**PHYWE**

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HANDBOOK

# COBRA

Radioactivity



**All experiments described in this handbook can be performed with the "COBRA-Interface" which has following specific features:**

The versatile high performance computer interface basic unit can be extended by means of a series of supplementary modules.

- Intelligent, microprocessor controlled interface for the performance of measurements and experiments in physics, chemistry, biology and technology

- Can be connected directly to any modern computer over the standard serial interface (RS 232) without supplementary cards and without opening the computer housing

- Replaces devices such as 4-channel plotters, xyt-plotters, transient plotters, digital counters, temperature, conductivity, pH, pressure measuring devices, etc.

- No load on the computer power supply due to the interface, thus excluding computer failures due to partial power supply overloads

- High performance, adjustable direct voltage output to provide power for experiments and for programmable power outputs

- Continuous extension of the series of modules and of the software library keeps on providing new applications for the COBRA user

**This HANDBOOK can be purchased separately.**
**It contains the experiments listed below. Please ask for a complete equipment list. Ref No 25206**

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**Handbook • COBRA – Radioactivity • No. 01176.02 • 7 described Experiments**

**CBR 1    (12018)**
The range of $\alpha$-particles in air

**CBR 2    (12019)**
Middle range of $\beta$-radiation in air

**CBR 3    (12020)**
Absorption of electrons (or positrons) in thin layers of matter

**CBR 4    (12021)**
The quantum current of $\gamma$-radiation in air

**CBR 5    (12022)**
Absorption of $\gamma$-quantums (or electrons) and their dependence on material density

**CBR 6    (12023)**
Law of deterioration; (radioactive decay)

**CBR 7    (12024)**
Radioactive balance
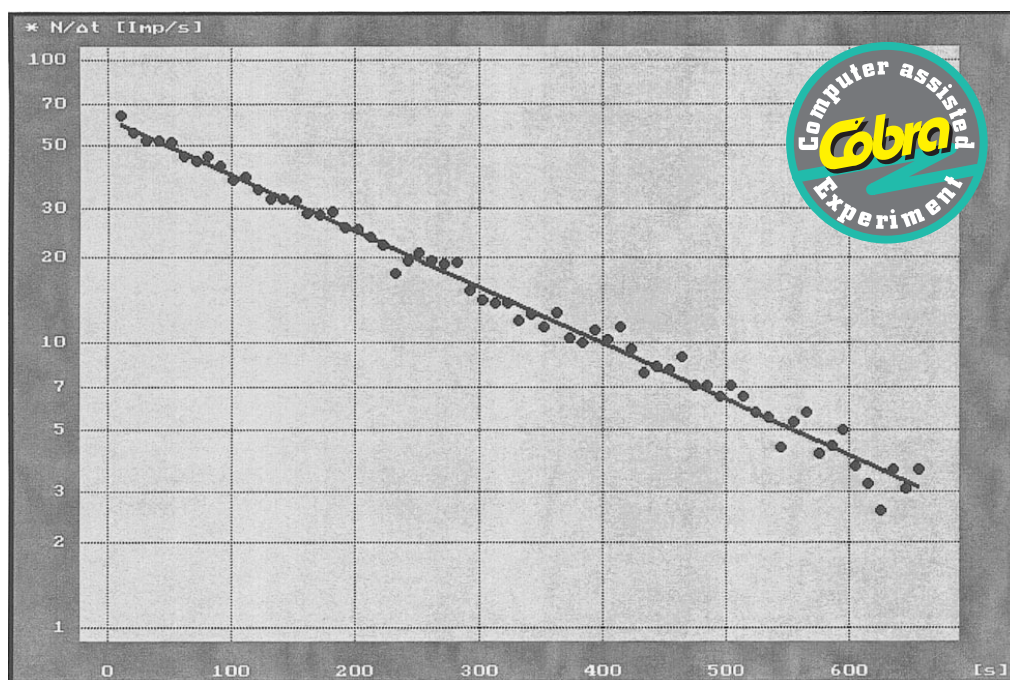


Logarithmed counting rate as dependent on time (Ba-137m)

(Experiment CBR 7: Radioactivity balance)

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