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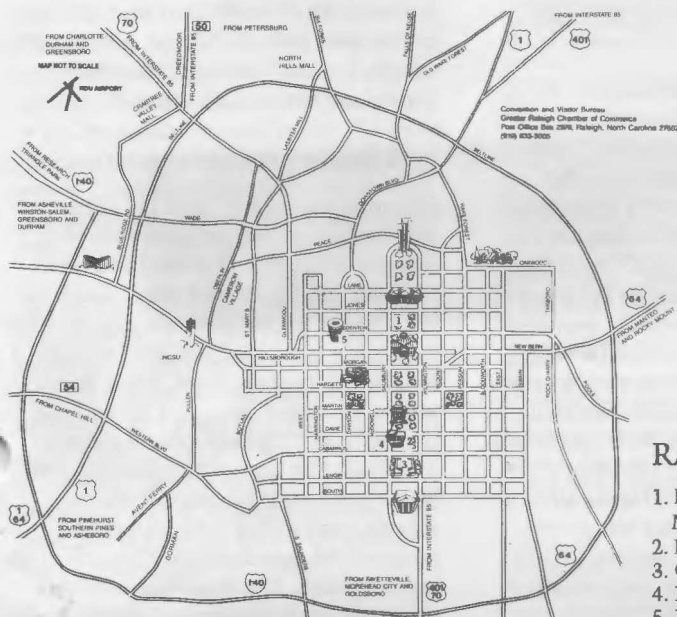
WELCOME TO THE RESEARCH TRIANGLE

Edith D. Sylla

The Research Triangle of North Carolina, composed of the area bounded by the University of North Carolina at Chapel Hill on the west, Duke University in Durham on the north, and North Carolina State University in Raleigh on the east, contains at its center the Research Triangle Institute, the National Humanities Center, and the research laboratories of the Environmental Protection Agency, the National Institute of Environmental Health Sciences, IBM, Glaxo, Burroughs Wellcome, Northern Telecom, and many other companies. The airport, also near the center of the Triangle, has recently become a hub for American Airlines, which will in short order double the number of flights each day into and out of the area. The population of the area is expanding daily, with high concentrations of Ph.D.s. Durham, famous for Duke's rice diet program, proclaims itself the City of Medicine. Raleigh, as the state capital, has many government employees. Recently a combination of excitement and skepticism has been generated by North Carolina's efforts to win the Superconducting Supercollider for a site north of Durham.

Although the distances between the three area universities make it impractical to divide the annual meeting between the three university campuses, bus or van tours to the three universities and to the National Humanities Center will

continued on next page



RALEIGH

1. North Carolina State Museum of Natural Sciences
2. Radisson Plaza Hotel
3. Civic Center
4. Parking
5. Holiday Inn

HSS EXECUTIVE COMMITTEE

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WILLIAM COLEMAN, University of Wisconsin-Madison

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The History of Science Society was founded in 1924 to secure the future of *Isis*, the international review that George Sarton (1884-1956) had founded in Belgium in 1912. The Society seeks to foster interest in the history of science and its social and cultural relations, to provide a forum for discussion, and to promote scholarly research in the history of science. The Society pursues these objectives by the publication of its journals *Isis* and *Osiris*, by the support and subvention of other forms of scholarly publication, by the organization of annual meetings and other programs, by the award of medals and prizes for outstanding contributions to the history of science, by the encouragement and sponsorship of local and regional sections of the Society, and by cooperation with other learned and scientific societies.

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NEWS OF THE SOCIETY

be available. The tobacco factories that used to be the center of Durham's economy are now mostly closed, but a bus tour is planned for Thursday afternoon to Reidsville to see the American Tobacco Company's state-of-the-art plant. Participants will need to arrive by noon Thursday to take advantage of this tour. For more information, contact Julia Bonham, University Studies, Box 7107, North Carolina State University, Raleigh, NC 27695; telephone (919) 737-2479.

The meeting headquarters for both HSS and SHOT will be the Radisson Plaza Hotel in Raleigh, with additional sessions held at the Raleigh Civic Center. During peak arrival times—Thursday afternoon and evening and any other times when it appears that the capacity of the Radisson vans will be exceeded—we will attempt to have someone at baggage areas of the airport to give advice on transportation to the Radisson. Look for a History of Science Society sign before calling the Radisson to request their complimentary van service. For the athletically minded, the Radisson Plaza Hotel has a health spa and swimming pool that will be open to hotel guests. We will be sharing the Civic Center on Saturday with a locally sponsored international festival at which it should be possible to purchase samples of ethnic foods.

For those driving and staying at the Radisson, free parking will be available in the parking garage across Salisbury Street. See the map for location of hotel and garage.

NOTA BENE: AUDIOVISUAL EQUIPMENT NEEDS FOR RALEIGH MEETING

Requests for audiovisual equipment for the Raleigh meeting were due to Edith Sylla by 15 September 1987. If you have forgotten to request such equipment for your talk at the meeting, but were hoping to use it, either replan your talk so it does not require audiovisual aids or call Edith Sylla **immediately** at (919) 737-2467 to see whether equipment can be found at the last minute!

XVIIIth INTERNATIONAL CONGRESS IN 1989

The first circular for the XVIIIth International Congress of History of Science will be ready in October and will either be mailed to HSS members in November or inserted in the January *Newsletter*.

WILLIAM COLEMAN RESIGNS PRESIDENCY

The History of Science Society officers and Council have received with great regret a letter from William Coleman resigning the Presidency of the Society effective 1 November 1987, because of serious illness. In his 14 July letter to the Council, Professor Coleman wrote: "To you, and through you all members of the Society, I express both my regrets and my great appreciation for the friendly assistance and support that I have received from you all since my election as Vice-President three years ago."

By mail ballot, the Council has voted to approve the Executive Committee's recommendation that Vice-President Mary Jo Nye serve as Acting President in November and December 1987 and that she begin a two-year term as President on 1 January 1988. At their 29 October meeting in Raleigh, Council members will discuss the Executive Committee's recommendation that the Nominating Committee prepare a mail ballot for the election of a Vice-President for 1988-1989 who will serve as President during 1990-1991.

The officers of the Society express their deep appreciation and admiration for William Coleman's judicious and sensitive superintendence of the Society under most difficult personal circumstances.

MICHAEL SOKAL TO BECOME FIRST HSS EXECUTIVE SECRETARY IN JANUARY

As reported in the July *Newsletter*, Michael M. Sokal of Worcester Polytechnic Institute has been elected by the Council as the first Executive Secretary of the History of Science Society for a five-year renewable term beginning in January 1988. Sokal received his Ph.D. from Case Western Reserve University in 1972 and has since published extensively, particularly on the history of the social sciences. His articles have appeared in such journals as *Science* and the *American Historical Review*, and he has edited books published by MIT Press and Rutgers University Press. He has taught at WPI since 1970 and has been a full professor since 1981. In the History of Science Society, he has served on the Schuman Prize Committee, the *Isis* editorial board, the Council, the

Committee on Research and the Profession, and several other committees. He is program cochair for the Raleigh meeting. In addition he has held offices in the AAAS Section L (History and Philosophy of Science) and Cheiron and has written the centennial history of Sigma Xi, the Scientific Research Society.

In taking over the Executive Secretary position, Sokal hopes to support the continued excellence of the Society's current programs, including *Isis*, *Osiris*, the *Newsletter*, and other publications; the annual meeting; and the several recently established programs, such as the Unaffiliated Scholars Program, the Visiting Historians of Science Program, and the Thematic Meetings Program. In his statement of candidacy, he also stated that he "would strive to administer the Society's operations efficiently and promote membership and financial growth, to increase the influence of historians of science among academics and policy makers, and, most importantly, to help stimulate the further intellectual growth of our discipline." WPI will join with the HSS in providing significant support for the Executive Secretary's office.

1987 ELECTION RESULTS

Successful candidates in the 1987 election for the HSS Council were Sharon Kingsland, Kenneth Manning, Ernan McMullin, Martha H. Verbrugge, and William A. Wallace. Successful candidates in the election for the Nominating Committee were John C. Greene, Jane Maienschein, Ronald Overmann, Stephen Brush, and Arthur Donovan.

EXECUTIVE COMMITTEE MEETING

At a meeting in New York 11-12 September, the Executive Committee voted to propose to Council that the last year of Michael Sokal's term on the Council be filled by the person with the next highest number of votes after the five just elected to Council for three years. Since Sokal will be Executive Secretary, he will not also serve as a regular Council member. The Executive Committee also received preliminary annual reports from the standing and ad hoc committees and prepared the agenda for the Council meeting in Raleigh. In connection with this meeting Gerald Holton and several of the

newer Society officers visited the offices of a number of the foundations that have been generous to the History of Science Society in the past. Program priorities will be an agenda item at the October Council meeting.

GOAL REACHED FOR ENDOWMENT FUND

Gerald Holton, chairman of the Fund Drive, has announced that the \$1,000,000 goal for the Endowment drive has been reached. The Society is grateful to all who have made reaching that goal possible.

1988 ANNUAL MEETING WITH THE AHA IN CINCINNATI

The program committee for the American Historical Association meeting, to be held simultaneously with the HSS meeting in Cincinnati, 27-30 December 1988, has issued a call for proposals, particularly those with the theme "History as Inquiry and Practice"; such sessions might discuss the status of the discipline in public discourse, its relationship to other methodologies, or the conflict between the old and new approaches. Entire sessions, panels, or workshops may be proposed. Single-paper proposals should contain suggestions for potential chairs, commentators, or related papers. Proposals should be submitted in triplicate and include a curriculum vitae for each participant and a one-paragraph abstract that summarizes the theses and significance of each paper. Proposals should be sent to Konrad Ja-rausch, Department of History, Hamilton Hall, University of North Carolina, Chapel Hill, NC 27514. The program committee will hold its first meeting in mid November to discuss early submissions. Proposals received before the end of October will receive more favorable consideration than last-minute entries. The final deadline for proposals is **15 February 1988**.

You are reminded that the History of Science Society program chairs for the December 1988 Cincinnati meeting requested that preliminary proposals be submitted by **15 October**. For more information contact Shirley Roe, Department of History, University of Connecticut, Storrs, CT 06268, or Joan Richards, Department of History, Brown University, Box N, Providence, RI 02912.

Osiris Survey

In 1983 the History of Science Society decided to revive publication of *Osiris* for a trial period of five years. In order to avoid a hiatus in the publication of *Osiris*, the Committee on Publications is beginning now to collect material for its review. The Committee welcomes comments about *Osiris* and would especially like to have your reactions to the following questions. Please send your comments to Thomas Hankins, Department of History DP-20, University of Washington, Seattle, WA 98195. Feel free to use a separate sheet of paper.

1. Do you subscribe to *Osiris*? Yes _____
No _____
2. Mark any single volumes that you have purchased separately: Volume 1 _____
Volume 2 _____ Volume 3 _____
3. Do you have a preference for either the thematic volumes (Vols. 1 and 4) or the long-article volumes (Vols. 2 and 3)? Explain. (The tables of contents of the first four volumes appear below and in the April 1987 *Newsletter*.)

5. Do you find that *Osiris* and *Isis* complement each other? Do the two journals together meet the Society's need for scholarly publications?

4. Does *Osiris* perform a function that is not being filled by other publications? What is that function?

6. Is continued financial support for *Osiris* a good use of Society resources?

7. What is your opinion of the quality of the numbers published so far?

Osiris now has 1,100 subscribers. Check the tables of contents below and use the coupon in the April 1987 *Newsletter* to order your copies. Please also see the survey above.

VOLUME 1: HISTORICAL WRITING ON AMERICAN SCIENCE

Edited by Sally Gregory Kohlstedt and Margaret Rossiter

Classic Themes

Sally Gregory Kohlstedt "Institutional History"
John Harley Warner "Science in Medicine"
Ronald L. Numbers "Science and Religion"
Sharon Gibbs Thibodeau "Science in the Federal Government"

Science in Specialties

Mort Greene "History of Geology"
Marc Rothenberg "History of Astronomy"
John Servos "History of Chemistry"
Jane Maienschein "History of Biology"
Albert Moyer "History of Physics"
Hamilton Cravens "History of the Social Sciences"

New Areas

Clara Sue Kidwell "Native Knowledge in the Americas"
George Wise "Science and Technology"
Alex Roland "Science and War"
Margaret Rossiter "Science and Public Policy Since World War II"

Access to the Sources

Clark A. Elliott "Bibliographies, Reference Works, and Archives"

VOLUME 2

David Lindbergh "Kepler's Optics and the Scope of Renaissance

Pierre Kerszberg "The Cosmological Question in Newton's Science"

David P. Miller "The Revival of the Physical Sciences in Britain, 1815-1840"

Ernst Mayr "Joseph Gottlieb Kolreuter's Contribution to Biology"

James Reardon-Anderson "Chemical Industry in China, 1860-1949"

Garland E. Allen "The Eugenics Record Office at Cold Spring Harbor, 1910-1940: An Essay in Institutional History"

Silvan Schweber "Shelter Island, Pocono, and Oldstone: The Emergence of American Quantum Electrodynamics after World War II"

Susan Wright "Recombinant DNA Technology and Its Social Transformation, 1972-1982"

Research at Purdue University During World War II"

Allan A. Needell "Berkner, Tuve, and the Federal Role in Radioastronomy"

VOLUME 4: THE CHEMICAL REVOLUTION

Edited by Arthur Donovan

From Stahl to Dalton—The Long Revolution

J. B. Gough "Lavoisier and the Fulfillment of the Stahlian Revolution in Chemistry"

Robert Siegfried "The Chemical Revolution and the History of Chemistry"

At the Core of the Chemical Revolution

C. E. Perrin "Continuity and Divergence of Research Traditions: Lavoisier and the Chemical Revolution"

Frederic L. Holmes "Lavoisier's Conceptual Passage"

Seymour H. Mauskopf "Gunpowder and the Chemical Revolution"

National Communities and the New Chemistry

H. A. M. Snelders "The New Chemistry in the Netherlands"

Anders Lundgren "The Debate that Wasn't: The Reception of the Anti-Phlogistic Chemistry in Sweden"

Ramon Gago "The Chemical Revolution in Spain"

Context and Scientific Change

John G. McEvoy "Continuity and Discontinuity in Scientific Change: The Case of the Chemical Revolution"

Arthur Donovan "Lavoisier and the Origins of Modern Chemistry"

Walter B. Cannon, L. J. Henderson, and the Organic Analogy"

Paul W. Henriksen "Solid State Physics

12. KOG

History of Science & Related Groups

The **Groupe de Recherche Art Histoire, Architecture, et Littérature (GRAHAL)**, founded in September 1986, is an association that centralizes and answers research queries from individuals and government bodies. GRAHAL proposes to help researchers wishing to obtain documents or conduct research in France. It can be helpful in overcoming problems associated with distance, a lack of familiarity with the French library system, and the difficulty in gaining access to various archives. It can also provide copies, photographs, compilations, books, and reviews, as well as transcriptions and translations. For more information contact GRAHAL, 4 Avenue Percier, 75008 Paris, France; telephone 42 25 91 02.

A **Société Française pour l'Histoire des Sciences de l'Homme** has recently been founded in Paris. The society intends to scholars working on any aspect of the history of the human sciences both in France and abroad. The first president is Benjamin Matalon of the Université de Paris VIII. The society is eager to reflect the international character of the field by developing a strong membership outside France and creating a forum for the passage of ideas both to and from the French community. The annual subscription is Fr 150, payable either by check or by a direct credit transfer to the society's bank account, held at the Société Générale, 27 Boulevard Saint-Michel, 75005 Paris (account no. 00003726274.4-18). For further details write to the secretary, Bernard-Pierre Lecuyer, CNRS-GEMAS, Maison des Sciences de l'Homme, 54 Boulevard Raspail, 75006 Paris, France.

A new society devoted to all aspects of the **history of aluminum** has been founded in France. The society has launched a journal, the *Cahiers d'histoire de l'aluminium*, and established a number of specialized committees to guide its program of research. The annual subscription is Fr 100. For further details write Ivan Grinberg, Institut pour l'Histoire de l'Aluminium, 38 avenue Hoche, 75008 Paris, France.

At its 21 May 1987 meeting at the Wellcome Institute for the History of Medicine, the **Leonardo da Vinci Society** proposed to establish a fund in memory of Kenneth D. Keele for the purpose of making study awards to young Leonardo students or scholars. Contributions will be gratefully received by J. B. Trapp, The Warburg Institute, Woburn Square, London WC1H 0AB. Checks should be made out to the Leonardo da Vinci Society.

THE BRITISH SOCIETY FOR THE HISTORY OF SCIENCE

Readers of the HSS *Newsletter* will have heard of plans for the Anglo-American meeting in Manchester, England, in July 1988. They may be interested in some of the other current activities of the British Society for the History of Science, coorganizers with HSS of the Manchester meeting.

BSHS was founded in 1947 and now has almost 700 members throughout the world. It holds regular meetings in the United Kingdom and produces a variety of publications. The three-day annual meeting in the summer is frequently attended by visitors from the United States and other countries. American colleagues who enjoy the Manchester meeting may wish to return for our summer meeting in 1989 in Edinburgh, which can conveniently be combined with a visit to the XVIIIth International Congress of the History of Science in West Germany.

The main benefit that overseas members derive from the Society is to receive its publications. The *British Journal for*

the History of Science (BJHS) has a high international reputation and has recently expanded to four issues (more than 500 pages) per year. It is distributed free to members of the Society. They also receive a triannual *Newsletter*, which is a popular source of information about conferences and research resources in many countries. The BSHS Monographs series is also well established, five titles having been published, available to members at reduced prices. A new monograph, *Archives of the British Chemical Industry, 1750-1914: A Handlist*, by Peter Morris and Colin Russell, will be published before the end of 1987. The Society also publishes an annual list of theses, giving details of all graduate research in the history of science at British universities. This useful guide to work in progress is free to members, or £3.50 to nonmembers and institutions.

The Society also serves the international scholarly community by acting to promote academic research in the history of science and to widen the audience for the subject. Unfortunately, the current climate is not a promising one for higher education in the United Kingdom, and prospects of continued contraction seem much more realistic than hopes of expansion. However, the government-appointed University Grants Committee, in a recent report on the history of science, recognized the potential value of teaching the

subject in all universities. This recognition reflects lobbying by the BSHS on behalf of the discipline, which will continue to be an important part of our activities. The Society also sees an expanded audience for history of science as a strong buttress for sustaining academic research. Like HSS, BSHS is exploring ways of introducing the subject into teaching in schools. An Education Section which will organize meetings and develop publications toward this end has recently been formed within the Society. The recruitment of enthusiastic new members to this section has been very encouraging. The problems of addressing a wider audience, through education, museums, and the mass media, are to be discussed at a conference on "History of Science and Its Publics," in London, 8-10 April 1988. Details are available from J. A. Secord, Department of Humanities, Imperial College, London SW7 2AZ, England.

