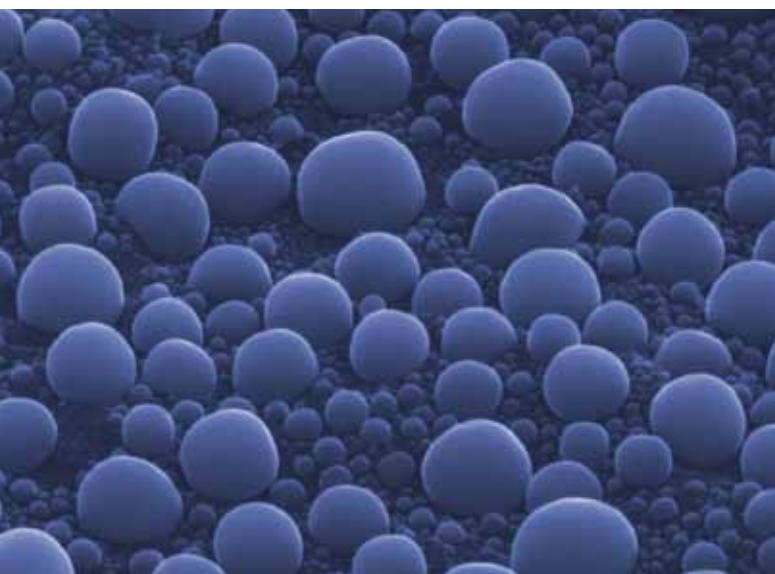


Health and consumer protection

The safety and quality of food and consumer products is of major concern not only for consumers, but also for producers and regulators at national and EU level. Safety concerns can also arise on non-food consumer products such as toys, cosmetics and textiles. EU legislation addresses both categories, and needs harmonised and effective testing systems to be applied. The JRC supports EU policy by providing EU-wide harmonised testing methods for food contact materials and chemical safety of food, as well as on safety and quality of consumer goods. The JRC also carries out research on nanomaterials, a promising technology for EU competitiveness which needs to be carefully assessed against risks to public health and the environment.

Assessing the safety of nanomaterials

Nanomaterials are already being used in hundreds of applications and consumer products and are an important driver of European competitiveness. The JRC provided scientific and technical input to the Commission's recommendation on a definition of nanomaterial, which was issued in October 2011.



▲ Tin nanoparticles synthesized and photographed by the JRC.



▲ Sir Brian Heap, President of EASAC, and Dominique Ristori, Director-General of the JRC, signed an agreement for closer cooperation between both organisations on 18 October 2011.

Together with the European Academies Science Advisory Council (EASAC), the JRC published a report on the state-of-the-art knowledge on the safety of engineered nanomaterials which concludes that to date, there is only limited scientific evidence to suggest that nanomaterials present a risk for human health. The report calls for harmonisation of test protocols and stresses that regulators and researchers need to work together to identify priorities.

In 2011, the JRC released the world's first certified nanoparticle reference material based on industry-sourced nanoparticles, to help ensure the comparability of nanoparticle size measurements worldwide. The new material (ERM-FD100) consists of silica nanoparticles of a nominal diameter of 20 nanometres, which are amongst the most widely used nanoparticles at the moment and are used in products such as polish, whiteners and dispersants. The reference material provides a basis for reliable hazard assessments, and it also enables producers of nanoparticles to monitor production quality over time against a stable reference point. Particle size was measured in collaboration with 33 laboratories from 11 different countries in Europe, America and Asia, thus bringing together expert knowledge from across the globe.