Newly Opened Correspondence Illuminates Einstein’s Personal Life

By David C. Cassidy, Hofstra University, with special thanks to Diana Kormos Buchwald, Einstein Papers Project

The Albert Einstein Archives at the Hebrew University of Jerusalem recently opened a large collection of Einstein’s personal correspondence from the period 1912 until his death in 1955. The collection consists of nearly 1,400 items. Among them are about 300 letters and cards written by Einstein, primarily to his second wife Elsa Einstein, and some 130 letters Einstein received from his closest family members. The collection had been in the possession of Einstein’s step-daughter, Margot Einstein, who deposited it with the Hebrew University of Jerusalem with the stipulation that it remain closed for twenty years following her death, which occurred on July 8, 1986. The Archives released the materials to public viewing on July 10, 2006. On the same day Princeton University Press released volume 10 of The Collected Papers of Albert Einstein, containing 148 items from the collection through December 1920, along with other newly available correspondence. Later items will appear in future volumes. “These letters”, write the Einstein editors, “provide the reader with substantial new source material for the study of Einstein’s personal life and the relationships with his closest family members and friends.”

Among Einstein’s main correspondents in the newly released collection are his first wife, Mileva Einstein-Marić, from whom he was separated in 1914 and divorced in 1919; Einstein’s two sons with Einstein-Marić, Hans Albert and Eduard; Einstein’s second wife and first cousin, Elsa Einstein, whom he married in 1919; Elsa’s two daughters from her previous marriage, Ilse and Margot; and Einstein’s sister, Maja, and her husband, Paul Winteler. Ilse died in 1934, Elsa in 1936. Maja and Margot joined Einstein in Princeton during the 1930s. The collection also includes a large number of poems and aphorisms written by Eduard Einstein, correspondence among Einstein’s maternal grandparents, as well as items of administrative and financial correspondence from Einstein’s Berlin and Princeton years.

The newly released letters provide little direct insight into Einstein’s scientific work. However, he does write his thoughts on the course of his work and, while traveling, his impressions of people, audiences, and cultural situations in the places he visits. In one letter to Elsa in 1916, during a visit with Paul Ehrenfest in Leiden, he wrote how pleased he was with the reception accorded relativity theory in the Netherlands. In another letter in 1920, he wrote of his mounting distress over the anti-relativity movement in Berlin, and by 1921, after lecturing extensively to the general public, he admitted, “Soon I’ll be fed up with...”

(continued on page 2)
and films in libraries near them via links using the “Find in a Library” feature offered publicly by WorldCat.

As would be expected, users usually discover Alsos through search engines, which have extensively indexed its holdings. It is reached by many additional users through links on appropriate pages of Wikipedia. Hundreds of libraries, college departments, secondary schools, research institutes, and professors worldwide provide links to Alsos for information about nuclear issues deemed relevant to many disciplines. Recently, Alsos has partnered with three other web sites to integrate a still larger variety of historical and current materials on nuclear themes on the Nuclear Pathways project (http://nuclearpathways.org). Alsos provides bibliographies for specific topics for those content-rich partner web sites.

The Alsos Digital Library for Nuclear Issues continues to expand its role as a source of references on both current and historical material. More specifically, the collection contains many references addressing the evolution of nuclear physics and its impact on world events. For further information contact Frank Settle, Department of Chemistry, Washington & Lee University, Lexington, VA, 24450, e-mail: fsettle@wlu.edu.

In Memoriam: Joan Warnow Blewett
by Spencer Weart

I first met Joan when I was a postdoctoral student, attending my first History of Science Society meeting. A young woman came up to me, found I was studying history of physics, and started enthusiastically telling me about a place I had never heard of, called the Center for History of Physics. Being an arrogant academic, I supposed that since I hadn’t heard of it, I didn’t need to know anything about it. But this woman thrust some brochures on me and insisted I keep in touch. It turned out the place was worth learning about after all.

When I became Director of the Center several years later, it was a small place: basically me, the Director, and Joan, the Directee. But she was the one who really knew what was to be done. She had been running the place as Acting Director for a year after the departure of the former Director, Charles Weiner, and she had been getting out the Newsletter, starting up fundraising, and handling a big educational project along with everything else. So she began to teach me about these things, and about libraries and archives in general. Most historians don’t know much more about libraries and archives than a motorist knows about what is behind the gas pump; you just go in and fill up. It turned out there was a lot to learn. Joan herself had learned much of it on the job, since like many librarians in those days she had not had any formal training in archives. Such formal training would not have been a big help for work at the Center anyway, where much had to be invented along the way.

Joan did not just learn about science archiving but helped to transform the field. She spent a long time working out concepts of “documentation strategy.” The aim of this new program was not the traditional one of grabbing the best stuff you could find to hoard in your own archives, but to identify the key historical documentation and work out ways to get it preserved, no matter just where. This goal was implicit in the plans physicists had laid for the Center at its origin, but Joan figured out how to do it. She also raised many hundreds of thousands of dollars in grants to get the work done. Meanwhile, the archives of our own Niels Bohr Library grew from roughly the size of a walk-in closet—and as messy, with a handwritten cardfile catalog—to a large modern space meticulously cataloged online. All this happened with Joan’s meticulous and ardent attention to doing everything right, up to the highest standards; and where there weren’t any standards in the archival community, she created them. Even after she retired, she continued to be a great help with her sound advice and her cheerful aid in fund-raising.

Joan’s most important monument is an invisible one: all over the country, in fact all over the world, there are papers preserved in archives that would otherwise have gone into a dumpster, irretrievably lost. These rescued papers document science in the past century. And that has been so important, a part of the history of civilization, that I expect scholars will be using these papers for as long as human civilization exists. Not many people leave such a useful and important legacy.

Joan’s human qualities were as outstanding as her professional ones. She was interested in everything, and I remember countless lunches when we talked about politics, books, and anything else in the world. Always upbeat and thoughtful of others, she was admired and warmly appreciated by everyone in the Institute (she knew them all, at least in the old days when it was smaller), and broadly in the archival and scientific communities. All who knew her were greatly saddened to learn of her untimely death.

The mistakes made by leading scientists often provide a better insight into the spirit and presuppositions of their times than do their successes.

— Steven Weinberg
the relativity. Even such a thing fades away when one is too involved with it ...” The new letters also show that, even during his most intense periods of work, he was often corresponding intensely with family members on personal matters.

The new correspondence reveals many aspects of Einstein’s private and public life: his complex relations with his first wife Mileva and his second wife Elsa, with other women in his life, and with his two sons, as well as his most personal thoughts on self-image and on his closest family members, friends, and colleagues. They show his engagement and at times deep passion for various political and social causes, such as pacifism and Jewish nationalism, but also his financial concerns and protracted struggle with health issues and the illnesses, at times serious, of some of his closest family members. The correspondence follows Einstein from the earliest extant letters to Elsa in 1912, through the hardships he and his two families experienced during World War I, the turmoil of the post-war period in Berlin, the relative stability of the late 1920s, the rise of Nazism and Einstein’s departure from Europe in 1933. The later part of the correspondence deals mostly with providing for Einstein’s first wife and his younger son, who suffered from schizophrenia, in Zurich.

