research work on the genetics, protection, and management of the basic food crops has now yielded results upon which firm recommendations can be made to farmers in terms of the soil and climatic conditions of their local regions, and seed of many improved varieties is ready for their use. With these recommendations and materials available, there is a basis for effective extension, and a system of regional resident "county agents" has been put into operation by the Ministry of Agriculture with important success. The ministry has consistently enlarged its direct and indirect financial support of the collaborative project.

The increased production of several food crops which Mexico is now enjoying is due in part to such factors as larger supplies of fertilizers and more irrigated farmland but, in important respects, is also the result of research and extension. The wheat crop, now sufficient to meet local demand for direct consumption, is grown almost entirely from seed of higher yielding, disease-resistant varieties developed through research. Hybrid and other improved corn varieties have been furnished which make possible a substantial increase in the corn crop. Better beans, tomatoes, and other vegetables have been produced. Recent research on the late blight disease of potatoes opens the possibility that potato varieties highly resistant to this scourge may be in the offing. A new poultry improvement project has aroused great interest among small farmers and their families and among commercial raisers, who evince enthusiasm for increasing the production of chickens and eggs as a source of much needed animal proteins.

An extremely important result of the cooperative project is the outstanding performance of growing numbers of well-trained young Mexican technologists, teachers, and investigators, who are reinforcing all aspects of professional agricultural work in Mexico and who are assuming responsibility for a number of projects formerly handled by foundation staff members.

The ten scientists on the staff of the foundation in Colombia operate a large central experiment station near Bogotá and five regional stations. Their work, now in its seventh year, is concentrated on training and research on foodstuff production, chiefly corn, wheat, beans, potatoes, and feed crops; and it has recently been extended to poultry and livestock improvement.

The office serves as a training center for graduates of schools of agriculture in Colombia and in neighboring countries of the high Andean region and has sponsored the advanced training of a number of these through fellowships and scholarships to Mexico and the United States. The work of the unit is financially supported by both the Ministry of Agriculture and the foundation.

The work in Chile began in the spring of 1955 and is concentrated on two crops —wheat and forages for livestock feed. Research has been begun in the three chief agricultural regions of the country. Large numbers of plant materials from Mexico and Colombia are being tested for adaptation and will be used with selected local varieties for increase or as the basis for hybridization for the development of better and higher-yielding varieties suited to Chilean conditions. Experiment station and other facilities are also being improved.

Crop improvement research is being extended into neighboring countries in a type of operation which is not handled directly by the foundation but which stems from the work it has done. In Central America the six governments have each established local corn improvement programs staffed by nationals but using materials from the Colombian and Mexican corn-breeding work as a basis for developing autonomous seed and improvement projects. The six local projects were established with orientation and aid from the foundation, and through cooperation of foundation staff representatives they are linked into an effective international group. During the 3 years the work has been in force, appreciable improvement has been made in the quantity and quality of corn produced, in the number of Central American scientists who have been trained for positions within their countries, and in the growth of interest on the part of administrators and agricultural producers in the utilization of improved methods and materials for greater economic benefits.

In Ecuador the Ministry of Agriculture is establishing a wheat-improvement project. As in the Central American corn program, a member of the foundation staff—in this case the leader of the wheat work in Colombia—provides technical advice and guidance. Both Ecuadorian and Colombian agricultural scientists participate in the effort.

The international cooperative activities of the operating centers are being continued and strengthened. The foundation is responsible for two of the corn germ plasm banks which are part of the plan of the National Research Council for preserving genetically valuable varieties. These germ plasm banks send seed to scientists all over the world. Those in charge of the work with wheat cooperate with the international wheat rust nursery project of the U.S. Department of Agriculture. In the fight against the late blight disease of potatoes, the foundation puts its facilities in the high Valley of Toluca in Mexico at the service of scientists in a dozen different countries and research centers for testing promising types of commercial potatoes against the virulent strains of the disease there which are found at no other place in the world.