New members may subscribe to BSHS for the special introductory price of \$22.00, for the year from 1 January 1988. This includes a subscription to the journal. Checks should be sent to the Executive Secretary of the Society, Wing Commander G. Bennett, "Southside," 31 High Street, Stanford-in-the-Vale, Faringdon, Oxon SN7 8LH, England. An order form for the monographs and the list of theses may also be obtained from this address.

J. V. GOLINSKI, Hon. Secretary, BSHS

The **American Society of Mechanical Engineers** has designated the NASS Lewis Icing Research Tunnel as the 21st International Historic Mechanical Engineering Landmark and the McKinley Climatic Laboratory as the 85th National Historic Mechanical Engineering Landmark.



Left: A substantial portion of the MBL History of Biology class, plus some family members, on a field trip to Sippewissett Marsh. Above: Some of the faculty of the MBL course. Left to right: Robert Olby, Shirley Roe, Garland Allen, Jane Maienschein, Bernardino Fantini, and Christiane Groeben. Courtesy of Richard M. Burian.

THE INTERNATIONAL ACADEMY OF THE HISTORY OF SCIENCE

The International Academy of the History of Science, a body whose elected members are individual scholars rather than nations (as is the case with the International Union of the History and Philosophy of Science), traces its origins to the winter of 1927–1928, when Aldo Mieli appealed in the journal *Archeion* for the establishment of an active international organization for the history of science. The context was that of the Sixth Congress of Historical Studies, which was to be held in Oslo in 1928. Within the framework of that Congress, the so-called International Committee of the History of Science came into being. Among its first members were Abel Rey, George Sarton, Henry Sigerist, Charles Singer, Karl Sudhoff, Lynn Thorndike, and Mieli himself. Gino Loria became its first President.

Under Mieli's leadership, the group's founders opted for "an elite of historians of science to be chosen according to the rules and procedures of the great academies." One of their aims was to purge the subject of an efflorescence of trivial anecdote that was threatening to submerge the various journals in the history of science. Premises were found in the Hotel de Neviers at 12 rue Colbert in Paris, where the Academy still remains. The first International Congress of the History of Science met in Paris in 1929 and the second met in London in 1931. At the second congress, the statutes were modified to pro-

vide for forty Effective Members and eighty Corresponding Members. Meetings were held in 1934 in Coimbra and in 1937 in Prague.

Aldo Mieli was the first *Secrétaire perpétuel* of the Academy (the title was adopted in 1932), Pierre Sergescu the second, and Alexandre Koyré the third. At the Lausanne Congress of 1947 the renaissance of the Academy was signaled by the appearance of the first number of the *Archives internationales d'Histoire des Sciences*, successor to *Archeion*. Lausanne saw the first meeting of the International Union of the History of Science, under the auspices of UNESCO, and there was a gradual transfer of function from the Academy to the Union in matters where the natural units of organization were nations. From the time of the 1971 Moscow Congress, the separate identity of the two bodies was made explicit. As far as its resources have allowed, the Academy has long supported the publication of works of scholarship, often of limited financial appeal, especially editions of hitherto unpublished texts. The *Archives* are now published for the Academy by the Institute of the *Enciclopedia Italiana*. The statutes now allow up to 115 Effective Members and up to 170 Corresponding Members.

(From a pamphlet distributed at a recent Academy-sponsored meeting. The current secretary is John North.)

In the summer of 1987, the **Marine Biological Laboratory (MBL)** in Woods Hole, Massachusetts, introduced a new course, "History of Biology: Heredity and Development." This two-week short course was codirected by Garland E. Allen (Washington University), Bernardino Fantini (University of Rome), and Jane Maienschein (Arizona State University). The international team of instructors included Frederick Churchill (Indiana University), Scott Gilbert (Swarthmore College), Robert Olby (University of Leeds), and Shirley Ann Roe (University of Connecticut); lectures were also given by Mirko Grmek (Sorbonne), Viktor Hamburger (Washington University), and Christiane Groeben (Naples Zoological Station). Course participants ranged from undergraduates and graduate students of history of science through retired biologists and historians, with a scattering of philosophers, historians, biologists, and medical school researchers. Considering the eighteenth through twentieth centuries, the course examined the changing nature of debates about whether embryonic development occurs by epigenesis or preformation, for example, and the changing relationship of heredity to development. After an intense two weeks of lectures, discussions, readings, field trips, and lab sessions, the group enthusiastically endorsed the idea of the MBL's offering future historical courses for 1989 or after. Interested parties may contact the committee directors, care of the MBL.

POSITIONS

The Committee on History and Philosophy of Science at the **University of California, Davis**, seeks a philosopher or historian of science at the associate- or full-professor level (tenured) with a national reputation to develop and head a new unit in the College of Letters and Science. The Davis campus has a variety of programs in the basic and applied sciences, with substantial strength and diversity in the biological and biomedical sciences. The History and Philosophy of Science program will take advantage of these strengths in the development of its research emphasis. For further information contact James R. Griesemer, Chair, Committee on History and Philosophy of Science, Department of Philosophy, University of California, Davis, CA 95616; telephone (916) 752-1068 or 0608. Complete dossiers, including a vita, list of three references, and offprints of recent work, should also be sent to the above address. Deadline for applications is **31 December 1987**. EOE.

The **Center for History of Chemistry (CHOC)** seeks an Assistant Director to develop and coordinate the Center's public education, exhibition, and publication programs. The incumbent will serve as principal liaison with representatives from the print and electronic media; supervise the Center's public information service; direct the research, design, production, and scheduling of CHOC exhibits; supervise the postproduction of Center publications; and serve as associate editor for the Center newsletter. Qualifications: Ph.D. in the history and sociology of science or equivalent training and a minimum of four years' professional experience in all phases of science and technical information writing, reporting, and publishing. Record of writing for publication in scholarly or popular arenas. Strong writing and public presentation skills a must. Reply by **1 November** to Director, Center for History of Chemistry, Room HS, 215 South 34th Street, Philadelphia, PA 19104-6310.

The Department of History at the **University of Chicago** announces a tenure-track position in nineteenth- and twentieth-century history of science, with specialization in history of biology, medicine, or physics. Applicants should have interests and teaching competences in other areas also—e.g., intellectual history, social

FELLOWSHIPS & GRANTS

The **American Antiquarian Society (AAS)** will offer a number of short- and long-term Visiting Research Fellowships during the year 1 June 1988 to 31 May 1989. AAS-National Endowment for the Humanities Fellowships will offer a maximum of \$27,500 for six to twelve months of research; other fellowships will offer support for one to three months' research on subjects for which the Society has strong holdings. A brochure containing full details about these fellowships and about the Society's collections may be obtained from John B. Hench, Associate Director for Research and Publication, American Antiquarian Society, 185 Salisbury Street, Worcester, MA 01609; telephone (617) 752-5813 or 755-5221. The deadline for fellowship applications is **31 January 1988**.

The **American Council of Learned Societies** announces a **15 December 1987** deadline for applications for grants-in-aid (maximum \$3,000) designed to assist scholars with the expenses of specific programs of research in progress during the period 15 April 1988 to 15 April 1989. They also have a deadline of **1 March 1988** for grants for travel to international meetings abroad from July to December 1988. For more information contact the Office of Fellowships and Grants, ACLS, 228 East 45th Street, New York, NY 10017-3398, including in your request information about your scholarly record.

The **American Institute of the History of Pharmacy** is accepting applications from now through **1 February 1988** for grants-in-aid to foster graduate research (master's

history, philosophy of history, philosophy of science—that complement those of faculty in the department. The department expects to fill the position at the assistant-professor level: candidates should have the Ph.D. by July 1988. The selected candidate will also be appointed to the Fishbein Center for the History of Science and Medicine and to the Committee on Conceptual Foundations of Science. Applications should include a letter of introduction stating areas of specialization and competence, a curriculum vitae, and three letters of recommendation. Send materials by **1 December 1987** to Robert J. Richards, Chairman of History of Science Search Committee, Department of History, University of Chicago, 1126 E. 59th Street, Chicago, IL 60637.

The **Institute of Electrical and Electronics Engineers** is seeking a Director for its Center for the History of Electrical Engineering in New York City. The initial deadline for application was 31 July, but potential candidates were encouraged to make inquiries after the deadline. For more information contact Bernard S. Finn, Division of Electricity, National Museum of American History, Smithsonian Institution, Washington, DC 20560; telephone (202) 357-1840.

The **Massachusetts Institute of Technology** announces a tenure-track assistant

professorship in the history of technology, with preferred specialization in the United States or Europe since World War I. Candidates should show competence in advanced twentieth-century subjects as well as in general surveys of the history of technology and should be able to demonstrate a connection between their scholarly proficiency and interest in general problems of technology and social change. Send letter of application and dossier by **30 November 1987** to Kenneth Keniston, Program in Science, Technology, and Society, MIT Building E51-110, Cambridge, MA 02139. AA/EOE.

The Department of History at **Princeton University** seeks someone to fill a tenured position (full or associate professor) in the history of science, preferably a specialist in the physical sciences in the early modern period. Please send nominations and applications, including a curriculum vitae, to Anthony Grafton, Department of History, Princeton University, Princeton, NJ 08544. Deadline is **20 November 1987**.

Applications are invited for a tenure-track junior faculty position as Dana Fellow in the History of Science at **St. Lawrence University**. Teaching responsibilities will be divided between an appropriate science department and the Freshman Program, an innovative multidisciplinary program emphasizing critical skills and dealing

or Ph.D. level) on some aspect of pharmacy. The grants total \$5,000 annually; they pay research expenses not normally met by the university granting the degree. Thesis projects devoted to the history of pharmacy, history of medicines, or other humanistic study strongly related to pharmacy or using a pharmaco-historical approach will be considered for part or all of the funds available. Guidelines for making an application should be requested from the American Institute of the History of Pharmacy, Pharmacy Building, 425 North Charter Street, Madison, WI 53706; telephone (608) 262-5378.

Applications are invited by the **American Philosophical Society** for the John C. Slater Fellowship, a new fellowship to support doctoral dissertations in the history of modern physical science, named in honor of John C. Slater (1900-1976), a member of the American Philosophical

Society, Institute Professor at MIT, and an outstanding leader in the development of quantum mechanics and solid state physics. The fellowship carries a stipend of \$8,000 and is open to doctoral candidates who have passed their preliminary examinations and are writing dissertations on a topic in the history of the physical sciences in the twentieth century. The application deadline is **15 December 1987**. Application forms and further information may be obtained by writing Edward C. Carter II, Librarian, American Philosophical Society Library, 105 South Fifth Street, Philadelphia, PA 19106.

The American Philosophical Society Library announces the Andrew W. Mellon Foundation Fellowship in Bibliography for 1988-1989. The fellow's primary responsibility will be to conduct a bibliographic study, to be published by the library, of some important part of the library's col-

lection. Candidates are encouraged to consider topics related to polar exploration, modern physics, or the Society's extensive fine arts collection, though proposals in other areas will be welcomed. One third of the fellow's time will be free for research and study of the fellow's choice. Candidates must have a Ph.D. or equivalent scholarly record. The fellowship will be held for eleven months and carries a salary of up to \$25,000, commensurate with the fellow's level of scholarly achievement. Deadline for application is **1 June 1988**. For further information contact Edward C. Carter II, Librarian, American Philosophical Society Library, 105 South Fifth Street, Philadelphia, PA 19106.

The **Charles Babbage Institute** will award a predoctoral fellowship and a professional internship in 1988-1989. The fellowship

Fellowships continue on next page

with enduring and fundamental human questions. Candidates with a liberal arts background, broad interdisciplinary interests, and the ability to teach the history of physics and other science courses are preferred. A master's degree in chemistry, geology, or physics, and a doctorate in the history of science are required. Letters of application, including a curriculum vitae, a statement of teaching and research interests, and three letters of recommendation should be sent by **2 November 1987** to Brian Watson, Department of Physics, St. Lawrence University, Canton, NY 13617. AA/EOE. Women and minorities are encouraged to apply.

The Institute for the History and Philosophy of Science and Technology at the **University of Toronto** invites applications for a three-year contractually limited term assistant professorship (renewable for an additional two years) beginning 1 July 1988. The salary is about \$35,000, depending on applicant's qualifications. Candidates must have the Ph.D. degree and two or three years' scholarly experience, and must be research specialists in some area of the Scientific Revolution (sixteenth to seventeenth centuries). They must also be able to teach most aspects of it, in both technical and social dimensions. Publications of high quality and promise of continuing excellence are essential requirements. Teaching responsi-

bilities include one full-year graduate course in the science of the period, as well as one and a half undergraduate courses in the general history of science. Send curriculum vitae and names of at least three references by **31 October 1987** to J. Z. Buchwald, Chair, Search Committee, IHPST, Victoria College, 73 Queen's Park Crescent East, University of Toronto, Toronto M5S 1K7, Canada; or by electronic mail on BITNET to BUCHWALD at UTOREPAS. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents.

The Department of History at the **Virginia Polytechnic Institute and State University** seeks a distinguished scholar-administrator of senior rank to direct a thirty-member department at Virginia's largest university. The department is committed to substantive research and publication and to the education of large numbers of undergraduate students. It also maintains a graduate program offering the M.A. degree. Letters of application, detailed vitae, and the names and addresses of three references must be received by **13 November 1987**. Address materials to Joseph L. Wieczynski, Department of History, Virginia Tech, Blacksburg, VA 24061. Virginia Tech hires only U.S. citizens and lawfully authorized alien workers. AA/EOE.

The Department of the History of Science at the **University of Wisconsin-Madison** announces a probable tenure-track appointment in the history of early science or technology or both beginning August 1988. This is in addition to the position in the history of the life sciences previously advertised (see July HSS *Newsletter*). The appointment will be at the assistant-professor level unless rank and experience require a higher level. The preferred area of specialization is some combination of ancient or medieval history or the Scientific Revolution, perhaps extending to the eighteenth century. Applicants with completed Ph.D. are strongly preferred. Inquiries and applications should be directed to David C. Lindberg, Chairman, Search Committee, Department of the History of Science, 4143 Helen White Hall, University of Wisconsin, Madison, WI 53706; telephone (608) 262-1406 or 262-3971. Applications should contain a curriculum vitae, a statement of research and teaching plans and interests, at least three letters of recommendation, and a copy of undergraduate and graduate transcripts. Course syllabi, actual or proposed, and sample publications or examples of written work would also be useful. The deadline is **1 January 1988**, but application **before the annual meeting** of the History of Science Society in Raleigh (29 October-1 November) is encouraged. AA/EOE.

FELLOWSHIPS—*continued*

will go to a graduate student whose dissertation addresses some aspect of the history of computers and information processing; it may be held at any location with appropriate research facilities. The stipend will be \$6,000, plus an amount up to \$2,500 for tuition, fees, travel, and other approved research expenses, and may be renewed twice. Priority will be given to students who are A.B.D. Applicants should send biographical data and a proposal stating and justifying the research problem, a plan of procedure for research and writing, information on availability of research materials, and evidence of faculty support for the project. Applicants should arrange for three letters of reference, certified transcripts of college credits, and GRE scores to be sent directly to the Institute.

The internship, with a stipend of \$1,000 per month, will be awarded for a period of three to nine months between 1 June 1988 and 31 May 1989; residence at the Institute is required. Appropriate applicants might include, but are not limited to, historians and social scientists interested in the history of information processing and its infrastructure, academics interested in preparing new courses in this history, or records managers and archivists interested in related archival problems. Interns are required to conduct a research project under the direction of the Institute staff. Applicants should send biographical data, a statement of interests, a proposal of dates during which the internship would be held, and the names (with telephone numbers and addresses) of three references.

Complete application materials for both fellowships should be received by **15 January 1988** by the Charles Babbage Institute, University of Minnesota, 103 Walter Library, 117 Pleasant Street SE, Minneapolis, MN 55455; telephone (612) 624-5050.

The **Center for History of Physics of the American Institute of Physics** has a program of grants-in-aid for research in the history of modern physics and allied sciences, such as astronomy, geophysics, and optics, and their social interactions. Grants can be up to \$2,000 each to be used to reimburse direct expenses connected with the work. Preference will be given to those who need part of the funds for travel and subsistence to use the resources of the Center's Niels Bohr Library in New York City or to microfilm papers

or to tape-record oral history interviews with a copy to be deposited in the library. Applicants should either be working toward a graduate degree in the history of science or show a record of publication in the field. To apply, send a vita plus a letter of no more than two pages describing your research project, and include a brief budget showing the expenses for which support is requested. Send to Spencer Weart, Center for History of Physics, American Institute of Physics, 335 East 45th Street, New York, NY 10017. Deadlines for receipt of applications are **30 June** and **31 December** of each year.

The **Francis C. Wood Institute for the History of Medicine of the College of Physicians of Philadelphia** announces its Rockefeller Foundation Humanities Residency Program. Two grants of \$25,000 each will be awarded to scholars who will spend the academic year 1988–1989 in residence conducting research in the College Library and participating in the Wood Institute seminar program. Grants will not be made for doctoral research. Deadline for applications is **15 January 1988**. For further information contact Christine Dacier, Wood Institute, 19 South 22nd Street, Philadelphia, PA 19103.

The **Hagley Museum and Library** announces the availability of research fellowships for 1988–1989. Advanced research fellowships funded by the National Endowment for the Humanities and the Andrew W. Mellon Foundation with a maximum stipend of \$27,500 support independent study in Hagley's fields of interest at its Center for the History of Business, Technology, and Society. Short-term grants-in-aid are also offered for two to eight weeks of research during 1988 in the Hagley's imprint, manuscript, pictorial, and artifact collections. Completed applications for the advanced research fellowships must be received by **15 February 1988**. Applications for grants-in-aid will be accepted throughout the year. For additional information contact Elizabeth Gray Kogen, Center for the History of Business, Technology, and Society, Hagley Museum and Library, P.O. Box 3630, Wilmington, DE 19807; telephone (302) 658-2400, ext. 244.

