

Overview of Current Development in Manufactured Nanomaterials
(Slovak Republic)

Date	Major Development	Participants of WPMN meeting
July 2010	(N/A)	
Oct 2009	(N/A)	Mr. Jan Janiga
March 2009	<p>1. Any national regulatory developments on human health and environmental safety including recommendations or discussions related to adapting existing regulatory systems or the drafting of laws/ regulations/ guidance materials;</p> <p>There is exists the system of national legislation in Slovakia which protects the human health and environment from negative impacts of products. These legally binding instruments can be applied for protection of environment and human health in relation to the nanomaterials and nanotechnology. From our point of view it is urgent need and demand for internationally acceptable methodology for nanomaterials risks establishing and evaluation. The international exchange of information at the field of physical and chemical properties and environmental and health risks of nanomaterials is needed for better protection of our environment and human health, from possible negative impacts of nanomaterials and nanotechnologies.</p> <p>2. Developments related to voluntary or stewardship schemes;</p> <p>At present there are no specific initiatives in relation to voluntary or stewardship schemes in Slovak republic.</p> <p>3. Information on any risk assessment decisions;</p> <p>No risk assessments on specific nanomaterials have been conducted in Slovakia and no specific risk assessment decisions have been taken in relation to nanomaterials.</p> <p>4. Information on any developments related to good practice documents;</p> <p>In Slovakia we are not in a position to develop good practice documents, which needs more specific knowledge and information exchange concerning manufactured nanomaterials, but such internationally accepted guidance are needed for our decision making process and we are opened for share our experiences and for international cooperation at this field.</p> <p>5. Research programmes or strategies designed to address human health and/ or environmental safety aspects of nanomaterials;</p> <p>There is no existing joint governmental strategy for nanomaterials in Slovak republic or specific overall research programmes in this area. However several strategies dealing partly with nanomaterials such as Economic development strategy, Research strategy and nanoparticles such</p>	Mr. Jan Janiga

	<p>as Sustainable development strategy or Health care strategy was worked out and approved by Government or Parliament. In this time we have not common specific strategy which is dealing with human health or environmental safety aspects of nanomaterials.</p> <p>It was established the new governmental advisory body for nanomaterials. This body was created from stakeholders and experts of environment, health and economy ministries, experts from scientific institution and universities, stakeholders from producers and consumers associations. The main goal of this advisory body is work out the common strategy for nanomaterials. As a first step in Strategy preparation process, it was worked out the analysis of actual situation of existing nanomaterials at market. One of the most important results of this analysis is rapid increasing of sold products containing nanomaterials, which can causes the enormous increasing the potential risks of products or composites containing nanomaterials their presumable negative impacts to environment and public health.</p> <p>At the field of research Ministry for the environment and Slovak academy of sciences sign up an agreement and create the working group for nanomaterials as an advisory body for research development at this area. Research institutions and universities have now issued a series of projects addressing aspects of further research on nanomaterials, including their health and environmental risks. Created working group for nanomaterials is used for exchange of knowledge and further cooperation between national authorities and producers of nanomaterials in Slovak republic. It was finalised project for mapping the existing producers and products containing nanomaterials in our market and for subscribing their possible negative impacts environment and human health.</p> <p>One of the most important part of research at the field of nanomaterials are construction ceramics, such as silicon nitride, titanium nitride, boron nitride, silicon carbide and titanium carbide and colour pigments. Ultra fine nano scale powders for construction ceramics are prepared by chemical vapour deposition or sol – gel methods.</p> <p>6. Information on any public/ stakeholder consultation;</p> <p>Slovak Institute for Standardization created the new technical commission for nanomaterials. Technical commission set up a new network expert group for nanomaterials with various stakeholders represented by national authorities, industry representatives, universities and Slovak academy of sciences. This technical commission was created in relation to the standardization work concerning nanomaterials in ISO and CEN.</p>	
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nanotechnology. However in the present time the inventory of existing nanomaterials in market as a source of potential risks for environment and human health is needed. From our point of view it is urgent need and demand for internationally acceptable methodology for nanomaterials risks establishing and evaluation. The international exchange of information at the field of physical and chemical properties and environmental and health risks of nanomaterials is needed for better protection of our environment and human health, from possible negative impacts of nanomaterials and nanotechnologies.

