

campaign for the reform of the criminal law.

The following officers were chosen for 1963: president and AAAS representative, Donal E. J. MacNamara; vice presidents, Marvin Wolfgang, Lewis Yablonsky, Clyde Vedder and Jacob Chwast; secretary-treasurer, Charles Newman; executive council members, John P. Kenney and Marcel Frym.

CHARLES NEWMAN, *Rapporteur*

History and Philosophy of Science (L)

Historical testimony by actual participants in recent technological developments was the highlight of the fifth annual meeting of the Society for the History of Technology. In a symposium on the history of rocket technology, chaired by Eugene M. Emme, G. Edward Pendray spoke on Robert H. Goddard and early A.R.S. rockets; Walter E. Dornberger on the V-2 rocket; John P. Hagen on Viking and Vanguard; and Simon Ramo on Atlas, Titan, and Thor. Speaking for the historical record, these men provided valuable material on some of the most significant episodes in the recent history of rocketry.

The session on the history of the technology of atomic energy was chaired by Ralph Sanders (Industrial College of the Armed Forces). Gerald W. Johnson (Assistant to the Secretary of Defense, Atomic Energy), Richard G. Hewlett (U.S. Atomic Energy Commission), and Rear Admiral Lewis L. Strauss (USNR, Ret.; former chairman, U.S. Atomic Energy Commission) served as panelists.

Johnston talked on the historical role of military research and development in atomic energy and emphasized the development of atomic weaponry and nuclear propulsion. He expounded upon the military's role in managing the fantastic engineering feat of fashioning the first atomic bomb. He paid special attention to the fear among U.S. scientists and military personnel that Germany had been making considerable headway in building an atomic bomb of its own, a fear which later proved unfounded. Johnson then recounted the Navy's development of the atomic submarine as the pioneer vehicle in nuclear propulsion.

Hewlett's paper, "Pioneering on nuclear frontiers: two early landmarks in reactor technology," provided some

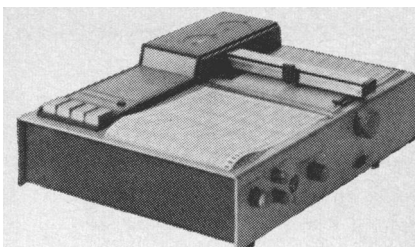
historical insights. He analyzed the historical significance of the first self-sustained chain reaction produced by Enrico Fermi on 2 December 1942 in Chicago and the first generation of electric power from atomic energy by Walter H. Zinn on 20 December 1951 from the experimental breeder reactor No. 1 at Idaho Falls, Idaho. Although these events are often called landmarks, Hewlett contended that they more appropriately could be called convenient reference points. He also pointed out that subsequent history of atomic energy suggests that a depersonalizing process inevitably accompanies the rise of big science.

Strauss presented a chronology of events which led to President Eisenhower's announcement of the Atoms for Peace Program before the United Nations on 8 December 1953. He credits President Eisenhower with originating the idea during a plane flight from Denver to Washington to attend the funeral of Chief Justice Vinson.

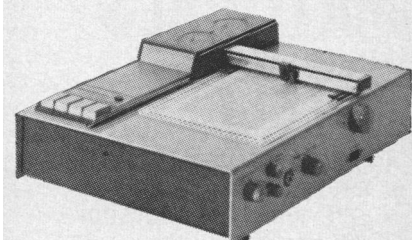
The history of the industrial laboratory was the subject of a session chaired by Cyril S. Smith. John Beer told of European precedents of the industrial laboratory; Kendall Birr related the history of the General Electric Laboratories; and Matthew Josephson spoke on Edison and industrial research. Simon Marcson and Nathan Reingold commented on their papers.

Among the participants in a work-in-progress session was Peter F. Drucker, who spoke on the need for engineers to consider the work habits of people in the underdeveloped nations and to design for their actual needs instead of for a too-advanced technology. Carl W. Condit told of the construction features revealed by the demolition of the Garrick Theater in Chicago which illustrated advances in construction engineering pioneered by Dankmar Adler. Eugene S. Ferguson reviewed the writings and the scholarly problems involved in the study of American technology from 1788 to 1853. Other papers of this session, chaired by Thomas P. Hughes, were by W. David Lewis, Frank D. Prager, Robert M. Vogel, and Lynn White, Jr.