Paraplegia Fellowships

The National Paraplegia Foundation has announced the continuation of a limited number of fellowships for research in spinal cord disease and trauma and in the complications commonly associated with such disease or injury. These fellowships carry a minimum stipend of $3000 per year and may be awarded to any candidate who has demonstrated a capacity for medical research and has outlined a program of meritorious study.

Application forms for the 1957–58 academic year may be obtained from the chairman of the Medical Advisory Committee, Dr. L. W. Freeman, and completed forms should be submitted to him not later than *15 Apr.* at the National Paraplegia Foundation, 1940 W. Michigan St., Indianapolis 7, Ind.

Academic's Two New Journals

Academic Press, New York, has announced publication of two new journals. *Annals of Physics,* a new monthly that is scheduled for release in April, will be under the editorship of Philip M. Morse, professor of physics at Massachusetts Institute of Technology. Assistant editors are Bernard T. Feld and Herman Feshbach of M.I.T., and Richard Wilson of Harvard University. They will be advised by an editorial council that includes E. Amaldi, R. F. Bacher, H. A. Bethe, S. Chandrasekhar, E. M. McMillan, L. Nordheim, J. R. Oppenheimer, R. E. Peierls, I. I. Rabi, F. Seitz, E. P. Wigner, and C. Zener.

Original articles on research in any branch of physics may be submitted. *Annals of Physics* hopes to provide a medium for the publication of important papers that are internally complete and, thus, are generally understandable to professional physicists working in other fields. The length of articles will not be a limiting factor.

The other new periodical is the *Journal of Molecular Spectroscopy,* which will be edited by Harald H. Neilsen of the department of physics at Ohio State University. The editorial board consists of Børge Bak, W. S. Benedict, Bryce L. Crawford, Jr., David M. Dennison, Michael Kasha, P.-O. Lowdin, S. Mizushima, James N. Schoolery, G. B. B. M. Sutherland, C. H. Townes, H. L. Welsh.

The journal will be devoted to publication of original research papers deal-

ing with molecular spectra in emission and absorption, molecular spectra in the ultraviolet, the visible, the near, and the far infrared, and in the microwave region. It will also contain contributions on Raman spectroscopy and radiofrequency spectroscopy (including nuclear magnetic resonance spectroscopy). Manuscripts dealing with both the experimental and the theoretical aspects of molecular spectroscopy will be welcomed.

It is planned to publish volume 1, consisting of four issues, during 1957. Volume 1, number 1, is scheduled for release in June. For subscription information about both journals, write to Academic Press, Inc., 111 Fifth Ave., New York 3, N.Y.

Hungarian Scientists

Some of Hungary's best younger scientists are among the approximately 25,000 refugees who have passed through the American reception center at Camp Kilmer, N.J., in the past 2 months. Approximately 500 men and women with degrees from Hungarian universities have been screened by a National Academy of Sciences group that is led by Wallace W. Atwood, head of the academy's office of International Relations [*Science* **125**, 187 (1 Feb. 1957)]. Many of the refugees have doctorates or have made considerable progress toward advanced degrees. The job of the screeners is to assess the qualifications of these specially trained people and find appropriate places for them in this country.

The engineers present no problems. Representatives of industry literally wait at the camp to hire them. However, other specialists, few of whom speak any English when they reach here, might well go unrecognized for a long time if they were left entirely to their own resources. But, through the work of the NAS group, some have been placed at once on staffs of universities and organizations like the Rockefeller Institute, the U.S. Department of Agriculture, and the National Institutes of Health.

The refugees, many of them former "freedom fighters," are of high caliber. Besides the graduates, there are many who have completed 2 or 3 years in Hungarian colleges. Others are expert mechanics and technicians. The college undergraduates are being screened by the World University Service, which tries to evaluate their education in our terms and secure scholarships for them.

