

did not vote.

Grassroots rebellion

The rejection of Sakharov prompted more than 1000 rank-and-file scientists to demonstrate in the academy's courtyard on 2 February—an unprecedented manifestation of collective dissent by scientists. For a time Sakharov toyed with the idea of running for a territorial seat. He accepted at least two nominations, one for an at-large Moscow seat and one representing the Oktyabr district, where the Lebedev Institute is located. But then, on 15 February, Sakharov withdrew from the territorial races, saying that he felt "inextricably linked with the academy" and that he would "not run anywhere except for the Academy of Sciences."

During the following months, Soviet scientists organized a campaign to reject the Academy's slate of 23 candidates in its entirety. Instead, in a split decision reached in a dramatic election held at the academy on 20–21 March, some 1000 academy members and 500 representatives of scientific institutes elected eight delegates from the presidium's slate and rejected the other 15. Among the eight elected are five physicists: Yuri Ossipyan, director of the solid-state physics institute at Chernogolovka and president-elect of the International Union of Pure and Applied Physics; Zhores Alferov, head of a group at the Ioffe Institute that has done pioneering work on injection lasers; Andrei Gaponov-Grekhov, a radiophysicist in Gorki who ran unsuccessfully against Sakharov for the physicist vacancy on the presidium last October; Nikolai Karlov, also a radiophysicist; and Karl Rebane. The other three individuals elected to the Congress are jurist Sergei Aleksei, chemist Oleg Nefedov and mathematician Vladimir Platonov.

According to a vivid report issued by the Soviet news agency Tass, the voting lasted for three hours on Tuesday morning, 21 March. "Then for over seven hours eleven members of the electoral commission were counting votes without using calculating machinery. This took place at a round table on the premises of the Moscow Palace of Youth. The table was divided by a broad red band. Ten observers—representatives of electors from collectives of scientists—as well as numerous journalists were seated opposite to members of the commission."

The vote was preceded, on Monday 20 March, by a meeting of the academy's general assembly. "All who spoke were unanimous," Tass report-

ed, "in the opinion that scientists—deputies in the supreme body of state authority—should not only pursue the interests of science but should, first and foremost, promote perestroika, the democratization of Soviet society, and the intellectualization of the process of making policy decisions."

Run-off election

On 10 April, Sakharov and Sagdeev were nominated by the academy's presidium for seats in the constitutional congress. Sakharov received 34 of 37 votes. In the second round of the academy's election, which was held 20 April Sakharov and Sagdeev were elected to the Congress of Deputies in what a US embassy official described as "virtually a clean sweep for the reformers."

Sakharov's election was almost a foregone conclusion, but Sagdeev's prospects were more uncertain and his victory says more about the emerging political balance. An outspoken advocate of democratization, competition and westernization in general, Sagdeev is extremely popular among scientists and science policy makers in the United States, and he has a strong following among the more liberal-minded Soviet scientists. But sometimes fellow scientists seem to resent him. In the election of new presidium members last October, he was accused by Kiril Kondratiev, an ally of academy president Guri Marchuk, of announcing scientific results

in the West before he announced them in the USSR itself.

Sagdeev was very closely identified with the idea of a manned mission to Mars and with the Phobos mission, which ended sadly in March when it was announced that the USSR had lost contact with the second of two spacecraft sent to the Mars moon. (Contact with the first was lost last summer as the result of a command error.) Even though the loss may (or may not) be the fault of organizations and plans in which Sagdeev had no responsibility, his prestige was bound to suffer. Apparently his political philosophy and general eminence outweighed, in the eyes of academy voters, the Phobos news.

There were many startling upsets in the general elections held 26 March. Georgi Arbatov, the USSR's designated top US expert and a member of the academy's presidium, lost to the head of the Orthodox Church (but won as a member of the academy's slate in the second round); Boris Yeltsin, the former Moscow party chief who was demoted and denounced by Gorbachev two years ago, won in a landslide against the head of the country's limousine manufacturer. It is not true, however, that Marchuk was defeated. Contrary to some news reports in the US, the academy president holds one of the party-reserved seats in the Congress of Deputies.

—WILLIAM SWEET

AIP BEGINS SEARCH FOR NEW EDITORS OF APPLIED PHYSICS JOURNALS

The editors of the *Journal of Applied Physics* and *Applied Physics Letters* are due to retire at the end of 1989, and a search for their successors is under way.

Gilbert J. Perlow was appointed editor of both journals in 1970. In 1974 Lester Guttman became editor of *Journal of Applied Physics*, while Perlow remained as editor of *Applied Physics Letters*. The journals have been managed from editorial offices at Argonne National Laboratory since 1962—a joint operation that has grown considerably in the past few years. In 1988, approximately 2100 manuscripts were submitted to *Journal of Applied Physics* and approximately 2400 to *Applied Physics Letters*. *Applied Physics Letters* is now published weekly.

