

The result of borings and investigations of availability suggest that it will be possible to acquire an area large enough to house an accelerator of 2.2 km diameter. This is more than adequate for the revised plan, which envisaged a ring of 1.8 km diameter, but would preclude the option of reverting to the old 1964 design of accelerator if that were ever seriously reconsidered. Discussions are also in progress to arrange for cooling water to be transported from Lake Geneva to the CERN site and for the necessary facilities to draw the vast amount of electric power for the accelerator from the French and Swiss grids.

At the recent meeting the Italian and German delegations expressed concern that the cost of the accelerator should not exceed 1,150 million Swiss francs (£110 million), the amount foreseen in the Adams proposals. Of this about Sfr 250 million is expected to come from economies in the existing installations at CERN. The Italians also stressed the importance of Britain's participation in the new accelerator, which will cost about a third less than the 1964 proposals which the previous British Government found too expensive.

COMPUTERS

Market looks Ahead

It has been said that the fourth generation of computers may be a long time coming, because the emphasis in the computer world has shifted from the design of bigger and better computers to the efficient use of those currently available or in the pipeline. To a certain extent this has been borne out by Computer 70, an international exhibition held last week at Olympia, London.

Acclaimed as the biggest computer show so far outside the United States, and certainly the most comprehensive in Europe, Computer 70 displayed a vast range of computer peripheral equipment, including countless alphanumeric display terminals and not a few complete computer mailing systems. British manufacturers do not on the whole seem to match up very well to the mainly American competition, and it is widely believed that there are more manufacturers of computer equipment in the northern suburbs of Los Angeles than in the whole of the United Kingdom.

Computers as such were not much in evidence at the exhibition, and the fact that the machines themselves are now taken very much for granted is probably the key to understanding the direction in which computing is heading. Traditional names in the peripheral market, such as IBM and ICL, have now been joined by hundreds more. For several firms, such as Scientific Data Systems Israel Ltd, Computer 70 is their first exhibition appearance. Together these manufacturers seem to cater for the organizational and decorative schemes of any imaginable office. A piece of computer equipment can certainly no longer be called laboratory apparatus, for it has become as basic as an office desk or a typewriter. These may be the first indications that the computer is coming out of the woods as far as society is concerned and is at last becoming almost respectable, in spite of the suspicions of a continuing hard core of opinion.

The general impression created by Computer 70 was underlined by Mr Alex d'Agapeyeff, when he delivered his presidential address to the British Com-

puter Society at its annual dinner last week. Giving his views on the definition of computing and its role in society, he was at pains to make the point that this is no longer a branch of mathematics or physics as it was at one time, but of communications if, indeed, it is possible to classify it at all. He summed up his philosophy neatly by suggesting that computing should now be understood principally as the technology of computer use, with those who follow the profession doing so in a way very similar to the practice of lawyers or engineers.

LABOUR RELATIONS

Upholding Chemists' Rights

THE Royal Institute of Chemistry, one of the largest organizations of its kind, has shouldered the responsibility for negotiating directly with employers the wages and conditions of its 25,000 members. A statement of these plans, issued this week by the institute, comes at a time when graduate scientists are worried that they are being left behind by the progress made by militant trade unions.

The institute has made this change in policy because it is unconvinced of the suitability of trade union policy and tactics for the specific purpose of looking after the interests of professional chemists, particularly those in private industry. The institute claims to have the necessary background of information and experience which the unions lack, and to have better facilities for acquiring it and keeping it up to date. It believes that it should quickly develop the necessary competence to handle negotiations where a most careful appraisal, requiring a thorough understanding of the responsibilities involved, is essential. The institute is also convinced that its high standing in the eyes of the employers will be a valuable asset.

Among the steps that the institute intends to take will be to develop the already considerable records of prevailing salary levels, so that these can be used to provide evidence in actions taken by the institute. In order that individual members may be able to obtain advice locally, regional advisory panels will be established. These panels will recommend action by the institute if they think it is necessary. Arrangements for mediation and arbitration under the supervision of the institute will be made so that disputes between members and their employers can be resolved without expensive litigation.

In no circumstances will the institute call on its members to strike, for it believes that employer and employee should work together to reach agreement rather than act as two opposing factions. That is not to say that the institute considers membership of a trade union to be incompatible with membership of the institute. It is neither hostile to trade unions nor opposed to the principle of collective bargaining. Indeed, collaboration with trade unions and other associations may sometimes be desirable, although the institute says it would prefer to make its own representations on behalf of members. The statement also makes it clear that, in spite of the scheme for amalgamation between the institute and the Chemical Society, the institute will continue to act as a separate and wholly autonomous organization.

The example set by the Royal Institute of Chemistry may well be followed by the other science institutes;