ments cited, whereas afterward, the Europeans collectively accounted for about this proportion. The change was presumably brought about by the opening of a $95-million facility in Grenoble, France, in 1972.

The Institut Laue-Langevin is jointly supported by France, West Germany, and the United Kingdom. These three nations provided the Grenoble neutron facility with about $41 million last year as compared to the *total* U.S. spending on neutron scattering research of approximately $20.5 million. When all neutron scattering expenditures in the three European nations was totaled, the panel found that they were spending at the rate of $95 million per year, almost four and a half times the U.S. rate. Brinkman told *Science* that the United States has been keeping up by being clever, but this will not work forever. There is already a noticeable reduction in the flow of researchers from overseas wanting to use U.S. neutron scattering facilities. They are going where the money is.

Why should anybody mourn the loss of leadership in neutron scattering? The argument, in the recent DOE report and in a 1977 National Academy of Sciences study, is that neutrons provide a unique tool for exploring properties of matter that other techniques cannot easily probe.

Neutron scattering experiments roughly divide into two classes, according to whether the neutrons do or do not lose energy as they pass through a sample. The first case is called inelastic scattering and the second elastic scattering. Techniques based on inelastic scattering provide spectroscopic information about the energy states associated with such phenomena as vibrations and magnetic interactions in solids. Elastic scattering gives structural details about the arrangements of atoms in materials. One form of elastic neutron scattering, for example, is neutron crystallography, which is entirely analogous to x-ray crystallography. Another kind of elastic neutron scattering is small angle scattering, which gives structural information about disordered, partially ordered, or ordered materials with very large periodicities.

Two characteristics of neutrons have made neutron scattering especially useful. The first is that, in contrast to x-rays, neutrons easily penetrate solids made of heavy elements but are strongly scattered by hydrogen and its isotopes. This feature has allowed chemists and biologists to study the structure of polymers and biological macromolecules. The second characteristic is the small magnetic moment of the neutron, which allows the

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Most Additives Are Harmless

In a message of solace to consumers and industry alike, the Food and Drug Administration (FDA) has concluded that most common food additives are harmless. A review of 415 natural and artificial additives generally regarded as safe turned up few surprises. Only salt was targeted for restriction or possible removal from the food supply, because of its potential for increasing hypertension.

The review, conducted by the Federation of American Societies for Experimental Biology, suggests that additional study be made of more than a dozen additives, including caffeine, on which there was considerable disagreement. Additional information on BHA and BHT, two widely used preservatives, was also sought, as were data on the long-term effects of vitamin additives such as iron, zinc, vitamin A and vitamin D—each consumed in ever-larger quantities.

Sanford Miller, director of FDA's Bureau of Foods, says the agency will at first act only indirectly against salt. "We'd like to see more labeling, and then some voluntary reductions by the food companies. It would be extraordinarily difficult to ban salt or to establish appropriate levels for each individual product, but we will if there is no voluntary effort."

Revlon Funds Animal Test Research

Revlon, Inc., announced it will spend $750,000 on a search for alternatives to the Draize animal test, long the standard test for consumer products that may irritate the eye. The company made its decision in the midst of a consumer boycott and protest that brought 3000 letters into its New York headquarters.

The test, which consists of pouring chemicals into the eyes of rabbits, has been attacked by animal lovers. Revlon's announcement followed by a month the observance in Europe of "Remember the Revlon Rabbit Day" and by 2 months the placing of an ad in *The New York Times* that asked, "Is another Revlon shampoo worth blinding rabbits to you?" The ad's sponsor, an animal rights group, claimed that "we have documents showing that last year Revlon victimized 2210 rabbits without any pain relief." Revlon, which is only one of many cosmetics firms that rely on the Draize test to fulfill federal safety regulation, was placed in the uncomfortable position of denying at their recent press conference that it willfully tortured captive animals.

The $750,000 Revlon grant is to be spent over a 3-year period at Rockefeller University, probably on research with tests using tissue cultures and sensitive biophysical monitoring. Revlon is not above using pressure tactics of its own. Its chairman told the press he knows that the chief executives of other companies "share our concern for consumer safety and we trust they will participate with us" in financing the research. A bill has been introduced in Congress to order the financial participation of the regulatory agencies in a search for a Draize alternative.

The next target of the Coalition To Stop Draize Rabbit Blinding Tests is the LD-50 toxicity test. In the meantime, the coalition's organizers are trying to reduce the amount of Draize testing by urging consumers to "stick to tried and true brands; don't try anything new and improved that would require evidence of safety." An official of the Washington-based Institute for Animal Problems says with feeling that "we must stop reinforcing the hysteria of innovation that is a disease of this culture."

Too Much Congressional Direction?

The waning hours of the 96th Congress provided an opportunity for some extraordinary Capitol Hill muscle-flexing in the science area. Three science agencies were subjected to undue meddling, or aggressive congressional oversight, depending on the point of view. In one instance—the authorization for the National Science Foundation (NSF)—President Carter decried Congress' detailed instructions to the agency as "a dangerous turn. . . . These provi-

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