

Support for Startup Ecosystem Formation

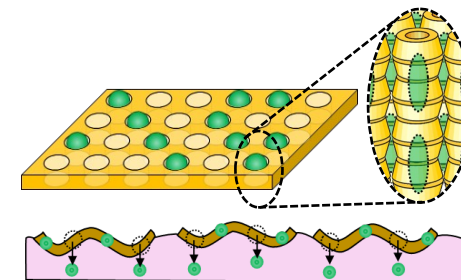
Adoption year: FY 2022 Principal Investigator: The University of Tokyo / Research Associate / Shuntaro Uenuma (As of Aug. 2022)

Subject of Research

Commercialization of nanosheets consisting of cyclic oligosaccharides

Overview

In the Covid-19 situation and the aging of society, hygiene, health, and medical care have been paid attentions. In this project, nanosheets consisting of cyclic oligosaccharides are used for deodorants, supplements, and pharmaceuticals. The active ingredients are loaded in these nanosheets and they can be attached to the bio-surfaces, thereby maximizing the potential performance of the active ingredients.

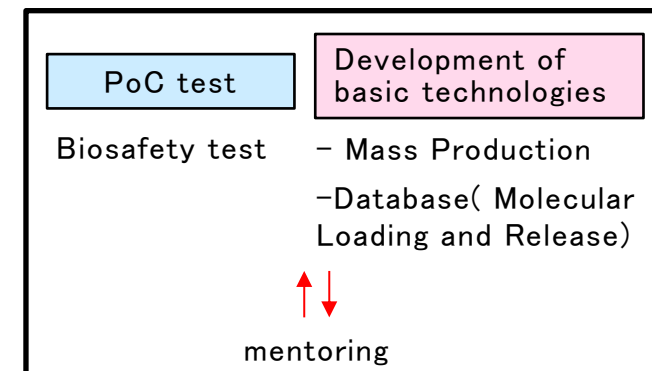


Business Models(when applying)

Nanosheet materials are extremely thin in thickness. Therefore, very little volume is required to coat the surface of the material. These cyclic oligosaccharide nanosheets are usually dispersed in water, so they can be taken as is, sprayed as a spray. First, we will focus on the healthcare market, and later we plan to apply the nanosheets to agrochemicals, DDS, and pharmaceuticals, etc.

Activity Planning(when applying)

In this program, we will first conduct safety tests on the newly developed cyclic oligosaccharide nanosheets to clarify that they can be used as biologically relevant materials. We will also work on the development of mass production technology for the nanosheets. Then, while selecting applications through mentoring and company matching, we will build a basic database of the types and amounts of molecules that can be adsorbed and supported by the nanosheets and their sustained release rates. This will enable the commercialization of cyclic oligosaccharide nanosheets based on appropriate strategies.



Commercialization based on appropriate strategies