

photographed, showing the specimen in place. An overall photograph is made of the site. The depth from the surface is measured. Any other material occurring in the same layer is carefully recorded.

If his photographs, even with the use of color filters, fail to show up the boundaries of the various strata, the archaeologist marks the limits artificially. Perhaps he scratches a line with his trowel. Perhaps he stretches a string along the line of demarcation.

Then he can call on the geologist to give him a date for his find. It will be a rough date, most likely. And perhaps he must be content with information as to which of a number of finds at the same site are the oldest. If Clovis points are found buried far below Folsom points, the archaeologist can feel sure that the Clovis point is much older.

The stratigraphical method is one of the most widely used ways of dating ancient finds. It has its drawbacks, however, and depends a great deal on the wisdom of the archaeologist using it.

Sometimes an article may be found in a certain level of soil or rock without belonging there at all. Men have long had a way of digging holes and burying treasures. Even dogs and wild animals root in the ground and may bury a bone or other object far below the level where it belongs naturally.

And sometimes movement of the earth itself will mix up the layers in a confusing manner.

There is another way by which the earth marks off the years to form a geo-calendar. As the glacial ice moved northward, the

summer melting of the ice each year left behind a layer of silt and clay much as the melting of a city's snow in the spring deposits a layer of slippery goo on the streets. With successive freezes of the glacial ice and spring meltings, layer after layer were laid down. The layers of sediment are known to geologists by the Swedish word "varve."

Counting varves gives archaeologists a way of noting the passing years. Unfortunately, in America there are two drawbacks to use of the varve calendar. In the first place, no one knows precisely in what year the first or last varve was laid down, so the varve calendar is left floating in time.

Also, in America at least, it seldom happens that any archaeological material is found deposited in a varve layer.

Science News Letter, July 4, 1953

#### GENERAL SCIENCE

## International Language

► THE "AVERAGE" language of the western world, Interlingua, is being introduced into scientific and technical publications as a workable and economical solution to the problems of international communication.

SCIENCE SERVICE has received a one year grant from the International Auxiliary Language Association (IALA) to handle introduction, translation and teaching of this "common denominator" language to science and technology editors and other interested persons.

Based on the principal western languages, Interlingua with its simplified uninflected grammar and universal vocabulary is read virtually without study by anyone who normally reads scientific and medical journals. A grammar and Interlingua-English dictionary has been published under Dr. Alexander Gode's editorship.

Already, two scientific journals published exclusively in Interlingua have entered their second year. SCIENTIA INTERNATIONAL is a monthly review of science, put out by SCIENCE SERVICE. *Spectroscopia Molecular*, a journal of spectroscopy, is edited by Prof. Forrest F. Cleveland, Spectroscopy Laboratory, Illinois Institute of Technology, Chicago 16, Ill.

One of the most important aids of Interlingua to science editors will be the use of a single Interlingua summary in place of several summaries in different languages for each of the scientific papers. Thus Interlingua will give both practical and economical advantages over older methods of abstracting.

The *Quarterly Bulletin of Sea View Hospital*, a journal of tuberculosis and chronic pulmonary diseases, now employs Interlingua summaries with each of its scientific papers. Before, the Bulletin used Spanish abstracts along with its English papers, but switched to Interlingua to reach a greater international audience. This journal is ed-

#### CHEMISTRY

## Impurity Virtue In Some Materials

► IMPURITY IS a virtue in some industrial and scientific materials. At a meeting of chemists and physicists in Schenectady, N. Y., it was revealed that some amounts of extraneous materials are useful in:

Transistors, the tiny devices that substitute for vacuum tubes.

Fluorescent lights, paints and television tubes.

Photographic film.

So far about 43 important impurities in phosphors, used in fluorescent lights, have been catalogued.

Science News Letter, July 4, 1953

ited by Dr. Harold D. Wainerdi, Sea View Hospital, West New Brighton, Staten Island 14, N. Y.

SCIENCE SERVICE's Interlingua Division has set up shop at 80 E. 11th St., New York 3, N. Y., with Dr. Alexander Gode and Hugh Blair as staff. The Interlingua Division will offer translation service to medical and other journals in preparing Interlingua versions of summaries, abstracts, papers, etc., for publication.

Further details about Interlingua can be obtained from Dr. Gode in the New York office, or from Watson Davis, director, SCIENCE SERVICE, 1719 N St., N. W., Washington 6, D. C.

Science News Letter, July 4, 1953

#### CHEMISTRY

## New Detergents Clean Up Radioactive A-Dust

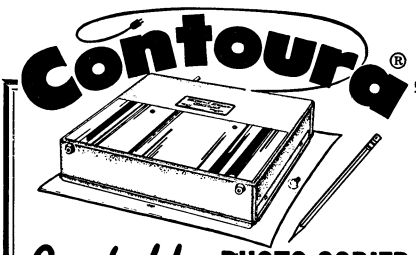
► SCRUBBING UP after an atomic blast is made practical by the discovery announced in Paris that certain of the newer cleaning agents trap and remove fission products in radioactive dust.

Phosphorus-containing scouring compounds have the ability to sequester, or grab and hold, rare-earth elements, which are among the most abundant fission products. This action removes nearly 99% of the invisible but menacing radioactive particles, according to tests reported to the 26th International Congress of Industrial Chemistry by Dr. Foster D. Snell, president of the chemical consulting firm of Foster D. Snell, Inc., New York.

Chemical elements from yttrium through europium are the materials found among the fission products after atomic bomb explosions. Phosphorus-type detergents remove these from surfaces commonly found in the home, Dr. Snell reported. Plaster, however, is better cleaned with water alone.

Science News Letter, July 4, 1953

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