

In the year 2000, APS began its second century. While some people worried that physics had had its century, physicists continued to produce new results unprecedented in breadth and startling in their diversity. These included the discovery of the tau neutrino and hints of the Higgs Boson; new results from the Relativistic Heavy Ion Collider (RHIC) where collisions of gold ions produce over 6000 particle per event; the slowing of light to less than one mile per hour which foreshadowed the more recent stopping of light; micron-sized lasers and lasers where atoms replaced light as the excited medium; gravity measured at the sub-millimeter scale in the search for extra dimensions; and the quantum entanglement of four particles

A new priority for APS was the effort to get more of the excitement of physics out to the public, and having so many new discoveries greatly facilitated this. While some efforts were made to capture the public's attention by tying physics to current events and sports, new research results also found their way to the front page of major newspapers as well as to radio and network TV. APS's new web site for the public, www.PhysicsCentral.com, came on line and is quickly becoming the physics site of choice.

As "dot com" companies came and went, APS continued its progress toward a fully online archive of all its journals, which by the end of the year extended back to 1981. Several new fully electronic products were initiated, including two virtual journals, while the Physical Review journals moved to article at a time production, allowing many papers to appear online well before the paper version could be accessed.

APS continued to participate prominently in the Washington, DC arena. The budget woes of the summer activated APS members to write a huge number of letters to key members of the House and Senate. These efforts, together with those of other scientific and engineering societies, were successful and funding for research received a major boost in the fall.

APS held two exciting general meetings, but efforts to bring several APS divisions together for a general fall meeting were unsuccessful. We must continue to work hard to unite the physics community behind common aims and battle the tendency of physicists to spin apart into ever smaller separate groups. I hope that you will join me in these efforts.

Jim Langer

RESEARCH PUBLICATIONS

Now that the APS electronic journal offerings are well established, the Editorial Office has begun to pay much more attention to internal processes. The goal is to create and install a faster and more efficient all-electronic review process to replace the present paper based system, but without interrupting the flow of the some 100 new papers (if that term can still be used for electronic submissions) that arrive each working day. Growth in submissions continues, an excellent indicator of the quality and desirability of the Physical Review journals.

Re-engineering and electronification of the editorial process encompasses many smaller projects, some planned, some underway, and some already completed. In order to prioritize, assign and track them, a comprehensive catalog of these projects was created this year. During the coming year, emphasis will be placed on projects to reduce the time for manuscript processing (by changes in both software and workflow), to ensure the recoverability of processes in the event of a disaster, and to develop electronic infrastructure.

Within the individual journals, changes abound. *Physical Review B*, *Physical Review E* and *Reviews of Modern Physics* recently introduced “e-first” or article-at-a-time publication, following in the footsteps of *PRD*, *PRC* and *PRA*. The two newly introduced virtual journals (<http://www.virtualjournals.org/>), *Nanoscale Science and Technology* and *Biological Physics Research*, have been well received and more will be developed in subject areas that fall between existing Physical Review journals and that have the potential to attract new subscribers and perhaps new authors. *Physical Review Focus* (<http://focus.aps.org/>), an all electronic publication in which PR articles are summarized, illustrated and expanded to be accessible to students, journalists, and physicists in other fields continued to be popular. The *Physical Review On-Line Archive* (PROLA) made rapid progress throughout the year, with all journal content back to 1981 included by shortly after the end of the year. Finally, the decision was made to introduce color cover figures on *Physical Review Letters*, a relatively minor change but one that is nonetheless likely to draw extensive comment.

Partnerships and alliances are essential to APS in developing electronic journals and the policies that govern them; a number of these relationships were begun or solidified in 2000.

The American Institute of Physics (AIP) and its online journal production service (OJPS) is an important partner with APS in presenting the *Physical Review* journals. This year both AIP and the Beacon Group, producer of *Physical Review Letters*, introduced author proof servers, speeding and simplifying the process of reviewing page proofs prior to publication. The close association with the Los Alamos E-print Archive has continued, with submissions to APS journals coming directly from it and a mirror site for the archive, arranged jointly by the APS Editorial Office and neighboring Brookhaven National Laboratory. The Library of Congress (LOC) formed an agreement with APS to archive PROLA now and as it grows and make it available to LOC visitors and to members of Congress. A second, similar arrangement to archive PROLA and a passive copy of the current PR journals is being negotiated with Cornell University, and both organizations anticipate the happy homecoming of *Physical Review* to the institution of its origin.

