



**Work Package 5, Health, Safety and Environment**

**Observatory Summary: SAFENANO**

Prepared by IOM / SAFENANO for ObservatoryNANO, March 2009



## UK observatory: SAFENANO

### The UK's premier resource on Nanotechnology Hazard & Risk

Over the last decade, the industry of nanotechnology has grown exponentially - in 2008 nanotechnology enabled consumer products alone numbered in excess of 800 (Project on Emerging Nanotechnologies, 2008) Applications for nano have been engineered for medical devices and pharmaceuticals, the agri-food sector, motor, electronics and cosmetics industries - the nanotechnology industry as a whole was valued at over \$25 billion in 2008 (Cientifica, 2008) and is predicted to reach a value of over \$3.1 trillion by 2015 (Lux Research, 2008).

#### What are the concerns?

Hand in hand with this recent mass upscaling of nanotechnologies have grown concerns about potential risks to health and to the environment that could potentially result from exposure to nanoparticles. In recent years, publication of a number of international reviews considering these potential risks from nanotechnology has led to global recognition that the safety of nanomaterials must be addressed due to their increasing implementation in everyday living.

#### How SAFENANO is helping to address the issues

SAFENANO is an initiative which aims to enable industrial and academic communities to quantify and control potential risks from nanotechnology to their workforce, as well as to consumers, the general population and the environment. As a UK Government Centre of Excellence for Nanotechnology, it helps to ensure industry, academia, government and the general public clear & easy access to independent & impartial advice on health, safety and environmental aspects of Nanotechnology; it remains the only of these centres to have a principal focus on health, safety and environmental aspects of nanotechnology.

Through a combination of novel research, review activities, expert opinion and training, the SAFENANO initiative provides the information necessary for assessment of risks specific to nanotechnology, and facilitates responsible development of safe nanomaterials. Key to this is the initiative's maintenance of impartiality and independence of opinion.

In the last 2 years SAFENANO has become firmly established as a world leader in the field, providing independent expert advice and judgement to government, national and international authorities on all aspects of nanotechnology health and safety. SAFENANO's independent, impartial advice is distributed via its three main activities: safenano.org, the SAFENANO Community, and SAFENANO Scientific Services.

Safenano.org is the UK's premier online resource on nanotechnology hazard & risk. Providing news, reviews, guidance, regular feature articles from respected figures in the field and a dedicated help desk, safenano.org is an invaluable free to access resource for industry, government, academia and the general public alike.

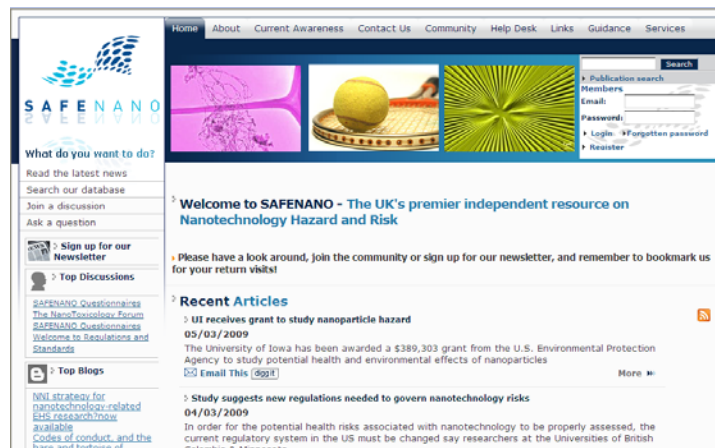


Fig. 1: SAFENANO.org

The SAFENANO Community aims to bring together stakeholders from across a range of disciplines to exchange opinions, discuss the latest advances and exchange ideas. It also features regular blogs from both members of the SAFENANO team, and invited guest writers including Andrew Maynard of the Woodrow Wilson Center's Project on Emerging Nanotechnologies.

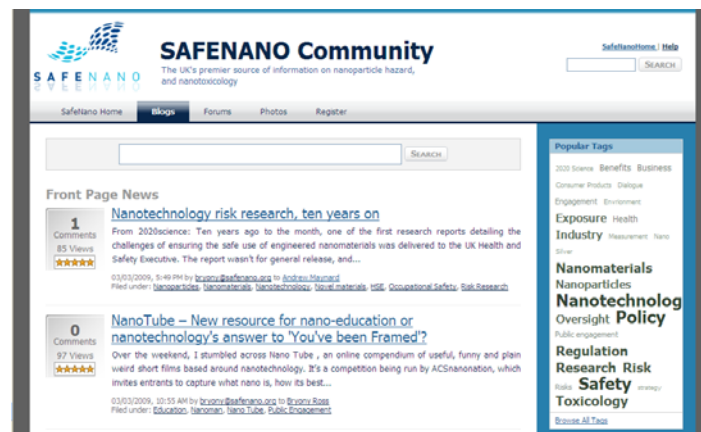


Fig. 2: SAFENANO Community

SAFENANO Scientific Services provides a multidisciplinary approach to supporting Industry with an emphasis on designing solutions specifically for the individual client. The SAFENANO team's expertise covers occupational hygiene and health, toxicology, ecotoxicology, data/knowledge review and training provision, placing us in a unique broad-ranging position for provision of consultancy work. As recognised leaders in the field, our authoritative reports are guaranteed to be independent, and can be trusted by employers, employees, insurers and investors alike.



Fig. 3: SAFENANO Scientific Services - Structural Outline

## World-Class Expertise

SAFENANO is a partnership between the **Institute of Occupational Medicine (IOM)** and **Napier University** and is underpinned by our partners in **SnIRC** (Safety of Nanomaterials Interdisciplinary Research Centre), one of the world's leading research groups working on nanoparticle risks issues. This places SAFENANO in the unique position of having access to a truly multi-disciplinary team of scientists, each at the top of their individual fields of expertise.

## References:

Cientifica (2008), The Nanotechnology Opportunity Report, 3<sup>rd</sup> Edition  
 Lux Research (2008) The Nanotech Report, 5<sup>th</sup> Edition