The **Institute of Electrical and Electronics Engineers (IEEE)** invites applications for its 1988–1989 Fellowship in Electrical History. The fellowship is for either one year of full-time graduate work in the

history of electrical engineering and technology at a college or university of recognized standing or for the support of up to one year of postdoctoral work in the same field for a recent graduate. For a predoctoral recipient, the fellowship stipend is \$9,000, with an additional amount up to \$2,000 to pay academic tuition and fees. The stipend is \$11,000 for a postdoctoral recipient. Further information and application materials may be obtained by writing to the IEEE Center for the History of Electrical Engineering, 345 East 47th Street, New York, NY 10017. The deadline for the submission of all application materials is **1 February 1988**.

The **Mellon Fellowships in the Humanities** seek faculty nominations of college seniors and recent graduates of outstanding promise for careers in teaching and scholarship. Approximately 120 awards, providing \$10,250 plus tuition and standard fees, will be available for candidates entering upon graduate study in the fall of 1988, with each award being tenable for as long as three years. Any member of the academic profession may nominate up to two candidates by sending their names, colleges, current addresses, and intended fields of study to the chairs of the regions in which they are currently enrolled, or, in case that information is not available, to Robert F. Goheen, Director, MFITH, P.O. Box 288, Princeton, NJ 08542; telephone (609) 924-4713. Deadline for receipt of nominations is **2 November 1987**.

The **National Endowment for the Humanities Younger Scholars Awards** support high school students or undergraduates below the level of senior who want to conduct research and writing projects during the summer. Award recipients are expected to work full time for nine weeks doing research and writing a paper under the close supervision of a humanities scholar. No academic credit may be sought for these projects. Awards are \$2,200 for college students and \$1,800 for high school students, with \$400 for the project adviser. Applications must be postmarked no later than **2 November 1987**. To request guidelines and application forms write Younger Scholars Guidelines, Room 316, Division of Fellowships and Seminars, National Endowment for the Humanities, 1100 Pennsylvania Avenue, NW, Washington, DC 20506.

The **National Historical Publications and Records Commission (NHPRC)** will offer three history fellowships in 1988. Partial

funding will be provided by the Andrew W. Mellon Foundation. Successful candidates will receive a stipend of \$17,000, plus \$3,400 toward fringe benefits and other expenses, and will spend ten months at a documentary publication project. Participating projects are *The Papers of Jefferson Davis* (Rice University), *The Selected Papers of Charles Willson Peale and His Family* (National Portrait Gallery, Smithsonian Institution), and *The Papers of Benjamin Franklin* (Yale University). Applicants should hold a Ph.D. or have completed all requirements for the doctorate except the dissertation. Further information and application forms are available from the NHPRC, Room 300, National Archives Building, Washington, DC 20408; telephone (202) 523-3092. The application deadline is **15 March 1988**.

Applications to the **National Humanities Center**, consisting of the Center's form, supported by a curriculum vitae, a thousand-word project proposal, and three letters of recommendation, must be post-marked by **15 October 1987**. The National Humanities Center supports advanced study in history, literature, philosophy, and all other fields in the humanities. Each year the Center awards thirty-five to forty fellowships to scholars of demonstrated achievement and to promising

younger scholars. Fellowship stipends are based, insofar as possible, on scholars' usual academic salaries. For more information contact Kent Mullikan, Assistant Director, National Humanities Center, 7 Alexander Drive, Research Triangle Park, North Carolina 27709.

The **National Library of Medicine** plans to select one recognized scholar to engage in historical research and staff consultation during the 1988-1989 season. Applications from individuals interested in spending from six to twelve months at the library between 1 September 1988 and 31 August 1989 are due by **1 February 1988**. For more information contact the Chief, History of Medicine Division, National Library of Medicine, 8600 Rockville Pike, Bethesda, MD 20894; telephone (301) 496-5405.

The **National Science Foundation Ethics and Values Studies Program (EVS)** supports projects that examine ethical or value aspects of current U.S. scientific or engineering research or its use. The next deadline for submitting preliminary proposals is **1 November 1987**. For a copy of EVS guidelines write NSF Forms and Publications, 1800 G Street NW, Washington, DC 20550; telephone (202) 357-9894.

The **National Science Foundation History and Philosophy of Science Program** has announced the establishment of a special program of postdoctoral research fellowships for (1) recent Ph.D.s in the history and philosophy of science and technology and (2) experienced scientists and engineers. Approximately fourteen one-year awards with a stipend of \$18,000 will be offered in March 1988 for tenure to begin after 30 April 1988 but before 1 April 1989. Recipients will spend one year conducting original research at an institution other than their own, working with a sponsoring senior scholar. Projects involving all time periods and fields are eligible, but proposals on twentieth-century topics are particularly encouraged. The deadline for submission of application materials is **1 December 1987**. For more information or to obtain application forms write NSF Postdoctoral Research Fellowships in History and Philosophy of Science, 1800 G Street NW, Room 336, National Science Foundation, Washington, DC 20550.

The **National Science Foundation Directorate for Science and Engineering Education** is a potential source of financial support for projects designed to use the history of science, mathematics, and technology to improve the understanding of the content of science, its intellectual development, its methodology, and its applications and implications. The Directorate funds projects at all instructional levels, with particular emphasis upon elementary, middle, and secondary schools and upon addressing the needs of those currently underrepresented in scientific careers—women, minorities, and disabled individuals. Four programs that may be of special interest to historians of science and technology are the Teacher Enhancement Program (target dates for receipt of proposals **1 February** and **1 August**), the Teacher Preparation Program (target dates **15 April** and **15 October**), the Instructional Materials Development Program (target dates **1 February**, **1 June**, and **1 October**), and the Informal Science Education Program (television, museums, etc.) (target dates **1 April**, **1 August**, and **1 December**). For more information, request Program Announcements NSF 87-10 and NSF 87-12 or contact Florence Fasanelli, Division of Teacher Preparation and Enhancement, National Science Foundation, Washington, DC 20550; telephone (202) 357-7074.

Prize Competitions

The American Association for the Advancement of Science has announced the 1987 competition for its **AAAS-Westinghouse Science Journalism Awards** in print or broadcast media. Entries should have been published or produced between 1 November 1986 and 31 October 1987. Persons other than the author may submit entries. The deadline for submission is **13 November 1987**. For more information and entry blanks write AAAS-Westinghouse Science Journalism Awards, Office of Communication, 1333 H Street, NW, Washington, DC 20005; telephone (202) 326-6440.

The American Society for Eighteenth-Century Studies announces the competition for the 1986-1987 **Clifford Prize** of \$300 for the best nominated article concerning some aspect of eighteenth-century culture regardless of discipline. For more information contact R. G. Peterson, Exec-

utive Secretary, ASECS, St. Olaf College, Northfield, MN 55057; telephone (507) 663-3488.

The Division of the History of Chemistry of the American Chemical Society and the Dexter Chemical Corporation wish to solicit nominations for the **1988 Dexter Award** for outstanding accomplishments in the history of chemistry. The award, which is usually presented at the Fall National Meeting of the American Chemical Society, consists of a prize of \$2,000 and an engraved plaque. Nominations should contain a cover letter giving an assessment of the nominee's contributions to the field, a vita, and a bibliography of publications. Copies of no more than three select publications may also be included if available. All nominations should be sent to William B. Jensen, Secretary-Treasurer, Division of the History of Chemistry, ACS, Department of Chemistry, University of Cincinnati, Cincinnati, OH 45221 by **1 January 1988**.

FELLOWSHIPS—continued

The Technical Information Division of the **Naval Research Laboratory (NRL)** in Washington, D.C., is seeking qualified candidates for two dissertation fellowships available to graduate students pursuing advanced study in the history of American science or technology. Each fellowship will pay \$22,458 per year and will be renewable for a second year on evidence of satisfactory progress in research and writing. One successful candidate will research and write a history of underwater acoustics research in the twentieth century, with emphasis on work done at NRL; the other candidate will research and write a history of X-ray science and technology in the twentieth century, with emphasis on study and development work done at NRL. The fellowship may begin any time between 15 September 1987 and 15 September 1988 and must be done in residence at the NRL. For further information contact David van Keuren, Code 2604, Naval Research Laboratory, Washington, DC 20375; telephone (202) 767-4263.

The **Newberry Library Center for Renaissance Studies** announces a 1988 Summer Institute in Italian Archival Sciences to be held 27 June through 5 August 1988. Institute leader Armando Petrucci, Director of the Institute of Paleography of the University of Rome, assisted by Franca Nardelli, will provide intensive training in the reading, transcribing, and editing of Italian vernacular manuscripts (1300–1600). Full-time faculty members and librarians with instructional responsibilities employed in institutions of higher learning in the United States are eligible to apply for stipends of up to \$3,000 provided by the National Endowment for the Humanities. Institutions of participants receiving Endowment awards will be required to pay ten percent of the stipends. The deadline for applications is **1 March 1988**. For more information contact the Center for Renaissance Studies, The Newberry Library, 60 West Walton Street, Chicago, IL 60610; telephone (312) 943-9090.

The **University of Oklahoma** announces junior- and senior-level Rockefeller Fellowships in the Humanities for research on the history of science in Western civilization. Fellowships for the 1988–1989 academic year are open to candidates with doctorates in history, the history of science, or related fields. Candidates are

particularly encouraged to focus on substantial projects integrating historical knowledge about the scientific enterprise and its results into general studies of modern culture and civilization. Fellows will have residence privileges with the university's History of Science Department and the University Libraries' History of Science Collections, a comprehensive research facility containing approximately 74,000 printed volumes. Applications are due **11 January 1988**. For further details write Mary Jo Nye, History of Science Department, 622 Physical Sciences Building, University of Oklahoma, Norman, OK 73019; telephone (405) 325-2213.

The **Osler Library of the History of Medicine** at McGill University sponsors two fellowships in the history of medicine designed to assist researchers who need to travel to and establish temporary residence in Montreal in order to use the resources of the library. The Scholar's Fellowship is directed to historians or physicians engaged in specific research projects; applicants for this fellowship should send a curriculum vitae and a description of their project, specifying the relevance of the Osler Library's holdings to their research. The Student's Fellowship is aimed at medical students who desire to broaden their background in medical history through a reading program based on the library's collections;

STUDY OPPORTUNITY

The seventeenth annual **Institute for the Editing of Historical Documents** is scheduled for 20 June through 1 July 1988, in Madison, Wisconsin. Jointly sponsored by the National Historical Publications and Records Commission (NHPRC), the State Historical Society of Wisconsin, and the University of Wisconsin, the institute will provide detailed theoretical and practical instruction in documentary editing. Applicants should hold a master's degree in history or American civilization. A limited number of tuition and travel grants are available. Major funding for the institute is provided by the Andrew W. Mellon Foundation. Further information and application forms are available from the NHPRC, Room 300, National Archives Building, Washington, DC 20408; telephone (202) 523-3092. The application deadline is **15 March 1988**.

candidates should submit a curriculum vitae, two letters of reference from teaching staff of their medical school, and an outline of their proposed reading program. Each fellowship carries a stipend of \$1,200 (Canadian) and may be held for one month during the calendar year 1988. Applications or requests for further information should be addressed to Faith Wallis, Osler Library, McGill University, 3655 Drummond Street, Montreal, Quebec, Canada H3G 1Y6. The deadline for applications is **31 December 1987**.

Research proposals are invited in all areas of humanistic studies except educational curriculum-building and performing arts for **University of Pennsylvania Mellon Postdoctoral Fellowships in the Humanities** for younger scholars who, by 30 September 1988, will have held the Ph.D. not fewer than three and not more than eight years. Preference is given to proposals that are interdisciplinary and to candidates who have not previously utilized the resources of the University of Pennsylvania and whose work would allow them to take advantage of the research strengths of the institution and to make a contribution to its intellectual life. The award carries an annual stipend of \$25,000. The application deadline is **1 December 1987**. For further information and application forms contact the Chairman, Humanities Coordinating Committee, 16 College Hall, University of Pennsylvania, Philadelphia, PA 19104-6378.

The **Philadelphia Center for Early American Studies** offers, in connection with its project on "The Transformation of Philadelphia and the Delaware Valley, 1750–1850," three postdoctoral fellowships for 1988–1989 to scholars of early American technology. Fellows receive a stipend of \$13,000 beginning 1 September 1988 for a period of nine months. The Transformation Project, a long-term collaborative study of the process by which a preindustrial town of 20,000 in 1750 evolved into an industrial metropolis of 400,000 by 1850, is funded primarily by the National Endowment for the Humanities and the Pew Memorial Trust and is directed by Michael Zuckerman. For 1988–1989 the Project will examine issues of technology in the modernizing metropolis, in close coordination with a parallel project directed by Judith McGaw of the University of Pennsylvania. Candidates should submit a vita, at least two letters of recommendation, a two- to three-page statement of purpose, and a sample of work to

Michael Zuckerman, Department of History, University of Pennsylvania, Philadelphia, PA 19104. Deadline for applications is **15 March 1988**.

The Rockefeller University will make grants of not more than \$1,500 to graduate students or postgraduate scholars of any discipline who are engaged in research requiring use of the historical collections at the **Rockefeller Archive Center**. Inquiries about the program and requests for application forms should be addressed to the Director, Rockefeller Archive Center, Pocantico Hills, North Tarrytown, NY 10591-1598. Application deadline is **31 December 1987** for grants to be announced in March 1988.

The **Rockefeller Foundation** has announced its program of **Fellowships in the Humanities**. The announcements of two of the twenty-one host institutions, the

Francis C. Wood Institute and the University of Oklahoma, appear in this section.

The Foundation will also pick six new institutions as residency sites. Applications are invited from programs in colleges and universities and other institutions—libraries, museums, arts organizations—with resources valuable to emerging fields of the humanities, especially from programs concerned with the humanities in an international context or related to the diverse cultural heritage of the United States. Details on the requirements are available from the Foundation. A card or letter notifying the Foundation of a program's intent to apply is requested by **1 December 1987**. Applications must be completed and received by **1 February 1988**. Since the application requires a 3,500- to 5,000-word essay as well as supporting materials, applicants are advised to request additional information **well in advance of the deadline**. For an

application packet and detailed instructions write to Fellowships in the Humanities, The Rockefeller Foundation, Arts and Humanities Division, 1133 Avenue of the Americas, New York, NY 10036.

Maurice L. Richardson Fellowships are available for graduate students in the history of medicine at the **University of Wisconsin-Madison**. Beginning and advanced graduate students in the history of science or in history with major concentration in the history of medicine are eligible. Stipends range from \$500 to \$9,000 per academic year, and students may apply for up to three academic years of support, one of which may be at the dissertation level. The deadline for applications is **15 January 1988**. Apply to the Department of the History of Medicine, University of Wisconsin-Madison, 1415 Medical Sciences Center, 1300 University Avenue, Madison, WI 53706.

Awards, Honors & Appointments

Martha Baldwin has been awarded a Prix de Rome from the American Academy in Rome for the academic year 1987-1988. While in Rome she will use the archives of the Society of Jesus to conduct research on the relations between Jesuit scientists and the major European scientific societies in the seventeenth century. Her postdoctoral fellowship is supported by a grant from the National Endowment for the Humanities. She reports that she is the first historian of science to win a Prix de Rome since the inception of the Academy in 1896.

Allen G. Debus, the Morris Fishbein Professor of the History of Science and Medicine at the University of Chicago, has been elected to membership in the Portuguese Academy of Sciences, the Academia das Ciências de Lisboa.

Kurt Ganzinger of Vienna, Austria, has received the 1986 Urdang Medal of the American Institute of the History of Pharmacy at the International Congress for the History of Pharmacy held in Oslo, Norway, in June 1987.

David C. Lindberg has accepted a five-year term as Director of the Institute for Research in the Humanities at the Univer-

sity of Wisconsin. He will continue to teach in the Department of the History of Science.

James H. Madison of Indiana University has been appointed Fischelis Scholar for 1987-1989 by the American Institute of the History of Pharmacy at the University of Wisconsin. He will work on the life and contributions of Eli Lilly (1885-1977).

Jack D. Pressman has been appointed Assistant Professor in the Department of the History of Health Sciences, School of Medicine, University of California, San Francisco, effective 1 January 1988.

Marsha L. Richmond has been appointed Assistant Editor of the Collected Correspondence of Charles Darwin, University Library Manuscripts Room, Cambridge, England.

Among those recently receiving grants-in-aid from the **American Council of Learned Societies** for work on the indicated topics are Judith Brooke Farquhar (University of North Carolina): history and anthropology of Chinese medicine; Vera Norwood (University of New Mexico): the significance of gender roles in Rachael Carson's work on natural history and environmental

conservation; and Hugh J. Ormsby-Lennon (Villanova University): magical linguistics, modern science, and English poetry from Spenser to Coleridge. Among those receiving fellowships for recent recipients of the Ph.D. are Lawrence P. Schrenk (Catholic University of America): the post-Aristotelian analysis of induction; and Jennifer Whiting (University of Pittsburgh): individual forms in Aristotle. Among those receiving fellowships for postdoctoral research is John L. Greenberg (independent scholar): the origins and genesis of the eighteenth-century French mathematical physics community.

The Program in the History and Philosophy of Science and Technology at **Cornell University** announces the following appointments: Jon Jarrett, Assistant Professor in the History and Philosophy of Twentieth-Century Physics; Ronald Kline, Assistant Professor in the History of Technology; Helge Kragh, Associate Professor in the History of Modern (Twentieth-Century) Physics; Bruce Lewenstein, Assistant Professor of Communication Arts (science writing and history of American science).

Among the Scholars of the **Getty Center for the History of Art and the Humanities** for 1987-1988 is Marcia Ascher (Ithaca College) for work in ethnomathematics.

NSF Fellowships for 1986 appear on page 26.

CALLS FOR PAPERS & MSS

The **Agricultural History Society** and the **Center for Historical Studies of Technology and Science at Iowa State University** announce a symposium on "The History of the United States Department of Agriculture." The symposium will meet 15-18 June 1989 in Ames, Iowa, and will mark the centennial of the elevation of the Commissioner of Agriculture to cabinet rank. Several sessions dealing explicitly with USDA scientific, technological, or medical developments are planned. Paper proposals should be submitted by **15 March 1988** to Alan I Marcus, Director, Center for Historical Studies of Technology and Science, 635 Ross Hall, Iowa State University, Ames, IA 50011-1202.

The Eighth Annual Conference of the **Association for the Advancement of Policy, Research, and Development in the Third World** will be held 20-25 November 1988 in Kingston, Jamaica, West Indies, on the topic "Towards a World Decade for Scientific and Technological Cooperation for International Development." Paper abstracts, panel proposals, and roundtable suggestions are solicited. Submit a one-page proposal and a biographical professional statement indicating areas of professional and geographical competency by **26 February 1988** to Mekki Mtewa, Executive Director, Association for the Advancement of Policy, Research, and Development in the Third World, P.O. Box 70257, Washington, DC 20024-1534.