Sokrates T. Pantelides (IBM Thomas J. Watson Research Center, Yorktown Heights, New York) has been

appointed chairman of a search committee charged with recommending the successors of Perlow and Guttman to AIP Executive Director Kenneth W. Ford. The other members of the committee are Douglas K. Finnemore (Iowa State University), Nick Holonyak Jr (University of Illinois at Urbana-Champaign), David V. Lang (AT&T Bell Labs, Murray Hill, New Jersey), Gerald Lucovsky (North Carolina State University), Thomas J. McIlrath (University of Maryland), James Plummer (Stanford University), Peter A. Wolff (Massachusetts Institute of Technology) and Jerry M. Woodall (IBM Yorktown Heights, New York). John T. Scott, director of AIP's Publishing Branch I, will serve as AIP liaison to the committee.

Candidates for the editorial positions should be respected members of the community of applied physicists and willing to devote the time and

AIP Conducts School Program at San Francisco Meeting



On 18 January 1989 the American Institute of Physics presented a pilot program for 7th and 8th grade students, aimed at increasing the number of students who choose to study science. Project SEEP (Students to Explore & Experience Physics) was organized by Beverly Citrynell of AIP's career placement division, and was presented in conjunction with the AAPT-APS annual joint meeting in San Francisco.

When contacted about the project, the 16 schools in the San Francisco Unified School District, which all have predominantly minority populations, wanted to take part, but the facilities provided by AAPT and APS were only able to accommodate 120-125 students. The final selection was made by lot; 25 students were picked from each of five schools.

The first half of the program featured two key speakers—William Havens, executive secretary of APS, and Jack Wilson, executive officer of AAPT—and physics demonstrations for the students and their teachers. The second half allowed the students to perform a variety of physics and chemistry experiments for themselves, covering such topics as superconductivity, polarized light and lasers, magnetism, and thin film physics in the form of soap bubbles.

energy necessary for these large-scale operations. They should be able to direct the work of associate editors and a secretarial staff to ensure the continued smooth flow of the journals' activities. In addition, they should be members of institutions that can provide, at AIP's expense, space, services and personnel.

Applications and nominations

should be sent by 1 September 1989 to Sokrates T. Pantelides, IBM Research Division, Thomas J. Watson Research Center, P.O. Box 218, Yorktown Heights NY 10598.

Further information can be obtained from Pantelides or from John T. Scott, American Institute of Physics, 500 Sunnyside Boulevard, Woodbury NY 11797, (516) 349-5810.

OSA AND AIP TO TRANSLATE SOVIET JOURNAL *ATMOSPHERIC OPTICS*

Beginning this year the Optical Society of America and the American Institute of Physics will publish *Atmospheric Optics*, the English translation of the Soviet journal *Optika Atmosferii*.

Edited by Vladimir E. Zuev, director of the Institute of Atmospheric Optics of the USSR Academy of Sci-

ences in Tomsk, *Atmospheric Optics* gives a monthly view of the latest technical applications, experimental discoveries and theoretical interpretations from the Soviet Union. Among the topics covered are spectroscopy of atmospheric molecular constituents, optical properties of aerosols, optical effects of turbulence,

refractive index, inverse problems of atmospheric optics, atmospheric sounding, optical models of the atmosphere, and lidar and computerized remote sensing instruments.

For the first time in the history of the AIP-OSA journal translation program, the Soviet publisher is making manuscripts available for translation prior to original-language publication. This will allow the publishing process to proceed with a shorter lag time than the six months that is usual for a translation journal of this type.

The domestic subscription rate for OSA members is \$50 and the institutional rate is \$500 (domestic). Subscribers can receive a bound copy of Volume 1, the 12 issues published in 1988, for \$395.

Orders and requests for further information may be sent to AIP Marketing Services, 335 East 45 Street, New York NY 10017.

AIP PUBLISHES NEW PHYSICS FACULTY AND STAFF DIRECTORY

The 1988-89 edition of AIP's *Directory of Physics & Astronomy Staff* has been published. Listed in the new directory are more than 32 000 physicists and astronomers on staff at more than 3000 institutions, including academic faculties and government, industrial and university laboratories.

The directory is divided into five parts: a list of individuals, followed by an alphabetical list of academic institutions and their faculty members, an alphabetical list of nonacademic research and development organizations and their staffs, a geographical list of academic institutions and, lastly, a list of R&D organizations by type.

The physics and astronomy staff directory is based on information provided by institutions. If omissions of individuals arise from omissions of departments or labs in the new edition, individuals are urged to submit the forms found at the end of the directory for inclusion in the next edition.

The American Physical Society has supplied copies of the 1988-89 directory to its members as Part II of the December 1988 *Bulletin of The American Physical Society*.

The standard price of the 1988-1989 *Directory of Physics and Astronomy Staff* is \$25 for AIP member society members and \$40 for non-members, institutions and libraries. Copies may be ordered from AIP Publication Billing, 500 Sunnyside Boulevard, Woodbury NY 11797.