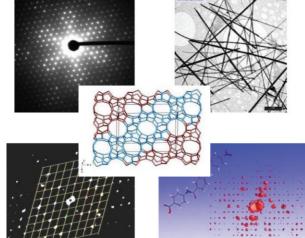
### **DigiSTAR**

www.nanomegas.com

## Advanced TEM electron diffraction tools for nanocrystal structure determination







- the DigiSTAR digital precession unit is easily retrofit to any TEM 100-300 KV (LaB6 /W - FEG), alignments are stored in memory
- ab-initio structure determination of any nanostructure using exclusively electron diffraction intensities
- precession semi-angle variable from 0- 85 mrad (TEM dependent), spot distortion correction-compensation at high angles
- ab-initio structure determination for metal, minerals, ceramics, polymers, semiconductors and pharmaceuticals
- 3D cell reconstruction when used in combination with 3D diffraction tomography
- efficiently solve complex structures in combination with powder X-Ray diffraction
- easy symmetry determination for nanocrystals (space and point group)
- accurate stoichiometry refinement for nanostructures



#### **EMPYREAN**

# The world of X-ray diffraction is no longer flat



## The only XRD platform that does it all

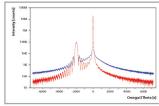
- Powders
- Thin films
- Nanomaterials
- Solid objects

The new Empyrean from PANalytical is truly innovative, with cutting-edge technology in every aspect. Empyrean brings the idea of the perfect XRD platform to life:

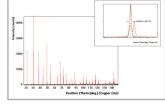
- The widest range of samples
- The highest data quality on every sample, no compromises
- Exceptional tube performance
- The highest performance goniometer
- 2nd generation PreFIX for optics and sample platforms

  Plysol<sup>3</sup>0 the only detector for OP 1D.
- PIXcel<sup>3D</sup>: the only detector for 0D, 1D, 2D and even 3D applications
- Unmatched area detector dynamic range, linearity and resolution
- See inside your samples with the world's first 3D detector

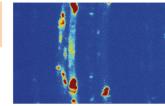
No.







2D



3D



PANalytical B.V. P.O. Box 13 7600 AA Almelo The Netherlands T+31 546 534444 F+31 546 534598 info@panalytical.com www.panalytical.com

**Cutting-edge technology. Ultimate commitment.** 