2. Developments related to voluntary or stewardship schemes;

At present there are no specific initiatives in relation to voluntary or stewardship schemes in Slovak republic.

3. Information on any risk assessment decisions;

No risk assessments on specific nanomaterials have been conducted in Slovakia and no specific risk assessment decisions have been taken in relation to nanomaterials.

4. Information on any developments related to good practice documents;

In Slovakia we are not in a position to develop good practice documents, which needs more specific knowledge and information exchange concerning manufactured nanomaterials, but such internationally accepted guidance are needed for our decision making process and we are opened for share our experiences and for international cooperation at this field.

5. Research programmes or strategies designed to address human health and/ or environmental safety aspects of nanomaterials;

There is no existing joint governmental strategy for nanomaterials in Slovak republic or specific overall research programmes in this area. However several strategies dealing partly with nanomaterials such as Economic development strategy, Research strategy and nanoparticles such as Sustainable development strategy or Health care strategy was worked out and approved by Government or Parliament. In this time we have not common specific strategy which is dealing with human health or environmental safety aspects of nanomaterials.

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	<p>Under the preparation is a project for mapping the existing producers and products containing nanomaterials in our market and for subscribing their possible negative impacts environment and human health.</p> <p>One of the most important part of research at the field of nanomaterials are construction ceramics, such as silicon nitride, titanium nitride, boron nitride, silicon carbide and titanium carbide and colour pigments. Ultra fine nano scale powders for construction ceramics are prepared by chemical vapour deposition or sol – gel methods.</p> <p>6. Information on any public/ stakeholder consultation;</p> <p>Slovak Institute for Standardization created the new technical commission for nanomaterials. Technical commission set up a new network expert group for nanomaterials with various stakeholders represented by national authorities, industry representatives, universities and Slovak academy of sciences. This technical commission was created in relation to the standardization work concerning nanomaterials in ISO and CEN.</p>	
Nov 2007	(N/A)	Mr. Jan Janiga
April 2007	(N/A)	Mr. Jan Janiga
Oct 2006	<p>1. Any national regulatory developments on human health and environmental safety including recommendations or discussions related to adapting existing regulatory systems or the drafting of laws/ regulations/ guidance materials;</p> <p>In the area of legislation development many institutions cooperate with us, mainly in the form of requiring comments, suggestions. There have been no external incentives in the area of nanomaterials.</p> <p>2. Developments related to voluntary or stewardship schemes</p> <p>Because of a strict regulation in the area of chemical production we do not develop voluntary schemes. In general there are only a few opportunities in chemical industry for stewardship schemes</p> <p>3. Information on any risk assessment decisions;</p> <p>Analyses of risk assessment are systematically carried out the results are attached to the “Safety report” which is periodically offered to the governmental institutions. So far, we have performed only a few trials with nanomaterials at the laboratory scale; therefore no risk assessment decisions have been made.</p> <p>4. Information on any developments related to good practice documents;</p> <p>Documents related to good practice have not been developed in Istrochem, o. z. yet, but there are activities, other documents, which substitute for Good practice documents. Actually there is no reason for using accredited methods in the area of nanomaterials because of the small number and scale of our trials.</p> <p>5. Research programmes or strategies designed to address human health and/ or environmental safety aspects of nanomaterials;</p> <p>In the scope of our interest in nanomaterials we have been monitoring the</p>	

available information. We have not met any restriction in use of nanomaterials in the area of rubber compounds filler or formulations of herbicides and so we have not carried out programmes of evaluating impact on health or environment

6. Information on any public/ stakeholder consultation.

Our activities are described in the reports submitted to the governmental institutions, part of information in them is provided to public on the principle of the law of free access to information. Information and news about our company are also published in newspapers, television, etc. At present most of our interests on nanomaterials are considered as a company secret.

Unfortunately no convenient document, paper or textbook describing the impact of nanomaterials on health, on environment is available. If such documents exist we would be able to consider the effects of nanomaterials more carefully.