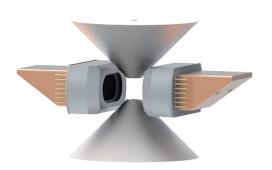


# SDD Racetrack Line

Best solid angle with our unique detector shape: PNDetectors unique oval shaped Silicon Drift Detectors — SDD Racetrack — combine excellent performance with highest possible solid angles of collection. Due to their compact geometry, these detectors can be positioned right next to the pole piece of any SEM or TEM, very close to the sample.

## Collect all available signal



#### Highest possible solid angle

 Due to the oval shape of the SDD Racetrack huge solid angles up to 1 sr per sensor can be achieved.

#### Highest possible solid angle

▶ After the spectacular success of our 100 mm² Racetrack SDDs, the oval shaped sensors are now also available in 60 mm² and 200 mm² size in order to fit every application.

#### Customer specific detector modules

► Ask us for customer specific detector solutions for the ideal integration into your system.

## Don't accept performance trade-offs

#### High spectroscopic performance

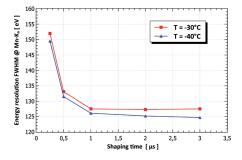
▶ The SDD Racetrack detectors provide excellent spectroscopic performance with energy resolutions down to 128 eV FWHM @ Mn-K $\alpha$  @ -30°C chip temperature.

### Windowless detectors for light element analysis

➤ The excellent performance of our pnWindow enables light element detection down to Beryllium and Peak-to-Background ratios of 15.000 with high quantum efficiency.



SDD Racetrack chips with 200 mm<sup>2</sup>, 100 mm<sup>2</sup> and 60 mm<sup>2</sup> active area





Measured energy resolution of a 100 mm<sup>2</sup> SDD Racetrack Module

