
GoNanoBioMat

Polymeric NanoBioMaterials for drug delivery: developing and implementation of safe-by-design concept enabling safe healthcare solutions


Duration: 01.04.2017 - 31.03.2019 (extended until 30.06.2019)

The aging population represents an enormous financial burden for society, unless ways can be found to maintain independence and quality-of-life (QoL) as long as possible for each individual. To achieve this, novel concepts and technologies for new solutions and products are needed. For example, the use of polymeric nanobiomaterials in medicine might be a solution for answering to this need.

Currently, the number of health applications on the market remains small due to the unclear situation of the future regulatory assessment of efficacy and safety. In this context, the GoBioNanoMat project aims to enable SMEs (small and medium size enterprises) and their suppliers, and Research Institutes to work on the development and production of polymeric nanobiomaterials for drug delivery implementing Safer-by-Design (SbD) approach. The major expected outcomes of this project are:

- a) A verified knowledge base (built on peer-reviewed scientific publications on polymeric nanobiomaterials, their environmental and human health risks and the regulatory aspects.),
- b) and guidelines to implement SbD approach for polymeric nanobiomaterial drug delivery systems
- c) as well as in depth investigation of three selected materials like Chitosan, Polylactic acid and Polyhydroxyalkanoates regarding drug delivery applications.

The GoNanoBioMat consortium combines expertise in the area of nanobiomaterial science and technology, life science, pharmaceutical science, as well as nanosafety and life cycle thinking. A strong regulatory background and knowledge base building, dissemination and training belong as well to the core competences of this consortium.

Project's Coordinator:	
 <p>Empa Materials Science and Technology</p>	<p>Peter Wick Empa - Swiss Federal Laboratories for Materials Science and Technology Switzerland peter.wick@empa.ch</p>



Peter Wick
[Empa - Swiss Federal Laboratories for Materials Science and Technology](#)
Switzerland
peter.wick@empa.ch

Project's Partners:



Manfred Zinn
[University of Applied Science and Arts Western Switzerland \(HES-SO\) Switzerland](#)



UNIVERSITÉ DE GENÈVE

Gerrit Borchard
[University of Geneva School of Pharmaceutical Sciences Switzerland](#)



Materials Science and Technology

Claudia Som
[Empa - Swiss Federal Laboratories for Materials Science and Technology Switzerland](#)

University of Applied Sciences and Arts of Southern Switzerland

SUPSI

Giuseppe Perale
[SUPSI – University of Applied Sciences and Arts of Southern Switzerland](#)



Olga Borges
[Center for Neuroscience and Cell Biology - University of Coimbra Portugal](#)



Peter Frei
[Hightechzentrum Aargau AG Switzerland](#)



Institut für praxisorientierte Qualifizierung

Urs Laubscher
[Institut für praxisorientierte Qualifikation IPQ Switzerland](#)



Vasile Ostafe
[West University of Timisoara Romania](#)



Youri Popowski
[Acrostak AG Switzerland](#)