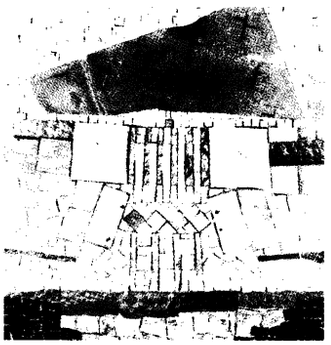

*"Amun" by Jerry Carter. Carter's work will be on display at the AAAS from 22 September to 1 December 1987.*

are used to create optical effects. Light is reflected and refracted by metallic and glass surfaces creating a rich tapestry of myriad appearances.

Exhibitions at the AAAS are open to the public during business hours, Monday through Friday. AAAS members especially are encouraged to stop by the Association headquarters and participate in the Science and Art Program. If you would like more information about the program, contact Virginia W. Stern, Science and Art Program, at the AAAS address.

## *New Frontiers of Science* Lecture Series Announced

Deciphering the code for human life . . . creating machines that read, speak, and think . . . unlocking the mysteries of the brain . . . developing the technology for levitating trains and superspeed computers . . . unearthing the origins of humankind . . . building a tunnel the size of the Capital Beltway to better understand the creation of the universe.

Six leading scientists will report on some of the most exciting and significant areas of current research in a lecture series on *New Frontiers of Science*, organized by AAAS and offered in cooperation with the Smithsonian Institution Resident Associate Program. The lecture series is being offered at a discount to AAAS members.

The lectures will be held on Thursdays, 22 October through 3 December 1987, 6:00 to 7:30 p.m. at the Smithsonian Institution in Washington, D.C.

Speakers and their topics are:

- 22 October. *Mapping and Sequencing the Human Genome*—Walter Gilbert, Nobel laureate, molecular biologist, Harvard University, discusses how new technologies are making it possible to decipher and literally write out the directions for human life contained in every cell, and the massive implications of undertaking this project.
- 29 October. *Early Humans: Evolution or Revolution*—Alan Walker, paleoanthropologist, Johns Hopkins University, discusses recent human fossil discoveries that could lead to a new view of the pattern of human evolution.
- 5 November. *Superconductors*—IBM physicist Paul Grant describes fast-breaking advances in superconductors, new materials that could change our world.
- 12 November. *Chemical Basis of Behavior*—Candace Pert, neuroscientist, National Institute of Mental Health, and discoverer of peptide T, explains how this and other brain chemicals are allowing scientists to track the origins of some of our most basic drives and behaviors.
- 19 November. *What Is the Universe Made of?*—Leon M. Lederman, director, Fermi National Accelerator Laboratory, describes how new advances in high-energy physics are helping to explain how the universe works and considers the impact of the proposed Superconducting Super Collider (SSC) on this work.
- 3 December. *The Future of Intelligence: Can Computers Think?*—Marvin Minsky, professor, Massachusetts Institute of Technology, and a leading expert in computers, robotics, and artificial intelligence, explores the world of artificial intelligence—if computers can handle complex, specialized problems, why can't they solve simple, everyday problems?

Alvin W. Trivelpiece, AAAS Executive Officer, will introduce the lecture series, which was developed with the assistance of David Challinor, assistant secretary for research, Smithsonian Institution; Mary E. Clutter, senior science adviser, National Science Foundation and AAAS Board member; Carol L. Rogers, head, AAAS Office of Communications and Membership; Rolf Sinclair, program director, Atomic, Molecular, and Plasma Physics, National Science Foundation, and secretary, Section B (Physics), AAAS; and Albert H. Teich, head, AAAS Office of Public Sector Programs.

The registration fee for the series is $62 for AAAS members and Smithsonian Institution Resident Associate Program members, $92 for nonmembers. AAAS members wishing to attend should call the Smithsonian Institution Resident Associate Program at 202-357-3030 by 1 October 1987. Be sure to identify yourself as a AAAS member.

## Symposium to Address Expected Shortfall of Scientists and Engineers

A symposium on the "Competition for Human Resources in Science and Engineering in 1990–95" will examine the likelihood of a "critical shortage" of quality scientists and engineers, as well as of science, mathematics, and engineering teachers and faculty in the mid-1990s. The symposium, organized by the Commission on Professionals in Science and Technology (CPST), will be held 11 and 12 October 1987 at the Washington Hilton Hotel in Washington, D.C.

The symptoms of the problem are evident already. At least a third of all high school science and math classes in the United States are now staffed by teachers unqualified in these fields.

Half of all engineering faculty under the age of 35 in U.S. universities are foreign nationals, and a fourth of them are on temporary visas. Nearly half of all U.S. doctoral engineering faculty members are over the age of 50.

The demand for top quality professionals by all employment sectors is expected to continue to expand in the 1990s, while the supply is moving downward. The CPST symposium will examine what, if anything, can be done to avert a serious imbalance.

Noted scholar and demographer Harold Hodgkinson of the American Council on Education will be the keynote speaker at the symposium addressing "Demographic Imperatives for Science" on Sunday evening, 11 October.

On 12 October, a morning session will address the threatened shortfall in the quality and quantity of science and engineering professionals, teachers, and faculty. Panelists representing all levels of education, from precollege to graduate, will discuss the training of scientists and engineers, while representatives from industry and defense will provide a preview of what promises to be a highly competitive job market for these people.

An afternoon panel will atempt to reconcile the competing supply-demand forces, seeking an agenda for action now.

The cost of the symposium for those who preregister is $120 for Commission members and $185 for nonmembers. Registration forms and further information is available from CPST at 1500 Massachusetts Avenue, NW, Suite 831, Washington, D.C. 20005, or call 202-223-6995. CPST is a participating organization of AAAS.

ELEANOR L. BABCO
BETTY M. VETTER
*Commission on Professionals in Science and Technology*