

USSR

## Conditions on educational success

*The Soviet Union's Five-Year Plan for 1976-1980 will make increasing demands upon the higher educational system. Vera Rich looks at what new degree regulations being introduced could mean for Soviet science*

By 1980 the Soviet economy will require 9.6 million "specialists" and 11 million persons with higher educational qualifications in order to attain the envisaged levels of economic growth and technological expansion. Hardly surprising, then, that considerable attention is being paid to problems of streamlining and improving the Soviet education system, particularly in the higher echelons; but a review of the method of awarding higher degrees is producing changes which can only be regarded as worrying.

The degrees of Candidate of Science (roughly equivalent to PhD) and Doctor of Science are not awarded by the Universities, but the Ministry of Education; Universities and Research Institutes make the necessary recommendations, but the confirmation is by no means automatic. The body which assesses the recommendations and awards degrees is the Higher Qualifications Commission (*Vyshshaya Attestatsionnaya Kommissiya*, VAK) of the Ministry.

On January 1 of this year, however, new regulations came into force, introducing a major reorganisation in both the structure of VAK and its operation which must, inevitably, reflect on the whole structure of Soviet research and the academic establishment. According to Professor V. G. Kirillov-Ugryumov, the Chairman of VAK, in a recent *Pravda* interview, these changes are not merely of an administrative nature; they also have a qualitative significance. The status and "potentialities" of VAK

have been extended. Requirements have been raised regarding the level of qualifications and, consequently, on entry into a scientific career.

In its reorganised form, the administration of VAK will be in the hands of a Plenum, a Presidium and a "College", in whose work leading scientists and specialists will participate. There are to be 34 councils of experts dealing with the principal lines of research, and also some 500 "specialised councils" for assessing degree theses, 150 of these councils being entitled to deal with Doctoral degrees. The Presidium and "College" of VAK have been operating since May 1975, and the first session of the Plenum met last July, but the establishment of the councils is not yet complete, although it is hoped to have them all fully organised by June of this year.

Regarding the "qualitative" changes, the new regulations, says Professor Kirillov-Ugryumov, will demand a higher standard in the theses submitted, and the postulants themselves will also have to meet certain more stringent requirements. The new regulations require that they should "combine a profound professional knowledge with a mastery of Marxist-Leninist theory, and with the convictions of an active builder of communist society".

Courses in political theory and participation in practical "community activity" have always formed a *de facto* compulsory part of Soviet higher education, but the student body and even the staff have tended to regard them as a necessary chore demanding little more than their physical presence. Hitherto the Soviet educational system, although Party-orientated, has permitted a certain number of non-Party scientists to rise to considerable academic heights (Academician Sakharov being the most notable example). The new stress on the political outlook

for higher degree postulants, in which their "community and political activity" as well as their scientific knowledge is taken into consideration, and the presence of Party and trade-union representatives on the "specialised councils", suggest that these days may be over, and that the non-Party element in science will gradually be phased out.

Significant, too, is the fact that almost all Professor Kirillov-Ugryumov's comments on the "distinguishing features" of the new regulations deal with these political aspects; on the academic side he notes merely that all exemptions from the examinations for the degree of Candidate and other "weaknesses" of the existing system will be eliminated, and that a higher standard will be demanded from the "official opponents" in the formal defence of doctoral theses.

Although the new regulations had not been published at the time of their introduction (a booklet of the full text is promised), their content and implications were well-known in Soviet academic circles some months in advance. As early as August 1975, reports from dissident sources were affirming that, under the new system, from 1985 onwards no non-Party member would be able to hold a major academic or scientific post, so that students wishing for a successful career in science would be well-advised to take steps to enter the Party ranks (via the Komsomols) at their earliest opportunity.

Politically speaking, the new emphasis on *partiinost'* does make a certain amount of sense—it was precisely the participation by the non-Party scientists that gave the dissident movement its real strength and significance. Scientifically speaking, however, while the new regulations may, in Professor Kirillov-Ugryumov's words, reflect a "qualitative" change, historical parallels would suggest that it is one which, in the long run, could be detrimental to Soviet science as a whole. □

ITALY

## Trieste still troubled

*Gillian Boucher reports from Trieste on the threat facing an international institution supported by funds from diverse sources*

THE International Centre for Theoretical Physics at Trieste is threatened with a serious cut in funds which, if not compensated by money from other sources, could result in its closure.

What is in jeopardy is the contribution from the United Nations Development Programme (UNDP), which was to have provided nearly one-fifth of the 1976 budget of \$1.2 million. UNDP provides funds for specific scientific activities: the regular programmes on solid state physics and applied mathematics. Since an irreducible 35% of the total budget goes on overheads, cutting out UNDP support would mean an enormous reduction in the scientific

work of the centre.

Disaster almost struck just before Christmas when the centre received a cable from UNDP announcing that no money would be available for the course (then due to start in three weeks' time) on the interaction of radiation with condensed matter, and that the sum for the 1976 mathematics course would be halved. Fortunately the centre had in writing UNDP's previous promise to support these courses, and managed to persuade UNDP that it was impossible to cancel the solid state course. Funding for the course was