

## LUCIDOT® ZEOLITES



*Lucidot® Zeolites were developed by Prof. Gion Calzaferri at the Department of Chemistry and Biochemistry of the University of Bern and are produced and sold by Clariant AG. The physical and chemical properties of Lucidot open up a wide range of application engineering opportunities. Studies carried out by Clariant and various universities have established the extraordinary potential of this nanoscale material, e.g.:*

- Biochemical applications (e.g. sensor system, docking of biological molecules)
- Use as molecular sieves
- Ion exchangers, 3.6 alkali metal ions per formula unit are rapidly exchangeable
- Selective adsorption (e.g. separation of linear and branched paraffins)
- Catalytic applications
- Use of the nanoporous zeolite as a carrier material - in combination with fluorescent dyes, they can be used to develop more powerful thin film solar panels and more powerful fluorescence concentrators, energetically optimized light-emitting diodes (LEDs) or even novel laser systems

