



OCTOPUS is a system designed for automated processing of neutron-irradiated, ^{176}Lu enriched targets. The process involves dissolution of the target, evaporation to dryness and re-dissolution of the residue in an appropriate solvent in order to obtain ^{177}Lu solution intended for radiolabelling. The device is also capable of dispensing the product.

BENEFITS

- Automated processing of the neutron-irradiated targets
- Designed to reach high extraction yield from hybrid ampoule and fast processing of further steps
- Fully automated operation from preparation of the sample to its processing after irradiation
- Simple labelling and dispensing available

KEY FIGURES

7 bar *Inlet for compressed air / noble gas*

150 °C *Heating and evaporation unit*

1 GM tube

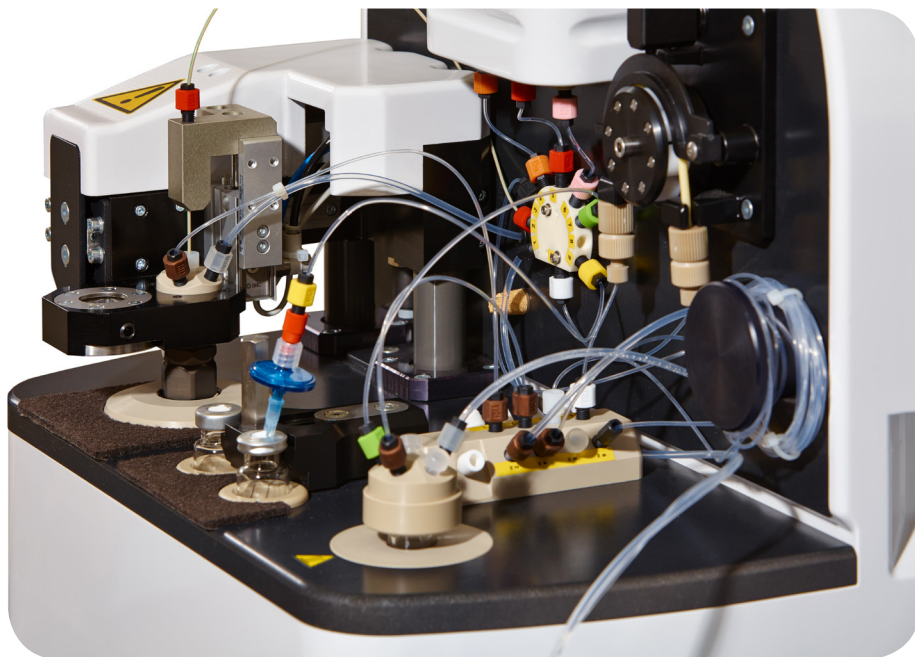
For high activity measurement

OCTOPUS

SYSTEM FOR PROCESSING ^{177}Lu
PREPARED BY NEUTRON ACTIVATION

PRODUCT DESCRIPTION

The apparatus is designed to reach high extraction yield from hybrid ampoule and fast processing of further steps (formulation or simple labelling process). The instrument is adjustable for a range of radionuclides, and a library of basic procedures is available for sequence programming. Ten hybrid ampoules are included with the system. One GM tube allows for high activity measurements, while the design allows processing of incoming activities in the order of hundreds of GBq. The system is driven by PLC and I/O cards, and communication with PC is via Ethernet cable.



PRODUCT SPECIFICATIONS

- Peristaltic pump, 9/10 selector, handling tool for loading, screwing, unscrewing
- Horizontal working desk equipped with three PEEK solenoid valves
- Synthesis reactor equipped with the GM tube for activity measurement and with the heating and cooling unit
- Three inlets for stock solutions and one inlet for large volume stock (mobile phase, washing phase)
- Two vials - one for collection of the enriched material, another one for the final product

PRODUCT APPLICATIONS

- Nuclear medicine
- Radiopharmacy and radiochemistry

Technical Parameters

Module dimensions	41 x 51 x 50 cm
External power supply	230 VAC / 24 VDC
Inlet for compressed air / noble gas	Up to 7 bar
Dissolving and evaporation unit	Up to 150 °C

