

ENTRY NO. CU1 Date
 Cyclotron Model Cyclone 10/5
 Institution Austin Repatriation Medical Centre
 Address Heidelberg, Melbourne, 3084, Australia
 Tel +61 3 9496 3995 Telex
 Fax +61 3 9457 6605 E-MAIL htd@austin.unimelb.edu.au
 In Charge: Dr. H. Tochon-Danguy Reported by: Dr. G. Egan

HISTORY

MILESTONE DATES:
 Installation Jan-Aug 1992 First Beam July 1992
 DESIGN/CONSTRUCTION BY: Ion Beam Applications
 COST: Accelerator A\$2.6 million Facility A\$7.6 million
 FUNDED BY: Institution, Federal & State Governments, donations.

STATUS

STAFF: Operators 2 Technicians 1
 BUDGET: Machine A\$0.25million Funded by State Govt.
 TIME DISTRIBUTION: (e.g. basic research, isotope production, maintenance, etc.)
 (a) PET isotope production (clinical) 50%
 (b) PET isotope production (research) 20%
 (c) Radiochemistry research 15%
 (d) Maintenance 15%
 (e) %

CHARACTERISTIC BEAMS

Accelerated Ions	E/A (MeV/u)	Current (part μ A)	
		Internal	External
(a) H^-	10 MeV		30 μ A
(b) D^-	5 MeV		20 μ A

1994 μ A-hours on target: 4000

FACILITIES

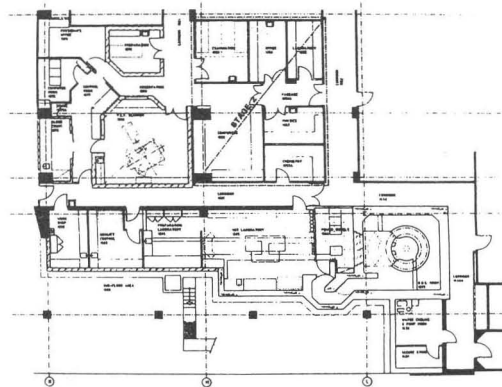
SHIELDED AREA: Fixed: 25 m² Moveable: m²
 Target Stations: 4 No. Served At Same Time: 1
 OTHER FACILITIES: Radiochemistry laboratories, radiopharmacy laboratories, PET scanner (ECAT 951/31R), image processing laboratories.

REFERENCES/NOTES

- (a) G.F. Egan, H.J. Tochon-Danguy et al. "Production, administration and disposal of PET isotopes",
- (b) J. Radiation Protection in Australia 13 (1995).

PLAN VIEW OF FACILITY, COMMENTS

Dedicated PET isotope (¹⁸F, ¹⁵O, ¹³N, ¹¹C) production. Floor plan of PET Centre including cyclotron and radiochemistry laboratories attached.



AUSTIN HOSPITAL P.E.T. CENTRE - FLOOR PLAN

Entry: CU2 Date: June 1996
 Machine Name:
 Cyclotron Model: IBA CYCLONE 30
 Institution: ANSTO - Radiopharmaceuticals Division
 Address: P.O.Box M34, Camperdown, 2040, AUSTRALIA
 Tel: +612 9565 7600
 Fax: +612 9565 7676 Web: http://www.ansto.gov.au
 E-mail: dwa@ansto.gov.au
 In Charge: D. W. Arnott

HISTORY

Installation: 9 Apr 1991 First Beam: 9 July 1991
 Design/Construction by: Ion Beam Applications
 Funded by: ANSTO / RPAH

USES

Isotope Production - PET	15 %
Isotope Production - SPECT	85 %
	%
	%
	%
Total time:	4000 h/year

CHARACTERISTIC BEAMS

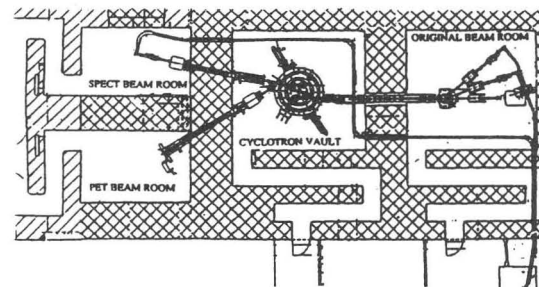
Ions/energy/current:
 H / 15 - 30MeV / 860uA

EXPERIMENTAL FACILITIES

REFERENCES

- [1] [2] E.Milo Conard, D.W.Arnott and S.Parcell. '1 mA 30 MeV Beams for Radionuclide Production' Proc. 14th Int. Conf. Cyc. Cape Town 1995, p124

PLAN VIEW OF FACILITY



COMMENTS

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