

Press Release / Hannover, June 2012

Nanoparticles: Particular GmbH cooperates with STREM Chemicals, Inc.

Starting in June 2012, Particular GmbH from Hannover, Germany, is cooperating with Strem Chemicals, Inc., from Massachusetts, USA. The German specialist for highly pure metal nanoparticles is proud to announce that Strem, a



renowned distributor of specialty chemicals, are going to start world-wide sales of Particular's nanomaterials to customers from all fields of nanotech R&D.

In contrast to wide-spread chemical synthesis, Particular produce their nanoparticle dispersions by physical laser ablation in liquids. One of the main advantages is that these particles are ligand-free (i.e. extremely pure), as they are produced in pure water or organic solvents without chemical reactants. In addition, this makes the particle surface very active.

"The higher reactivity and lower toxicity of Particular's nanoparticles make them very attractive for medical diagnostic and catalytic applications. We are excited to expand our portfolio of advanced nanomaterial technologies and provide our customers with access to these unique, high purity nanoparticle dispersions," said Strem's Chief Operating Officer Dr. Ephraim Honig.

Dr. Niko Bärsch, CEO of Particular, comments: "Strem Chemicals is a perfect partner whose customers appreciate their expertise and reliability. We are happy to contribute high-quality materials that customers can use to improve established nano-products or even to realize new nano-innovations."

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T +49 511 27 88 313 F +49 511 27 88 100 info@particular.eu Geschäftsführer: Dr.-Ing. Niko Bärsch Ust.-ID-Nr.: DE266943246 Handelsregister: HRB 204903 Registergericht Hannover Together with their research partners from Hannover and Essen, Particular have been developing and selling these materials since July 2010. The partnership with Strem shall now increase the technology's popularity, in order to establish Particular's nanoparticle variety and quality in different fields of nanoscience.

Examples of applications are:

- making antibodies, DNA and peptides visible in light and electron microscopy at the same time, by conjugating them with pure, non-toxic nano-gold,
- embedding antibacterial nanoparticles into laquers, coatings, and even mouldable polymers, by applying organic solvent phase transfers,
- replacing conventional heterogeneous catalysts by highly active supported nanoparticles from ligand-free metals,
- evaluating the environmental and toxicological impact of pure colloids to exclude side-effects from unknown ligands e.g. in biological applications.

About Particular:

Particular from Hannover, Germany, started their business as a nanomaterial supplier in July 2010. The start-up is the first company to employ laser ablation in liquids for the commercial production of highly pure nanoparticles.

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Links:

Homepage of Particular: http://particular.eu/start.html

Homepage of STREM Chemicals: <u>http://strem.com/</u>

Photo of nanoparticle dispersions: http://bit.ly/LKwVhl

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