The twentieth annual meeting of **Cheiron: The International Society for the History of Behavioral and Social Sciences** will be held at Princeton University, Princeton, New Jersey, on 15-19 June 1988. Papers and work-in-progress reports dealing with any aspect of the history of the behavioral and social sciences, or with related historiographical or methodological issues, are cordially invited. Some travel assistance is available for graduate students with papers accepted for the program. For further information contact the Program Chair, Raymond E. Fancher, Department of Psychology, York University, North York, Ontario, Canada M3J 1P3; telephone (418) 736-5120. Five copies of papers (seven pages of text double-spaced, maximum, with identification of author and institution only on a detach-

able cover sheet) should be submitted by **15 January 1988** for blind reviewing.

Ferris State College welcomes proposals for papers or entire sessions for its first annual conference on **Humanities, Science, and Technology**, to be held 11-12 March 1988. The conference will provide a unique forum emphasizing concerns that transcend traditional disciplinary boundaries. It will include such sessions as medical ethics, the politics of scientific research, history of science and technology, and art and technical innovation. Proposals should include a 300-word abstract and the participant's vita. All proposals are due **1 December 1987**. Please indicate if you are interested in serving as a session chair or commentator. Proposals should be submitted to Coordinating and Program Committee, Department of Humanities, Ferris State College, Big Rapids, MI 49307; telephone (616) 592-2758 or 592-2771.

The **International Society for the Comparative Study of Civilizations** will meet 27-30 May 1988 at Hampton University, Hampton, Virginia. A special theme will be "Africa: Image and Reality in Western Civilization," but there are a number of other themes as well. Send abstracts or inquiries by **15 November 1987** to Matthew Melko, Program Chair, ISCSC 1988, Wright State University, Dayton, OH 45435.

The twenty-fourth meeting of the **Joint Atlantic Seminar in the History of Biology** will be held at the Marine Biological Laboratory, Woods Hole, Massachusetts, on Saturday, 12 March 1988. Those who wish to present a paper should send a title and abstract by **20 January 1988**; graduate students and recent Ph.D.s are especially encouraged to submit papers. Those wishing to attend should register by 22 February 1988. For more information contact Thomas Gariépy, Program in the History of Science, Stonehill College, North Easton, MA 02357.

In light of the recent interest in the controversy concerning the origins of the Kekulé benzene dream, John Wotiz plans to organize an open panel discussion as part of his upcoming symposium, "The Kekulé Benzol Fest 100 Years Later,"

which will be held at the American Chemical Society meeting in Boston in 1990. Persons interested in participating in the panel should contact John Wotiz, Department of Chemistry, Southern Illinois University at Carbondale, Carbondale, IL 62901; telephone (618) 453-5321.

An international conference celebrating the 350th anniversary of Descartes's *Discourse on Method*, "**Metaphysics and Classification of the Sciences in 1637**," will take place at San Jose State University, 15-17 April 1988. The conference will feature both invited and contributed papers. A contributed paper should take between 25 and 40 minutes to present and focus on some aspect of the publications of 1637 or of the famous "tree of philosophy" consisting of Descartes's metaphysics, physics, mechanics, medicine, and morals. Adherence to the stated theme is encouraged but is not a criterion of acceptance. The organizing committee must receive contributed papers by **15 December 1987**. Notification of acceptance or rejection of papers will be made by 15 January 1988. Please send papers and other communications to Stephen Voss, Department of Philosophy, San Jose State University, San Jose, CA 95192; telephone (408) 277-2871 or 286-2340.

MEETINGS

The **American Philosophical Society Library** will sponsor a symposium titled "The Grand Enterprise: Modern Physical Science in America, 1920-1960." The symposium honors John Clarke Slater (1900-1976), a leader in quantum mechanics and solid state physics, head of the physics department at MIT from 1930 to 1951, and a member of the American Philosophical Society from 1940 until his death. The conference will be held 18-19 March 1988 at the American Philosophical Society Library and will feature a special address by John A. Wheeler and sessions on the rise of modern physics in America, the uses of quantum mechanics, and Slater's MIT. Among the participants will be Peter Galison, John Heilbron, Paul Hoch, Robert Kargon, Stuart W. Leslie, Larry Owens, Abraham Pais, and Silvan Schweber. The symposium is open to all interested parties, though space is limited. Those interested in attending should

Papers in all areas of history are invited for a meeting of the **Pacific Coast Branch of the AHA**, in conjunction with the **Western Association of Women Historians**, at San Francisco State University, 10-13 August 1988. Deadline for submission is **15 December 1987**. For more information contact Jess Flemion, Program Chair, PCB, Department of History, San Diego State University, San Diego, CA 92182.

MSS FOR PUBLICATION

American Studies, in cooperation with the Center for Historical Studies of Technology and Science at Iowa State University, announces a special issue devoted to technology, medicine, and science in American culture and society. Articles on the influence of American society and culture on American technology, science, and medicine will be especially welcome. For more information write the guest editor for the volume, Hamilton Cravens, Center for Historical Studies of Technology and Science, Program in History of Technology and Science, Department of History, Iowa State University, Ames, Iowa 50011-1202; telephone (515) 294-1156. Deadline for submission is **15 September 1988**.

contact Edward C. Carter II, Librarian, American Philosophical Society, 105 South Fifth Street, Philadelphia, PA 19106; telephone (215) 627-0706.

The **American Studies Association** and the **Canadian Association for American Studies** announce an international convention on the subject "Creating Cultures: People, Objects, Ideas," to take place 21-24 November 1987 at the New York Hilton. For more information contact American Studies Association, P.O. Box 7780-1429, Philadelphia, PA 19182-0113. Deadline for preregistration is **31 October**.

The conference "**Boscovich in Rome, 1725-1759: His Scientific Life and Works**" will be held in Rome in April 1988 (see Calls for Papers section of the July 1987 *Newsletter*). For more information contact either Piers Bursill-Hall, Department of Pure Mathematics, 16 Mill Lane, Cambridge, England CB2 1SB, or G. E. Viola, Istituto della Enciclopedia Italiana, Piazza Paganica 4, Rome 00186, Italy.

Lehigh University Press announces that \$1,500 and a publication contract will be awarded to the author of the best book manuscript in the field of science, technology, and society studies as judged by the editorial board of the press. Deadline is **1 April 1988**. For information and an entry form write Stephen H. Cutcliffe, Director, Lehigh University Press, Chandler-Ullmann Hall, Lehigh University, Bethlehem, PA 18015.

The **National Aeronautics and Space Administration** invites proposals from historians to research and write individual volumes for its new series in NASA history, which is designed to provide thematic treatments of NASA's aeronautical and space programs, placing them in broad historical contexts of interest to both academic and general audiences. NASA may provide up to two years' support for research, writing, and associated expenses to qualified historians with demonstrated writing ability who have well-developed proposals for book-length manuscripts on appropriate subjects. For more information contact Sylvia Fries, Code XH, National Aeronautics and Space Administration, Washington, DC 20546, by **1 March 1988**. Final proposals must be submitted by 1 August 1988.

The **Center for Ancient Studies of the University of Minnesota** will sponsor a conference "Perception and Presentation of the Past," addressing the question how professionals who pursue research into the human past communicate the results of their research to the interested general public. The conference takes place 14-16 October 1987. For further information contact Leslie Denny, Professional Development and Conference Services, University of Minnesota, 220 Nolte Center, 315 Pillsbury Drive SE, Minneapolis, MN 55455-0139; telephone (612) 625-0727.

The Comité des Travaux Historiques et Scientifiques has issued an invitation to the **113th French National Congress of Scholarly Societies**, to take place in Strasbourg 5-9 April 1988. Among the scientific sections at the congress will be a section on the history of science and technology in eastern France and nearby countries. Those wishing to participate should request the proper forms (which must be returned by **15 January 1988**) from Secrétariat du Congrès National des

The Department of Aeronautics, National Air and Space Museum, Smithsonian Institution, has recently initiated the **Smithsonian History of Aviation** series. This series will include a combination of new monographic works, reprints of classics, translations, and source documents on American and international aviation; it will begin in 1988. Authors interested in submitting manuscripts for consideration should contact John T. Greenwood, General Editor, Smithsonian History of Aviation, Department of Aeronautics, National Air and Space Museum, Smithsonian Institution, Washington, DC 20560.

Manuscripts and inquiries are invited for the **State University of New York Press** series **Science, Technology, and Society**, which will publish scholarly monographs on the social relations of science and technology, including philosophy, sociology, history, anthropology, and psychology of science informed by a social studies of science and technology perspective. For more information contact the general editor of the series, Sal Restivo, STS, SUNY Press, Department of Science and Technology Studies, Rensselaer Polytechnic Institute, Troy, NY 12181; telephone (518) 266-8504.

Sociétés Savantes, Ministère de l'Éducation Nationale, Comité des Travaux Historiques et Scientifiques, 3-5 Blvd. Pasteur, 75015 Paris, France.

The **History of Genetics, Eugenics, and Evolution: A Commemorative Conference in Honour of Bernard Norton (1945-1984)** will take place 7 May 1988 at the University of Leicester in England. The program includes talks by Nils Roll-Hansen, David Barker, Robert Olby, Peter Bowler, Jonathan Hodge, and John R. G. Turner. Further details may be obtained from Wing Commander G. Bennett, 31 High Street, Stanford-in-the-Vale, Faringdon, Oxon SN7 8LH.

A free public education conference, **In Time of Plague: Plagues, Their History and Social Consequences**, is being sponsored by *Social Research*, an international quarterly of the social sciences published by the Graduate Faculty of the New

Meetings—continued

School for Social Research. The conference will be held in the Bernhard Mayer Auditorium of the New School, 66 West 12th Street, on Friday and Saturday, 15–16 January 1988. Conference speakers include Joshua Lederberg, Lewis Thomas, Anthony Quinton, Allan Brandt, Paul Slack, William Foege, and Dorothy Nelkin.

A conference on **Italian Scientists in the Low Countries in the XVIIth and XVIIIth Centuries** will take place at the University of Utrecht, 25–27 May 1988, to commemorate the 350th anniversary of the first edition in Leyden of Galileo Galilei's *Discorsi e dimostrazioni matematiche intorno a due nuove scienze* and to study the relationships between Dutch and Italian scientists from the late Renaissance to the Enlightenment. For more information contact the Institute for the History of Science, Janskerkhof 30, 3512 BN Utrecht, The Netherlands.

The **Newberry Library Center for Renaissance Studies** announces the 1988 Renaissance Conference, "Mannerist Italy and Beyond: Debates in Honor of Eric Cochrane," to be held 13–14 May 1988 at the Newberry Library. For further information contact the Center for Renaissance Studies, The Newberry Library, 60 West Walton Street, Chicago, IL 60610.

An international symposium on **Modern Cosmology in Retrospect** will take place in Bologna, 20–23 May 1988, as part of the ninth centenary of the University of Bologna. For more information contact Silvio Bergia, c/o Conference Service srl, Via Tagliapietre 18/b, 40123 Bologna, Italy.

The **New Jersey Historical Commission** and the **New Jersey Academy of Science** will present a conference for the general public on the history of science and technology in New Jersey and the United States since the eighteenth century on Saturday, 21 November 1987, at the Quality Inn Conference Center, U.S. 1 South, in North Brunswick. Speakers include Reese V. Jenkins, Edward Cohen, Melvin Kranzberg, Jeffrey L. Sturchio, Leonard S. Reich, and Laura Smith Porter. Topics will include Bell Telephone Laboratories, New Jersey's pharmaceutical and chemical industries, and the Institute for Advanced Study. For further information contact Science and Technology, at the Historical

Commission, 113 West State Street, CN 305, Trenton 08625; telephone (609) 292-6062.

Fall and winter talks to the **New York Academy of Sciences**, History and Philosophy Section, include Martin Rudwick, "Windows onto the Deep Past: Early Illustrations of Prehuman History," on 30 September; J. H. Leopold, "The Mechanical Celestial Globes of the Renaissance: The Cassel Globes," on 28 October; Wilbur Knorr, "Lost and Found: Recovering Lost Works of Ancient Science," on 3 December; and Anthony Grafton, "Humanism and Science in Rudolphine Prague: Kepler in Context," on 27 January. All talks begin at 8 p.m. at the Academy of Sciences, 2 East 63rd Street, New York, NY 10021; telephone (212) 838-0230.

A *Principia* tricentennial symposium, **Newton's Legacy**, will be held at Tulane University, New Orleans, 12–14 November 1987. The program will be divided into five half-day sessions organized around the years 1687, 1787, 1887, and 1987 and will include contributed papers. For more information contact Frank E. Durham or Robert D. Purrington, Department of Physics, Tulane University, New Orleans, LA 70118; telephone (504) 865-5520.

The **North American Conference on British Studies** will sponsor a luncheon at the American Historical Association meeting in Washington on 29 December 1987 at which Frank Manuel will discuss "The Religion of Isaac Newton." Members of the History of Science Society are cordially invited to attend. The sale of tickets to the luncheon will be handled by the AHA at the convention.

The Seventh Annual Luncheon of the **Planning History Group** will be held in conjunction with the meeting of the Organization of American Historians on Saturday, 26 March 1988, at noon in Bally's Hotel in Reno, Nevada. Carl Abbott (Portland State University) will present a paper entitled "New York of the South or Paris of America? Economic Strategies in Washington, D.C., Since 1890." Carol A. O'Connor (Utah State University) will chair the session. Tickets will be available as part of the preregistration package for the OAH meeting or at the OAH Registration. As the number of tickets is limited, purchase through preregistration is encouraged. For additional information contact Blaine A. Brownell, College of

Social and Behavioral Sciences, University of Alabama at Birmingham, Birmingham, AL 35294; telephone (205) 934-5643; or Mark H. Rose, Program in Science, Technology, and Society, Michigan Technological University, Houghton, MI 49931; telephone (906) 487-2115.

A conference on **Swedenborg and His Influence**, including presentations on Swedenborg and science, will take place in Bryn Athyn, Pennsylvania, 7–9 February 1988. For more information contact Jane K. Williams-Hogan, Academy of the New Church College, Box 278, Bryn Athyn, PA 19009.

The **25th Transdisciplinary Symposium on Philosophy and Medicine** will be held in San Francisco, 11–12 December 1987, on the theme "Historical and Philosophical Problems in Medical Genetics." Presentations will explore the concepts of genetic health and disease, the nature of explanation in medical genetics, and the ethics and ethos of medical genetic research and practice, from the perspectives of the history, philosophy, and sociology of science and medical and biomedical ethics. For more information please contact Eric T. Juengst, Division of Medical Ethics, UCSF School of Medicine, 1362 Third Avenue, San Francisco, CA 94143; telephone (415) 476-3093.

For the Record

A conference on **Science and Technology in the Public Interest: The National Bureau of Standards in the Post-War Era, 1945–85**, took place at the National Bureau of Standards, Gaithersburg, Maryland, on 17–18 September 1987.

Dissertations Completed

Adele Clarke, "Emergence of the Reproductive Research Enterprise: A Sociology of Biological, Medical, and Agricultural Science in the U.S., 1910–1940." 1985. University of California, San Francisco.

David Rhees, "The Chemists' Crusade: The Rise of an Industrial Science in Modern America, 1907–1922." 1987. University of Pennsylvania.

Marie-Madeleine Saby-Rousset, "Les Canons de Jean de Lignères sur les tables astronomiques de 1321: Edition critique, traduction, et étude." 1987. Ecole Nationale des Chartes, Paris.

BSHS-HSS Anglo-American Conference: Provisional Program

Manchester, 11-15 July 1988

Monday, 11 July

Dinner, Introduction, and Wine Reception

Morning Sessions

Based on precirculated or published work

Tuesday, 12 July

The Scientific Revolution and Its Social Context I: The Hierarchy of the Disciplines

9:00 a.m. - 10:30 a.m.

Organizer and chair: Jan Golinski (Churchill College, Cambridge)

John A. Schuster (University of Wollongong): *Opening Remarks*

Mario Biagioli (University of California, Berkeley): *The Scientific Revolution and the Social Legitimation of Mathematicians: The Case of Galileo*

Lynn S. Joy (Vanderbilt University): *Humanism and the Problem of Traditions in Seventeenth-Century Natural Philosophy*

Discussant: Robert S. Westman (University of California, Los Angeles)

The Scientific Revolution and Its Social Context II: The Peculiarities of the English

11:00 a.m. - 12:30 p.m.

Organizer and chair: Jan Golinski (Churchill College, Cambridge)

John Henry (University of Edinburgh): *Occult and Vitalist Traditions in English Mechanical Philosophy*

Discussant: Stephen Pumfrey (University of Lancaster)

Julian Martin (University of Cambridge): *Francis Bacon's Political Reformation of Natural Philosophy*

Michael Hunter (Birkbeck College, University of London): *Institutionalizing Science: Aspiration and Actuality in the Early Royal Society*

Discussant: Paul B. Wood (Queen's University, Ontario)

The Industrial Revolution: Anglo-American Comparisons

9:00 a.m. - 10:30 a.m.

Organizer: Judith McGaw (University of Pennsylvania)

Chair: Maxine Berg (University of Warwick)

Carolyn Cooper (Yale University): *Latent Technology Transfer: English and American Woodworking Machines, 1620-1865*

Christine MacLeod (University of Cambridge): *The Peculiarities of the English Patent System: A Comparative Approach, 1660-1852*

Robert Gordon (Yale University): *Skills and the Transfer of Technology in Metallurgy and Manufacturing*

Judith McGaw: *Agriculture in the Industrial Revolution: Some Anglo-American Comparisons*

Discussant: Maxine Berg

Science, Education, and Practice circa 1900

9:00 a.m. - 10:30 a.m.

Organizer: Christopher Lawrence (Wellcome Institute, London)

Robert Fox (La Villette, Paris): *Industry, Science, and Education in Late Nineteenth-Century France*

Steven Sturdy (Wellcome Unit, University of Manchester): *Physiology and the Public Health Profession*

David Allen (University College, London): *The Survival of the Amateur Tradition in the Newly Professional World of Biology*

Kathryn Olesko (Georgetown University): *The Pedagogical Imperative*

M. Eileen Magnello (St. Anthony's College, Oxford): *The Professionalization of Modern-Day Statistical Theory*

Discussants: To be decided

Sociological Approaches to the History of Science and Technology I

9:00 a.m. - 10:30 a.m.