With more subscribers relying on the online journals, continuity of access is extremely important, and careful planning and fast action to maintain it can really pay off. This was pointed up by a freakish event that occurred in the wee hours of September 21st, when one of the major feeder cables that supplies power to the Editorial Office spontaneously ruptured. A rapid staff team response to the outage limited downtime to a few hours. Lessons learned from this event are being integrated into the business continuity plan being developed jointly with the APS headquarters office in Maryland.

APS journals now compete with many others for limited library resources. As a result of this, increased effort has been put into informing librarians around the world of rapid publication developments. Library focus group meetings held across the US and England provide invaluable feedback. Librarians communicate user preferences and APS provides insight on scholarly publishing that affects their institutions. In addition, APS has begun a program to develop academic consortia and corporate multi-site licenses. Multi-year academic consortium agreements allow APS to achieve stability in journal subscription revenue, while additional colleges and universities can gain online access to APS journals for a nominal access fee.

SCIENTIFIC MEETINGS

The APS Meetings Department planned and managed three scientific meetings in FY2000: the March Meeting, the April Meeting and the annual meeting of the Division of Plasma Physics. The APS units held an additional 18 meetings throughout the year. The Meetings Department processed the abstracts and produced the *Bulletin* for 10 APS of these.

The March Meeting, held in Minneapolis, attracted more than 4,900 attendees. In addition, 123 exhibitors rented booths, representing a 20% increase in exhibitors compared to 1998. A new event for students was introduced at the March Meeting - Students Lunch with the Experts. Experts on specific topics were selected to participate in informal discussions with students during lunch. Student evaluations indicated that the event was a success and that they would like to see the program continued. A special mini-program sponsored by the Forum on Industrial and Applied Physics (FIAP) and the Division of Polymer Physics (DPOLY) focused on the industrial applications of polymer physics. Another program highlight was the symposium entitled, *The FY2001 Nanotechnology Initiative: What's in Store for the Future?* featuring a panel of experts from the University of California, the Department of Energy, and the National Science Foundation.

The April Meeting, held in Long Beach, California, drew approximately 1,000 attendees. It featured 12 outstanding plenary lectures, including everything from extrasolar planets to high precision optical spectroscopy. A student reception was very lively and well attended, as was the Awards Banquet that featured a talk on "The New Era of Space Exploration" by Dr. Barbara Wilson from the Jet Propulsion Laboratory.

MEMBERSHIP SERVICES

New members continued to join APS throughout 2000 but not quite enough to compensate for those who were lost. The official FY 2000 count was down slightly to 41,570.

During the year a new APS section, the California Section, was organized and the needed 200 signatures obtained. At the end of October, interim officers and an executive committee were appointed and committees were formed to create the Bylaws and organize the first Section Meeting. A formal petition will go to the Council in April.

A new program was initiated to help increase retention and recruitment figures for the coming year. Physicists in more than 50 university departments agreed to become "Friends of APS." These new APS "Friends" will assist with informing faculty and students about APS programs and the benefits of membership. During 2001, APS hopes to gain many more "Friends" not only in universities but also in national laboratories and industry.

The 2000-2001 APS Member Directory was offered in both paper and CD-ROM formats. More than 10,000 members opted for the CD-ROM and another 2,000 chose to use only the online directory available at www.aps.org/memdir/index.html. The expense for providing the directory was decreased significantly by incorporating these changes.

Several new member services were initiated. One, the Technical Network, offers an online directory of APS members who are willing to share their technical expertise with other members. A second, the Faculty Industrial Fellow Program, allows APS to act as a clearinghouse for APS members on university faculties and industrial labs. Faculty looking for short term leaves in industry can apply online for designated positions that are also posted online.

EDUCATION AND OUTREACH

This was a busy year of renewal and re-direction. The Physics Teacher Education Collaborative (PhysTEC) was created in partnership with AAPT and AIP to improve the science preparation of future teachers. The three societies plan to provide support and technical assistance to university physics departments that participate in the program. Emphasis will be on active collaboration between a university's physics departments and its school of education, with involvement of the local school district. After submitting a five-year, \$4.6 million proposal to both the National Science Foundation and to the Fund for the Improvement of Post Secondary Education, the APS was awarded a total of \$125,000 for further development of the project. With this support, the four leaders of PhysTEC made three-day site visits to nine universities, each seeking to take part in this program. The planning grant activities were strengthened by a conference held at the American Center for Physics in November that involved participants from eight universities, members of the national PhysTEC advisory committee and a professional evaluation.

