

The MidDec Integrated Delta E detector is based on advanced patented technology and is produced in a high tech clean room in Scandinavia. The integrated Delta E detector benefits scientific research in various areas.

As examples the detector could be used in experiments in nuclear physics, measurement of radiation in satellite telescopes, experiments in material physics or in microscopes used in medical and pharmaceuticals research.

Compared with the detectors used today in accelerators and telescopes the integrated Delta E detector has a lot of advantages.

The MidDec Delta E detector is:

More sensitive

- Giving a larger measuring range
- Identifies particles with lower energy

Rugged

- Easy to handle
- Can be used in transportable units

Compact

- Thin
- Down to 1 μ m

Easily customised

- Tailor made after your specifications

Together all these advantages show that the integrated Delta E detector is a vital component for any scientist in the world, who aim to build a new generation of measurement system in order to increase the borderline of scientific research.

This is accomplished through the integration on Si of a ΔE sensor with underlying E detector substrate.

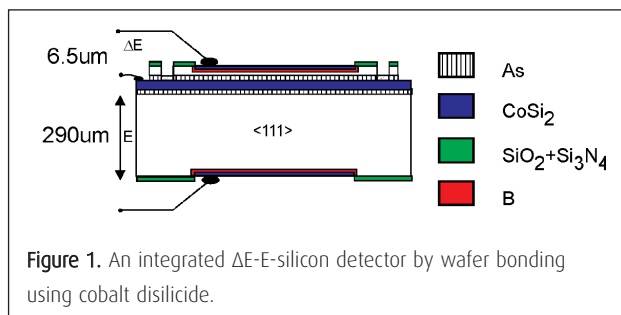


Figure 1. An integrated ΔE -E-silicon detector by wafer bonding using cobalt disilicide.

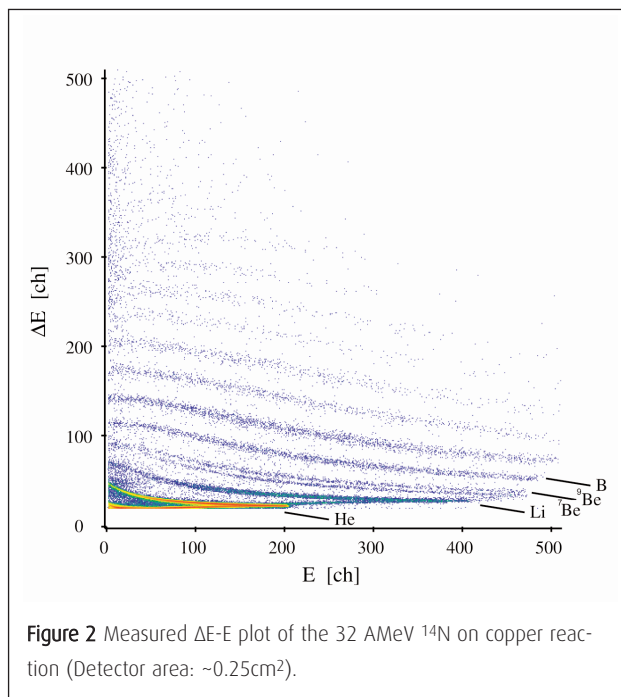


Figure 2 Measured ΔE -E plot of the 32 AMeV ^{14}N on copper reaction (Detector area: $\sim 0.25\text{cm}^2$).