Further information may be found at the web sites of the Albert Einstein Archives: www.albert-einstein.org, and the Einstein Papers Project: www.einstein.caltech.edu.

Preserving the History and Heritage of Agilent Technologies, Part I

The Meaning of “Priceless” at Agilent

by Cindy Alfieri, Agilent Library

You are probably familiar with the advertisement that itemizes the high cost of planning a major event and ends with the word “priceless.” At Agilent Technologies, the term applies equally well to laboratory notebooks, equipment manuals, application notes and technical reports. These are the main archival documents that the library at Agilent hunts down, pulls from dumpsters, blows the dust off, lovingly catalogs and ferociously protects so that future researchers will have access to this trove of information. Nowadays this level of commitment is required in order to save materials before they are unh thinkingly tossed out when people change jobs, office locations or employers. Part of the commitment involves educating people on the importance of retention (“just because that product is obsolete or out of support doesn’t mean you should toss the manual!”). As Hewlett-Packard Co-founder Dave Packard said in his book The HP Way, people want to do the right thing. Just a simple statement on the why and wherefore of the archival operation is all it usually takes to get people onboard. And that attitude is largely why our archives continue to grow.

In 1999, the Hewlett-Packard corporation spun off its test and measurement organization as an independent entity called Agilent Technologies. A library was created for the entire Agilent research community, to be both a 21st century reference library and a protector of the historical record. Our mission for preservation is simple: track down the materials before they get into the dumpster or disappear into the ether; make the materials as broadly accessible as company policy allows; and raise visibility internally for why the materials deserve to be preserved.

Lab Notebooks. For many years, Agilent and HP have had an informal process for maintaining lab notebooks. We have used notebooks of various types, colors and sizes to record the process of research and the interpretation of results. The notebooks protect the company’s intellectual property, provide a tool for referring back to the processes that achieved certain results and capture knowledge in a systematic fashion. Agilent’s process is now more formal. The library purchases the notebooks for the company, disseminates them and obtains them back for preservation. Although we recently investigated the prospect of moving from the traditional print format to electronic lab notebooks, the traditional approach continues as the format of choice. Our bioinformatics group does maintain digital notebooks, however, because of the large body of digital data they capture to document their experiments.

Equipment Manuals. One day an engineer phoned the library in a panic, relating that he had just started supporting an old product that was still in support life and that he needed a copy of the manual—which, to his surprise, he couldn’t find on the Web. The library had a copy and sent it to him. This fairly typical scenario is the result of an ongoing effort to search the world, literally, for manuals and bring them back to California for cataloging and retention. In 2005, for example, we received a half-ton of print manuals from Agilent-UK. The manuals typically come to us in binders and vary from 50 pages to 500 pages. Sometimes we see other formats: we recently received thousands of manuals from Agilent-Brasil on microfiche.

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year, a researcher sent us a URL with dozens more links to old equipment manuals. (The trouble with the links, however, is that you never know when they’ll suffer from link rot.) We are always excited when folks start a conversation this way: “I’m not sure you want these, but I thought I’d let you know I have some old manuals here.” Our current collection of manuals includes both obsolete products and currently supported products.

We recently worked with one of our business units to locate paper copies for dozens of obsolete HP manuals that were among the 200 most-requested manuals from the business unit’s external web site. Those manuals were converted to PDF format and are now freely available on Agilent’s external web site. Our vision is to one day provide that level of access to all equipment manuals as PDF documents.

**Application Notes.** Application notes are short documents that describe to the user the application(s) for a particular technology. Again, the library is a central point of contact for both Agilent and HP application notes. We are in the process of digitizing all the application notes for easier access.

**Technical Reports.** Agilent/HP technical reports describe scientific or technical research issues, progress or results—effectively, the R&D within the company. They are used to promote the exchange of ideas internally and to serve as a catalyst toward further research. Although the majority of our reports are for internal use only, we consider broader (external) release where competitive intelligence is not at issue.

As with most research-focused companies, Agilent uses many other forms of data capture to assist in filling in the big picture of invention and discovery. While some of that documentation turns out to be quite ephemeral, much of it—such as the formalized approaches noted above—does survive as historical record. And that survival is priceless. For further information, contact Cindy Alfieri, Global Manager, Library, Agilent Technologies, e-mail: cindy_alfieri@agilent.com.

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**Finding a Subject for a Biography**

*R. W. Smith, University of Alberta*

A biography is one of the most challenging jobs a historian can undertake, committing the scholar to long years of work. So the choice of a subject is crucial. Consider, for example, George Biddell Airy, British Astronomer Royal from 1835 to 1881, one of the towering figures of nineteenth century astronomy. Airy conducted a staggering voluminous correspondence, wrote a huge number of papers and reports, and was a central player in various scientific societies and institutions. He kept copies of practically everything he wrote. He has, however, never been the subject of a biography. Indeed, the astonishing extent of Airy’s records seems to have frightened off potential biographers. But far more common problems for would-be biographers are a paucity of worthwhile evidence on which to base a study. Even if a good body of records exists, they can be practically unusable if they are not carefully cataloged, organized, and accessible.

**Sir William Hunter McCrea** (1904-1999) was one of the leading astronomers and cosmologists of the Twentieth century. His scientific researches and engagements in various scientific debates were very important, and these activities continued far beyond his retirement in 1972. He had turned to cosmology around 1930, a time when it was not really a respectable field of inquiry, and lived to see it become one of the most esteemed and exciting areas of inquiry in the physical sciences, with several of his students playing crucial roles in its development.

McCrea was centrally involved too with a range of British and international scientific institutions. Later in his life he wrote some significant historical works, including a history of the Royal Greenwich Observatory. McCrea was also a witness to some of the critical moments in Twentieth century Astronomy and Cosmology. For example, in the early 1930s Subrahmanyan Chandrasekhar, then a fellow at Cambridge, would lunch with McCrea at Imperial College, London, before they walked to meetings of the Royal Astronomical Society. Thus it was that in January 1935, McCrea had a ring-side view of A.S. Eddington’s now infamous attack on his friend Chandrasekhar’s ideas on relativistic degeneracy inside stars.

In 1978, I was fortunate enough to interview McCrea as part of a project run by the Center for History of Physics on the history of Astrophysics and Cosmology, a project that led to a remarkably extensive collection of oral history interviews. At that time I certainly did not imagine tackling a biography of McCrea. But by late 2004, the idea had begun to seem an attractive one as a way to explore not just McCrea’s life but how Astronomy and Cosmology changed during his lifetime. Before committing myself, however, I needed, like any potential biographer considering a possible subject, to find out, first, what kinds of correspondence and manuscripts were in the records left after his death, and if these were rich enough to make a biography feasible. Then, second, I needed to check if the collection was in fact usable and in particular if it had been cataloged.

There is, it turns out, a substantial collection of McCrea papers. It is housed at Royal Holloway College of the University
In 2004, an act of Congress directed the Secretary of the Interior to conduct a special resource study to determine the national significance, suitability, and feasibility of designating one or more historic sites of the Manhattan Project for potential inclusion in the National Park System. In March 2005, a meeting on Capitol Hill, hosted by the Atomic Heritage Foundation, included representatives of the National Park Service, the Advisory Council on Historic Preservation, the Smithsonian Institution, the Department of Energy, Congressional staffers, and representatives of some of the communities and local governments that might be involved. The Park Service subsequently appropriated funds for the study, which got underway in 2006.