The Teacher-Scientist Alliance (TSA), a program funded by the Campaign for Physics to encourage hands-on, inquiry based science in grades K-8, held its sixth APS Lead-Scientist Institute in Washington, DC, for 47 scientists, engineers, and key educators, representing communities in 12 states. Over five days in January, participants learned about current trends in science education reform and how to put this information to work in their communities. In March, TSA held its third follow-up Regional Leadership Institute in San Diego. In July, TSA again provided technical and personnel support to leaders in North Carolina's efforts at reforming science education, when those leaders conducted their second statewide Leadership Institute following the TSAI model.

During the March and April APS meetings, APS sponsored High School Physics Teachers' Days, attended by 60 local physics teachers in Minneapolis and 67 in Long Beach. The staff of the Department of Education and Outreach worked hard to make these both well attended and lively. Evaluations were very positive.

Throughout the year APS continued its efforts to attract and retain more women and minorities in physics. The Committee on Minorities which sponsors the APS Minority Corporate Scholarships for students who major in physics awarded over 25 scholarships and began a study of minority physicists at national laboratories. To continue their investigation of the environment for women in physics, the Committee on the Status of Women in Physics conducted three site visits, including the first one to a national laboratory. The committee co-sponsored a networking breakfast for women with FIAP at the March meeting and hosted one at the April meeting for the first time.

With the help of the Committee on Careers and Professional Development, APS continued to develop the Career & Professional Development Liaison Program aimed at providing students with better information and advice about careers based on physics. A one-day workshop for faculty liaisons was held at the March meeting.

PUBLIC INFORMATION ACTIVITIES

During the planning for the APS Centennial in 1999, a decision was made to devote more resources to informing the public about physics and its importance to society. Following the recommendation of a special member task force, APS hired a media relations coordinator, who has enabled APS to place physics stories on the network TV news as well as in the popular press.

More recently, a second recommendation of the task force has been implemented with the creation of a new magazine-like website, www.PhysicsCentral.com, aimed at bringing information from the world of physics to the general public. Physics Central content includes news, in-depth stories on selected topics, personalities, exciting visuals, educational material, links, and more.

The site currently has seven sections. The news portion of the site is constantly updated with scrolling links to stories on the latest developments involving physics-related events. The "Physics in Action" section attempts to explain physics concepts at the lay level and to show how those ideas relate to ongoing cutting-edge research. Next to that is "People in Physics," which profiles interesting scientists by exploring their lives both at work and at play. A "Picture of the Week" shows visually compelling natural phenomena accompanied by an easy-to-understand explanation of its physics. The final three sections are "Ask Lou," in which Lou Bloomfield, author of the book "How Things Work" answers questions in a weekly column, a list of links to top physics web sites, and the "Writers' Gallery" which features short essays by physicists who are also award-winning writers.

Early in September, Bob Park, the director of the Office of Public Information, was badly injured in a serious accident. In spite of interruptions and distractions caused by this, however, the office actually increased its involvement with the media. Consumer issues were again emphasized;

they offer an ideal arena in which to demonstrate the role of physics in matters that directly affect the lives of ordinary citizens. Moreover, the popularity of product fraud and safety stories with the public guarantees good media coverage. Other issues covered ranged from Ballistic Missile Defense and polygraph testing to alternative medicine, space exploration and creationism. Here are a few of the highlights.

The year began with an issue that the Office of Public Information has confronted since 1989: claims of “free energy” that run contrary to fundamental laws of physics. At one end of the scale are classic perpetual motion scams that would directly violate the laws of thermodynamics. At the other extreme are claims invoking revolutionary advances in physics that are not accepted by most scientists. These claims often take the form of a direct attack on the foundations of modern physics. These issues were treated in *What’s New* as well as in articles in magazines and newspapers.

Another issue that carried over from the previous year was the somewhat astonishing growth in magnet therapy, now topping \$2 billion annually. Appearing on NBC’s *Today Show*, Bob Park pointed out that even for far more powerful MRI magnets, there are virtually no detectable physiological interactions.

Finally in 2000, there were renewed claims of a connection between cell phone use and cancer. The APS, in spite of its landmark 1995 study on power-line fields and cancer, had refrained from issuing a statement on cell phones. In both cases, however, the quantum energy involved is simply far too small to disrupt chemical bonds in DNA. Throughout 2000, this point was repeatedly made to the media on the basis of the 1995 study.

