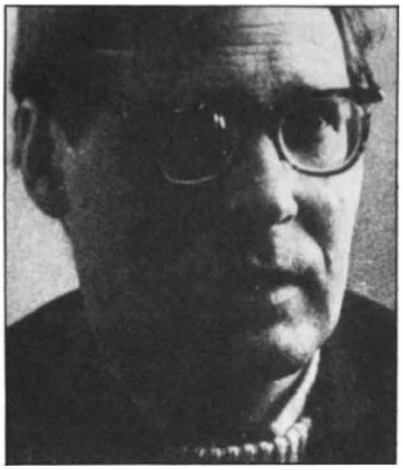

Sergei Kovalev: arrested in December

Moscow scientists under pressure

from Vera Rich, London

THE arrest and harassment of members of the Moscow group of Amnesty International highlights yet again both the involvement of a number of leading Soviet scientists with problems of human rights and the extreme disfavour with which these activities are viewed by the authorities.

Physicist Andrei Tverdokhlebov, the secretary of the group, was arrested in Moscow on April 18, on his way to work. The same day, the Ukrainian science-fiction writer Mykola Rudenko, a postal "associate member" of the group, was arrested in Kiev.

Another prominent member of the group, Dr Sergei Kovalev was arrested last December, as part of a KGB operation against the *samizdat* journal "The Chronicle of the Lithuanian Catholic Church". Dr Kovalev has since been charged with "anti-Soviet agitation and propaganda".

Other members of the Amnesty group, including the Chairman, cybernetic Valentin Turchin, and Vladimir Albrekht, a mathematician, have had their apartments searched, and documents, including Amnesty material, confiscated.

The Moscow group of Amnesty International was recognised by the International Executive Committee of Amnesty last September. Following the usual procedure, the Secretariat assigned the new group three case-sheets, referring to prisoners of conscience in Sri Lanka, Yugoslavia and Spain respectively. The group as such, had no connection with the internal affairs of the Soviet Union, in accordance with the policy of Amnesty International which does not allow any of its groups to concern itself with prisoners in its own country.

Although certain of the members of the group, have, as private individuals, also been active as regards the defence of human rights within the Soviet Union (Tverdokhlebov and Turchin have, on occasion, been co-signatories to the "open letters" for Dr Andrei Sakharov), it seems clear that it is not only their actions as private individuals, but also the existence of the Amnesty group which has earned official disfavour. The latest reports from Kiev indicate that although Rudenko has been released, his continued freedom is conditional; he has had to sign a promise not to leave Kiev, has been warned that he is awaiting further investigation and trial, and that his Amnesty activities "compound his crime" against the Soviet Union.

A statement from Academician Andrei Sakharov, addressed to the General Secretary of Amnesty International and to the "international public", described the arrests and harassments as "an affront to international public opinion and an attack against legality and democratic and humane principles to which this organisation and its members in the USSR invariably adhere."

Soviet space achievements celebrated

In spite of the recent setbacks to the manned Soyuz programme, Soviet Cosmonautics Day, April 12, was celebrated with the usual progress report on Soviet achievements. Although, on the practical side, the festival was marked only by the launch of that most routine of Soviet spacecraft, a Kosmos (number 726), this deficiency was more than offset by the official and quasi-official speeches.

At a celebration meeting held in the Central Theatre of the Soviet Army in Moscow, Academician Boris M. Petrov spoke of the year's work in tones of unqualified achievement. On such an auspicious day, nothing was said of the problems with the Soyuz–Salyut projects. The stress was entirely on the potentialities of the Salyut programme "for long term experiments in space with human participation".

Special emphasis, too, was placed on the expansion of Soviet participation in international space projects. "Successful cooperation" is at present going forward between the Soviet Union and the USA, France and India, and this co-operation on "major projects" will be extended during 1975 to include Sweden. The Interkosmos (joint COMECON) programme also progresses steadily, the latest satellite in the series being Interkosmos 13.

Within the purely Soviet framework, more than 50 Orbita communications satellites have now been launched, and a new one is planned to bring television to the workers on the Baikal–Amur Railway (one of the present major Soviet prestige engineering projects.

Although the official speeches at such a celebration must, of necessity, be laudatory, Academician Petrov's plaudits are, in fact, substantiated by a year of solid routine achievement. Although the Soyuz setbacks have captured the headlines, valuable preparatory work has gone forward on the Soyuz–Apollo plans (the major difficulty still, apparently, being one of linguistics). The Franco–Soviet "Araks" experiment, operating from magnetically antipodal bases in the Arctic and the Kerguelen Islands, is proceeding steadily with its programme of investigations of the terrestrial magnetic field. Although unfavourable meteorological conditions in the Antarctic have made it impossible, to date, to carry out the main part of the experiment—the injection of electrons into the magnetosphere to create an artificial aurora—some valuable, if routine, observations of the natural aurora have been carried out. Interkosmos 13, with its payload of Czech and Soviet instruments, was likewise devoted especially to magnetospheric and polar ionospheric research, a programme which is also being supported by a team on the drifting ice-flow polar station North Pole 22. A few days after the celebrations, on April 19, the first Indian satellite (named Ariabata after a fifth-century mathematician) was successfully placed in orbit from a Soviet carrier, achieving, *inter alia*, the distinction of being the heaviest first satellite of any country (360 kg).

Cosmonautics Day is, however, not only the time for an annual stock-taking of Soviet space achievements; it is also an occasion for press speculation and "informed" interviews on future plans.

Much of this material is necessary speculative and non-committal. "To prove, for example that there is not and was not life on Mars would be no less important than to find life there", is a typical comment of this type. Nevertheless, from these "supporting" interviews it would seem that long term planners are at least toying with the possibility of recovering soil specimens from the nearer planets. The combination of a Lunokhod-type vehicle with telecontrolled manipulators and a return craft of the Luna-16 type is considered "very promising" for this purpose. And, with an eye to the more distant future, the Institute of Medico-Biological Problems of the Ministry of Health is already working out ecological recycling and life-support systems for eventual long term space flights. □