



Promoting the implementation of Safe by Design

ROMANIAN ACADEMY "Ilie Murgulescu" INSTITUTE OF PHYSICAL CHEMISTRY

Promoting the Implementation of Safe by Design (PROSAFE)

Coordination and Support Action (CSA)

- an overview -

Speranta Tanasescu

15th National Seminar of Nanoscience and Nanotechnology Bucharest – Romania, June 15, 2016

> Project #646325, Funded by the Horizon 2020 Framework Programme of the European Union





Main Objective:

to facilitate and promote the acceptance/uptake of Safe by Design within the Member States, National Organisations, OECD and Globally, <u>at all stages of the nano-material value chain and</u> product value chains containing nanomaterials, as well as the respective production processes

FROM UNCERTAINTIES AND POTENTIAL RISKS

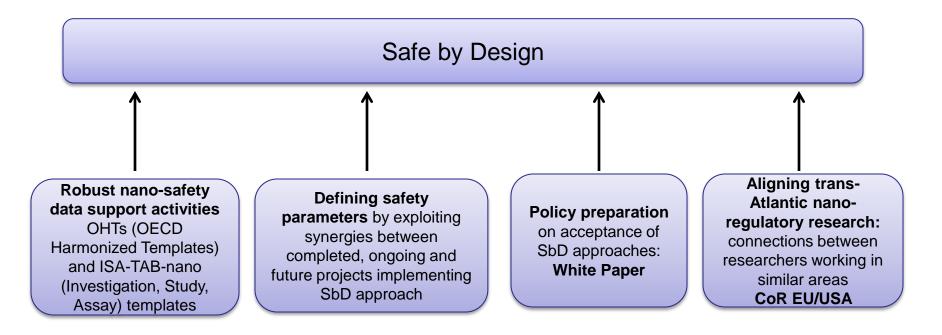
TOWARDS CERTAINTY AND MANAGED RISKS

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Influence of PROSAFE supporting and coordinating Safe by Design actions



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WP 4 -Task 4.2 Definition of call topics and harmonisations Task leader: IPC (S. Tanasescu)



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Main Objectives of Task 4.2:

Definition of common call topics

□ Harmonization of national oriented tasks, protocols, procedures and data as well as Safe-by-Design concepts

Task 4.2 contribution to the overall ProSafe impact:

Addressing safe-by-design approaches and their integration in industry's innovation processes

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Definition of common call topics

Challenging aspects related to the aim of the call

- Focused on the needs of industrial companies, helping to find and implement the Safe-by-Design working concepts generally applicable for specific industrial branches
- Identifying existing gaps in the symbiosis between research and innovation with the respective safety for humans and the environment through the development of appropriate solutions.

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Harmonizing national and other regulation oriented protocols, procedures and data as well as Safe-by-Design concepts

Linking initiatives and promote the acceptance of Safe by Design at all levels of the MNMs value chain as well as the respective production processes.

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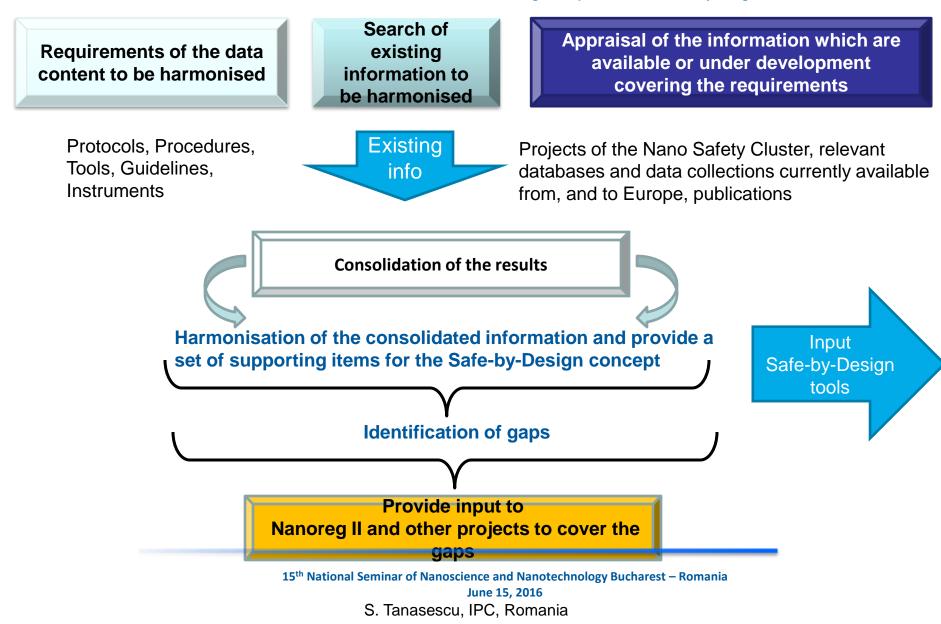
Harmonization of national regulatory oriented protocols, procedures, data and Safe-by-Design concepts Promoting the implementation of Safe by Design **Concept/structure** Safe by Design **Defining safety parameters:** The nano-safety data acquisition (validated data referring to MNM evaluation of robust data of known structure, An integrated approach in well-defined systems, providing a bridging of under specific conditions) data acquisition, evaluation and harmonisations Harmonising regulation oriented protocols and data