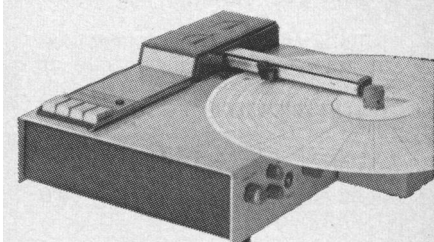
The annual meeting of the society was marked by the presentation for the first time of the Leonardo da Vinci medal. This was awarded to R. J. Forbes of the Netherlands "for his distinguished contributions, both monographic and bibliographical, to the history of technology." The Abbot Payson Usher prize was awarded to Silvio



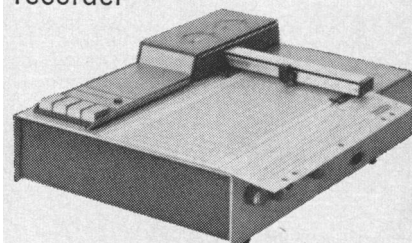
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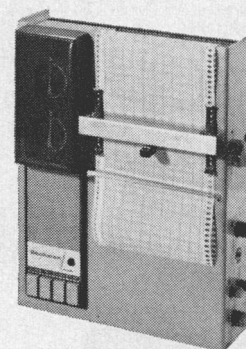
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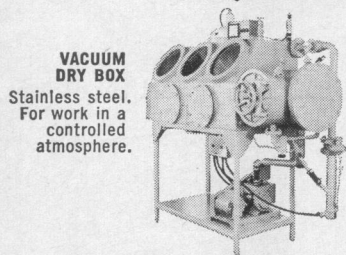
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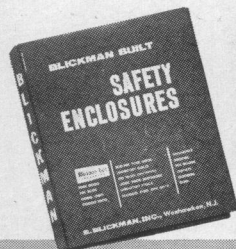
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A. Bedini for his article, "The compartmented cylindrical clepsydra," which appeared in the spring 1962 issue of *Technology and Culture*.

As its officers for the coming year, the society elected Cyril S. Smith as president, Peter F. Drucker as first vice president, Elmer Belt as second vice president, and Melvin Kranzberg as secretary. New members of the executive council include J. G. Brainerd, W. E. Hanford, and Thomas P. Hughes.

MELVIN KRANZBERG, *Secretary*
RALPH SANDERS, *Program Chairman*

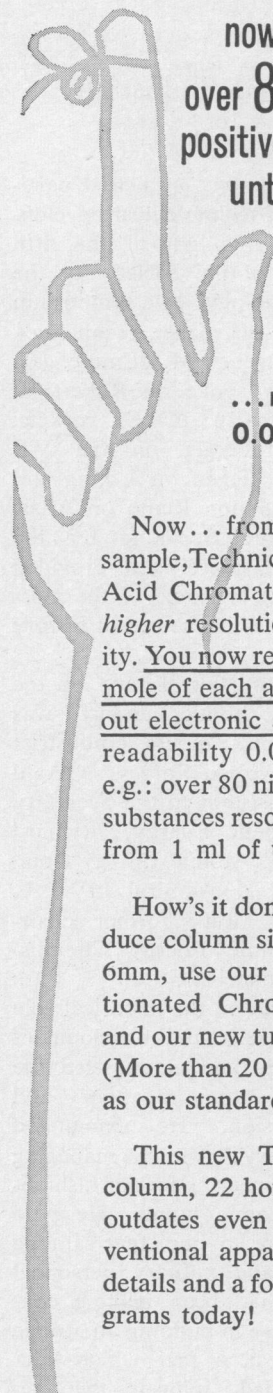
Engineering (M)

Four speakers representing universities, industry, and government presented points of view on the very important problem of continuing education for technological personnel. Although it was agreed that the individual engineer is ultimately responsible for the furtherance of his own education, nevertheless many institutions of our society should recognize an obligation to encourage further development of each individual and to employ him at his highest skill and capability in view of the pressing demands for qualified technical personnel. Engineering societies, according to H. K. Work and C. E. Davies, can provide educational opportunities by national, state, and local technical meetings; providing teachers and arranging for courses on an in-plant or inter-industry basis; workshops; seminars; and similar activities. A plea was made for professional recognition of continuing education efforts. M. W. Kriegel outlined present company policies to encourage employees and listed programs, such as tuition refund plans, time off for course attendance, industrial leaves, professors visiting the company to teach, time and expense to attend university short courses, graduate and post-doctoral study industrial fellowships on full- or part-time, teaching machines, and others. J. W. Macy pointed out that the Bell report stressed the need for continuing education of government personnel and the government's plans for allowing attendance at courses, graduate study, visiting professors, and in-laboratory training programs. He mentioned that government employees may devote one year out of every ten years of work to further education. Discretionary funds are available in many areas for advanced study. T. P. Torda stressed the need for

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Science

History and Philosophy of Science (L)

Melvin Kranzberg and Ralph Sanders

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