

SOVIET SCIENTISTS REBEL, SAKHAROV AND SAGDEEV ELECTED TO NEW CONGRESS

An extraordinary spirit has swept Soviet science institutions in the aftermath of an attempt last winter by the academy's old-guard leadership to impose an unpopular slate of candidates on Soviet science.

In the new constitutional system adopted by the USSR last summer, Soviet voters and major Soviet institutions including the Communist Party currently are selecting 2250 delegates to a Congress of Deputies. The Congress's official purpose is to elect a two-chamber parliament called the Supreme Soviet and a president, who presumably will be Mikhail Gorbachev. The Congress also will meet once a year to consider constitutional questions, and it has the potential of becoming a constitutional convention somewhat comparable to the one that met in Philadelphia in 1787 and wrote the US Constitution. From this point of view, the question of who will be in a position to play Benjamin Franklin's role in the Soviet Congress is of more than passing interest.

On 26 March, 1500 delegates to the Congress representing territorial districts and the USSR's constituent republics were elected by voters in a general election; in contested districts where candidates failed to win a majority or in uncontested districts where the official candidate was struck off the ballot by a majority of voters, second-round elections are to be held. Meanwhile, the other 750 delegates are being selected by officially sanctioned organizations such as the party's youth league, unions, trade and professional groups, and the Academy of Sciences.

In an internal election held on 18 January, the Academy selected a slate of 23 candidates that did not include—to the dismay of many Soviet scientists—either Andrei Sakharov or Roald Sagdeev, even though they had received by far the largest number of nominations from scientific institutes and other academy sec-



Unprecedented demonstration of Soviet scientists took place outside the USSR Academy of Sciences Presidium on 2 February to protest the exclusion of Sakharov, Sagdeev and other advocates of democratization from the academy's slate of candidates for the Congress of Deputies.

tions. The result was especially surprising in view of the fact that Sakharov had been elected to the academy's presidium just three months earlier, after Sagdeev withdrew in his favor (see *PHYSICS TODAY*, January 1989, page 61). According to Bill Keller, the Moscow bureau chief for *The New York Times*, "The Academy of Sciences presidium evidently outdid all other organizations in limiting the choice it present[ed] to its members...."

The election procedures that led to the exclusion of Sakharov and Sagdeev have been described in a special report by Paul Doty, director emeritus of the Center for Science and International Affairs at Harvard University, who was in the USSR at the time of the election. The election, Doty said, was "carried out by an oddly composed group of full and

corresponding members of the academy. Roughly, this group would contain the 45 regular voting members of the presidium, the 25 or so emeriti (over 75 years of age) and 6 heads of special regional sections of the academy or scientific centers. To this number (of about 80) were then added a much larger group numbering about 300 and composed of the full and corresponding members of the 19 departments that cover the major scientific specialties. This expansion was apparently agreed to as a step toward greater democratization. However, this group is made up predominantly of corresponding members who carry out much of the administrative work of the academy and it is the conservative bias of this group which allegedly led to the upset." Apparently some less conservative members were complacent and

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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