, the chemisorption of inorganic fertilizers often makes large fractions of the added fertilizers unavailable to the plants. Furthermore, the adsorption of pollutants from streams and from the atmosphere often causes considerable soil pollution. The large and strong adsorption capacity of the amorphous materials may well upset biological activity and balance in soils. It was emphasized that much fundamental and applied work would be needed in these highly important areas.

The permeability of volcanic soils is often high, thus causing excessive drainage which poses problems in rice growing. Measures to remedy this situation, such as the addition of bentonites, require more study of the factors governing colloidal stability to which the problem is directly related.

The colloidal properties of soils are also directly related to properties such as strength, swelling, and shrinking, which are of importance for foundation engineering and road building.

Industrial Applications

Industrially, the use of the amorphous materials should be explored for those applications where small particle size and high adsorption capacity and large surface area are important. On the basis of knowledge of the structure and chemistry of the surface, it will be possible to chemically modify the surface to tailor the colloidal system to suit a particular application. Potential fields of application are in ceramics, paints, fillers, drilling fluids, lubricating greases, defoaming, ion exchange, heterogeneous catalysis, and adsorbents.

H. VAN OLPHEN

National Research Council,
Washington, D.C. 20418

Forthcoming Events

February

9–11. **Aerospace and Electronic Systems**, 12th annual winter conv., Los Angeles, Calif. (W. H. Herrman, Inst. of Electrical and Electronics Engineers, Inc., Los Angeles Council Office, 3600 Wilshire Blvd., Los Angeles 90005)

9–11. **Advanced Planning for Industry on Ships and Marine Systems**, Washington, D.C. (National Security Industrial Assoc., Dept. NM, Suite 700, Union Trust Bldg., 15th and H Sts., NW, Washington, D.C. 20005)

9–11. **Weed Science Soc. of America**, Dallas, Tex. (D. L. Klingman, Agricultural Research Service, U.S. Dept. of Agriculture, Beltsville, Md. 20705)

9–12. **Conference of the Reinforced Plastics/Composites Div.**, 26th, Washington, D.C. (C. Condit, Soc. of the Plastics Industry, Inc., 250 Park Ave., New York 10017)

10–11. **Vinyl Plastics II—Fundamentals of Processing Techniques**, Atlanta, Ga. (J. Seay, School of Architecture, Georgia Inst. of Technology, 225 North Ave., NW, Atlanta 30332)

11–13. **Society of University Surgeons**, New Haven, Conn. (T. Drapanas, Tulane Univ., New Orleans, La. 70112)

12. **Society of Teachers of Family Medicine**, Chicago, Ill. (Miss G. Gillespie, Div. of Family Medicine, Box 875, Biscayne Ave., Miami, Fla. 33152)

14–15. **American Medical Assoc., Medical Education**, 67th annual congr., Chicago, Ill. (C. H. W. Ruhe, AMA Council on Medical Education, 535 N. Dearborn St., Chicago 60610)

14–18. **American Soc. of Abdominal Surgeons**, New Orleans, La. (B. F. Alfano, ASAS, 675 Main St., Melrose, Mass. 02176)

14–18. **American Soc. of Range Management**, 24th annual, Reno, Nev. (F. T. Colbert, ASRM, 2120 S. Birch St., Denver, Colo. 80222)

15–16. **Virus and Water Quality: Occurrence and Control**, 13th annual, Urbana, Ill. (V. L. Snoeyink, Dept. of Civil Engineering, Univ. of Illinois, Urbana 61801)

17–18. **Conference on Integrated Information Systems**, Palo Alto, Calif. (R. W. Rector, Cognitive Systems, 319 S. Robertson Blvd., Beverly Hills, Calif. 90211)

17–19. **Solid State Circuits**, intern. conf., Philadelphia, Pa. (R. W. Webster, Texas Instruments, P.O. Box 5012, Dallas, Tex. 75222)

17–24. **Therapeutic Use of Dreams**, New York, N.Y. (H. Gershman, American Inst. for Psychoanalysis, 329 E. 62 St., New York 10021)

18–19. **Theoretical Chemistry and Sulfur Chemistry**, 3rd annual symp., New Orleans, La. (L. P. Gary, Jr., Loyola Univ., New Orleans 70118)

18–20. **Experimental Nuclear Magnetic Resonance**, 12th annual conf., Gainesville, Fla. (J. M. Anderson, Bryn Mawr College, Bryn Mawr, Pa. 19010)

18–21. **Western Electroencephalography Soc.**, Honolulu, Hawaii. (D. Crowell, Pacific Biochemical Research Center, Univ. of Hawaii, Honolulu 96822)