Organizer and chair: Trevor Pinch (University of York)

Karin Knorr Cetina and K. Amann (University of Bielefeld): *Consensus Formation in the Laboratory*

Pinna G. Abir-Am (Harvard University): *Toward a Historical Ethnography of Scientific Rituals: Interpreting the Fiftieth Anniversary of the First X-Ray Protein Photograph*

Peter Keating (Harvard University) and Albert Cambrosio and Michael Mackenzie (University of Quebec at Montreal): *The Role of Laboratory Techniques in the Development of Scientific Concepts: Affinity, Avidity, and Monoclonal Antibodies*

Stephen Yearley (Queen's University, Belfast): *Methods of Closure, Closure of Methods: The Case Research on the Precambrian Biosphere*

Discussant: Bruno Latour (Ecole des Mines de Paris)

Sociological Approaches to the History of Science and Technology II

11:00 a.m. - 12:30 p.m.

Organizer and chair: Trevor Pinch (University of York)

Andy Pickering (University of Illinois, Urbana): *Making Sense of Science: Pragmatism and Constructivism*

continued on next page

Sociological Approaches—continued

Michael Lynch (Boston University) and Samuel Edgerton (Williams College): *Visual Images and the Demonstration of Claims: Astronomers' Methods for Producing and Displaying Digitized Images of Research Objects*

Steven Shapin (University of Edinburgh): *Closure and Credibility in Seventeenth-Century English Science*

Martin Rudwick (Princeton University): *The Closure of the Devonian Controversy*

Discussant: Bruno Latour (Ecole des Mines de Paris)

Wednesday, 13 July**Science and Corporate Strategy**

9:00 a.m. – 10:30 a.m.

This session will be based on David Hounshell and John Smith's *Science and Corporate Strategy: Du Pont R&D, 1902–1980*

Organizer and chair: Jeffrey Sturchio (Beckman Center for the History of Chemistry)

Discussants: William Reader, L. F. Haber, and Robert Bud

The Business of Science and Technology: Recent Work on the History of Industrial Research

11:00 a.m. – 12:30 p.m.

Organizer: Jeffrey Sturchio (Beckman Center for the History of Chemistry)

Chair: David Hounshell (Harvard Business School and Hagley Museum and Library, University of Delaware)

Arthur Norberg (Charles Babbage Institute): *Punching Cards to Magnetizing Cores: Industrial Research and Development's Role in Changing Machine Computation Methods, 1925–1955*

Peter Morris (Beckman Center for the History of Chemistry): *Buna S and GR-S: A Comparative Study of German and U.S. Industrial Research*

Jonathan Liebenau (Boston University, London): *On Pharmaceuticals between the Wars*

Discussants: Jeffrey Sturchio and Michel Callon (Ecole des Mines de Paris)

The Migration of Science and Medicine

9:00 a.m. – 10:30 a.m.

Organizer: John Harley Warner (Yale University)

Merriley Borell (Tufts University School of Medicine), Deborah J. Coon (Harvard University), H. Hughes Evans (Harvard University), and Gail A. Hornstein (Mount Holyoke College): *Selective Importation of the "Exact Method": Creating Boundaries in Experimental Physiology and Psychology in the United States, 1870–1910*

Russell C. Maulitz (Presbyterian Hospital, Philadelphia): *Intellectual Migration: The Case of Pathological Anatomy*

Godelieve van Heteren (Wellcome Institute, London): *"Medical Internationalism" under National Flags: The Case of England and Germany in the Late Nineteenth Century*

John Harley Warner: *The Medical Migrant's Baggage Unpacked: Anglo-American Constructions of the Paris Clinical School*

Discussants: Everett Mendelsohn (Harvard University) and William F. Bynum (Wellcome Institute, London)

Anglo-American Medicine in the Twentieth Century

11:00 a.m. – 12:30 p.m.

Organizer: John Pickstone (University of Manchester Institute of Science and Technology)

This session will be based on forthcoming studies of American hospitals by Rosemary Stevens and Charles Rosenberg (both University of Pennsylvania) plus precirculated papers by

Daniel Fox (State University of New York, Stony Brook): *U.K. and U.S. Policies for Chronic Illness*

Joel Howell (University of Michigan): *Technology in British and American Hospitals*

Discussants: To be announced

Images in Science

9:00 a.m. – 11:00 a.m.

Organizer and chair: Ludmilla Jordanova (University of Essex)

Julie Solomon (Ohio State University): *To Know, to Fly, to Conjure: A Representation of Human Knowing in the Water Colors of John White (1585)*

Trevor Levere (University of Toronto): *Images of Arctic Exploration*

Robert Root-Bernstein (Institute for Disease Research, Los Angeles): *The Evolution of Visual Representations of Chemical Concepts: Theories Embedded in Pictures*

David Gooding (University of Bath): *Word Sketches and Pictures: A Comparison of Visual and Verbal Representations of Natural Phenomena*

Popularization

11:00 a.m. – 12:30 p.m.

Organizer and chair: James Secord (Imperial College, London)

George Rousseau (University of California, Los Angeles): *The Image of Science and Scientists in the Eighteenth Century*

Richard Yeo (Griffith University): *Images of Newton in the Eighteenth Century*

Ghislaine Lawrence (Science Museum, London): *Museums and the Popularization of Science in the Twentieth Century*

Michael Shortland (University of Oxford): *Film Biographies of Scientists in the Twentieth Century*

Discussants: Simon Schaffer (University of Cambridge) and Dorinda Outram (University of Cork)

Thursday, 14 July**Gender and Science**

9:00 a.m. - 10:30 a.m.

Organizer and chair: Evelyn Fox Keller (Cornell University)

Anne Fausto-Sterling (Brown University): *Trends in Developmental Biology: A Feminist Perspective*Helen Longino (Mills College): *Feminist Critiques of Rationality: Critiques of Science or Philosophy of Science*Lynda Birke (Open University): *Biology, Process, and the Development of Gender*Evelleen Richards and John Schuster (University of Wollongong): *Gender Analysis of Science: The Myth of the Feminine Method*

Discussants: Everett Mendelsohn (Harvard University) and Evelyn Fox Keller

Women and Technology

11:00 a.m. - 12:30 p.m.

Organizers: Ruth Schwartz Cowan (State University of New York, Stony Brook) and Ludmilla Jordanova (University of Essex)

Chair: Ruth Schwartz Cowan

Alison Adams (University of Manchester Institute of Science and Technology): *Will Expert Systems Be Male?*

Other papers to be announced

Science and the Military

9:00 a.m. - 10:30 a.m.

Organizers: Paul Hoch (University of Warwick) and Everett Mendelsohn (Harvard University)

Paul Hoch: *Crystallization of a Strategic Alliance: Big Physics and the Military in the 1940s*Harvey Sapolsky (Massachusetts Institute of Technology): *Military Support for Research in the United States*Paul Forman (Smithsonian Institution): *Physics as a Spin-Off from Military Technology: The Case of Microwave Spectroscopy*Robert Seidel (Los Alamos National Laboratory): *Shedding Light on Defense: The Military Response to the Laser*

Discussant: Harry Woolf (Institute for Advanced Study, Princeton)

Big Science

11:00 a.m. - 12:30 p.m.

This session will be based on the following forthcoming books:

John Heilbron (University of California, Berkeley), *History of the Lawrence-Berkeley Laboratories*; Robert Smith (Johns Hopkins University and Smithsonian Institution), *Shaping the Space Telescope: The Interpenetration of Science, Technology, and Politics*; and John Krige and Dominique Pestre (CERN), *History of CERN*.

Organizer: David Edgerton (University of Manchester Institute of Science and Technology)

Discussants: James Capshew (National Air and Space Administration); plus British discussant

Science and Secularization I

9:00 a.m. - 10:30 a.m.

Organizer and chair: John Brooke (University of Lancaster)

Gad Freudenthal (Hebrew University, Jerusalem): *Where Does Theology Enter Aristotelian and Peripatetic Sublunar Theory of Matter?*Stuart Peterfreund (Northeastern University): *Cosmology, God's Truth, and the Common Understanding*Neal C. Gillespie (Georgia State University): *Industrial Mechanism and Design: William Paley's Abortive Reform of Natural Theology*David N. Livingstone (Queen's University, Belfast): *Pre-Adamites: The History of a Harmonizing Strategy***Science and Secularization II**

11:00 a.m. - 12:30 p.m.

Chair: To be announced

Frank James (Royal Institution, London): *The Sacralization of Science: The Scientists' Declaration, 1864-1865*James R. Moore (Open University): *Darwin and the Secularists*David M. Knight (University of Durham): *Observation, Experiment, Theory, and the Spirits*Ronald L. Numbers (University of Wisconsin-Madison): *Creationism in Britain and America***Afternoon Sessions****Tuesday, 12 July**

2:00 p.m. - 4:00 p.m. Sessions

Science and Religion in the Seventeenth Century

Chair: Owen Hannaway (Johns Hopkins University)

James Lattis (University of Wisconsin-Madison): *Christopher Clavius and Astronomical Research and Education at the Collegio Romano*Martha Baldwin (University of Chicago): *The Counter Reformation and the Scientific Revolution*Steven Harris (University of Wisconsin-Madison): *Jesuit Science and "Puritan" Science*Martin Counihan (University of Southampton): *Bernard O'Connor (1666-1698) and the Scientific Revolution in Ireland, Poland, and England***The Chemical Revolution**

Organizer: Hans-Georg Schneider (St. Cross College, Oxford)

Chair: To be announced

Robert Siegfried (University of Wisconsin-Madison): *A Compositional Representation of the Chemical Revolution*

continued on next page

Chemical Revolution—continued

H. A. M. Snelders (Rijksuniversiteit Utrecht): *The New Chemistry in the Netherlands*

Seymour Mauskopf (Duke University): *Gunpowder and the Chemical Revolution*

Hans-Georg Schneider: *The Parallelism of the Revolutions in Chemistry and Politics: Evidence and Explanations*

Science and Public Health

Organizers: Christopher Hamlin (University of Notre Dame) and Michael Worboys (Sheffield City Polytechnic)
Chair: Michael Worboys

Christopher Hamlin: *Local Government Board and Expert Advice: A Reassessment*

Barbara Gutmann Rosenkrantz (Harvard University): *Contact Contagion: American TB Campaigns, 1900–1920*

Paul Weindling (Wellcome Unit, Oxford University): *Diphtheria*

Biology in Context

Chair: John C. Greene (University of Connecticut)

Margaret Schabas (Harvard University and University of Wisconsin–Madison): *Nature's Economy: Linnaeus, Lyell, and Darwin*

Gregg Mitman (University of Wisconsin–Madison): *Darwinism Reconsidered: World War I and Evolutionary Thought in America*

Barbara Kimmelman (University of Pennsylvania): *Agricultural Scientists, Nature Study, and the Development of a Lower-Level Science Curriculum in America, 1900–1920*

History of Computing

Organizer: Geoffrey Tweedale (University of Manchester)

Contributions from the National Archive for the History of Computing, Manchester; the Charles Babbage Institute, Minneapolis; and Eda Kranakis, Amsterdam

4:30 p.m.–5:30 p.m. Sessions**Renaissance Maps and Jokes**

Chair: To be announced

Lesley Cormack (University of Toronto): *The Social Context of Geography at Oxford and Cambridge, 1580–1620*

Paula Findlen (University of California, Berkeley): *Lusus Naturae and Lusus Scientiae: Virtuosity and Curiosity in Early Modern European Culture*

Chemistry around the Great War

Chair: Colin Russell (Open University)

Hugh R. Slotten (University of Wisconsin–Madison): *American Responses to Gas Warfare in World War I*

David Rhees (American Philosophical Society): *The Chemists' Crusade: The Rise of Industrial Science in Modern America, 1907–1922*

Medicine around 1900: Woman's Role and Men's Networks

Chair: Diana E. Long (College of Physicians, Philadelphia)

Edward T. Morman (Johns Hopkins University): *Hygiene, Morality, Physiology, and Religion: Frances Emily White's Search for Women's Role in Scientific Medicine*

Sandra F. McRae (National Museum of Science and Technology of Canada): *British Medicine in Greater Britain: The BMA and BAAS Canadian Meetings of 1897*

Styles in Twentieth-Century Biology

Chair: Robert Olby (University of Leeds)

Ton van Helvoort (Limburg University): *Enzymatic and Bacteriological Approaches to Bacteriophage*

Keith Vernon (University of Manchester): *The Numerical Taxonomy Debates: National and Disciplinary Differences*

Classical and Modern Physics: Analyzing the Transition

Chair: Mary Hesse (University of Cambridge)

Casper Hakfoort (Twente University): *Physical World Views from Maxwell to Einstein: A Historiographical Review*

Daniel M. Siegel (University of Wisconsin–Madison): *Layering in the Scientific Tradition: Newtonian and Modern Mechanics*

Wednesday, 13 July**2:00 p.m.–4:00 p.m. Sessions****Science-Technology Relations in Nineteenth-Century Britain**

Chair: Donald Cardwell (University of Manchester Institute of Science and Technology)

Gerrylyn Roberts (Open University): *The Society of Chemical Industry*

Colin Hempstead (Teeside Polytechnic): *Telegraphy: Science and Technology*

Bruce J. Hunt (University of Texas, Austin): *Cable Telegraphy and British Field Theory*

The Human Sciences in Early Twentieth-Century America

Chair: Roger Smith (University of Lancaster)

Stephen Cross (Johns Hopkins University): *Antinomies of Science and Society: "Cultural Lag" and the Image of Social Science between the Wars*

Jill Morawski (Wesleyan University): *Common Sense and the Common Science: The Fate of an Opponent of Popular Psychology*

Valerie Pinsky (University of Cambridge and Smithsonian Institution): *Archaeology at the Smithsonian, 1930–1960*

European Medicine around 1800: Institutions and National Styles

Chair: To be announced

Stephen Jacyna (Wellcome Unit, Glasgow): *Clinical Medicine in France and Scotland*

Arleen Tuchman (Vanderbilt University): *Military Interests and Medical Reform in Eighteenth-Century Prussia*

Mary Fissell (University of Pennsylvania): *Patients and the English Infirmaries*

Thursday, 14 July

2:00 p.m.–4:00 p.m. Sessions

Historiographical Perspectives

Chair: Roy Porter (Wellcome Institute, London)

John McEvoy (University of Cincinnati): *The Chemical Revolution and the Whig Interpretation of History: The Case for a Robust Contextualism*

H. Floris Cohen (Utrecht): *Nature and Causes of the Scientific Revolution*

J. Bruce Brackenbridge (Lawrence University): *Kuhn, Kepler, and Revolutions*

Science and Literature

Arranged by the Science and Literature Society

Chair: Lance Schachterle (Worcester Polytechnic)

Discussants: George Rousseau (University of California, Los Angeles), Stuart Peterfreund (Northeastern University), and Gillian Beer (University of Cambridge)

Centers and Colonies in Biology and Medicine

Chair: Nathan Reingold (Smithsonian Institution)

Edward J. Larson (University of Georgia): *Cui bono? Botanizing in the Southern Colonies*

Elizabeth Hachten (University of Wisconsin–Madison): *F. F. Erisman and the Russian Public Health Movement*

Ilana Loewy (Paris): *Science at the Periphery: Yellow Fever in Rio de Janeiro and the Pasteur Institute Mission*

Kathleen G. Dugan and Huang Weiwen (Chinese Academy of Sciences, Beijing): *American Science in Republican China: The Search for Fossil Man*

Institutions and Styles in Modern Physics and Mathematics

Chair: Gerald Holton (Harvard University)

Karen Parshall (University of Illinois): *Mathematics Comes to America: J. J. Sylvester at the Johns Hopkins University*

Raj Williamson (University of Manchester Institute of Science and Technology): *The Manchester School of Physics*

Robin Rider (University of California, Berkeley): *Operations Research in Britain and America*

Technology and Urban Infrastructure

Chair: To be announced

William Luckin (Bolton Institute and University of Manchester) and Russell Moseley: *CNAAs on the British National Grid*

Alan Wilson (University of Manchester): *Sanitary Engineering in Nineteenth-Century Manchester*

Joel Tarr (Carnegie-Mellon University): *The Development of the Network City in the United States*

4:30 p.m.–5:30 p.m. Sessions

Engraving the Moon: Acquiring a Comet

Chair: Albert Van Helden (Rice University)

William B. Ashworth (University of Missouri–Kansas City): *Claude Mellan and the Selenographical Tradition*

Pamela Gossin (University of Wisconsin–Madison): *The Reception and Use of John Flamsteed's Cometary Theory and Data by Isaac Newton and Edmund Halley*

Thinking about Geography

Chair: Janet Browne (Darwin Letters Project and University College, London)

Robert M. Brain (University of California, Los Angeles): *Popular Geography and the Quest for German Identity, 1848–1871*

Jane R. Camerini (University of Wisconsin–Madison): *Biological Distribution Maps in the Work of Darwin and Wallace*

The View from America: Flexner and Rockefeller in Europe

Chair: Robert E. Kohler (University of Pennsylvania)

Thomas Bonner (Wayne State University): *Abraham Flexner as Critic of British and Continental Medical Education*

Darwin H. Stapleton (Rockefeller Archive Center): *Assessment and Decision: The Rockefeller Foundation in Britain in the 1920s*

Science and Twentieth-Century Engineering

Chair: Jerry Ravetz (University of Leeds)

Edwin T. Layton (University of Minnesota): *The Dimensional Revolution and the Convergence of Physics and Engineering in the Twentieth Century*

Colin Divall (University of Manchester): *Academic Engineering in Twentieth-Century Britain*

Selling Science

Chair: Judith R. Goodstein (California Institute of Technology)

Bruce V. Lewenstein (Cornell University): *Public Understanding of Science in the United States after World War II*

Alan Morton (Science Museum, London): *The Laser-Scanner Supermarket Checkout in the USA*

Other papers accepted, to be scheduled

Sophie Forgan (Teesside Polytechnic): *The Context of Learning: The Development of University Buildings and Science in the Nineteenth and Early Twentieth Centuries*

Edward B. Davis (Messiah College): *Robert Boyle, Divine Freedom, and the Rejection of Rationalistic Natural Philosophy*

Registration

The details given in this program are subject to amendment. They are circulated now so that intending participants can make their arrangements well in advance.

Registration forms (and final fees) will appear in the January 1988 *Newsletter* for return by **10 April 1988**. Registration forms will also be sent at that time to all those requesting them. To ensure receipt of the form (especially if you are not a member of either society), you should complete the *preregistration form* attached below. Choices you indicate will be treated as provisional. Please make the effort to give this information as soon as possible; this will greatly assist the organizers.

Please keep this program. It will *not* be reissued in January.