Public meetings were held this past April in Oak Ridge, Tenn., site of the enormous uranium-enrichment plants that made the material for the Hiroshima bomb; in May in Dayton, Ohio, where the plutonium “initiator” was developed; and in June in Los Alamos, New Mexico, where the first atomic bombs were designed and assembled.

Also under study are the sites in Hanford, Washington, where reactors produced the plutonium for the Trinity test device and Nagasaki bomb. The public comment period for this initial stage is closed, and the study is now into Stage 2 (Develop Preliminary Alternatives). This will last until Spring 2007 and will “identify a range of reasonable alternatives for NPS involvement, assess their effects, analyze public reactions, and select a preferred alternative.” For further information see www.cfo.doe.gov/me70/history/NPSweb/index.htm.

Of London, where McCrea had been a professor of mathematics from 1944 until 1966. Moreover, with the essential help of an Archival Processing Grant from the Center for History of Physics, the collection has been excellently cataloged by the National Cataloguing Unit for the Archives of Contemporary Scientists, housed at the University of Bath.

With anxieties dispelled about spending years hunting through a thin or disorganized collection of records, and the encouragement of the McCrea family, I am now at work on a McCrea biography.

Progress in the History of Physicists in Industry Project
by Orville R. Butler

The AIP History Center’s grant-funded Project to Document the History of Physicists in Industry, which extends through December 2007, moved into the home stretch this past year. We successfully negotiated interviewing visits to several companies in an area we had deferred to the end because of its special sensitivity to inspection: the Aerospace and Defense sector. Meanwhile we got well underway with coding and preliminary analysis of previous interviews. Project historian Orville R. Butler and Director Joe Anderson completed site visits at the corporate laboratories of Honeywell Aerospace, Lockheed Martin, General Atomics, and Agilent Technologies, adding nearly 40 interviews to the project. Another six extended life-history interviews were completed by AIP postdoctoral historian Babak Ashrafi and others. Butler and Anderson will soon visit Raytheon and are in the process of arranging the final laboratory site visit of the project, and they are also visiting public and private archives that may preserve the history of corporate R&D.

As the laboratory site visits have wound down, our emphasis has shifted to coding and analysis of the over one hundred interviews collected so far. NVivo, the program we use for analysis, released a major upgrade this summer that permits increased automation of encoding as well as far more detailed analysis. We have had to modify our coding process in minor ways to work around current bugs in the program, but once coding is completed we should be able to undertake detailed analysis limited only by the number and scope of our interviews.

Preliminary Findings

In the process of editing and encoding the interviews we have noticed several trends that we expect will be evident in our final analysis. Some of these trends have already been well documented but others do not yet appear in the research literature. The literature has described a decline of “pure” research in industrial settings, which our study confirms. Many of our respondents argue that the distinction between pure and applied research in industry has always been something of a myth, and that instead of “pure” vs. “applied” research, the distinction has in fact been “long term” vs. “near term.” If we accept that definition, our study shows a continued trend toward “near term” research, and an increasing influence of business divisions over the nature of industrial research. The latter is most commonly done by giving control over the lab budget to the business divisions. These divisions’ influences include a push towards research that can provide a quicker
return on investment. While modest exceptions to this trend can be found, they exist primarily where “research” is itself a product that is sold primarily to the government, often funded by ongoing contracts.

The effects of the growing influence of electronic records and communications is less clear-cut. As in other fields, e-mail has increasingly replaced telephone conversation as a primary source of communication. Laboratory notebooks, on the other hand, have declined in use rather than migrating to an electronic format. This assertion will no doubt be fine-tuned by subsequent analysis. Some companies still maintain extensive requirements for research documentation in laboratory notebooks. More often, however, the use of lab notebooks has become largely voluntary and in some cases virtually non-existent. Some laboratories maintain a form of electronic “room” where researchers on a project post and discuss their findings. Others continue a strong oral tradition of “hallway” discussions. In periodic formal reports, PowerPoint presentations have replaced view-graphs. Even where widely used, however, PowerPoint remains somewhat controversial. Some interviewees argue that PowerPoint has changed the nature of presentations from data-based to picture- or concept-based. They suggest this has a potential to increase the role of managers outside the R&D labs who don’t understand the science underlying the concepts. Others argue that PowerPoint presentations have diminished the free-flowing discussion of concepts between scientists by imposing a narrow format on the previously open interactions during reporting sessions, and leads to a focus on results over process.

These and other findings remain tentative at this point, but they give us an initial framework to understand and conceptualize the interviews that we’ve completed. As we bring the interview portion of the History of Physicists in Industry Project to a close in the next few months, we will devote much of the remaining year and a half to coding and analyzing our interviews and preparing the final report.

New High in Book Donations to Niels Bohr Library

Give us your dirty old books! In the Winter/Spring of 2004, the History Center distributed an announcement on the Physics Astronomy Mathematics division of the Special Libraries Association listserv and pamphlets at the Special Libraries Association Conference of that year asking librarians for unwanted books. We hoped to generate interest and awareness among potential donors of books to the Niels Bohr Library. Although a number of historians and physicists make valuable donations to our library each year, we realized that many universities and special libraries weeding their collections may not know about us, a library specializing in history of physics with a strong interest in the unused and outdated books they routinely discard. This announcement proved to be very fruitful; a surprising number of people responded with donations, sometimes large and always valuable.

The Niels Bohr Library holds one of the world’s premier collections in the History of Physics and its allied sciences (Astronomy, Geophysics, etc.) for the 19th and 20th centuries. While textbooks and monographs form the backbone of the collection, there are also many conference proceedings, biographies, institutional histories, instrument catalogs, instructional materials, popular-science books, and works on social aspects of the scientific community. While we buy some books from used-book dealers, we rely chiefly on the generosity of donors to fill in gaps.

The response to our advertisement has awarded us close to 300 books to add to the collection. Most significant was a group of 232 books that we accessioned, donated by the Goucher College library. They no longer taught history of science there and were weeding books to move to a new facility. The collection, which started in the 1880’s, had a large number of History of Physics and Astronomy books. Herbert and Frances Bernstein donated books from the New York University Courant Institute of Mathematical Sciences Library. Our library accessioned 32 physics books, selecting from the long list they sent us items that we wanted but did not have. Lehigh University also responded to our announcement with an excellent donation, sending us one hundred books from their collection relating to Physics, Astronomy and Geophysics. We accessioned 42 that we did not already have in our collection. Following our usual practice, when we are given books that are duplicated in our collection, we retain the better copy and sell the other to a dealer; thus the duplicate has a chance of finding a home that wants it, and we get some income to use for book purchases.

Book donations to our library have increased overall, and we gladly accept efforts to help us in our endeavor to preserve these resources. In many cases we have the only copy of a particular edition of a book known to exist in this country, or even the only copy of a text known to exist anywhere. While our oral history interviews and other archival sources remain the main reason scholars come to the Niels Bohr Library, we have increasingly had visitors who have been chiefly interested in using the books.

