



Hierarchical Architectures of Micro and Nanoparticles

Guest Editor:

**Prof. Dr. Johann Michael
Köhler**

Department of Physical
Chemistry and Microreaction
Technology, Institute for Micro-
and Nanotechnologies/Institute
for Chemistry and Biotechnology,
Weimarer Str. 32, D-98693
Ilmenau, Germany

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Message from the Guest Editor

The controlled interaction and aggregation of particles as well as their connection with biomolecules and synthetic macro- and supramolecules are important tasks towards the realizing of this vision. The fabrication of non-spherical nanoparticles with extraordinary high size and shape homogeneity, surface functionalization and controlled interaction between particles with each other and with molecules, the coupling of different materials, and the designing of nanosystems integrating stiff and movable elements are important challenges. It is expected that in future the border line between material on the one side and functional devices on the other side will disappear. Particles will become equipped with functions and act as partially autonomous devices, on the one hand. Devices will shrink their dimensions down to the nanoscale while retaining their specific functional features and operational autonomy. The construction of hierarchically organized particle assemblies is a crucial step in this direction and will be addressed by the Special Issue here announced.

- nanoparticles
- addressed bonding
- selective interaction
- hierarchical assembling





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Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica,
Politecnico di Milano, Piazza L.
da Vinci 32, 20133 Milano, Italy

Message from the Editor-in-Chief

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Applied Sciences Editorial Office
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