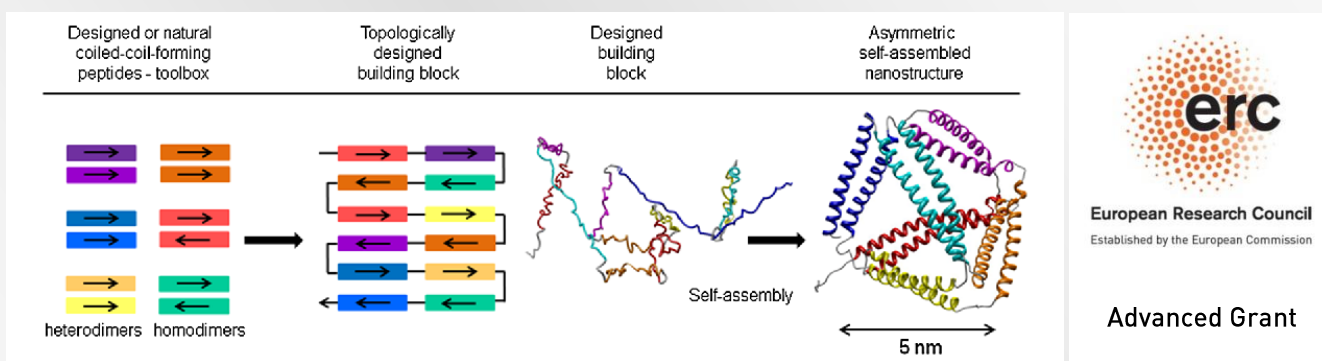


SELF-ASSEMBLED PROTEIN NANOSTRUCTURES

This invention applies to a new technology with the help of which it is possible to plan polypeptide chains which, by self-assembly, form protein nanostructures. Polypeptides are assembled modularly from linked peptide segments that in pairs form coils and thus the side of a polyhedron. The invention makes it possible to design new protein structures not found in nature, and the input of selected functions into positions with nanometer resolution, which makes it possible to prepare technologically interesting advanced nanomaterials. Protein nanomaterials have numerous advantages compared to nanomaterials from organic or inorganic building blocks.



TYPE OF COOPERATION

Technology licensing opportunities

INTELLECTUAL PROPERTY

EU patent EP2764018
US patent US2016311859

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MORE INFORMATION ABOUT THE INVENTION



Technology

The strategy is suitable for preparing protein nanostructures that can be functionalized for various medicinal (vaccines, drug supply) and other technological purposes (biocatalysis sensors, the input of recognizable places, optical, electrical and mechanical properties).

Main advantages

- Definition at the nanometer level
- Modularity and adaptability to different uses
- Possible installation of different functional groups at selected sites
- Affordable and renewable production on an industrial scale
- Biocompatibility

Key words

Medicine, Sensors, Protein nanostructures