Precirculation of papers

All those registered for the conference will receive a book containing the final program, papers for discussion in the morning sessions, and abstracts of papers to be given in the afternoon sessions.

Subsidies and speakers

Both societies hope to subsidize their postgraduate (i.e., student) members. The HSS is seeking funds to assist a limited number of participants with their travel expenses. HSS participants are urged to apply to the ACLS for travel grants (Christine M. Gillis, American Council of Learned Societies, 228 East 45th Street, New York, NY 10017). To request application forms, persons should address an inquiry to the Travel Grant Office of the ACLS, setting forth the name, dates, place, and sponsorship of the meeting, as well as a brief description of the nature of the applicant's scholarly interests and proposed role in the meeting. The deadline for completed applications is **1 March 1988**; prospective applicants should request forms **well in advance** of this deadline. The HSS is also seeking funds for travel grants from the National Science Foundation. The BSHS is willing to consider support of its British speakers in cases of exceptional hardship. But otherwise, all speakers will be expected to pay the same fees as other participants, and to pay their own expenses. This is in line with the normal practice of the two societies, and is clearly necessary in a conference where a high proportion of those attending will appear on the program.

Travel to Manchester from the USA

Information about group travel arrangements will be available at the Raleigh meeting and will appear in full in the January *Newsletter*. These arrangements will allow HSS members and their guests to depart from four U.S. cities on three U.S. airlines, with minimal restrictions. Though final plans were incomplete as the *Newsletter* went to press, HSS members and their guests who take advantage of this arrangement will probably be admitted to the banquet and to at least one of the special excursions without charge.

Displays for publishers and other parties

The conference building has ample space for displays. We expect the major book publishers to be represented. We shall also be including displays from museums, allied societies, and research centers, as well as from individuals who would like to present visual aspects of history of science.

Conference arrangements

Accommodation and meals. The conference sessions will be held in the Architecture Building of the University of Manchester. Meals, a bar, and bedrooms will be provided in an adjacent building (Manchester Business School, Cornbrook House). The accommodation is of two grades, to suit one's habits and purse: **Type A**—single rooms with bathroom en suite; and **Type B**—single (student) rooms in groups of four, sharing a bathroom.

Approximate charges are given below.

Evening functions. There will be a full social program. **Monday evening**—Introductory talks, plus a wine reception provided by the University of Manchester. **Tuesday evening**—Buffet and civic reception in Manchester Town Hall, followed by a lecture by Gillian Beer (University of Cambridge) on science and literature. **Thursday evening**—Banquet at one of England's best Chinese restaurants.

Excursions

On **Tuesday** there will be an organized, free visit to the Greater Manchester Museum of Science and Industry, a major and rapidly expanding museum based in the world's first passenger railway station, the terminus of the Liverpool-Manchester line. This museum is about a mile from the conference site and so is also accessible at other times.

On **Wednesday** afternoon there will be two excursions. Coaches will leave after lunch to Chatsworth House, home of the Devonshire family (Hobbes, Henry Cavendish, Cavendish Labs, etc.); one of England's finest country houses.

A second trip will leave at tea-time (after the afternoon sessions) for Styal Mill, a working museum of the textile industry, based on a perfectly preserved eighteenth-century mill, plus industrial village. It is set in pleasant countryside; one of the premier sites for study of the Industrial Revolution in Britain.

Because of these excursions Wednesday dinner is **NOT** part of the conference charge.

There will also be guides to the relevant sites of interest in Manchester itself.

Friday, 15 July

There may be some ancillary meetings; otherwise this is an opportunity to look around Manchester and the district.

Fee guidelines

These are for full members of the two sponsoring societies. There will be a mark-up for nonmembers of about £10. We hope to be able to subsidize postgraduate (i.e., student) members.

Registration fee and meals, no accommodation	£50
Fee and meals and type A accommodation (4 nights)	£130
Fee and meals and type B accommodation (4 nights)	£75

Extra charges

Banquet (Thursday)	£10
Chatsworth excursion	£6
Styal excursion	£4

The meals charge includes dinner on Monday (and reception); breakfast, lunch, and buffet on Tuesday; breakfast, lunch *but not* dinner on Wednesday and Thursday.

Preregistration Form

Please check as appropriate.

- I am interested in attending the BSHS-HSS Meeting in Manchester
- I am a Full Associate Student Member of BSHS.
- I am a Full Student Member of HSS.
- I am a member of neither society.

Of the morning sessions I would expect to attend

Tuesday

- Scientific Revolution I
- Scientific Revolution II
- Industrial Revolution
- Science, Education, Practice
- Sociological Approaches I
- Sociological Approaches II

Wednesday

- Corporate Strategy
- Industrial Research
- Migration
- Medicine
- Images
- Popularization

Thursday

- Gender and Science
- Women and Technology
- Science and Military
- Big Science
- Secularization I
- Secularization II

I would expect to visit (1) Manchester (2) Styal or (3) Chatsworth.

I expect do not expect to go to the banquet on Thursday.

I expect to require NO accommodation Type A accommodation Type B accommodation.

Please return this form by 1 December 1987 to J. V. Pickstone; Centre for the History of Science, Technology, and Medicine; Mathematics Tower; University of Manchester; Oxford Road; Manchester M13 9PL, UK.

This information is to assist conference planning. It does not commit you to particular choices or indeed to attending.

Name _____

Address _____

Books Received by Isis March-May 1987

Held over from the July issue

Terry S. Reynolds (Compiler and Editor). *The Machine in the University: Sample Course Syllabi for the History of Technology and Technology Studies*. With the assistance of the Technology Studies and Education Committee of the Society for the History of Technology. iv + 241 pp. Second edition. Bethlehem, Pa.: Lehigh University and Michigan Technological University Science, Technology, and Society Programs, 1987. \$7.95 [paper]. (Photo-offset from typescript.)

Heinrich Rickert. *The Limits of Concept Formation in Natural Science: A Logical Introduction to the Historical Sciences* (abridged edition). Edited and translated by **Guy Oakes**. (Texts in German Philosophy.) xxxii + 240 pp., index. Cambridge/London/New York: Cambridge University Press, 1986.

John S. Rigden. *Rabi: Scientist and Citizen*. (Alfred P. Sloan Foundation Series.) xiii + 302 pp., illus., apps., index. New York: Basic Books, 1987. \$21.95.

James C. Riley. *The Eighteenth-Century Campaign to Avoid Disease*. xvii + 213 pp., bibl., index. New York: St. Martin's Press, 1987. \$29.95.

Grazyna Rosińska. *Optyka w XV wieku: Między nauką średniowieczną a nowożytną. (Fifteenth-Century Optics: Between Medieval and Modern Science.)* (Studia Copernica, 24.)

190 pp., illus., apps., indexes, English summary. Warsaw: Polish Academy of Sciences, 1986. Zl 500.

Colin A. Russell. *Lancastrian Chemist: The Early Years of Sir Edward Frankland*. x + 187 pp., illus., indexes. Milton Keynes/Philadelphia: Open University Press, 1986. (Distributed in North America by Taylor & Francis, Philadelphia.) \$63.

Henry Savage, Jr.; Elizabeth J. Savage. *André and François André Michaux*. x + 435 pp., illus., bibl., index. Charlottesville: University Press of Virginia, 1986. \$27.50.

Elizabeth Scarborough; Laurel Furumoto. *Untold Lives: The First Generation of American Women Psychologists*. xiv + 236 pp., illus., apps., bibl., index. New York: Columbia University Press, 1987. \$27.50.

I. I. Schmalhausen. *Factors of Evolution: The Theory of Stabilizing Selection*. Edited by **Theodosius Dobzhansky**. Translated by **Isadora Dordick**. With a new foreword by **David B. Wake**. xxii + 327 pp., illus., figs., bibl., indexes. Chicago/London: University of Chicago Press, 1986. \$14.95 [paper].

Laurence Schneider (Editor). *Lysenkoism in China: Proceedings of the 1956 Qingdao Genetics Symposium*. Translated by **Qin Shizhen** and **Laurence Schneider**. (Chinese Law and Government, 1986, 19[2].) xxii + 98 pp. Armonk, N.Y.: M. E. Sharpe, 1986. \$16.95 [paper].

Philip Scranton; Walter Licht. *Work Sights: Industrial Philadelphia, 1890-1950*. 279 pp., illus., bibl., index. Philadelphia: Temple University Press, 1986. \$29.95.

Elizabeth Sears. *The Ages of Man: Medieval Interpretations of the Life Cycle*. xviii + 236 pp., 98 plates, bibl., index. Princeton, N.J./Guildford, Surrey: Princeton University Press, 1986. \$55.

Bruce Sinclair (Editor). *New Perspectives on Technology and American Culture*. (American Philosophical Society Library Publication No. 12.) ix + 81 pp. Philadelphia: American Philosophical Society, 1986. \$5 [paper].

Audrey Z. Smith. *A History of the Hope Entomological Collections in the University Museum, Oxford, with Lists of Archives and Collections*. xiii + 172 pp., illus., apps., index. Oxford/New York: Clarendon Press of Oxford University Press, 1986. \$29.95.

Duane A. Smith. *Mining America: The Industry and the Environment, 1800-1980*. (Development of Western Resources.) xiii + 210 pp., illus., bibl., index. Lawrence: University Press of Kansas, 1987. \$29.95.

Albert W. Snoke. *Hospitals, Health, and People*. xii + 232 pp., illus., index. New Haven/London: Yale University Press, 1987. \$27.50.

Robert Sobel; David B. Sicilia. *The Entrepreneurs: An American Adventure*. Foreword by **Alfred D. Chandler, Jr.** Illustrations compiled by **Martin W. Sandler**. x + 278 pp., illus., bibl., index. Boston: Houghton Mifflin, 1986. \$29.95.

Michael M. Sokal (Editor). *Psychological Testing and American Society, 1890-1930*. xiii + 205 pp., illus., index. New Brunswick, N.J./London: Rutgers University Press, 1987. \$28.

Richard Sorabji (Editor). *Philoponus and the Rejection of Aristotelian Science*. ix + 253 pp.,

bibl., indexes. Ithaca, N.Y.: Cornell University Press, 1987. \$42.50.

Robert Spaemann; Reinhard Löw; Peter Koslowski (Editors). *Evolutionismus und Christentum*. (Civitas Resultate, 9.) ix + 152 pp., index. Weinheim: Acta humaniora, VCH, 1986. DM 38.

Arthur M. Squires. *The Tender Ship: Governmental Management of Technological Change*. xix + 247 pp., illus., app., index. Boston/Basel/Stuttgart: Birkhäuser, 1986. SwF 68.

Johannes Stark. *Erinnerungen eines deutschen Naturforschers*. Edited by **Andreas Kleinert**. x + 153 pp., illus., index. Mannheim: Bionomica Verlag, 1987. DM 20 [paper].

John T. Stock; Mary Virginia Orna, O.S.U. (Editors). *The History and Preservation of Chemical Instrumentation*. (Chemists and Chemistry, 8.) (Proceedings of the ACS Division of the History of Chemistry Symposium, Chicago, 9-10 September 1985.) viii + 268 pp., illus., indexes. Dordrecht/Boston/Lancaster: D. Reidel, 1986. (Distributed in North America by Kluwer Academic Publishers, Norwell, Mass.) Dfl 125, \$59, £39.75. (Photo-offset from typescript.)

Robert G. Strom. *Mercury: The Elusive Planet*. (Smithsonian Library of the Solar System.) xii + 197 pp., illus., apps., index. Washington, D.C./London: Smithsonian Institution Press, 1987. \$19.95.

K. Sundaram. *Cassirer's Conception of Causality*. (American University Studies, Series 5: Philosophy, 28.) xii + 147 pp., bibl., index. New York/Bern/Frankfurt am Main: Peter Lang, 1987. \$26.

Richard S. Tedlow; Richard R. John, Jr. (Editors). *Managing Big Business: Essays from the Business History Review*. xxvii + 425 pp., figs., index. Boston: Harvard Business School Press, 1986. \$26 (cloth); \$12.95 (paper).

Arnold Thackray (Compiler). *Contemporary Classics in Physical, Chemical, and Earth Sciences*. (Contemporary Classics in Science.) Foreword by **Gerald Holton**. Preface by **Eugene Garfield**. xviii + 375 pp., indexes. Philadelphia: ISI Press, 1986. \$39.95.

Arnold Thackray (Compiler). *Contemporary Classics in Engineering and Applied Science*. Foreword by **Melvin Kranzberg**. Preface by **Eugene Garfield**. (Contemporary Classics in Science.) xviii + 362 pp., indexes. Philadelphia: ISI Press, 1986. \$39.95.

Cecelia Tichi. *Shifting Gears: Technology, Literature, Culture in Modernist America*. xvii + 310 pp., illus., bibl., index. Chapel Hill/London: University of North Carolina Press, 1987. \$35 (cloth); \$14.95 (paper).

Shin'ichirō Tomonaga. *Welt im Spiegel*. Edited by **Erwin Müller-Hartmann**. Translated by **Wolfgang Muntschick**. 130 pp. Stuttgart: Franz Steiner Verlag Wiesbaden, 1986. DM 28 [paper].

George D. Tselos; Colleen Wickey (Compilers). *A Guide to Archives and Manuscript Collections in the History of Chemistry and Chemical Technology*. (Center for History of Chemistry Publication No. 7.) viii + 198 pp., illus., indexes. Philadelphia: Center for History of Chemistry, 1987. \$7.50 [paper].

James Turner. *Without God, Without Creed: The Origins of Unbelief in America*. (New Studies in American Intellectual and Cultural

History.) xviii + 316 pp., index. Baltimore/London: Johns Hopkins University Press, 1985. \$26 (cloth); \$12.95 (paper).

Stephen P. Turner. *The Search for a Methodology of Social Science: Durkheim, Weber, and the Nineteenth-Century Problem of Cause, Probability, and Action*. (Boston Studies in the Philosophy of Science, 92.) xv + 251 pp., bibl., index. Dordrecht/Boston/Lancaster: D. Reidel, 1986. (Distributed in the U.S. and Canada by Kluwer Academic Publishers, Norwell, Mass.) Dfl 105, \$39.50, £29.25.

Sharaf al-Din al-Jūsi. *Oeuvres mathématiques: algèbre et géométrie au XII siècle*. Compiled and edited by **Roshdi Rashed**. (Collection Sciences et Philosophie Arabes, Textes et Etudes.) 2 volumes. 900 pp., figs., bibl., index. Paris: Société d'Édition "Les Belles Lettres," 1986. Fr 640.

David K. van Keuren. "The Proper Study of Mankind": *An Annotated Bibliography of Manuscript Sources on Anthropology and Archeology in the Library of the American Philosophical Society*. (American Philosophical Society Library Publication No. 10.) 79 pp. Philadelphia: American Philosophical Society, 1986. \$5 (paper).

Edward Wenk, Jr. *Tradeoffs: Imperatives of Choice in a High-Tech World*. xii + 238 pp., figs., bibl., index. Baltimore/London: Johns Hopkins University Press, 1986. \$19.95.

James O. Wheeler; Francis M. Sibley (Compilers). *Dictionary of Quotations in Geography*. xiv + 257 pp., bibl., index. New York/Westport, Conn./London: Greenwood Press, 1986. \$45.

Norbert Wiener. *Collected Works with Commentaries*. Edited by **P. Masani**. Volume IV: *Cybernetics, Science, and Society; Ethics, Aesthetics, and Literary Criticism; Book Reviews and Obituaries*. (Mathematicians of Our Time, 23.) xx + 1083 pp., illus., figs., index. Cambridge, Mass./London: MIT Press, 1985. \$85.

Robert C. Williams. *Fordson, Farnall, and Poppin' Johnny: A History of the Farm Tractor and Its Impact on America*. ix + 232 pp., illus., figs., bibl., index. Urbana/Chicago: University of Illinois Press, 1987.

Trevor I. Williams. *Howard Florey: Penicillin and After*. xvi + 404 pp., illus., index. Oxford/London/New York: Oxford University Press, 1984. \$29.95.

Howard S. Wolko (Editor). *The Wright Flyer: An Engineering Perspective*. ix + 106 pp., illus., figs. Washington, D.C.: Smithsonian Institution Press for the National Air and Space Museum, 1987. \$9.95 (paper).

Gereon Wolters. *Mach I, Mach II, Einstein und die Relativitätstheorie. Eine Fälschung und ihre Folgen*. xv + 474 pp., app., bibl., index. Berlin/New York: Walter de Gruyter, 1987. DM 188, \$104.50.

David Woodward (Editor). *Art and Cartography: Six Historical Essays*. (The Kenneth Nebenzahl, Jr., Lectures in the History of Cartography.) xvi + 249 pp., illus., index. Chicago/London: University of Chicago Press, 1987. \$65.

Helen Wright. *James Lick's Monument: The Saga of Captain Richard Floyd and the Building of the Lick Observatory*. xvi + 231 pp., illus., index. Cambridge/London/New York: Cambridge University Press, 1987. \$32.50.

PUBLICATIONS, ETC.

The Smithsonian Institution has just published *A Brief History of Geomagnetism and a Catalog of the Collections of the National Museum of American History*, by Robert P. Multhauf and Gregory Good (Smithsonian Studies in History and Technology, 48) (87 pages; 75 photographs and illustrations). The work concentrates on instruments used in America. It is available free of charge to scholars and researchers by writing on official letterhead to Deborah J. Warner, National Museum of American History, Room 5122, Smithsonian Institution, Washington, DC 20560.

The American Institute of the History of Pharmacy and the British Society for the History of Pharmacy (BSHP) have collaborated in the publication of *My Dear Mr. Bell: Letters from Dr. Jonathan Pereira to Mr. Jacob Bell, London, 1844-1853*, edited by C. P. Cloughly, J. G. L. Burby, and M. P. Earles. Funded in part by the estate of Cecil P. Cloughly and the BSHP, this work provides valuable insight into the lives of two key individuals at the center of pharmaceutical developments in Great Britain during nine formative years of the Pharmaceutical Society of Great Britain. The letters are especially informative about the influence of these two men on the character and policies of the *Pharmaceutical Journal* during this time. *My Dear Mr. Bell* can be ordered from the AIHP, Pharmacy Building, 425 North Charter Street, Madison, WI 53706, at a cost of \$11 [\$6.60 to AIHP members].