PUBLIC AFFAIRS ACTIVITIES

The Office of Public Affairs kicked off its Washington events on March 29th with a Capitol Hill reception honoring Republican Senator Bill Frist of Tennessee, Democratic Senator Joseph Lieberman of Connecticut and former NIH Director Harold Varmus. These were the first recipients of the annual public service award to be presented jointly by the American Astronomical Society, the American Mathematical Society and the APS.

Later in the spring, the APS joined other member societies of the Science Engineering and Technology Working Group in organizing “Congressional Visits Day (CVD) 2000,” which brought more than 300 researchers to Washington for a two-day event that culminated in an intensive Capitol Hill science lobbying effort. Twenty APS members, mostly from the Divisions of Condensed Matter and Materials Physics, participated in the CVD events that included a reception in the Rayburn Foyer honoring the late George Brown of California, who was the dean of science policy makers in the House of Representatives prior to his death.

A month later, in May, the APS Divisions of Particles and Fields, Nuclear Physics, and Physics of Beams, brought more than 50 researchers to Washington for another reception and exhibit in the Rayburn Foyer, which followed an afternoon of Hill visits. The APS Washington Office conducted a morning briefing for participants and worked with the divisions to develop materials

for Hill distribution. Ohio State nuclear physicist Bunny Clark coordinated the activities on behalf of the divisions.

Throughout the budgetary season, the APS conducted a full-court press, using timely alerts, letter-writing campaigns and congressional testimony to highlight the importance of science research and education to the nation's economy, health, national security and quality of life. At one critical juncture, when the future of the Spallation Neutron Source was threatened by House appropriators, the Washington Office orchestrated a campaign that earned a flattering mention in the highlights section of *Congressional Quarterly* (*CQ Weekly*, July 15, 2000).

Late in the appropriations process, during intensive bargaining between the White House and congressional leaders, APS members, as well as other scientists and engineers, produced a deluge of letters to high-level policy makers. Administration officials credited this effort with making the difference in the final outcome, across-the-board increases of roughly 15 percent to research agencies. But, in spite of the successes, several areas, most notably high-energy physics, trailed the rest. These areas pose a major challenge for future APS Washington efforts.

Letters from APS members and a statement from the APS Council played a major role in influencing the White House to delay deployment of a National Missile Defense (NMD). These argued that a key requirement of the Defense Reauthorization Act of 1999 had not been met: that of demonstrating technical feasibility prior to a decision to deploy. The Washington Office had played a significant role in having that language -- which is consistent with the APS 1999 NMD Council Statement -- inserted in the final bill last year.

The bipartisan "Frist-Rockefeller Doubling Bill," formally known as the *Federal Research Investment Act*, was the only failure on the policy agenda of the Washington Office. Despite passing the Senate unanimously three times, the bill floundered in the House, where the chair of the House Science Committee refused to let the bill come forward.

INTERNATIONAL AFFAIRS

During the past year, APS has been involved in initiatives to increase physics collaboration in South Asia, Africa and Latin America. These initiatives were led by the Office of International Affairs, which also provides support to the US Liaison Committee (USLC) for the International Union of Pure and Applied Physics.

An agreement was developed between the Cuban Physical Society (CPS) and the APS to implement an exchange program between Cuban and US physicists. The President of CPS was invited to participate in the APS April Meeting and to consult with Society officers. In return, APS was invited to send representatives to Cuba to participate in the Fourth International Workshop on Physics Teaching in Engineering and the First Ibero-American Workshop on Applied Physics in Engineering, in Havana in June. The APS and CPS are now studying the organization of possible workshops to be convened in the near future.

In October, the President of APS and the Director of International Affairs traveled to India to visit colleagues and institutions in Mumbai, Bangalore and Delhi over a two-week period. The

trip was purposely intended to be informal and to focus on scientific matters. Additional issues addressed were impediments to scientific exchange, the Indian nuclear program and its impact on US-Indian scientific relations, and the steps that should be pursued in order to invigorate and strengthen US-Indian scientific collaboration.

The APS Committee on International Scientific Affairs, with the assistance of the Office of International Affairs, has compiled a directory intended for Latin American colleagues of Spanish-speaking US physicists who would be willing to participate in lecture programs, educational activities and collaborations in Latin America. This directory, still a work in progress, has recently been made available online and will eventually be published regularly to be distributed to colleagues throughout Latin America.

Since 1992, the APS has worked in partnership with the Open Society Institute (OSI) to furnish paper journals to key institutional libraries throughout the former Soviet Union. OSI has covered approximately half the cost of the APS journals to include distribution within former Soviet Union republics. This year, the OSI program was phased out for Russia creating an emergency. As a result, APS implemented a plan to provide electronic journals to Russian institutions at the Society's expense for one year while negotiations for future payment could be discussed.