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Harmonization of national regulatory oriented protocols, procedures, data and Safe-by-Design concepts



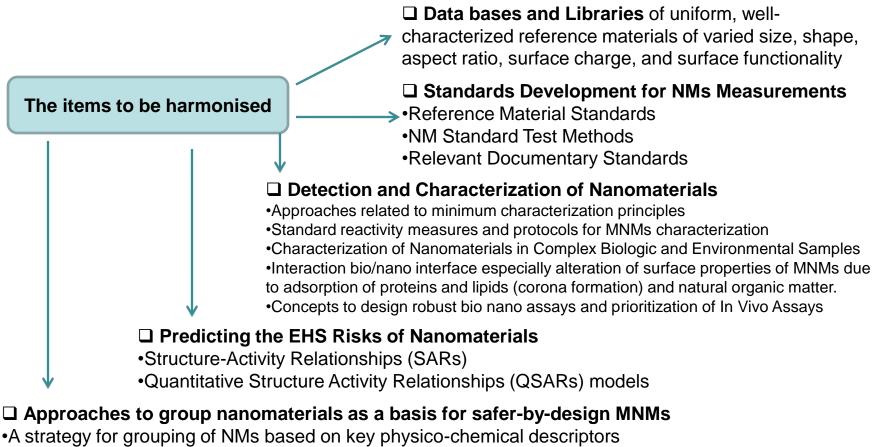
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Harmonization of national regulatory oriented protocols, procedures, data and Safe-by-Design concepts







•Understanding of characteristics - fate - effects relationships as link to grouping (sameness)

Genomic tools

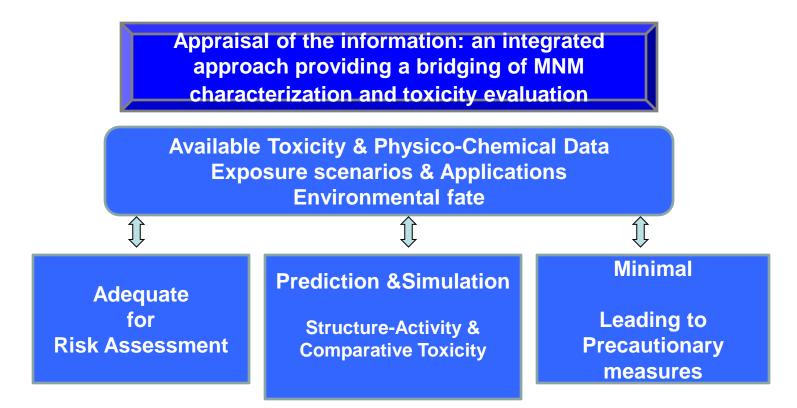
•nanoQS/PARs - quantitative structure or property-activity relationships for nanomaterials

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Harmonization of national regulatory oriented protocols, procedures, data and Safe-by-Design concepts



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Conclusions and issues for further considerations in the Gaps Analysis as a basis for safer MNMs by design Harmonizing and uptake of safe-by-design approaches, regulatory conditions and pre-cautionary principles

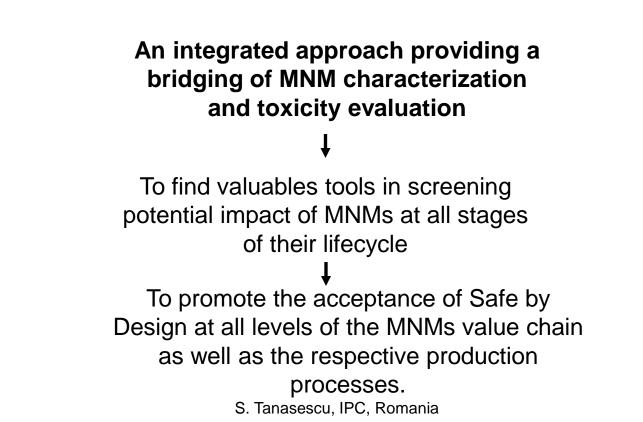
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Remarks

The framework used for the harmonization of the SbD tools considered physicochemical properties, toxicological and ecotoxicological endpoints, and integrated the existing and identified additional properties/endpoints to evidence those which may and may not be addressed by standard test guideline methods and where further development of in vitro, in vivo or other methodologies is required.





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Thank you for your attention