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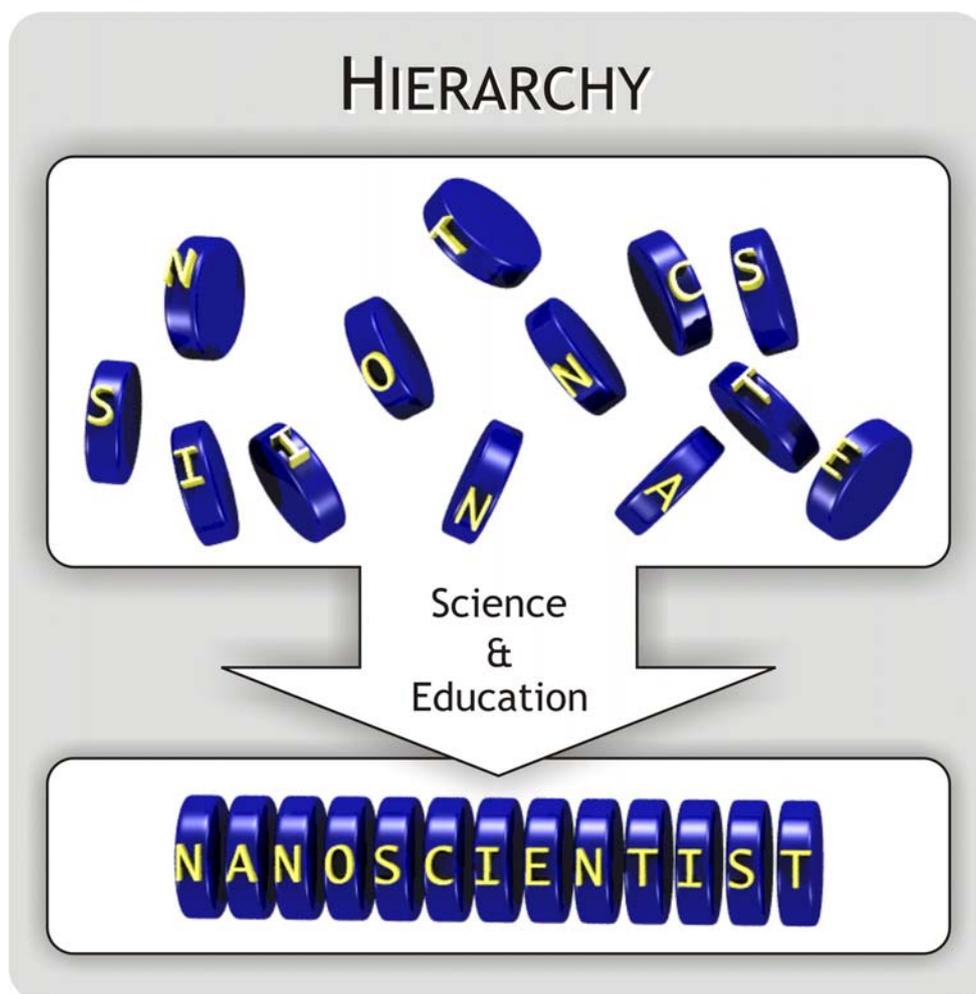
PEOPLE  
MARIE CURIE ACTIONS

**Marie-Curie Initial Training Networks (ITN)**  
**Call: FP7-PEOPLE-2007-1-1-ITN**

ANNEX 1

PROPOSAL NUMBER: 215851-2  
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**“HIERARCHY”**



Project title: Hierarchical Assembly in Controllable Matrices  
Acronym: **HIERARCHY**  
Coordinator: Prof. Roeland Nolte, Radboud University Nijmegen (RU)

## **List of Participants**

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## **Abstract**

The mission of HIERARCHY is to train and educate young scientist in the rapidly developing field of nanosciences, in particular hierarchical self-assembly. The training programme educates early stage and experienced researches in many aspects of this highly interdisciplinary field, such as theory, materials chemistry and biochemistry, advanced characterisation techniques, physics and commercial device development. In addition, the training programme will address non-scientific issues, important for the career development of young scientists, e.g. communication and presentation skills, IPR and entrepreneurial skills, ethical issues, language enhancement and cultural awareness. The training takes place on a Network level and also locally at the host institutions. HIERARCHY's training programme will deliver versatile individuals with a broad scientific knowledge, ready to pursue a successful career in the European industry or academia. The interdisciplinary research training is centralised around the novel concept of hierarchical assembly in controllable matrices. This concept exploits liquid crystalline media as controllable matrices for programmed self-organisation, which goes far beyond the possibilities of currently employed techniques. A liquid crystal matrix in combination with a variety of simultaneously or sequentially applied external stimuli will yield a unique toolbox to build functional macroscopic structures with nanometer control. Leading European laboratories in soft condensed matter and solid state matter will work towards new paradigms in nanosciences. HIERARCHY's intention towards application of the designed structures, illustrated by the presence of three industrial partners in the consortium, is an important step towards commercialisation of nanosciences in Europe. With Europe's desire to become the major player in the area of nanosciences, valorisation of developed technology is a key lesson for Europe's new generation of nanoscientists.