

DSM Science & Technology Awards (NORTH) 2009	
Name	Ilja Voets
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Ilja Voets has shown that a clever combination of different polymers yields an entirely new class of nanoparticles that form spontaneously in a simple one-step mixing procedure. The performance of the materials is excellent as they can be tailor-made to meet specific needs since their structure, stability, properties, and interactions can be well understood in terms of existing and newly developed thermodynamical theories. The results of the work present a major breakthrough in the preparation and characterization of internally structured nanosized materials opening up a novel, versatile route towards improved surface coatings, “smart” carrier systems, emulsifiers, molecular sensors, nanoreactors, and contrast agents. A promising novel class of functional, responsive, biocompatible, and hierarchical materials can now be developed which will find applications in a wide variety of disciplines such as nanotechnology and medicine.