5. Patents and Prototypes

Industrial Technologies:

- ***Nuclear Instruments and Methods***

In the project "Nuclear instrumentation" the following prototypes have been designed and constructed:

(a) for the Hot Bird diffractometer:

a 1500 VA power regulator, controlled by phase variation (using SCRs - thyristors) for the high-temperature chamber;

a regulated power supply for feeding a laser diode;

an electronic circuit for controlling a small goniometric cradle.

(b) for the DIDE spectrometer:

an electro-mechanical device for automatic opening and closing of the neutron beam. This device has a back-up power supply and several circuits for signalling and alarming.

(c) For the EPA spectrometer:

a computerised position system of the spectrometer, using 4 step motors.