The Society continues to provide APS membership to physicists residing in countries with currency and economic restrictions through its Matching Membership Program. Selected applicants living in eligible countries participate in either the “sponsored” program (in which an individual or institutional sponsor pays 50% of the membership dues) or in the “fund” program (in which the matching member’s dues are billed on a graduated scale). APS currently has 199 matching members in 39 countries.

The Office of International Affairs assists members with inquiries concerning US visa denials and issuance delays. Often, the Office can provide information or make inquiries that can help visa applicants. The free circulation of all *bona fide* scientists planning to do research or attend conferences, workshops and graduate school in the US is of paramount importance to the APS.

PRIZES AND AWARDS

This year the APS honored 46 Prize and Award recipients, for research in all fields of physics, as well as for contributions to physics in developing countries, for education, for public service, and for communicating physics to a broader audience. Sixteen of these recipients were presented with their prize or award at the March meeting, sixteen at the April meeting, and the remaining fourteen at meetings of individual divisions or topical groups of the APS. In addition to these, several of the individual units presented their own awards for Ph.D. dissertations in particular areas of research.

In November 2000, the Council approved the George E. Valley, Jr. Prize for an outstanding contribution to any field of physics by a physicist under age 30. Funded by a generous bequest from the estate of George E. Valley, Jr., himself a physicist with a long and distinguished career, the prize will be given every other year and carries a cash award of \$20,000, making it the largest

prize given by the APS. Nominations are being accepted in 2001 for the first recipient, who will receive the Prize in 2002.

FINANCES *for* FISCAL YEAR JULY 1, 1999 - JUNE 30, 2000

At the end of fiscal year 2000 the total assets of the American Physical Society were \$86.0M, up from \$82.4M a year before. The Society's liabilities were \$20.3M, up from \$18.5M the previous year. Net assets at the end of fiscal year 2000 were \$65.6M, compared with \$63.9M at the end of fiscal year 1999. Net assets include \$5.2M in restricted net assets and \$60.4 in unrestricted net assets. The restricted net assets are monies intended for prizes and awards and for programs of the Campaign for Physics. The unrestricted net assets are the Society's reserves, which may be used for any of the operations of the Society. The reserves are primarily invested in equities and fixed income issues to provide income to the Society. A portion of the income from investments augments contributions from members to support Society programs. The remaining portion of investment income is re-invested to allow reserves to grow with inflation. The reserves also include \$4.8M in land, buildings and equipment.

Table 1

AMERICAN PHYSICAL SOCIETY STATEMENTS OF FINANCIAL POSITION As of June 30, 2000 and 1999

Assets	<u>2000</u>	<u>1999</u>
Cash and cash equivalents	\$ 9,225,602	\$ 7,005,118
Investments, at fair value		70,249,346
68,400,613		
Accounts receivable, net of allowance for doubtful		
accounts of \$183,000 and \$215,000	660,029 1,152,582	
Pledges receivable, net	290,160	507,671
Prepaid expenses and other assets	342,350	258,225
Land, building and equipment, net	4,837,211	4,718,156
Beneficial interest in perpetual trust	<u>368,224</u> <u>368,224</u>	
Total assets	<u>\$85,972,922</u>	<u>\$82,410,589</u>
 Liabilities and net assets		
Liabilities:		
Accounts payable:		
American Institute of Physics	\$ 806,943	\$ 618,981
Other	1,991,814	1,377,426
Deferred revenues:		

Publications	12,086,364	11,564,932
Membership dues	2,395,578	2,237,440
Other	3,560	63,776
Liability for post-retirement medical benefits	<u>3,049,214</u>	<u>2,634,951</u>
Total liabilities	<u>20,333,473</u>	<u>18,497,506</u>
Net Assets:		
Unrestricted	60,454,880	58,293,391
Temporarily restricted	4,771,944	5,209,971
Permanently restricted	<u>412,625</u>	<u>409,721</u>
Total net assets	<u>65,639,449</u>	<u>63,913,083</u>
Total liabilities and net assets	<u>\$85,972,922</u>	<u>\$82,410,589</u>

Table 2**AMERICAN PHYSICAL SOCIETY****STATEMENTS OF ACTIVITIES****For the Years Ended June 30, 2000 and 1999**