Niels Bohr Library Acquires Materials in New Formats

Each year we receive more donations in digital formats. The variety of new formats, many of them proprietary and few of them likely to be in widespread use decades hence, is daunting for a repository that aims to preserve the information for as long as posterity may want them; “digital materials last five years or forever, whichever comes first.” That is, digitized information is almost indestructible in principle, but in practice depends on ephemeral physical media and software formats. We accept material in digital formats that are currently supported by AIP’s Information Technology Department, and we think we can maintain the information indefinitely provided we can continue to find funds to either store it on servers that are regularly backed up, or reformat it onto gold CD-R or DVD-R discs. When the current formats begin to obsolesce, and as more research becomes available on the longevity of such discs, we will establish a schedule for migrating the information to new formats and media. This is analogous to our current policy of regularly inspecting our analog recordings and reformatting them where needed.

Another feature of the new digital age is that it is getting increasingly problematic to make distinctions among “archival records,” “audiovisual recordings,” “oral history interviews,” “published materials,” and so forth. A given DVD might contain materials that place it in all of these categories at once! We are fortunate to have dedicated professional catalogers who rise to the challenge of making sure future scholars will find everything they need for their work.

Manuscript Collections and Audiovisual Materials

This year’s accessions include a DVD recording of a presentation given by Benjamin Bederson titled “Los Alamos and Ti- nian: a personal memoir”; a DVD recording from the Musée des Arts et Métiers of filmed talks and digitized reproductions of photographs and French cyclotron files from 1940-1947; a set of two CDs of a sound recording made by the Argonne National Laboratory titled “To Fermi – with love” (an item that already existed in our collection as a long-playing disc recording). We also received a short audio recording and transcript of Lord Kelvin speaking about radioactivity, dated 1905.

The Gravity Research Foundation made its annual addition of files pertaining to the 2006 Essay Contest (0.5 linear feet). This year, for the first time, the donation included a DVD (“Universal Gravitation and Autodynamics: a working quantum model for universal gravitation”). The Gravity Research Foundation also digitized the files from their annual contest from 1949-2006 and submitted this CD copy to the archives for research use. As further evidence of the changing nature of records, we received a set of e-mail correspondence files from Nancy Grace Roman. These records were submitted through electronic mail, printed onto archival paper and added to the archives (3 folders). Robert Ubell added to our existing collection of files from his years as editor of the “Masters of Modern Physics” series (0.5 linear feet). The Publishing Division of the American Institute of Physics increased its holdings in our archives with the addition of programs and abstracts from past years of the Magnetism and Magnetic Materials Annual Conference and digests of the INTERnational MAGnetics Conference (2.0 linear feet).

The Member Societies of AIP have been exceptionally active this year in preserving their historical records. The Society of Rheology increased its existing collections in our archives with the addition of the Rheology Bulletin from 1977-2005 and the society’s annual meeting programs and abstracts from 1978-2005 (0.75 linear feet), as well as a set of rosters from 1958-1996 containing lists of the officers and committee members of various Society of Rheology committees. The Acoustical Society of America also increased its holdings with the addition of a publication commemorating the 75th Anniversary of ASA (1 folder), celebrating in 2004. The American Physical Society donated the records of Val Fitch (2 linear feet), containing files produced during his term as President of APS. The American Astronomical Society donated the audio recordings of the AAS Centennial Celebration, held in Chicago in 1999 (13 audio cassettes).

This spring the American Institute of Physics celebrated 75 years of service with a meeting at the Cosmos Club in Washington, DC (where the AIP Governing Board held its initial meeting in 1931) and symposia held at AIP’s corporate headquarters in College Park, MD and its publishing center in Melville, NY. We are saving many materials generated by this celebration, including webcasts, taped sessions, promotional materials, and organizational records, as well as the interviews noted in the oral history section of this report.

The Niels Bohr Library received several additions to our Institutional Histories collection, including a DVD commemorating the Acoustical Society of America’s 75th anniversary; a set of three DVDs from the IBM Research Center, commemorating its 60th anniversary; a pamphlet titled Official Guide: Carnegie Institute of Technology; an unpublished manuscript (101 pages) documenting the history of the Lehigh University Department
of Physics, and a presentation given by Cherry Murray at a 2005 meeting of APS, outlining the history, changes and development of Bell Labs and Lucent Technologies. For our biographical files we received a copy of a talk given by Lawrence Cranberg titled “Ethical Problems of Scientists.”

To our growing Miscellaneous Physics Collection, we added the following items: “Remembering the Manhattan Project: Report of the proceedings from the Atomic Heritage Foundation’s Symposium Report and Preservation Plan” (115 pages); a photocopy of a notebook from the files of Jules Guéron, from his uranium research (100 pages); notebooks and lecture notes from David Allen Park’s undergraduate years at Harvard (0.5 linear feet); a program from the Broadway show “Dr. Atomic” and notes from a pre-performance talk by Wolfgang Panofsky; a manuscript by Arjun Saxena titled “Important facts and clarifications of the invention and evolution of integrated circuits” (54 pages, 1 CD); and a CD containing an audiovisual presentation inspired by the audio recording of Benjamin Lee’s talk at the 1977 APS meeting in Chicago, compiled by Joo Sang Kang, Professor of Physics, Korea University.

Books

The Niels Bohr Library continues to receive many important donations of books and other printed materials, many of them difficult or impossible to find elsewhere. For example, Albert Parr from the National Institute of Standards and Technology donated George Shortley’s own copy of The Theory of Groups and Quantum Mechanics, the classic text famous as “Condon and Shortley.” This unique copy has Shortley’s extensive marginal notes, and will be locked in our rare books collection.

Several of our donations narrated the histories of physics at particular universities. Ryan E. Doezma donated Late Start, Last Finish from the University of Oklahoma Physics Department. John David Jackson donated History of the Physics Department: University of California, Berkeley 1950-1968, and Cyrus C. Taylor donated Physics at a Research University: Case Western Reserve 1830-1990.

As noted in the separate article on p.7, some large collections came after we asked institutional librarians to consider sending us books that they were planning to discard. Meanwhile we got enough other large donations to keep library staff busy checking what we needed and cataloging the new accessions. Because our collection is already quite comprehensive, we actually need only a fraction of the useful books offered. For example, Angela Gooden at the Geology-Mathematics-Physics Library at the University of Cincinnati offered to donate nine books, but we already had copies of most of them. We did gain the second edition of the textbook Physics by Chris D. Zafiratos.

Besides rescuing what would have been library discards, we accessioned 27 books to our collection from a donation by Louis Belliveau on his retirement from the Harry Diamond Laboratory. Herbert and Frances Bernstein donated a number of books from the New York University Courant Institute of Mathematical Sciences Library, of which we accessioned 31. And AIP’s CEO Marc Brodsky offered books from his own library, adding 24 books to our collection. Elroy O. LaCasce of Bowdoin College offered a number of books, of which we accessioned 8. We also received donations of valuable printed materials from Alice Dodge Wallace, Shaun Hardy of the Department of Terrestrial Magnetism at the Carnegie Institution of Washington (including IUGG reports), David Park at Williams College, and Milton Katz of the SUNY College of Optometry (books on optometry and ophthalmic lenses).

Visual Archives

We now have over 8,000 images available in a greatly improved online interface. That is still only a third of the collection, and we are digitizing more photos on a regular basis. Many of the donations we received this year are now online, including images we are grateful to have received from Donald Clayton, Ken Ford, Charles Hargrove (Bancroft Library), Jeff Hecht, Zdenek Herman, Hubert Lechevalier, Norton Hintz, Lawrence W. Jones, Randy J. Montoya (Sandia National Labs), Peter Prokop (Bildarchiv Austria), Dale Syphers (Bowdoin University), and Crystal Tinch (AAS). Nobel laureates Roy Glauber and Theodor W. Hänsch donated photographs of themselves at our request, and so did AIP Member Society Presidents Anthony A. Atchley, Robert Bau, John J. Hopfield, Timothy Killeen, Andrew M. Kraynik, Christie R. K. Marrian, Neal D. Shinn and J. Craig Wheeler.

Oral History Interviews

Tape-recorded interviews are the materials most used by scholars who visit the Library, and we have added an unusually large volume since last Fall’s report. Many have come through the History of Physicists in Industry project conducted by Joe Anderson and Orville Butler. These are structured interviews of 1-2 hours, built around questions about the administrative organization and record-keeping practices of industrial research laboratories, but including a variety of interesting personal and historical information. In the fall of 2005, Anderson and Butler visited two major industrial labs. At Honeywell, they interviewed David Arch, Robert Carlson, Barry Cole, Allen Cox, Bob Hornung, Burgess Johnson, Cathy Juneau, Jane Kaufenbur, and Daniel Youngner. Interviewed at Lockheed Martin were David Chennette, Rick Kendricks, Walt Martin, Jeff Newmeyer, Rich Nightingale, Malcolm O’Neill, Pat Perkins, Jessica Perrine, James Ryder, and Mike Schultz.

In 2006 at General Atomics in La Jolla, Anderson and Butler interviewed David Baldwin, Doug Fouguet, Chris Hamilton, Woodie Jarrett, Linda Lanstille, John Rawls, Constantine Scheder, Arksl Shenoy, Rich Steven, and Tony Taylor. At Agilent Technologies in Santa Clara, they interviewed Cindy Aliese, Devon Dawson, Curt Flory, Jim Hollinshorst, Mel Kronick, Steve Newton, Darlene Solomon, Hoen Storrs, Bob Taber, and Greg VanWiggeren. As another part of the project, the Center for History of Physics contracted with historian Sheldon Hochheiser to conduct two more extensive, autobiographical interview sessions with William Brinkman.

We received a large donation of video oral histories from the American Association of Physicists in Medicine (81 DVDs),
focusing on physicists in medicine. These interviews were conducted from 1995 to 2004, but were recently reformatted from VHS to DVD.

David DeVorkin sent us 10 interviews that he conducted in Cambridge, Mass. in fall 2005. They were with Eugene Avrett, Robert Davis, Owen Gingerich, Kathy Haramundanis, David Latham, Thomas Marsden (two separate sessions), Richard E. McCrosky, Leo McGrath and Charles Whitney. He also provided copies of interviews with other important figures in space astronomy: Thomas van Flandern, Steve Maran, and Victor Sablinski.

The Center’s postdoctoral historian, Babak Ashrafi, interviewed Joel Birnbaum (two sessions), Len Cutter, Cherry Ann Murray (two sessions), and Arno A. Penzias (two sessions). Stuart W. Leslie interviewed Harold Agnew (Los Alamos), as well as Edward Chester Creutz, Arthur Kantrowitz of AVCO-Everett Research Lab, Tihiro Okhawa (General Atomics) and Ronald Waltz (General Atomics). Working under a National Science Foundation grant administered by the AIP Center, Patrick McCray interviewed Michael Flatte, Olle Heinonen, Daniel Loss, Stephan von Molnar and Stuart Wolf. Other interviews that historians sent to us for archiving were Michael Gruntman by David Stern, Chester McKinney by David Blockstock, and the AVS award winners Dick Brundle, Jane Chang, and Stan Veprek by Paul Holloway. Joan Bromberg conducted an interview with Carol O’Alley. And Francis Slakey and Jennifer Ouellette interviewed Richard Garwin and Sidney Drell for APS News; here as in many of the other cases we transcribed the interview. Sean F. Johnston sent us an interview series relating to the history of holography. His interviews are with Steven A. Benton, Tung Hon Jeong, Emmett N. Leith, Graham Saxby, Larry D. Siebert, and a partial interview with H. John Caulfield. Finally, an interview with Herman Zimmerman was conducted by Maiken Lolck with support from an AIP Center grant-in-aid.

The American Institute of Physics celebrated its 75th Anniversary in 2006, and hired Richard Kindig to produce interviews with all available important figures from our past and present, discussing AIP’s history and the role of physics in general. The results are archived on 22 DVDs, with notes but no transcript. The interviewees were John A. Armstrong, Richard Baccante, Theresa C. Braun, Marc H. Brodsky, Mildred S. Dresselhaus, Kenneth W. Ford, Hans Frauenfelder, Roderick M. Grant, William C. Kelly, H. William Koch, Gloria B. Lubkin, Robert H. Marks, Elaine Moran, Norman F. Ramsey, John S. Rigden, Roland W. Schmitt, Frederick Seitz, Benjamin B. Snavely, Justin T. Stimatze, James H. Stith, Darlene A. Walters and Lindsay Windsor.

Recent Publications of Interest

Compiled by Babak Ashrafi

This is our usual compilation of some (by no means all) recently published articles on the history of modern physics, astronomy, geophysics and allied fields. Note that these bibliographies have been posted on our web site since 1994, and you can search the full text of all of them (along with our annual book bibliography, recent Catalog of Sources entries, exhibit materials, etc.) by using the “Search” box on our home page: www.aip.org/history/s-index.htm. To restrict your search to the bibliographies, use the advanced search link.


Astronomy & Geophysics Vol. 47, no.2, April 2006: “Comets from antiquity to the present day,” by Iwan Williams and Stephen Lowry.

Berichte zur Wissenschaftsgeschichte Bd. 29, Heft 1, 2006: “Das erste Jahrhundert deutschsprachiger meteorologischer Lehrbücher,” by Stefan Emeis.


The only thing wrong with scientists is that they don’t understand science. They don’t know where their own institutions came from, what forces shaped them, and they are wedded to an anti-historical way of thinking which threatens to deter them from ever finding out

— Eric Larrabee


Documentation Preserved, Fall 2006
Compiled by Jennifer S. Sullivan

As you can see, an unusually large number of collections are included in this Newsletter’s Documentation Preserved column. In the past we’ve depended entirely on voluntary descriptions sent to us by the archives holding the collection—prompted usually by our semiannual survey of repositories. This issue’s bumper crop of collection descriptions is the result of two new Web-based ways that we gather information on collections. A growing number of archives are creating online catalogs of their archival collections, and this year we began systematically checking for and, if available, searching the online catalogs for each of the 50 or so archives that we survey every six months, taken from the 200 archives we survey over a two-year cycle. Second, we searched the Research Library Group’s new ArchiveGrid, introduced this spring, which contains nearly a million collection descriptions from thousands of libraries, archives and museums. Thanks to the three sources—voluntary reports (which are still vitally important) and the two Web venues—we’re pleased to be able to provide you with an unusually large number of new collections. As always, more complete descriptions may be found in our International Catalog of Sources for Physics and Allied Sciences (ICOS), online at www.aip.org/history/icos

National Library of Australia. Manuscripts Section, Canberra, ACT 2600, Australia.
John Gatenby Bolton papers. 1940-1993. 0.56 linear meters (4 boxes).

Academia Brasileira de Ciências member files. Academia Brasileira de Ciências. 1916-[ongoing]. Restrictions: Access restricted to dossiers of living members; open access to dossiers of deceased members.

Edward Hunter Gowan scrapbook. 1935-1948. 0.03 meters.
Ernest Sydney Keeping papers. 1917-1977. 0.42 meters.

Royal Society. Library. 6 Carlton House Terrace, London SW1Y 5AG, England, UK.
Papers of Thomas Gold. 1944-2004. 28 boxes. Restrictions: This collection is open for access, some correspondence has been restricted until January 1, 2030.

St. John’s College. The Library, Cambridge CB2 1TP, England, UK.
Papers and correspondence of Sir Harold Jeffreys. 1886-1999. 68 boxes.

University of Bath. Library. University Archives, Claverton Down, Bath BA2 7AY, England, UK.

University of Bristol. Arts and Social Sciences Library, Special Collections. Tyndall Avenue, Bristol, BS8 ITJ, England, UK.

Université Louis Pasteur de Strasbourg. Mission culture scientifique et technique. 7, rue de l’Université, 67000 Strasbourg, France.

American Association for the Advancement of Science. 1200 New York Ave., NW, Washington, DC 20005, USA.
Records of the Executive Office of the American Association for the Advancement of Science. 1907-1989. 70.55 linear feet. Records of Science and policy programs of the American Association for the Advancement of Science. 1954-1994. 158.75 linear feet. Restrictions: Cases containing sensitive and graphic information may be restricted. Researchers must obtain access permission from program staff. Membership and meetings records, American Association for the Advancement of Science. 1848-[ongoing]. Records of Education and human resources programs of the American Association for the Advancement of Science. 1953-1995. 90+ linear feet.
American Philosophical Society. Library. 105 South Fifth Street, Philadelphia, PA 19106, USA.

Leonard Carmichael  papers. circa 1917-1973. 183 linear feet (circa 180,000 items).

Thomas H. Court collection on microscopes and other optical instruments. 1588-1935. 5 linear feet.

George Howard Darwin  letters. 1834-1881. 5 items.

John Dovaston astronomical notebook. 1764-1799. 1 volume (131 pages).

Benjamin Vaughan  papers. 1746-1900. 13.25 linear feet.

Brown University. The John Hay Library, University Archives. Providence, RI 02912, USA.

Ladd Observatory  papers. circa 1875-1971. circa 27 linear feet. Restrictions: The bulk of this material is stored off site and cannot be seen at the Library without making an appointment.

Ladd Observatory  scrapbook of clippings relating to astronomy. 1917-1939. 1 volume (253 pages).

Albert Michelson manuscripts of Experimental determination of the velocity of light. circa 1882. 1 volume (114 pages).

California Institute of Technology. Institute Archives. 1201 East California Blvd. (Mail Code 015A-74), Pasadena, CA 91125, USA.

Oral history interview with Noel R. Corngold. October 11 - October 16, 2002. Transcript: [ii], 73 leaves (2 sessions). Interviews were conducted by Sarah Lippincott. Restrictions: Permission to quote or cite required from CalTech.

Arthur L. Klein  papers. 1928-1974. 1.5 linear feet.


Case Western Reserve University. Kelvin Smith Library. Special Collections. 11055 Euclid Ave., Cleveland, OH 44106-7151, USA.

William D. Buckingham collection. 1925-1968. 3 boxes.


Herman R. Branson  papers. 1952-1970. circa 8 linear feet.

Chemical Heritage Foundation. Roy Eddleman Institute for Interpretation and Outreach. 315 Chestnut Street Philadelphia, PA 19106, USA.

Papers of Robert G. Parr. 1941-2003. 69 linear feet. Restrictions: A limited number of files are restricted due to their confidential academic nature—these files are noted as such in the finding aid.

Chicago Historical Society. Prints and Photographs. Clark Street and North Avenue, Chicago, IL 60614, USA.

Photographs of Argonne National Laboratory. 1949-1952. 23 photographic prints.

City College of the City. University of New York. Archives and Special Collections, North Academic Center. New York, NY 10031, USA.

Alfred G. Compton  papers. 1853-1965. 1.2 cubic feet.

Columbia University. Oral History Research Office. Box 20, Room 801 Butler Library, New York, NY 10027, USA.


Columbia University. Rare Book and Manuscript Library. New York, NY 10027, USA.

Ian Vlodarski  papers. 1960-1969. circa 125 items (1 box).

Cornell University. Carl A. Kroch Library, Division of Rare and Manuscript Collections. 2B Carl A Kroch Library, Ithaca, NY 14853, USA.


Arecibo Ionospheric Observatory  Electrical Engineering reports, by Donald F. Holcomb. 1952-2004. 7 cubic feet.


Cornell University Department of Astronomy  Records. 1903-2004. 1 volume and 0.1 cubic foot.

Kenneth L. Greisen  lecture notes. 1940. 1 volume.


P. Gerald Kruger  letters. 1926-1931, 2002. 0.3 cubic feet.

Dartmouth College. Library. Special Collections Dept. Hanover, NH 03755, USA.

Dartmouth College Observatory  record of astronomical observations. 1850-1851. 1 volume (117 pages).


Dudley Observatory. Archives. 107 Nott Terrace, Schenectady, NY 12308, USA.

Papers of James H. Armsby. 1851-1864. 2 boxes.

Dudley Observatory  observational journals. 1859-1883. 19 volumes.

Duke University Medical Center. Archives and Memorabilia. DUMC 3702, Durham, NC 27710, USA.


Fisk University. Library. Special Collections. Nashville, TN 37208-3051, USA.

Augustus Shaw  records. 1925-1926. 0.5 linear feet.

Georgetown University. Library. Special Collections Division. 37th and O Streets, N. W., Washington, D. C. 20057, USA.

Reverend James Curley  papers. 1832-1889. 2 boxes.

Friar A. W. Forstall  papers. 1880-1910. 0.5 box.

Hoover Institution on War, Revolution and Peace. Archives. Stanford University, Stanford, CA 94305, USA.

Scientists for Sakharov, Orlov and Shcharansky  records. 1975-1998. 33 manuscript boxes.

Huntington Library. 1151 Oxford Road, San Marino, CA 91108, USA.

Paul W. Merrill  papers. 1922-1961. 15 boxes.

Library of Congress. Manuscript Division. James Madison Memorial Building, First Street and Independence Avenue, S. E., Washington, DC 20540, USA.

Federal science & technology policy, by D. Allan Bromley. 1 videocassette

Dana family  papers. 1805-1961. 9 microfilm reels.


Massachusetts Institute of Technology. Institute Archives and Special Collections. M.I.T. Libraries, Rm. 14N-118, Cambridge, MA. 02139, USA.

Department of Nuclear Engineering  curriculum materials. 1952-1990. 104 cubic feet (104 records cartons).

National Aeronautics and Space Administration. Ames Research Center. Moffett Field, CA 94035, USA.

National Institute of Standards and Technology. NIST Research Library and NIST Archives, Information Services Division. 100 Bureau Drive, MS 2500, Gaithersburg, MD 20899, USA.


Naval Historical Center. Operational Archives Branch. Washington Navy Yard, DC 20374-5060, USA.

Johns Hopkins University Applied Physics Laboratory records. 1942-1956. 2 cubic feet.

New York Public Library. Rare Books and Manuscripts Division. Fifth Avenue and 42nd Street, New York, NY 10018, USA.

Gherardi Davis papers. 1828-1940. 3 linear feet (8 boxes).

New York Public Library. Schomburg Center for Research in Black Culture. New York, NY 10037, USA.

H. Mack Thaxton papers. 1961-1963. 25 items (1 folder).

North Carolina State University. Special Collections Research Center, NCSU Libraries. Box 7111, Raleigh, NC 27695-7111, USA.


Northeastern University Libraries. Archives and Special Collections. Boston, MA 02115, USA.

Albert James Augustine papers. 1927-1935. 0.15 cubic feet (1 box). Beverly C. Dunn, Jr. papers. 1927-1935. 0.5 cubic feet (1 box). Restrictions: Student records (box 1, folder 1) are restricted until 2045.

Ohio State University. University Archives. 2700 Kenny Road, Columbus, OH 43210, USA.


Oregon State University Libraries. University Archives. Corvallis, OR 97331, USA.

Oceanography: The Making of a Science video. 110 VHS videocassettes (60 minutes each), 1 file folder of additional material. Oregon State University Atmospheric Sciences Department records. 1968-1991. 25 cubic feet.


Pikes Peak Library District. Special Collections. Colorado Springs, CO 80901, USA.


Princeton University. Dept. of Rare Books and Special Collections, One Washington Road, Princeton, NJ 08544, USA.


Radcliffe Institute for Advanced Study. Schlesinger Library. Cambridge MA 02138, USA.

Helen Meriwether Lewis Thomas papers. 1890-1997. 0.4 linear feet.

Rice University. Fondren Library, Woodson Research Center. P. O. Box 1892, Houston, TX 77001, USA.


Rutgers University Libraries Special Collections and Archives. New Brunswick, NJ 08903, USA.

John Maurer papers. 1928-1987. 27 cubic feet (8 cartons, 2 manuscript boxes, and 26 oversize boxes).
University of Iowa Libraries, Main Library. Archives. Iowa City, IA 52242-1420, USA.


Harry F. Olson papers, 1938-1966. 0.25 linear feet.

C.C. (Charles Clayton) Wylie papers, 1910-1960. 0.5 linear feet.

University of Maryland. Hornbake Library. Archives and Manuscripts Department. College Park, MD 20742, USA.

Frank J. Kerr papers, 1945-2000. 39.5 linear feet.

John S. Toll papers, 1943-1991. 27.0 linear feet.


Calvin N. Mooers papers, 1930-1990. 28.0 cubic feet.


Oral history interview with Herman P. Schwan [videorecording]. 3 videotapes.

Flower and Cook Observatory records, 1875-1987. 5.0 cubic feet.


University of Pennsylvania. Van Pelt-Dietrich Library Center. Annenberg Rare Book & Manuscript Library, 3420 Walnut Street, Philadelphia, PA 19104-6206, USA.

John Ewing notebooks on astronomy and physics, 1959. 1 item. Massachusetts Institute of Technology Department of Physics letter to Lewis Mumford, 1851-2005. 0.5 linear feet.

University of Rochester. Rush Rhees Library, Dept. of Rare Books, Manuscripts and Archives, Rochester, New York 14627, USA.

Papers of the Department of Physics, 1929-1946. 3 boxes.

Institute of Applied Optics records, 1917-1936. 2 boxes.

University of Texas at Austin. Center for American History. University Archives. Faculty Papers Collection. Austin, TX 78713, USA.

Papers of Bryce S. DeWitt, 1950-2005. 6.3 linear feet. Restriction: Restricted access to glass plates. All other materials unrestricted. Access to glass plates arranged by appointment only. Contact archivist for details.

W. F. Eberlein papers, 1936-1986. 16.0 linear feet.

Walter E. Millett papers, 1923-2003. 10.0 linear feet.


University of Utah. Marriott Library. Special Collections. Manuscript Division. Salt Lake City, UT 84112, USA.

James Gilbert Black papers, 1921-1983. 0.9 cubic feet.

University of Washington Libraries. University Archives. Mailstop #0-10. Seattle, WA 98195, USA.

David Bodansky Papers, 1955-2001. 4.45 cubic feet. Restriction: 1 file is restricted. Contact repository for details.

Utah State University. Merrill-Cazier Library. Special Collections & Archives. Logan, UT 84322-3000, USA.

**Recent Publications on the History of Physics**

A supplement to the Newsletter of The Center for History of Physics/Niels Bohr Library and The Forum for History of Physics, American Physical Society

Compiled by Per and Eleanor Dahl

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**BOOKS**

This list is the thirteenth of an annual series. It includes books on the history of modern physics and related topics (including astronomy, geophysics, and physics in medicine) published in 2004 or later. (See earlier lists for details on how the list is prepared.) Articles in journals are listed elsewhere in the *Newsletter*.

For more comprehensive coverage of publications on the history of science, consult the annual Current Bibliography in *Isis* (published by the University of Chicago Press for the History of Science Society). Publications on the history of astronomy are listed in the *Journal of Astronomical History and Heritage*.

We suggest that you use this list to recommend books for your institution’s library; ISBN numbers are given, when available, for this purpose. Prices (which are for hardcover editions unless otherwise indicated) are subject to change by the publisher.

Permission is hereby granted to copy freely all or part of this list for any educational purpose. More extensive versions of this and the previous lists are available on the Center’s web site at:

[www.aip.org/history/web-news.htm#bibl](http://www.aip.org/history/web-news.htm#bibl)

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COLLECTED WORKS OF SCIENTISTS (including unpublished papers)


HISTORY OF ASTRONOMY, ASTROPHYSICS, COSMOLOGY & SPACE SCIENCES


HISTORY OF PHYSICS

Baker, Gregory L.; Blackburn, James A. The Pendulum: A Case Study in Physics. xii + 300 pp., figs., bibl., index. United Kingdom: Oxford University Press, 2005. ISBN 0198567545 (hc) $89.50.


Dardo, Mauro. Nobel Laureates and Twentieth-Century Physics. xi + 533 pp., illus., bibl., index. Cambridge: Cambridge University Press, 2004. ISBN 0521832470 (hc) $110.00.


