

VTT TECHNICAL RESEARCH CENTRE OF FINLAND LTD



Implementation of Safe-by-Design thinking into manufacturing of products containing nanomaterials

Looking for partners for NMBP-15-2019 call (Safe by design, from science to regulation: metrics and main sectors)

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Background & Motivation

- § Notable effort has been put into research activities related to nanomaterial safety both at EU and national level.
- § However, comprehensive risk assessment of various products containing nanomaterials is still missing in many industrial areas.
- § This is most probably due to the required case-by-case assessment.
- § **The solution** is to
 - § pro-actively take into account the potential risks of nanomaterials.
 - § ensure the safety of nanomaterials over their whole value chain, already at the early stages of product development.

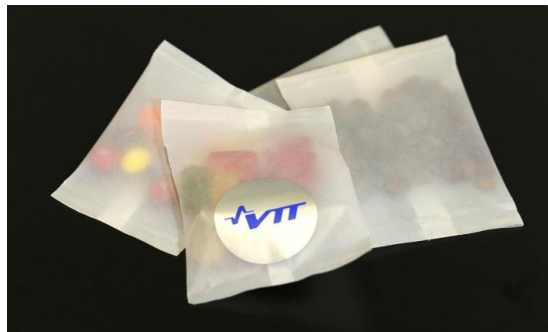
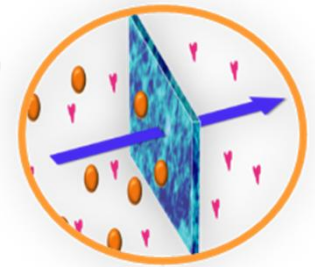
Partners wanted

- § Industry working with nanomaterials
 - § Nanomaterial producers
 - § Producers of products containing nanomaterials
- § Organisations specialized in
 - § metrology (exposure and hazard assessment)
 - § risk assessment (occupational and consumer)
- § Representatives of authorities
- § End user / consumer organisations



Scope

- § Base on cellulose; Functionality with nanomaterials
- § Potential application areas: packaging incl. food contact materials, cosmetics, coatings, composites, construction materials, membranes, pharmaceuticals



Circular Materials Challenge winner

Category 2: Combining materials that nature can handle

The **VTT Technical Research Centre of Finland** has created a compostable multi-layer material from agricultural and forestry by-products, which could be used to package products like muesli, nuts, and cheese.



DWoC2.0 project Design: Heidi Turunen
Photo: Anne Kinnunen



DWoC2.0 project Design: Heidi Turunen
Photo: Eeva Suorlahti

What VTT can offer?

- § Scientific excellence
 - § Multidisciplinary RTO
- § Contacts and networks
 - § Industry
 - § Product safety; standardisation, safety assessment etc.
 - § international co-operation; USA, Japan etc.
 - § Involvement in relevant ETPs, EIPs, PPPs, JTIs
- § Research infrastructure
 - § Pilot scale facilities
- § Skillfull support staff
 - § Grant writers, EU coaches, EU Finance & administration
- § Experience in coordination of EU projects

16/03/2018

H2020 / FP7 Projects	Scientific excellence on bio-nanomaterials
InnPaper	Manufacturing
NanoTextSurf	Chemical & biochemical modification
NOVUM	Characterisation
GreeNanofilms	Bio-nanocomposites
Tunable films	Bio-nanomaterial films & membranes
Nanoselect	Safety
INCOM	Additive manufacturing
SUNPAP	
Nanosustain	
MARINA	





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