TRANSCRIPT AVAILABLE

Frank L. A. Gerbode: Pioneer Cardiovascular Surgeon, a bound and indexed series of interviews conducted by Sally Smith Hughes, may be ordered at cost (\$76) from the Regional Oral History Office, 486 Bancroft Library, University of California, Berkeley, CA 94720; telephone (415) 642-7395. The interviews document the late surgeon's contributions to the postwar growth of open heart surgery, his invention of surgical procedures and instruments, and his collaboration in the development of a membrane heart-lung machine and in computerized patient monitoring. The oral history also details Gerbode's major role in the institutional history of Stanford Presbyterian Hospital, now Pacific Presbyterian Medical Center.

CALL FOR INFORMATION

The seventh annual bibliography of works on the history of Australian science is expected to be published in the Australian Academy of Science's *Historical Records of Australian Science* in December 1987. The bibliography will list mainly works published during 1986 but will also include earlier items that have been omitted from previous bibliographies. The compiler is seeking relevant material published during 1986. Please send details or copies of books, journal articles, theses, reports, and reviews on the subject to L. E. Carlson, Deakin University Library, Deakin University, Victoria 3217, Australia.

Archives and Other Resources

The **Hunt Botanical Library**, Hunt Institute for Botanical Documentation, Carnegie-Mellon University, has received a grant to convert portions of the library's card catalogue into machine-readable form and to make its holdings available for resource sharing by contributing this information to the Online Computer Library Center (OCLC) database. Approximately one quarter of the collection is to be converted, including the floristic and systematic literature, the essential material of taxonomic botany. For further information contact the Hunt Institute, Carnegie-Mellon University, Pittsburgh, PA 15213; telephone (412) 268-2434.

The **Institute for Research in Classical Philosophy and Science** (Pittsburgh) currently has under its care the 26,174 file cards prepared over the last sixty years by **Otto Neugebauer** (Institute for Advanced Study, Princeton), the renowned historian of the exact sciences. These cards fall into two types. The first are detailed and meticulously written subject cards that divide the history of the exact sciences by time period, culture, and topic. These subject cards are keyed to the second type of cards, the bibliographical cards that record the literature and documents Neugebauer consulted. With the permission of Professor Neugebauer, the Institute for Research in Classical Philosophy and Science has prepared microfilm and microfiche versions of these cards, which will now be made available to scholars and institutions, along with a user's guide and directory. For more information contact Alan C. Bowen, Institute for Research in Classical Philosophy and Science, 1314 Browning Road, Pittsburgh, PA 15206; telephone (412) 362-3572.

Books Received by Isis
June-August 1987

Ordering information: Books and publications listed in the *HSS Newsletter* are available from the publisher. The History of Science Society cannot fill orders for non-HSS publishers.

Note: Most books on the Books Received List that will be reviewed in *Isis* have already been assigned to reviewers. If you are interested in reviewing a forthcoming book for *Isis*, please fill in the coupon "News of Forthcoming Books" in earlier issues of the *Newsletter*.

Donald J. Albers; G. L. Alexanderson (Editors). *Mathematical People: Profiles and Interviews*. Introduction by **Philip J. Davis**. xvi + 372 pp., illus., figs., index. Boston/Basel/Stuttgart: Birkhäuser, 1986. \$24.95.

Toby A. Appel. *The Cuvier-Geoffroy Debate: French Biology in the Decades Before Darwin*. (Monographs in the History and Philosophy of Biology.) 305 pp., illus., figs., apps., index. New York/Oxford: Oxford University Press, 1987. \$35.

Wallace Arthur. *Theories of Life: Darwin, Mendel, and Beyond*. 214 pp., bibl., index. Harmondsworth, Middlesex/New York/Victoria: Penguin, 1987. £3.95, \$6.95 (paper).

Robert C. Bannister. *Sociology and Scientism: The American Quest for Objectivity, 1880-1940*. ix + 301 pp., bibl., index. Chapel Hill/London: University of North Carolina Press, 1987. \$29.95.

Michael Banton. *Racial Theories*. vi + 181 pp., bibl., index. Cambridge/London/New York: Cambridge University Press, 1987. \$44.50 (cloth); \$12.95 (paper).

Margaret E. Baron. *The Origins of the Infinitesimal Calculus*. (Dover Classics of Science and Mathematics.) vii + 304 pp., figs., bibl., index. Reprint edition. Oxford: Pergamon, 1969; New York: Dover, 1987. \$7.95 (paper).

Isaac Barrow. *Isaac Barrow's Optical Lectures, 1667*. Edited by **A. G. Bennett** and **D. F. Edgar**. Translated by **H. C. Fay**. xxxv + 243 pp., figs. London: Worshipful Company of Spectacle Makers, 1987. £25 (paper).

Armida Batori. *Clavis scientiarum: La catalogazione automatizzata dei libri scientifici antichi*. (Collana di Storia della Scienza.) 136 pp., figs., apps., bibl. Milan: Università degli Studi di Pavia, 1987. (Paper.)

Peter Baxandall; Hans Liebeck. *Vector Calculus*. (Oxford Applied Mathematics and Computing Science Series.) ix + 550 pp., figs., bibl., index. Oxford/New York: Oxford University Press, 1986. \$49.95.

Edward H. Beardsley. *A History of Neglect: Health Care for Blacks and Mill Workers in the Twentieth-Century South*. xvi + 383 pp., illus., figs., bibl., index. Knoxville: University of Tennessee Press, 1987. \$34.95.

Peter Beighton; Greta Beighton. *The Man Behind the Syndrome*. Foreword by **John M. Opitz**. 240 pp., illus., index. Berlin/Heidelberg/New York: Springer-Verlag, 1986. \$36.

D. S. Bendall (Editor). *Evolution from Molecules to Men*. xiii + 594 pp., figs., index. Cambridge/London/New York: Cambridge University Press, 1983. \$19.95 (paper).

Thomas Bender. *New York Intellect: A History of Intellectual Life in New York City, from 1750 to the Beginnings of Our Own Time*. xix + 422 pp., index. New York: Alfred A. Knopf, 1987. \$25.

Andrew W. Benjamin; Geoffrey N. Cantor; John R. R. Christie (Editors). *The Figural and the Literal: Problems of Language in the History of Science and Philosophy, 1630-1800*. (Based on papers presented at a conference at Leeds University, 10-12 January 1984.) 229 pp., figs. Manchester: Manchester University Press, 1987. £27.50.

Fabio Bevilacqua (Editor). *Atti del VII Congresso Nazionale di Storia della Fisica*. (Based on papers presented at Società Italiana di Fisica, LXXII Congresso Nazionale, Padova, 2-7 October 1986). 333 pp., figs. Milan: Consiglio Nazionale delle Ricerche, Gruppo Nazionale di Coordinamento per la Storia della Fisica, 1987. (Paper.) (Photo-offset from typescript.)

Wiebe E. Bijker; Thomas P. Hughes; Trevor Pinch (Editors). *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology*. xiii + 405 pp., illus., bibl., indexes. Cambridge, Mass./London: MIT Press, 1987. \$35.

Johanna Bleker; Heinz-Peter Schmiedebach (Editors). *Medizin und Krieg: Vom Dilemma der Heilberufe 1865 bis 1985*. 272 pp., index. Frankfurt am Main: Fischer Taschenbuch Verlag, 1987. (Paper.)

Stuart Blume; Joske Bunders; Loet Leydesdorff; Richard Whitley (Editors). *The Social Direction of the Public Sciences: Causes and Consequences of Co-operation between Scientists and Non-scientific Groups*. (Sociology of the Sciences: A Yearbook, XI.) xvi + 359 pp., figs., index. Dordrecht/Boston/Lancaster: D. Reidel, 1987. \$36 (paper).

Gernot Böhme; Nico Stehr (Editors). *The Knowledge Society: The Growing Impact of Scientific Knowledge on Social Relations*. (Sociology of the Sciences: A Yearbook, X.) xi + 209 pp., index. Dordrecht/Boston/Lancaster: D. Reidel, 1986. \$59.

Niels Bohr. *The Philosophical Writings of Niels Bohr*. Volume I: *Atomic Theory and the Description of Nature*. (Cambridge: Cambridge University Press, 1934). 119 pp. Volume II: *Essays 1933-1957 on Atomic Physics and Human Knowledge*. (New York: Wiley, 1958). viii + 101 pp., figs. Volume III: *Essays 1958-1962 on Atomic Physics and Human Knowledge*. (New York: Wiley, 1963). vii + 100 pp. Woodbridge, Conn.: Ox Bow Press, 1987. \$20 each (cloth); \$10 each (paper).

G. C. Bond. *Heterogeneous Catalysts: Principles and Applications*. (Oxford Chemistry Series, 34.) x + 176 pp., figs., bibl., index. Second edition. Oxford/New York: Oxford University Press, 1987. \$39.95 (cloth); \$17.95 (paper).

Henri Bouasse. *Cordes et membranes: Instruments de musique à cordes et à membranes.* (Bibliothèque scientifique de l'ingénieur et du physicien.) xxiv + 505 pp., illus., figs. Paris: Librairie Delagrave, 1926; Albert Blanchard, 1987. Fr 249 (paper).

Henri Bouasse. *Verges et plaques, cloches et carillons.* (Bibliothèque scientifique de l'ingénieur et du physicien.) xxiv + 455 pp., illus., figs., index. Paris: Librairie Delagrave, 1927; Albert Blanchard, 1987. Fr 235 (paper).

Peter Brain. *Galen on Bloodletting: A Study of the Origins, Development, and Validity of His Opinions, with a Translation of the Three Works.* xiii + 189 pp., bibl., index. Cambridge/London/New York: Cambridge University Press, 1986.

Philippe Breton. *Histoire de l'informatique.* (Histoire des Sciences.) 239 pp., figs., bibl., index. Paris: Editions la Découverte, 1987. Fr 85 (paper).

Peter Brimblecombe. *The Big Smoke: A History of Air Pollution in London Since Medieval Times.* xiv + 185 pp., illus., bibl., index. London/New York: Methuen, 1987. \$39.95.

Harold I. Brown. *Observation and Objectivity.* xii + 255 pp., bibl., index. New York/Oxford: Oxford University Press, 1987. \$24.95.

Barry Brundell. *Pierre Gassendi: From Aristotelianism to a New Natural Philosophy.* (Synthese Historical Library, 30.) x + 251 pp., bibl., index. Dordrecht/Boston/Lancaster: D. Reidel, 1987. Dfl 130, \$64, £49.

Leonard C. Bruno. *The Tradition of Science: Landmarks of Western Science in the Collections of the Library of Congress.* xi + 350 pp., illus., bibl., index. Washington, D.C.: Library of Congress, 1987. \$30.

Robert Burton. *Eggs: Nature's Perfect Package.* 158 pp., bibl., index. New York/Oxford: Facts on File, 1987. \$22.95.

Alphonse de Candolle. *Histoire des sciences et des savants depuis deux siècles, d'après l'opinion des principales académies ou sociétés scientifiques.* (Corpus des Oeuvres de Philosophie en Langue Française.) 314 pp., illus. Paris: Fayard, 1987. Fr 150.

Catalogue of the Transylvania University Medical Library. Introduction by **Roemol Henry.** xxvii + 635 pp., illus., apps., index. Lexington, Ky: Transylvania University Press, 1987.

Susan E. Cayleff. *Wash and Be Healed: The Water-Cure Movement and Women's Health.* (Health, Society, and Policy.) x + 247 pp., illus., bibl., index. Philadelphia: Temple University Press, 1987. \$29.95.

Arnold M. Clark. *Understanding Science Through Evolution: A Humanist Approach.* (American Lecture Series, 109.) xv + 148 pp., figs., bibl., index. Springfield, Ill.: Charles C Thomas, 1987. \$21.50 (paper).

Joel Colton; Stuart Bruchey (Editors). *Technology, the Economy, and Society: The American Experience.* xiii + 287 pp. New York: Columbia University Press, 1987. \$35.

Alain Corbin. *The Foul and the Fragrant: Odor and the French Social Imagination.* Translated by **Miriam Kochan.** vii + 307 pp., index. Cambridge, Mass.: Harvard University Press, 1986.

Nora Crook; Derek Guiton. *Shelley's Venomed Melody.* xii + 273 pp., illus., index. Cambridge

London/New York: Cambridge University Press, 1986.

C. R. Day. *Education for the Industrial World: The Ecoles d'Arts et Métiers and the Rise of French Industrial Engineering.* ix + 293 pp., figs., bibl., index. Cambridge, Mass./London: MIT Press, 1987. \$30.

Gordon E. Dean. *Forging the Atomic Shield: Excerpts from the Office Diary of Gordon E. Dean.* Edited by **Roger M. Anders.** xxxii + 309 pp., app., index. Chapel Hill/London: University of North Carolina Press, 1987. \$27.95.

Allen G. Debus. *Chemistry, Alchemy, and the New Philosophy, 1550-1700.* (Collected Studies Series, CS249.) xii + 332 pp., figs., index. London: Variorum Reprints, 1987. £32.

Robert A. Divine (Editor). *The Johnson Years. Volume II: Vietnam, the Environment, and Science.* ix + 267 pp., index. Lawrence: University of Kansas Press, 1987. \$25.

Mary Douglas. *How Institutions Think.* (The Frank W. Abrams Lectures, presented at Syracuse University, March 1985.) xi + 146 pp., bibl., index. Syracuse: Syracuse University Press, 1986. \$19.95 (cloth); \$10.95 (paper).

M. Dresden. *H. A. Kramers: Between Tradition and Revolution.* xxiv + 563 pp., illus., app., index. Berlin/Heidelberg/New York: Springer-Verlag, 1987. \$59.95.

Krishna R. Dronamraju. *Haldane: The Life and Work of J. B. S. Haldane with Special Reference to India.* Foreword by **Naomi Mitchison.** xvi + 211 pp., illus., app., bibl., indexes. Aberdeen: Aberdeen University Press, 1985.

Pierre Duhem. *Prémices philosophiques.* Edited with an introduction in English by **Stanley L. Jaki.** (Brill's Studies in Intellectual History, 3.) xiii + 239 pp., index. Leiden/New York: Brill, 1987. Dfl 95, \$43.25.

Jean-Paul Dumont. *Introduction à la méthode d'Aristote.* (Bibliothèque d'Histoire de la Philosophie.) 223 pp., figs., index. Paris: J. Vrin, 1986. Fr 150 (paper).

Ellen Dwyer. *Homes for the Mad: Life Inside Two Nineteenth-Century Asylums.* xiv + 309 pp., figs., bibl., index. New Brunswick, N.J./London: Rutgers University Press, 1987. \$32.

Albert Einstein. *The Collected Papers of Albert Einstein. Volume I: The Early Years: 1879-1902.* Edited by **John Stachel.** lxvi + 433 pp., illus., bibl., index. Princeton, N.J.: Princeton University Press, 1987. \$52.50.

_____. *The Collected Papers of Albert Einstein. Volume I: The Early Years, 1879-1902.* Translated by **Anna Beck,** with **Peter Havaas** as consultant. xxii + 142 pp.. Princeton, N.J.: Princeton University Press, 1987. (Paper.)

H. Tristram Engelhardt, Jr.; Arthur L. Caplan (Editors). *Scientific Controversies: Case Studies in the Resolution and Closure of Disputes in Science and Technology.* x + 639 pp., indexes. Cambridge/London/New York: Cambridge University Press, 1987. \$59.50 (cloth); \$19.95 (paper).

J. Worth Estes; David M. Goodman. *The Changing Humors of Portsmouth: The Medical Biography of an American Town, 1623-1983.* xv + 361 pp., illus., apps., index. Boston: Francis A. Countway Library of Medicine, 1986. (Distributed by Science History Publications/USA.) \$19.95.

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Krin Gabbard; Glen O. Gabbard. *Psychiatry and the Cinema.* Foreword by **Irving Schneider.** xx + 304 pp., illus., index. Chicago/London: University of Chicago Press, 1987. \$24.95.

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Robert Mortimer Gascoigne. *A Chronology of the History of Science, 1450-1900.* (Garland Reference Library of the Humanities, 714.) xi + 585 pp., app., index. New York/London: Garland, 1987. (Photo-offset from typescript.)

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Peter Goldman. *The End of the World That Was: Six Lives in the Atomic Age.* (A Newsweek Book.) xiv + 129 pp., illus., index. New York/Scarborough, Ont.: New American Library, 1986. \$6.95, Can \$9.25 (paper).

Robert B. Gordon; Tjalling C. Koopmans; William D. Nordhaus; Brian J. Skinner. *Toward a New Iron Age? Quantitative Modeling of Resource Exhaustion.* vi + 173 pp., illus., figs., bibl., index. Cambridge, Mass./London: Harvard University Press, 1987. \$25.

Roy Gould. *Going Sour: Science and Politics of Acid Rain.* 155 pp., illus., figs., apps., bibl. Boston/Basel/Stuttgart: Birkhäuser, 1985. \$11.95 (paper).

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Ivor Grattan-Guinness (Editor). *History in Mathematics Education*. (Cahiers d'Histoire et de Philosophie des Sciences, 21.) (Proceedings of a workshop held at the University of Toronto, July–August 1983.) 208 pp., figs., index. Paris: Société Française d'Histoire des Sciences et des Techniques, 1987. (Distributed by Librairie Belin, Paris.) (Paper.)

Jeremy Gray. *Linear Differential Equations and Group Theory from Riemann to Poincaré*. 460 pp., figs., apps., bibl., index. Boston/Basel/Stuttgart: Birkhäuser, 1986. \$51.50. (Photo-offset from typescript.)

Zvi Griliches (Editor). *R & D, Patents, and Productivity*. (National Bureau of Economic Research Conference Report.) xi + 512 pp., figs., apps., indexes. Chicago/London: University of Chicago Press, 1984. (Paper.)

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Henry E. Guerlac. *Radar in World War II*. (The History of Modern Physics, 1800–1950, 8.) 2 volumes. xxvi + 1171 pp., illus., figs., apps., indexes. New York: American Institute of Physics/Tomash, 1987. \$110.

Antonio Alberto Guerrino. *La psiquiatria Argentina*. (Colección de Doctor a Doctor.) 272 pp., illus., apps., bibl., index. Buenos Aires: Editores Cuatro, 1982. (Paper.)

Arsenij Gulyga. *Immanuel Kant: His Life and Thought*. Translated by Marijan Despalatović. xi + 295 pp., apps. Boston/Basel/Stuttgart: Birkhäuser, 1987. \$55.

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Ernst Haeckel. *Das System der Medusen: Textband und Atlasband*. 2 volumes. 832 pp., illus. Reprint edition. Weinheim/Deerfield Beach, Fla: VCH, 1986. DM 396.

D. W. Hafemeister; D. Schroerer (Editors). *Physics, Technology, and the Nuclear Arms Race*. (AIP Conference Proceedings, 104.) (Based on papers presented at the American Physical Society, Baltimore, 17 April 1983.) viii + 372 pp., illus., figs., apps. New York: American Institute of Physics, 1983. \$36.75.