**HISTORY OF SCIENCE**


**INSTITUTIONAL DEVELOPMENT OF SCIENCE**


PHILOSOPHY OF SCIENCE


SCIENCE AND SOCIETY


SCIENCE AND ART, ARCHITECTURE, AND MUSIC


SCIENCE AND GOVERNMENT; PUBLIC POLICY


SCIENCE AND TECHNOLOGY – ENERGY, EFFECTS ON ENVIRONMENT


SCIENCE AND THE MILITARY; ATOMIC WEAPONS


Dorries, Matthias (ed.) Michael Frayn’s Copenhagen in Debate: Historical Essays and Documents on the 1941 Meeting Between Niels Bohr and Werner Heisenberg. (Berkeley Papers in History of Science, Vol. 20.) viii + 195 pp., illus., bibl., index. Berkeley: Office for History of Science and Technology, University of California, Berkeley, 2005. ISBN 0967261724 (pb) $12.00.


COLLECTED BIOGRAPHIES (3 or more Scientists)


Visser, Rob; Touret, Jacques (eds.) Dutch Pioneers of the Earth Sciences. (History of Science and Scholarship in the Netherlands, Vol. 5). xii + 200 pp., illus., figs., index. Amsterdam: Royal Netherlands Academy of Arts and Science, 2004. ISBN 9069843897 (hc) $40.00.


HISTORY OF EARTH SCIENCES


Hoare, Michael Rand. The Quest for the True Figure of the Earth: Ideas and Expeditions in Four Centuries of Geodesy. xii + 275 pp., illus., apps., index. Burlington, VT: Ashgate Publishing, 2005. ISBN 0-7546-5020-0 (hc) $84.95.

Kozak, Jan T.; Moreira, Victor S.; Oldroyd, David R. Iconography of the 1755 Lisbon Earthquake. 82 pp., illus., app., bibl., index. Prague: Geophysical Institute of Sciences of the Czech Republic, 2005. ISBN 8023943901 (hc) Eu25.


Livingstone, David N.; Withers, Charles W. J. (eds.) Geography and Revolution. viii + 433 pp., figs., app., bibl., index. Chicago, IL: University of Chicago Press, 2005. ISBN 0226487334 (hc) $45.00.


HISTORY OF INSTRUMENTS


HISTORY OF MATHEMATICS


HISTORY OF TECHNOLOGY


INDIVIDUAL BIOGRAPHIES & AUTOBIOGRAPHIES; ANALYSES OF A SCIENTISTS WORK


[Bacon, Roger] Goldstone, Lawrence; Goldstone, Nancy. The Friar and the Cipher. Roger Bacon and the Unsolved Mystery of the


REFERENCE WORKS: ENCYCLOPEDIAS, HANDBOOKS, etc.


TEXTS, LECTURES, AND POPULAR WRITINGS BY SCIENTISTS


Giving Back to the Physics Community

“Prizewinners of the AIP member societies have benefited manifestly from their association with physics, and should be grateful for the opportunity to give something back,” declared Charlie Duke, winner of the American Physical Society’s Pake Prize in 2006. Charlie donated his prize money to the Center for History of Physics to “put my money where my mouth is.”

Charlie received this prize “For groundbreaking theoretical contributions to the understanding of tunneling in solids, and inelastic scattering of low-energy electrons in solids, and for his outstanding contributions to Xerox Corporate Research both as an intellectual and research manager.” The Center and the American Institute of Physics (AIP) extend hearty congratulations and a very big thank you to Charlie for his generosity and foresight in helping preserve the history of physics.

Early this year Charlie retired from the position of Vice President and Senior Research Fellow in the Xerox Innovation Group. Prior to holding this position, he was Deputy Director and Chief Scientist of the Pacific Northwest Division of the Battelle Memorial Institute and Affiliate Professor of Physics at the University of Washington. He has recently been named a Research Professor in the Department of Physics at the University of Rochester. During his illustrious career, Charlie has been active in leadership roles with several different science and technical societies, including the AVS, American Physical Society, Materials Research Society, and AIP itself.

Charlie, a recent member of the Friends of the Center for History of Physics Development Committee, urges all who have an interest in the preservation and dissemination of science history to give generously to the Center. He notes that “Physics is fun, a great career option, and has contributed mightily to the economic and defense strength of the US. The Center has the vital mission of collecting and preserving archival records of the men and women who made these contributions, and of disseminating this information as an inspiration to the next generation of scientists.”

Charlie joins a small but illustrious group of prominent scientists who have given part or all of their prize money from major awards in recent years.

Prize and Award Monies Donated to the Center

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<td>2005 Heinz Award, Technology, the Economy and Employment</td>
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<td>Allan R. Sandage</td>
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<td>Robert L. Gluckstern</td>
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75 Years of Information that Matters

On May 3, 2006 at the Cosmos Club in Washington, DC, physicists and policy-makers gathered to commemorate the first meeting of the AIP Governing Board, held 75 years ago to the day in the Cosmos Club. A wide-ranging symposium, “Diverse Frontiers of Science,” featured talks from many noted scientists in a variety of fields. Later, a reception and dinner was held in honor of the anniversary. It was noted that several talks included a quote from Yogi Berra. The consensus of the speakers on the “end of physics” issue was, “It ain’t over ’til it’s over.”

Please visit the AIP web site at www.aip.org/anniversary/event_overview.html to see the program and speakers, including a historical overview by Center for History of Physics Director Spencer Weart.
The new Pension Protection Act of 2006 may help your charitable gift-giving practices in 2006 and 2007 if you are 75 ½ years old and withdrawing from an Individual Retirement Account (IRA).

IRA and Charitable Gifts: Taxpayers are encouraged to save for retirement through IRAs where their money grows untaxed until withdrawn in retirement. Withdrawals are considered taxable income at a presumed lower tax rate in retirement than during the taxpayer’s prime earning years thus benefiting the taxpayer. However, significant complications limited the use of IRA withdrawals for charitable gifts. Under the older regulations, donations made through IRA withdrawals required the donor to take an IRA distribution, pay tax on the proceeds, write a check to the charity of choice and then, and only if they itemize their deductions, take an income tax deduction on their tax return. Another discouraging complication included the annual cap of 50% of the adjusted gross income (AGI) on tax-free charitable gifts.

New Act: The new amendment permits tax-free withdrawals for charitable contributions directly from IRA funds not to exceeding a total of $100,000 annually per individual or $200,000 per couple if both hold separate IRA accounts. The rationale behind this new act is to encourage greater charitable giving by removing the tax on donated IRA withdrawals. Donors who have benefited from the untaxed growth of their IRA now will benefit when making charitable contributions with those funds. Because the donor will not have to recognize income from the withdrawals, their AGI will be lower, so self-employment and social security taxes will be lower. Other benefits may include elimination of the 3% phase-out of charitable deductions, possible avoidance of the alternative minimum tax (AMT), and reduced paperwork for those donors who no longer need to itemize their deductions.

Strategy for Donors: Retirees face significant penalties unless they meet required minimum IRA withdrawals. Charitable contributions made through their IRA in 2006 and 2007 can be used to satisfy these minimum requirements. Donors may consider using permissible IRA withdrawals for charitable purposes first before making donations with other taxable income.

Financial institutions administering the IRA will be able to process the donation and resulting paperwork so the donation process should be easy. If you have questions about the IRA charitable giving, please e-mail or call the Center at historyfriends@aip.org or 301-209-3006. The AIP Center for History of Physics is a 501(c) (3) charitable organization.
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