

ENTRY NO. CU7 Date August, 1995  
 Cyclotron Model CGR-MeV 520  
 Institution Dpt. Anal. Chem.-Inst. Nucl. Sc.-Universiteit Gent  
 Address Proeftuinstraat 86, B-9000 Gent, Belgium  
 Tel +32 9 264 66 16 Telex Kare1.Striickmans  
 Fax +32 9 264 66 99 E-MAIL @rug.ac.be  
 In Charge: Dr. K. Striickmans. Reported by: Dr. K. Striickmans.  
 Prof. Dr. R. Dams (Dpt. chairman)

**HISTORY**  
**MILESTONE DATES:**  
 Installation 1976 First Beam 1977  
**DESIGN/CONSTRUCTION BY:** CGR-MeV  
**COST:** Accelerator 5,000,000 XEU Facility 5,000,000 XEU  
**FUNDED BY:** NFWO Nat. Fund for Scientific Research  
 (Belgium) RUG Universiteit Gent

**STATUS**  
**STAFF:** Operators 1 full-time Technicians 2 part-time  
**BUDGET:** Machine 50,000 XEU/y. Funded by NFWO / RUG / UZ  
**TIME DISTRIBUTION:** (e.g. basic research, isotope production, maintenance, etc.)  
 (a) isotope production for PET 70 %  
 (b) proton induced X-ray emission (PIXE) anal. 20 %  
 (c) charged particle and neutron activation anal. 5 %  
 (d) thin layer activation 5 %  
 (e) neutron therapy <1 %

#### CHARACTERISTIC BEAMS

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

1994  $\mu$ A-hours on target:  $\sim 10^4$

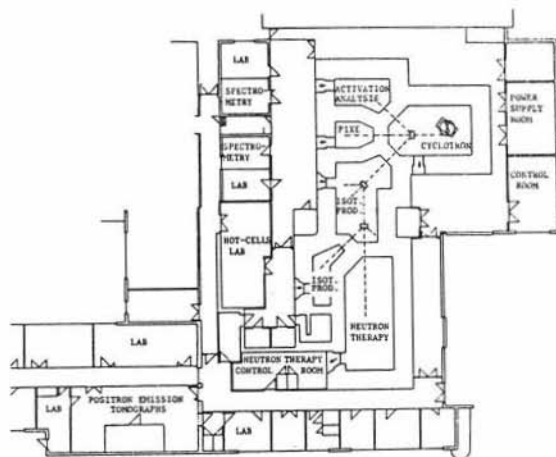
#### FACILITIES

**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, radiochemistry labs, 2 spectrometry labs, mechanical and electronic workshop

#### REFERENCES/NOTES

- (a) A biennial report describes the current research.  
 (b) activities of the Dpt. (cyclotron applications a.o.)

#### 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) $^3\text{He}$ , $^4\text{He}$ | 2-7         | 500                   | 100      |

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

#### 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