section, is the director of the Center for Organic Chemistry in Bucharest. After achieving fame for developing the now widely employed process of using aluminum chloride as a catalyst in the isomerization of hydrocarbons, Nenitzescu has more recently turned his attention to carbonium ions and small-ring compounds. His institute is concerned with hydrocarbon chemistry, a scientist there explained in an interview, and it has close ties with the economy and with the society. Like the Parhon Institute, it serves as a training ground for young researchers, and also as a place where engineers from industrial institutes can come to learn about new methods and techniques. The institute also works on specific problems that the industrial institutes are unable to handle. And there is also close contact with foreign scientists—in this case, particularly with American ones, such as George A. Olah of Case Western Reserve.

Chemical research started out in 1949 in a small laboratory at the Polytechnic Institute at the University of Bucharest. Its 60 research workers dealt with all branches of chemistry—organic, inorganic, and physical. Now there are three institutes in Bucharest, one for each branch of chemistry. Each has its own building and well over 100 researchers. And there are also chemical institutes in Cluj, Timoasara, and Jassy. The increase in the number of chemists, brought about by the government's interest in developing a modern chemical industry in Romania, has made it possible for fundamental work to expand.

One group of researchers at the Organic Chemistry Center, for example, has used amyl sodium as a catalyst to make a new kind of polyethylene that is stronger, and has a higher melting point and molecular weight, than existing polyethylenes. Soon the product will be produced by industry here, and many other countries are also interested in it. "It started out as a theoretical problem about 10 years ago," Ciresica Huch, the leader of the research group, told *Science*, "but the Ministry of Chemistry became interested after we published our results."

In other fields, of course, where there was no strong tradition before World War II, the emphasis has been on building a tradition and on supporting basic science. In atomic physics, for example, until very recently there was little chance for the Academy institute to contribute to the economy. In the years since 1956, when the institute was established by the ministry-level Nuclear Energy Committee (which had been set up a year earlier), many Romanian scientists were sent to the Soviet atomic center in Dubna and to other foreign research centers for training. Several cooperative research ventures were also undertaken. "Until 1968," Holubei told *Science*, "our principal interest was scientific development. Last year, as the government became interested in utilizing nuclear power here, our committee was reorganized, so that we now direct all the nuclear work in Romania—research, development, and production of equipment and parts." Under the new economic plan, the government hopes to build several small nuclear power plants over 10 years.

But Holubei wants basic science to continue to flourish. He would like to see the Academy's Atomic Physics Institute develop into something like the institutes in other, more established fields that have been able to continue their fundamental science and, at the same time, use their research for strengthening the economy. "Last year Romanian scientists contributed 0.5 percent of all the papers published in the world in nuclear physics," Holubei said. "We want to increase that percentage." Ion Ursu, the director of the Atomic Physics Institute, agrees with Holubei. "To be independent," Ursu said in a recent interview, "we must have good fundamental science. Otherwise, we will always be in the position of borrowing from more advanced countries, and we do not want to do that."

In Romania, planning has not been an end in itself. Rather, it has been the means by which development—and, eventually, independence—could grow. Scientists here are the ones who plan the research, and one can be sure that fundamental science will not be slighted. The scientists who would like to be free to do whatever kind of work they like are still around, and it is unlikely that any amount of pressure, patriotism, or national pride will eliminate them. But they are definitely in the minority. Most Romanian scientists, because of the traditions of the past and because of their country's need for the contributions they can make, seem willing to accept the planning as necessary. They feel that their country could not have developed to the extent it has without planning, and the thing they seem most interested in is its further development and its independence.—ANDREW JAMISON

A former Science *news intern, Harvard senior Andrew Jamison traveled in Eastern Europe this summer.*

NEWS IN BRIEF

• **HANDLER DECLINES ADVISORY POST:** Philip Handler, president of the National Academy of Sciences and chairman of the National Science Foundation's policy-making board, has declined to serve on the Defense Science Board. This board advises the Secretary of Defense on scientific matters. An official at NAS said that Handler had not made public his reasons. Frederick Seitz, Handler's predecessor at NAS from 1963 to 1968, had been chairman of the board, as well as a science adviser to NATO. Detlev Bronk, NAS president from 1950 to 1962, had been an active member of the Defense Science Board and chairman of the Aviation Medicine Committee of the Academy.

• **PHYSICIST WINS FERMI AWARD:** The Atomic Energy Commission has named Dr. Walter H. Zinn the 13th winner of its $25,000 Enrico Fermi Award. Zinn, a vice president of Combustion Engineering, Inc., previously directed the AEC's Argonne National Laboratory at Argonne, Ill. He was a member of the Fermi team which built the world's first atomic pile.

• **SST ADVICE REVEALED:** The Nixon Administration belatedly released reports on the supersonic transport which Representative Henry Reuss (D–Wis.) said amounted to a "resounding nonendorsement" of the program. Reuss had been refused access to the report by John Volpe, Secretary of the Department of Transportation, until he invoked the Freedom of Information Act. The report was prepared by a committee named by Nixon last winter which included officials from the departments of State, Defense, Treasury, Justice, Labor, Commerce, and Welfare. The panel took a negative view, Reuss said. The transportation subcommittee of the House Committee on Appropriations is now studying the report.

• **ONTARIO SCIENCE CENTRE:** A $30 million Canadian science center, similar to the Museum of Science and Industry in Chicago, has been completed in Don Mills, near Toronto, Canada. The Ontario Science Centre features 450 scientific and technological displays that permit active participation by observers. The Centre was funded primarily by the provincial government of Ontario.