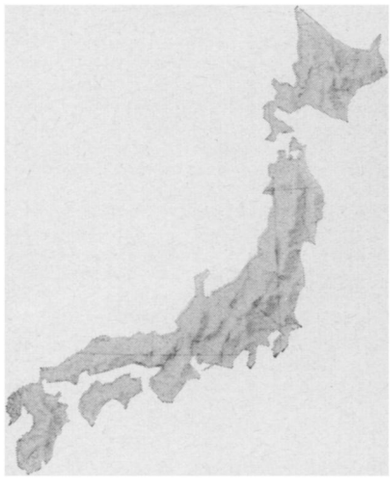
LETTER FROM TOKYO



# Hassle delays accelerator

## Government wants more say in running the planned 40-GeV machine

by Stuart Griffin

Japanese plans for the construction of a 40-billion-electron-volt (GeV) protron synchrotron, the country's pioneer project in the field of what the Science & Technology Agency calls "big science," is faltering because of a growing rift between physicists and Ministry of Education officials over who should operate it.

Failure by the Science Council, an advisory organ to the Ministry, to decide upon a concrete and comprehensive operational plan for the synchrotron is holding back the Government's building of the Elementary Particles Research Institute at Tsukuba, 75 miles north of Tokyo.

This Institute would be part of the so-called Science City, which itself has provoked stormy discussions between Government agencies, private industry and research institutes over points of jurisdictional authority and funds control (SN: 3/16, p. 259).

The proton synchrotron project dates back to 1962, when the Japanese Government, acting on recommendations by the Science Council, decided to include the Institute and its facilities at the future Science City. Arguments over the budget, however, brought on lengthy delays, only recently resolved.

Planned as an opener in Japan's bid for big science, and as a basic research center for elementary particles, the Institute was to have been completed in five years, at a cost of $83 million—a figure finally provisionally budgeted by the Treasury.

The Institute furthermore would require $13.5 million a year to operate. A professional staff of 900 would cost almost $20 million a year more.

Funds received to date, however, have been spent only on preparatory research for the Institute's construction, a total of under $4 million.

Building was expected to get under way in late 1968, until the recent wide gulf developed among the authorities concerned over how the Institute should be run after its establishment.

An important group of scientists, physicists representing the field of elementary particles, has warned it would refuse to participate unless guaranteed complete freedom of research activities, as in the case of other national institutes and universities.

But representatives of the Education Ministry on the Special Committee on the Science Research System, organized recently as a crash project to study operations of the Institute, countered by stating categorically they could not let the Institute be run by "a collection of privately employed physicists acting under self-rule . . ." after the disbursement of so much advance money, with the budget for the project as high as it is, and coming entirely from Government funds.

The Ministry of Education insists the Institute must come directly under the Ministry, with its director appointed by the Government.

The scientists contend that the special Education Civil Service Law, governing the operation of all national universities, should be applied in full to the Institute. They insist the staff itself be empowered to appoint the director and decide on the scope of operations.

Recently a further fly has appeared in the ointment with the refusal of the Ministry of Finance to authorize a supplemental budget of approximately $4 million to get the project moving before the end of 1968.

The Ministry argues that as long as the Institute's "operational formula" remains undecided, further funds cannot be allocated.

There are even rumors that the Ministry of Education may have to, or might insist upon, scrapping the entire proton synchrotron project, and even abandon the scheme to establish as broad an Elementary Particles Research Institute as had originally been envisioned and programmed, if the physicists insist on full scale academic autonomy.

Even if the Japanese accelerator plans go through, the country's high-energy physics effort will lag considerably behind the rest of the world. The U.S. has had a 30-billion-electron-volt machine in operation at Brookhaven, N.Y., since 1961, and the Soviet Union this year started up the world's most powerful machine at Serpukhov, with 76 GeV. Moreover, construction on a 200-400-GeV accelerator was begun this fall at Weston, Ill., with an estimated completion date of 1973.

Nevertheless, a 40-GeV would be far from useless, and would give an experimental shot in the arm to Japan's high energy program, which already vigorously supports many brilliant theorists.

In addition to the particle research institute, present plans call for research centers in language, statistical mathematics, natural history and other subjects to be built at the $1.5 billion Science City. In addition, established institutes in metals, health and arctic research, among others, will move there from their present locations.



Science Service, Inc. is collaborating with JSTOR to digitize, preserve, and extend access to *Science News*. www.jstor.org