A. Rupert Hall; B. A. Bembridge. *Physic and Philanthropy: A History of the Wellcome Trust, 1936–1986*. Foreword by Sir David Steel. xi + 477 pp., illus., apps., index. Cambridge/London/New York: Cambridge University Press, 1986. \$39.50.

Günther Hamann (Editor). *Aufsätze zur Geschichte der Naturwissenschaften und Geographie*. (Österreichische Akademie der Wissenschaften, Philosophisch-historische Klasse, Sitzungsberichte 475.) (Veröffentlichungen der Kommission für Geschichte der Mathematik, Naturwissenschaften und Medizin, 44.) 220 pp., illus., figs. Vienna: Verlag der Österreichischen Akademie der Wissenschaften, 1986. S 490, DM 70 (paper).

James R. Hansen. *Engineer in Charge: A History of the Langley Aeronautical Laboratory, 1917–1958*. (The NASA History Series.) xxxviii + 620 pp., illus., apps., index. Washington, D.C.: National Aeronautics and Space Administration, 1987. (Paper.)

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Rom Harré. *Varieties of Realism: A Rationale for the Natural Sciences*. vii + 375 pp., figs., indexes. Oxford/New York: Basil Blackwell, 1986. \$34.95.

Ahmad Y. al-Hassan; Donald R. Hill. *Islamic Technology: An Illustrated History*. xiv + 304 pp., illus., bibl., index. Paris: UNESCO; Cambridge/London/New York: Cambridge University Press, 1987. \$39.50.

Peter Hayes. *Industry and Ideology: I.G. Farben in the Nazi Era*. xxviii + 411 pp., illus., apps., index. Cambridge/London/New York: Cambridge University Press, 1987. \$39.50.

Tamara Miner Haygood. *Henry William Ravenel, 1814–1887: South Carolina Scientist in the Civil War Era*. (History of American Science and Technology Series.) xii + 204 pp., illus., bibl., index. Tuscaloosa/London: University of Alabama Press, 1987. \$22.95.

Samuel P. Hays. *Beauty, Health, and Permanence: Environmental Politics in the United States, 1955–1985*. With the assistance of Barbara D. Hays. (Studies in Environment and History.) xv + 630 pp., index. Cambridge/New York: Cambridge University Press, 1987. \$29.95.

L. S. Hearnshaw. *The Shaping of Modern Psychology: An Historical Introduction*. viii + 423 pp., bibl., indexes. London/New York: Routledge & Kegan Paul, 1987. \$36.95.

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Jeffrey Herf. *Reactionary Modernism: Technology, Culture, and Politics in Weimar and the Third Reich*. xii + 251 pp., figs., bibl., index. Cambridge/London/New York: Cambridge University Press, 1984. (Paper.)

Ernest R. Hilgard. *Psychology in America: A Historical Survey*. xxix + 1009 pp., illus., figs., indexes. San Diego, Calif./New York/Chicago: Harcourt Brace Jovanovich, 1987.

Janet D. Hine. *Roger North's Writings on Music to c. 1703: A Set of Analytical Indexes*. With digests of the manuscripts by Mary Chan and Jamie C. Kassler. 206 pp., app., bibl. Kensington: University of New South Wales School of English, 1986. (Paper.)

Henry M. Hoeningwald; Linda F. Wiener (Editors). *Biological Metaphor and Cladistic Classification: An Interdisciplinary Perspective*. xiii + 286 pp., figs., index. Philadelphia: University of Pennsylvania Press, 1987. \$25.

Mel Horwitch. *Clipped Wings: The American SST Conflict*. x + 473 pp., illus, index. Cambridge, Mass./London: MIT Press, 1982. \$25.

Eise Hoyrup. *Women of Science, Technology and Medicine: A Bibliography*. (Skriftserie fra Roskilde Universitetsbibliothek, 15.) viii + 132 pp. Roskilde, Denmark: Roskilde University Library, 1987. Free of charge (paper).

William Graves Hoyt. *Goon Mountain Controversies: Meteor Crater and the Development of Impact Theory*. Foreword by Eugene M. Shoemaker. xii + 442 pp., illus., index. Tucson: University of Arizona Press, 1987. \$40.

Richard P. Huemer (Editor). *The Roots of Molecular Medicine: A Tribute to Linus Pauling*. (Based on papers presented at a symposium of the Orthomolecular Medical Society, San Francisco, 7–8 May 1983.) 290 pp., illus., figs., index. New York/Oxford: Freeman, 1986. \$26.95.

Robert J. Hunter. *Foundations of Colloid Science*. Volume I. xi + 673 pp., figs., apps., index. Oxford/New York: Oxford University Press, 1987. \$115.

Anthony Huxley. *Plant and Planet*. 480 pp., illus., bibl., index. Revised edition. Harmondsworth, Middlesex/New York: Penguin, 1987. \$6.95, £4.95 (paper).

Georges Ifrah. *Universalgeschichte der Zahlen*. 580 pp., illus., app., bibl. Frankfurt/New York: Campus Verlag, 1986. DM 78.

Dallas Irvine (Editor). *Wrong Relativity and a New Mathematics: Two Upsets of Established Belief Systems*. 260 pp., figs. St. Louis: Warren H. Green, 1987. (Paper.)

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Vincent C. Jones. *Manhattan: The Army and the Atomic Bomb*. (United States Army in World War II Special Studies.) xx + 660 pp., illus., bibl., index. Washington, D.C.: United States Army Center of Military History, 1985. \$21.

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Mark Kac; Gian-Carlo Rota; Jacob T. Schwartz. *Discrete Thoughts: Essays on Mathematics, Science, and Philosophy*. Edited by Harry Newman. (Scientists of Our Time.) xii + 264 pp., figs. Boston/Basel/Stuttgart: Birkhäuser, 1986. \$65.

Ravi Kalia. *Chandigarh: In Search of an Identity*. xiii + 201 pp., illus., bibl., index. Carbondale/Edwardsville: Southern Illinois University Press, 1987. \$22.50.

Edward J. Kealey. *Harvesting the Air: Windmill Pioneers in Twelfth-Century England*. xiii + 307 pp., illus., app., bibl., index. Berkeley/Los Angeles: University of California Press, 1987. \$35.

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C. W. Kilmister (Editor). *Schrödinger: Centenary Celebration of a Polymath*. 253 pp., index. Cambridge/London/New York: Cambridge University Press, 1987. \$54.50.

David A. King. *Islamic Astronomical Instruments*. (Collected Studies Series, CS253.) xvi + 350 pp., illus., bibl., indexes. London: Variorum Reprints, 1987. £36. (Photo-offset from typescript.)

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Bernard Lightman. *The Origins of Agnosticism: Victorian Unbelief and the Limits of Knowledge*. x + 249 pp., illus., bibl., index. Baltimore/London: Johns Hopkins University Press, 1987. \$29.50.

David N. Livingstone. *Nathaniel Southgate Shaler and the Culture of American Science*. (History of American Science and Technology Series.) xiv + 395 pp., bibl., index. Tuscaloosa/London: University of Alabama Press, 1987. \$32.95.

Paul Lorenzen. *Constructive Philosophy*. Translated by Karl Richard Pavlovic. x + 291 pp., illus. Amherst: University of Massachusetts Press, 1987. \$30.

John Losee. *Philosophy of Science and Historical Enquiry*. x + 153 pp., figs., indexes. Oxford/Clarendon Press, 1987. \$32.

Björn Löwendahl (Editor). *Olof Rudbeck's Book of Birds: A Facsimile of the Original Watercolours (c. 1693-1710) of Olof Rudbeck the Younger in the Leufsta Collection in Uppsala University Library*. Volume I: *Introductory Essays*. 99pp., 35 color plates, index. Stockholm: Björck & Björjesson, 1986. £600 (limited edition of 500).

David Lowenthal. *The Past Is a Foreign Country*. xxvii + 499 pp., illus., bibl., indexes.

Cambridge/London/New York: Cambridge University Press, 1985. \$27.95.

Walter A. McDougall. . . . *the Heavens and the Earth: A Political History of the Space Age*. xviii + 555 pp., illus., app., index. New York: Basic, 1985. \$11.95 (paper).

Robert P. McIntosh. *The Background of Ecology: Concept and Theory*. (Cambridge Studies in Ecology.) xiii + 383 pp., bibl., indexes. Cambridge/London/New York: Cambridge University Press, 1985. (Paper.)

Herbert McLeod. *Chemistry and Theology in Mid-Victorian London: The Diary of Herbert McLeod, 1860-1870*. Edited with an introduction by Frank A. J. L. James. 30 pp., 23 microfiches, index. London/New York: Mansell, 1987. £92 (paper).

Maureen McNeil (Editor). *Gender and Expertise*. (Radical Science Series, 19.) 266 pp., illus., figs., bibl. London: Free Association Press, 1987. (Paper.)

Hans Mark. *The Space Station: A Personal Journey*. viii + 262 pp., illus., apps., index. Durham, N.C.: Duke University Press, 1987. \$24.95.

Emily Martin. *The Woman in the Body: A Cultural Analysis of Reproduction*. xi + 276 pp., illus., figs., bibl., index. Boston: Beacon, 1987. \$21.95.

Julien Offray de la Mettrie. *Oeuvres philosophiques*. Volume I: 1751. (Corpus des Oeuvres de Philosophie en Langue Française.) 390 pp. Paris: Fayard, 1987. Fr 160.

Julien Offray de la Mettrie. *Oeuvres philosophiques*. Volume II: 1737-1752. (Corpus des Oeuvres de Philosophie en Langue Française.) 352 pp. Paris: Fayard, 1987. Fr 150.

John R. Millburn. *Benjamin Martin: Author, Instrument-Maker, and "Country Showman": Supplement*. 63 pp., illus., app., index. London: Vade-Mecum, 1986. £5.95, \$9.95 (paper).

Arthur I. Miller. *Frontiers of Physics: 1900-1911. Selected Essays with an Original Prologue and Postscript*. (Pro Scientia Viva.) xxv + 293 pp., illus., figs., bibl. Boston/Basel/Stuttgart: Birkhäuser, 1986. \$34.95.

Gloria Moldow. *Women Doctors in Gilded-Age Washington: Race, Gender, and Professionalization*. xiii + 246 pp., illus., bibl., index. Urbana/Chicago: University of Illinois Press, 1987. \$24.95.

Maria Teresa Monti (Editor). *Catalogo del Fondo Haller della Biblioteca Nazionale Braidense di Milano*. Parte II: *Dissertazioni*, Vol. III: L-R. x + 514 pp. Milan: Franco Angeli. L40,000 (paper).

Sir Nevill Mott. *Conduction in Non-Crystalline Materials*. (Oxford Science Publications.) xiii + 128 pp., figs., bibl., indexes. Oxford/New York: Oxford University Press, 1987. \$32.50.

Robert P. Multhauf; Gregory Good. *A Brief History of Geomagnetism and a Catalog of the Collections of the National Museum of American History*. (Smithsonian Studies in History and Technology, 48.) iii + 87 pp., illus., bibl. Washington, D.C.: Smithsonian Institution Press, 1987. (Paper.)

Johan Nordstrom (Editor). *Lychnos Lardomhistoriska Samfundets Arsbok*. (Annual of the Swedish History of Science Society.) 286 pp., illus., figs., bibl., index. Stockholm: Almquist & Wiskell, 1986.

GRADUATE PROGRAMS

The graduate program in the Department of the History of Health Sciences, **University of California, San Francisco**, has recently been expanded. It covers fields in the history of medicine, nursing, pharmacy, and dentistry, and awards both M.A. and Ph.D. degrees. A joint M.D.-Ph.D. program for students interested in combining a medical and historical career is also available. All departmental offerings can be supplemented with courses at the University of California, Berkeley, and Stanford University. The deadline for applications for the 1988-1989 academic year is **15 February 1988**. Contact the Department of the History of Health Sciences, School of Medicine, University of California, San Francisco, Box 0726, San Francisco, CA 94143.

NSF FELLOWSHIP AWARDS

The **National Science Foundation** has announced the awards made in the History and Philosophy of Science Program for fiscal year 1986. Among them are the awards made to the scholars listed below, with their institutions at the time of application and their research topics.

Finn Aaserud (American Institute of Physics): physicists in American science policy after World War II. **Prina G. Abiram** (individual award): schools of molecular biology in the United States, Great Britain, and France, 1935-1970. **William Aspray** (University of Minnesota): Von Neumann's development of the computer as a scientific instrument. **Margaret Atherton** (University of Wisconsin-Milwaukee): Berkeley's science and philosophy. **Scott Atran** (individual award): the universal foundations of biological classification. **Herbert S. Bailey** (Princeton University Press): an English-language translation of the papers of Albert Einstein. **George Boolos** (MIT): studies in the philosophy of logic and mathematics.

Esteban Rodríguez Ocaña. *La constitución de la medicina social como disciplina en España (1882-1923)*. (Colección Textos Clásicos Españoles de la Salud Pública, 30.) 280 pp. Madrid: Ministerio de Sanidad y Consumo, Secretaría General Técnica, 1987. (Paper.)

Henry Gilbert Orme; William H. Brock. *Leicestershire's Lunatics: The Institutional Care of Leicestershire's Lunatics during the Nineteenth Century*. (Leicestershire Museums Publications, 87.) vii + 57 pp., illus., apps., bibls. Leicester: Leicestershire Museums, Art Galleries, and Record Service, 1987. £5.50 (paper).

Mary Ellen Bowden (Manhattanville College): astrometeorology and the rise of meteorology. Joan Bromberg (Laser Institute of America): a history of the scientific, engineering, and commercial development of lasers. Stephen Brush (University of Maryland, College Park): a history of planetary physics. Tyler Burge (UCLA): individualism and visual perception. Frederick Burkhardt (American Council of Learned Societies): the edition of the correspondence of Charles Darwin.

Samuel K. Coleman (North Carolina State University): the role of Harry C. Kelly in postwar Japanese science policy. Karen S. Cook (individual award): the development of geological maps in England, France, and Germany. Michael Crowe (University of Notre Dame): John Herschel's contribution to astronomy. Robert C. Cummins (University of Colorado at Boulder): the semantics of cognitive states. James T. Cushing (University of Notre Dame): the interpretation of scientific laws and practice. William C. Eamon (New Mexico State University): science and popular culture. Bruce Eastwood (University of Kentucky): the origins of the new astronomy. Ellery T. Eells (University of Wisconsin-Madison): probabilistic causality.

Solomon Feferman (Association for Symbolic Logic): the collected works of Kurt Godel. Henry R. Frankel (University of Missouri, Kansas City): historical and philosophical analysis of the controversy over continental drift. Robert Marc Friedman (individual award): historical studies of the Nobel science prizes. Peter Galison (Stanford University): Presidential Young Investigator Award. Ronald N. Giere (Indiana University): theory of science. Stanley Goldberg (individual award): instruments, measurement, and theory. Anthony Grafton (Princeton University): time and the rise of modern science.

Daryl M. Hafer (Eastern Michigan University): a comparative study of access to technology by women in preindustrial society. Geoffrey P. Hellman (Indiana

University): a modal interpretation of mathematics. David K. Hill (Augustana College): the development of theories of motion. Louisa S. Hoberman (individual award): scientists, engineers, and urban technology in Mexico. David L. Hull (Northwestern University): an evolutionary analysis of the social and conceptual development of science. Reese V. Jenkins (Rutgers University): the Thomas A. Edison papers. Robert Kargon (Johns Hopkins University): Karl Compton and the transformation of MIT. Sharon Kingsland (Johns Hopkins University): the rise of American genetics, 1900-1930. Richard Kremer (Dartmouth College): a select edition of the Helmholtz correspondence.

John Lankford (University of Missouri, Columbia): the transformation of the American astronomical community, 1859-1940. Larry Laudan (Virginia Polytechnic Institute): methodological underdetermination: its rationale, its scope, and its consequences. Rachel Laudan (Virginia Polytechnic Institute): the image of science in the histories of science. Stuart W. Leslie (Johns Hopkins University): academic entrepreneurs and postwar American science. Elisabeth A. Lloyd (University of California, San Diego): the confirmation of scientific theories. Penelope Maddy (University of Illinois at Chicago): set-theoretic realism. David B. Malament (University of Chicago): Godel's contribution to general relativity. Kenneth L. Manders (University of Pittsburgh): the role of concepts in mathematical knowledge.

Joseph Needham and Anne Shillinglaw (East Asian History of Science Trust): science and civilization in China. Karen V. Parshall (Sweet Briar College): James Joseph Sylvester and the development of mathematics. John H. Perkins (Evergreen State College): agronomy, wheat, and the historical roots of crisis in crop production science. William Provine (Cornell University): the Oxford School of ecological genetics. Margaret Rossiter (Cornell Uni-

versity): history of women scientists in the United States since 1940.

A. I. Sabra (Harvard University): the cultural context of medieval Islamic science. Franz Samelson (Kansas State University): behaviorism and its competitors, 1930-1950. Teddy Seidenfeld (Carnegie-Mellon University): probability shifts and coherent revisions in degrees of belief. Michael Shank (Harvard University): mechanics in transition. Daniel M. Siegel (University of Wisconsin-Madison): aspects of Maxwell's electromagnetic theory. Robert Siegfried (University of Wisconsin-Madison): a reinterpretation of the chemical revolution. Lawrence Sklar (University of Michigan): the place of empiricist critique in naturalistic science. Brian Skyrms (University of California, Irvine): deliberation. Robert W. Smith (Johns Hopkins University): the space telescope history project. John Stachel (Princeton University Press): the collected papers and correspondence of Albert Einstein. Nancy L. Stepan (Columbia University): Latin America and the world eugenics movement. Anthony N. Stranges (Texas A & M University): a history of high-pressure coal hydrogenation in Germany, 1910-1945. Noel Swerdlow (University of Chicago): studies in the history of astronomy.

Paul Teller (University of Illinois at Chicago): the consistency of relativity with the violation of the Bell inequalities. Arnold W. Thackray, Jeffrey L. Sturchio, and George Tselos (University of Pennsylvania): the development of polymer science and industry in America. Paul H. Theerman (individual award): science in its cultural context. Bas C. Van Fraassen (Princeton University): laws of nature and laws of physics. Charles Weiner (MIT): biomedical scientists and patents in the twentieth century. Bruce R. Wheaton (Berkeley Science Historians): research physics and electronic application. Gilbert F. Whittemore (individual award): ethical values in the operation of the Federal Radiation Council (1959-1970).

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