

erties A or B of fetal blood, non-secretor type, (2) the Hr factor and (3) finer differences of the Rh factor. The report to the clinician in the exceptional Rh positive mothers can be worded as an incompatibility detected by a particular reagent. In any event, it will be necessary for these bloods to be referred to a serologic specialist who may or may not have on hand

potent anti-Hr and the other two varieties of anti-Rh sera. So far as the clinician is concerned, one may recommend the simple genetic theory based on the behavior of the diagnostic (anti-Rh₀) serum, which contains but a single antibody. A more detailed analysis which requires the use of other anti-Rh sera or anti-Hr serum can be supplied by the specialist in the field.

SCIENTIFIC EVENTS

THE IPATIEFF HIGH PRESSURE AND CATALYTIC LABORATORY OF NORTHWESTERN UNIVERSITY

THE funds for the founding of the High Pressure and Catalytic Laboratory came from Northwestern University and private sources. A part of the apparatus was contributed by the Universal Oil Products Company. The idea for such a laboratory was sponsored by Professor W. V. Evans, of the department of chemistry, and permission to establish such a laboratory was obtained from the president of the university. The aims of the laboratory have been:

1. To study catalytic reactions under normal and high pressures because of their theoretical as well as their industrial importance.
2. To give students in chemistry and engineering not only theoretical but practical knowledge of the main types of catalytic reactions and the properties of catalysts.

During the first five years of the existence of the laboratory the work has dealt mainly with the application of catalysts in the field of terpenes, as follows:

1. A method for obtaining terpenes from solutions of terpene alcohols by dehydration in the presence of very dilute inorganic salts such as magnesium chloride, ammonia chloride, etc.
2. A new method of determining the presence of three, four and five methylene rings in di-cyclic terpenes.
3. A study of alkylation of terpenes with aromatics in the presence of various catalysts.
4. A new cyclic isomerization of limonene into a new di-cyclic terpene.
5. A study of the transfer of hydrogen in the terpene series in the presence of no hydrogenation catalyst.

From the student's point of view the following programs are in progress:

- A. Students perform experiments on hydrogenation, oxidation, isomerization, polymerization, alkylation, etc.
- B. They become acquainted with and prepare the main types of catalysts.

The equipment of the laboratory consists of the following:

1. Ipatieff type bombs of various sizes and models

which can withstand pressures up to 400 atmospheres at 500° C. temperature.

2. Special type bombs for the study of the solubility of gases and critical temperatures, which allow the removal of small portions of the reactants during the reaction for study.

3. Turbo mixer type bombs which rapidly mix the reactants during a reaction.

4. Special apparatus for the study of continuous reactions under pressures up to 130 atmospheres.

5. Special bomb-proof units where these high pressure reactions can be carried out.

The laboratory is under the control of Dr. V. N. Ipatieff, an authority on high pressure reactions and a pioneer in the field of catalysis.

Dr. Ipatieff is assisted by Professor Pines, who gives lectures on catalysis in the department of chemistry. Professor Pines has been associated with Professor Ipatieff in his major discoveries of the past fifteen years.

The war has interfered with the development of this laboratory both by taking away prospective students and by making it impossible to secure needed apparatus. As soon as it is possible to do so, the laboratory will be enlarged, and its accommodations increased. A large number of students and research associates taking graduate work along the lines of catalysis and high pressure are expected to take part.

NEW LECTURE ROOM VISUAL AIDS AT COLORADO AGRICULTURAL AND MECHANICAL COLLEGE

EIGHTEEN mural paintings depicting the epochs of geologic time through representations of various plants and animals from the pre-Devonian period through succeeding epochs to modern times have been painted on 500 square feet of the walls of the botany building lecture room at the Agricultural and Mechanical College, Fort Collins, Colo.

Since they were painted during the summer of 1944, the murals have continued to attract increased attention and have been accorded growing favorable comment by students, faculty and visiting botanists and geologists.

The 7-foot panels done in oil by Dr. L. W. Durrell,