mother cell to the offspring, and commented "When you know the structure of these things (the genes contained in the chromosomes in cell nuclei) you can begin to find out how they pass on characteristics. If you do that, you've gone a long way toward finding out what life is."

All the Nobel laureates are to receive their awards—a recognition certificate, a gold medal, and $40,000—in a ceremony that will take place in Stockholm on 10 December. The King of Sweden, Gustaf VI Adolf, will make the presentation.

NAS Congratulates Soviet Academy

Detlev W. Bronk, president of the U.S. National Academy of Sciences, sent the following congratulatory letter to A. N. Nesmeyanov, president of the U.S.S.R. Academy of Sciences, on 6 October, two days after the launching of Sputnik I.

"On behalf of the National Academy of Sciences of the USA, I wish to congratulate you and your Academy of Science of the USSR for the great achievement of placing an earth satellite in orbit. This is a brilliant contribution to the furtherance of science for which scientists everywhere will be grateful. I had the privilege of conveying in person these congratulations to Academician Blagonravov in Washington on Saturday morning, and will do so again tomorrow to Academician Bardin."

Physicist Denied Passport

The U.S. Court of Appeals for the District of Columbia has ruled in the case of Weldon B. Dayton, physicist of Corning, N.Y., that the Secretary of State may use confidential information in denying passports to people believed to be going abroad to advance the Communist movement. Dayton was accused of being active in Communist-front activities, associating with Communists, and wanting to go abroad "to engage in activities which will advance the Communist movement." It is reported that Dayton wanted to go to India to conduct research with Bernard Peters, a physicist who renounced his American citizenship and left the country to work at the Tata Institute for Fundamental Research in Bombay.

Dayton held that he had the right to confront witnesses who gave information against him. The State Department eventually told him the substance of the charges but would not reveal the identity of the informants, saying that this would compromise investigative sources and endanger national security.

In a 2-to-1 decision, this view was approved by Judge E. Barrett Prettyman and Judge Wilbur K. Miller. Prettyman wrote in his majority opinion that "the community interest makes [the decision] necessary." In a dissent, Judge Charles Fahy stated: "A finding that the denial is in the 'national interest' is too broad when the particular national interest is not broken down to come within the governing criteria." Dayton's attorney, Harry I. Rand, intends to appeal to the Supreme Court.

The appellate court's ruling was just the opposite of that taken in another passport case in November 1955 by District Court Judge Luther Youngdahl. In the case of Leonard Boudin, Youngdahl ruled out the use of secret evidence by the State Department in acting on passport applications. The Government appealed Youngdahl's ruling, but later avoided the issue and granted Boudin a passport when the case was rejected by the Court of Appeals because of a legal technicality.

Kabul Archeology Exhibit

The Museum of Kabul in Afghanistan is to be reorganized with the aid of a mission established by the United Nations Educational, Scientific and Cultural Organization. The museum contains archeological collections considered of first importance in the study of the art and civilizations of Asia.

The UNESCO mission will consist of a specialist from Switzerland, a specialist from France, and a specialist from Syria. It will be headed by M. Jean Gabus of Neuchatel, Switzerland, who is director of the Institute of Ethnology at the University of Neuchatel.

The President Names Killian

James R. Killian, president of Massachusetts Institute of Technology, has been named by President Eisenhower to the newly created post of special assistant to the President for science and technology. He is to take office immediately. The President said:

"This man, who will be aided by a staff of scientists and a strong advisory group of outstanding experts reporting to him and to me, will have the active responsibility of helping me follow through on the program that I am . . . outlining. . . . Through him, I intend to be assured that the entire program is carried forward in closely integrated fashion, and that such things as alleged interservice competition or insufficient use of overtime shall not be allowed to create . . . harm to our scientific and development program.

"Moreover, Dr. Killian will see to it that those projects which experts judge have the highest potential shall advance with the utmost possible speed. He will make sure that our best talent and the full necessary resources are applied on certain high-priority top-secret items. . . ."

In the television address on 7 November in which he announced Killian's appointment, the President discussed the U.S. missiles program and reported that this country had solved the problem of bringing a missile back from outer space. He also announced changes in the Defense Department to give missile development priority and to assure that "any new missile program . . . will, whenever practicable, be put under a single manager and administered without regard to the separate services." In conclusion, the President said:

"Although for tonight's purpose I stress the influence of science on defense, I am not forgetting that there is much more to science than its function in strengthening our defense, and much more to our defense than the part played by science. The peaceful contributions of science . . . are the most important products of the conquest of nature's secrets." . . .

U.S.–U.K. Conference on Controlled Thermonuclear Research

Major phases of research in the field of controlled thermonuclear reactions in the United Kingdom and the United States were reported upon and discussed recently in a joint conference of representatives of the two nations at Princeton University. The conference was arranged by the U.S. Atomic Energy Commission and the U.K. Atomic Energy Authority.

Several essentially distinct approaches to solving the problems of controlled thermonuclear reactions are being pursued in each of the two countries. Some of the experimental devices utilized have, for some months, been yielding substantial numbers of neutrons from the interior gas; in other machines there has been confinement of very hot gases for a small fraction of a second.

There are two main conditions necessary for the attainment of power-producing thermonuclear reactions. First, heavy hydrogen must be heated to a temperature of at least 100 million degrees centigrade. Second, this hot gas must be confined within a container for an appreciable fraction of a second. When the temperature reaches several million degrees centigrade, neutrons will be emitted in large numbers.

At this lower temperature, it is a delicate and difficult matter to distinguish