

**ENTRY NO.** CU7 **Date** June 16, 1992  
 Cyclotron Model CGR-MeV 520  
 Institution Lab. Anal. Chem., Inst. Nucl. Sc., Universiteit Gent  
 Address Proeftuinstraat 86, B-9000 Gent, Belgium  
 Tel +32 91/64.66.16 Telex  
 Fax +32 91/64.66.99 EMAIL STRYKMAN@INWCHEM.RUG.  
 In Charge: Dr. K. Strijckmans Reported by: Dr. K. Strijckmans  
 Prof. Dr. R. Dams (Director)

**HISTORY**  
**MILESTONE DATES:**  
 Installation 1976 First Beam 1977  
**DESIGN/CONSTRUCTION BY:** CGR-MeV  
**COST:** Accelerator 5.MECU Facility 5.MECU  
**FUNDED BY:** NFWO, Nat. Fund. for Scientific Research  
 (Belgium) RUG University Gent

**STATUS**  
**STAFF:** Operators 1 full-time Technicians 2 part-time  
**BUDGET:** Machine 50.000 ECU/y. Funded by IIKW a.  
**TIME DISTRIBUTION:** (e.g. basic research, isotope production, maintenance, etc.)

- (a) isotope production for PET 50 %
- (b) charged particle and neutron activation anal. 20 %
- (c) proton induced X-ray emission (PIXE) analysis 20 %
- (d) neutron therapy 5 %
- (e) thin layer activation 5 %

**CHARACTERISTIC BEAMS**

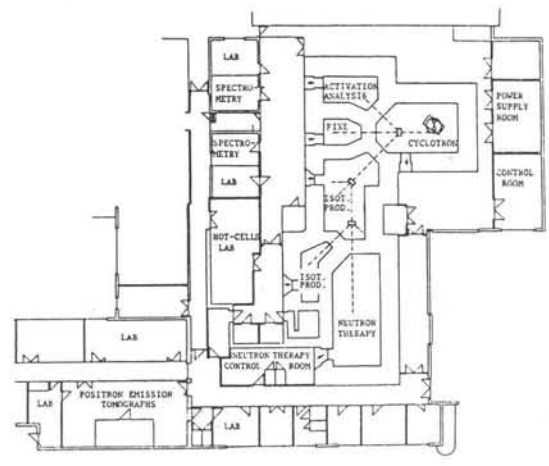
Accelerated Ions	E/A (MeV/u)	Current (part $\mu$ A)	
		Internal	External
(a) p	2.5 - 24		100
(b) d	1.5 - 7.3		100
$^3\text{He}$	2 - 10.7		60
$\alpha$	2.5 - 7.3		60

1991  $\mu$ A-hours on target:  $\sim 10^4$

**FACILITIES**  
**SHIELDED AREA:** Fixed 200 m<sup>2</sup> Moveable m<sup>2</sup>  
 Target Stations: 7 No. Served At Same Time: 1  
**OTHER FACILITIES:** 2 positron emission tomographs, 6 hot-cells, radiachemistry labs, 2 HPGe spectrometers, 1  $\gamma$ - $\gamma$  coincidence set-up, 1 wall type ion chamber, n-dosimetry

**REFERENCES/NOTES**  
 (a) IIKW = Inter-University Institute Nuclear Sciences.  
 (b) A biannual report, describing the research activities (cyclotron applications a.o.) can be requested to the director

**PLAN VIEW OF FACILITY, COMMENTS**



**ENTRY NO.** CU8 **Date** 1989  
 Cyclotron Model CGR-MeV 520  
 Institution Université de Liège  
 Address Centre de Recherches du Cyclotron  
 Tel 32 41 56 36 87 Telex  
 Fax 32 41 56 29 46 EMAIL  
 In Charge: D. LaMotte Reported by: D. LaMotte

**HISTORY**  
**MILESTONE DATES:**  
 Installation First Beam 1975  
**DESIGN/CONSTRUCTION BY:** CGR-MeV  
**COST:** Accelerator Facility  
**FUNDED BY:**

**STATUS**  
**STAFF:** Operators 5 Technicians 5  
**BUDGET:** Machine Funded by  
**TIME DISTRIBUTION:** (e.g. basic research, isotope production, maintenance, etc.)

- (a) Solid State Physics 30 %
- (b) Bio-Medical Application 40 %
- (c) Isotope Production 30 %
- (d)
- (e)

**CHARACTERISTIC BEAMS**

Accelerated Ions	E/A (MeV/u)	Current (part $\mu$ A)	
		Internal	External
(a) p	2.5-24	300	100
(b) d	2-7	500	100

He<sup>3</sup>, He<sup>4</sup>  
 1991  $\mu$ A-hours on target:

**FACILITIES**  
**SHIELDED AREA:** Fixed 700 m<sup>2</sup> Moveable m<sup>2</sup>  
 Target Stations: 7 No. Served At Same Time: 1  
**OTHER FACILITIES:** radiochemistry (automated production of labelled compounds), medical unit (positron scanners), radio pharmacy, biological laboratories

**REFERENCES/NOTES**  
 (a)  
 (b)

**PLAN VIEW OF FACILITY, COMMENTS**