Changes in Unrestricted Net Assets:	<u>2000</u>	<u>1999</u>
Revenues:		
Research publications	\$27,044,692	\$26,589,351
Scientific meetings	2,439,786	3,079,082
Membership operations	3,029,921	2,929,016
Public affairs and programs	367,100	524,878
Net assets released from restrictions	<u>970,363</u>	<u>942,065</u>
	<u>33,851,862</u>	<u>34,064,392</u>
Expenses:		
Research publications	26,186,324	25,562,820
Scientific meetings	2,541,981	2,713,362
Membership operations	3,166,626	3,346,578
Public affairs and programs	2,114,597	2,480,229
Fundraising	317,681	298,084
General and administrative	786,797	708,961
Prizes and related costs	<u>970,363</u>	<u>942,065</u>
	<u>36,084,369</u>	<u>36,052,099</u>
Loss from operations	<u>(2,232,507)</u>	<u>(1,987,707)</u>
Non-operating activities:		
Income from investments	4,214,614	4,380,359
Net unrealized and realized gains on long-term investments	592,648	2,318,721
Income from centennial activities	128,475	986,393
Expenses of centennial activities	<u>(541,741)</u>	<u>(4,248,694)</u>
	<u>4,393,996</u>	<u>3,436,779</u>
Increase in unrestricted net assets	<u>2,161,489</u>	<u>1,449,072</u>
Changes in Temporarily Restricted Net Assets:		
Contributions	184,942	265,317
Income from investments	347,394	358,403
Net assets released from restrictions	<u>(970,363)</u>	<u>(942,065)</u>
Decrease in temporarily restricted net assets	<u>(438,027)</u>	<u>(318,345)</u>
Changes in Permanently Restricted Net Assets:		
Contributions	<u>2,904</u>	<u>2,715</u>
Increase in permanently restricted net assets	<u>2,904</u>	<u>2,715</u>
Increase in net assets	1,726,366	1,133,442
Net assets at beginning of year	<u>63,913,083</u>	<u>62,779,641</u>
Net assets at end of year	<u>\$65,639,449</u>	<u>\$63,913,083</u>

Table 3

AMERICAN PHYSICAL SOCIETY
STATEMENTS OF CASH FLOWS
For the Years Ended June 30, 2000 and 1999

	<u>2000</u>	<u>1999</u>
Cash flow from operating activities:		
Increase in net assets	\$ 1,726,366	\$ 1,133,442
Adjustments to reconcile increase in net assets to net cash provided by (used in) operating activities:		
Depreciation and amortization	733,022	843,331
Net realized (gains) losses on long-term investments	(289,207)	876,244
Net unrealized gains on long-term investments	(303,441)	(3,194,965)
Increase (decrease) in cash attributable to changes in assets and liabilities:		
Decrease (increase) in accounts receivable	492,553	(419,487)
Decrease in pledges receivable	217,511	7,092
(Increase) decrease in prepaid expenses and other assets	(84,125)	75,776
Increase in accounts payable	802,350	182,093
Increase (decrease) in deferred publication revenue	521,432	(106,265)
Increase in deferred membership dues	158,138	47,566
(Decrease) increase in other deferred revenue	(60,216)	61,556
Increase in liability for post-retirement medical benefits	<u>414,263</u>	<u>440,137</u>
Net cash provided by (used in) operating activities	<u>4,328,646</u>	<u>(53,480)</u>
Cash flow from investing activities:		
Proceeds from the sales of investments	10,083,044	10,048,719
Purchases of investments	(11,339,130)	(11,052,399)
Purchases of equipment and building renovations	<u>(852,076)</u>	<u>(2,128,234)</u>
Net cash used in investing activities	<u>(2,108,162)</u>	<u>(3,131,914)</u>
Net increase (decrease) in cash and cash equivalents	2,220,484	(3,185,394)
Cash and cash equivalents at the beginning of year	<u>7,005,118</u>	<u>10,190,512</u>
Cash and cash equivalents at the end of the year	<u>\$ 9,225,602</u>	<u>\$ 7,005,118</u>

CONTRIBUTIONS AND GIFTS TO APS

APS is fortunate to benefit from generous gifts from corporations, governmental agencies, national labs, foundations, other organizations and individuals toward its programs. These programs include education and outreach initiatives, international affairs programs, public information efforts, and funds for prizes and awards. During 2000, gifts of over \$1 million were received and the number of APS members providing a voluntary contribution of \$100 or more in conjunction with their annual membership renewal nearly doubled. The leadership of APS gratefully acknowledges the generosity of the following contributors during 2000: