Rice Will Receive New Van de Graaff

By MARJORIE TRULAN
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The Atomic Energy Commission is supplying the Rice Institute with a $1 million Van de Graaff positive-ion accelerator for fundamental research in nuclear physics.

This was announced last week by the Commission's Chicago Operations Office.

May '61 Delivery

Dr. Tom W. Bonner, head of the department of physics and member of the National Academy of Sciences, said the 12 million-electron-volt tandem accelerator, to be delivered in about 18 months will extend the facilities of the present nuclear laboratory and will supplement the Van de Graaff generator installed on campus six years ago.

The accelerator will be used to study compound nucleus formation and the mechanism of nuclear reactions.

"We expect to devote much time to neutron physics for the designing and understanding of the operation of nuclear reactors," Dr. Bonner commented.

In Physics Lot

Plans are not as yet complete regarding the housing of the accelerator, which is to be located where the physics parking lot is now. The structure must be 110 feet long and contain at least 8000 square feet of floor space, Dr. Bonner said.

Pierce and Pierce, A.I.A., having also designed the biology and geology labs as well as the present nuclear laboratory, are designing the new building, which the Institute will furnish.

Research Teams

Although the AEC-sponsored research program is headed by Dr. Bonner, the accelerator will also be used by Dr. J. R. Risser, Dr. G. C. Phillips, and Dr. Calvin M. Class, all of the teaching staff; Dr. Jesse Weil, Dr. Reiner Bass, and Dr. Theodor Retzschmidt, all of the research staff; and about twenty graduate students.

"Within three or four years," Dr. Bonner stated, "we would like to connect the two Van de Graaffs and thus have an 18 million-volt accelerator—the largest in the nation."

Weighs 35 Tons

The new Van de Graaff weighs more than 35 tons. Purchased from High Voltage Engineering Corporation of Burlington, Massachusetts, it will be one of the largest and most powerful of its type and will double the power of the machine the Institute now has.

Two other Van de Graaff particle accelerators have been ordered by the AEC for the Argonne National Laboratory at Lemont, Illinois, and the Oak Ridge National Laboratory at Oak Ridge, Tennessee.

First at Chalk River

The first accelerator of the advanced tandem design was installed six months ago at the Chalk River, Ontario Laborator-

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ies of Atomic Energy of Canada, Ltd.

Tandems have also been purchased by the University of Wisconsin, by California Institute of Technology, and by Florida State University.