However, the National Academy of Sciences is immediately concerned only with those who hold degrees or who have recognized professional status. Well-paid positions have been found for more than 100 people in this category. The quality of these specialists and the efficiency of the screening process is indicated by the fact that so far there have been only two job changes. These two shifts were not caused by failure but by the refugee's desire to specialize in a certain line.

Most of the Hungarian scientists are quite young, for the average age of the escapees as a whole is only about 25. In such a group, there are of course no internationally known names. For the most part, older men of recognized distinction have remained in Hungary or have sought refuge in European countries where they have academic associations.

For the screening process it has been possible to organize a group of scientifically qualified Americans of Hungarian birth. Charlotte Ferencs of Johns Hopkins University screens the physicians and biological specialists. The former, regardless of qualifications, are difficult to place because of American laws on licensure to practice. With some, however, there has been no difficulty. One radiologist was recognized by American specialists as an outstanding man in his field. An orthopedic surgeon was a university professor until he fell afoul of the Communist regime 10 years ago. The Rockefeller Institute had a place immediately for a specialist in the chemistry of muscle. A neurophysiologist husband-and-wife team fitted into the research program of the National Institutes of Health. The same organization had a job ready for a cardiovascular physiologist.

Several in the medical group have already done part of the postgraduate work necessary to qualify as specialists. The screening committee is trying to obtain fellowships for them so that they can complete their training in this country.

One of the most colorful members of Atwood's group at Camp Kilmer is Maria Steller, a specialist in jurisprudence who escaped from Hungary years ago during the Nazi period. Since her field of interest has made it difficult for her to find an appropriate place in American life, she has a particular understanding of the problems likely to be encountered by her countrymen. Therefore, she has concerned herself with the rather large number of refugees who hold advanced degrees that are not in the physical or biological sciences. In this connection, apparently very few refugees with doctorates in literature want to come to the United States, for an international literary center is being built up in Montreal. They all want to go there where they can associate with poets, novelists, artists, and the like, from all the oppressed countries.

Nearly all the scientists among the refugees speak two or three languages with reasonable fluency; however, few have any knowledge of English, because contact with English-speaking countries has been almost completely outside their experience. This at first appeared to be a serious placement handicap, and it was decided that no one should leave Camp Kilmer unable to carry on some kind of conversation in our native tongue.

As a result an unusual educational experiment is under way in cooperation with Rutgers University, whose campus nearly adjoins the camp. The refugees are housed in a special dormitory where they are drilled in English for 5 hours a day by Rutgers faculty members who do not know any Hungarian. The course lasts for 8 weeks, at a cost of about $600 per person. Funds are provided by the Ford and Rockefeller foundations. After the first 4 weeks most of the students are able to conduct at least an elementary conversation.

Cellulose Research Institute

A new venture into fundamental research, a partnership between industry and the academic world, has come into being with the establishment of the Cellulose Research Institute at the State University College of Forestry at Syracuse University, Syracuse, N.Y. The director of the new institute is J. J. Hermans, professor of physical chemistry and director of the laboratory for Inorganic and Physical Chemistry at the University of Leiden, the Netherlands. Hermans is a specialist in the chemistry of macromolecular substances.

Another appointment is that of Kyosti V. Sarkanen as research associate. Sarkanen is an organic chemist who has had several years' experience in the pulp industry in Finland and with the Central Laboratory of the Finnish pulp and paper companies.

The industrial firms which, together with the College of Forestry, are the originating sponsors of the institute are the American Viscose Corporation, Philadelphia, Pa.; the Buckeye Cellulose Corporation, Memphis, Tenn.; the Celanese Corporation of America, New York, N.Y.; and the Hercules Powder Company, Wilmington, Del.

The primary objective of the unit is to provide a central source of fundamental knowledge that will serve as a basis for industrial development and growth. The institute's program will be devoted to basic research related to cellulose. All research results will be published.

The institute will also be a source of research personnel interested in chemistry and related fields. Advanced degree candidates will be affiliated with the institute and will carry out investigations under the guidance of its staff and according to the graduate requirements of