TANDEM VAN DE GRAAFF ACCELERATOR

A High Voltage Engineering Corporation Model FN purchased in 1966 with NSF funds; operation funded primarily by the U.S. Department of Energy. See W.G. Weitkamp and F.H. Schmidt, "The University of Washington Three Stage Van de Graaff Accelerator," Nucl. Instrum. Meth. **122**, 65 (1974).

Some Available Energy Analyzed Beams

Ion	*Max. Current* (particle μA)	*Max. Energy (MeV)*	*Ion Source*
^{1}H or ^{2}H	50	18	DEIS or 860
^{3}He or ^{4}He	2	27	Double Charge-Exchange Source
^{3}He or ^{4}He	30	7.5	Tandem Terminal Source
^{6}Li or ^{7}Li	1	36	860
^{11}B	5	54	860
^{12}C or ^{13}C	10	63	860
* ^{14}N	1	63	DEIS or 860
^{16}O or ^{18}O	10	72	DEIS or 860
F	10	72	DEIS or 860
* Ca	0.5	99	860
Ni	0.2	99	860
I	0.01	108	860

* Negative ion is the hydride, dihydride, or trihydride.

Additional ion species available include the following: Mg, Al, Si, P, S, Cl, Fe, Cu, Ge, Se, Br and Ag. Less common isotopes are generated from enriched material.

BOOSTER ACCELERATOR

We give in the following table maximum beam energies and expected intensities for several representative ions. See "Status of and Operating Experience with the University of Washington Superconducting Booster Linac," D.W. Storm *et al*., Nucl. Instrum. Meth. A **287**, 247 (1990).

Available Energy Analyzed Beams

Ion	*Max. Current* (pμA)	*Max. Practical Energy* MeV
p	>1	35
d	>1	37
He	0.5	65
Li	0.3	94
C	0.6	170
N	0.03	198
O	0.1	220
Si	0.1	300
^{35}Cl	0.02	358
^{40}Ca	0.001	310
Ni	0.001	395