Constructing Models of Polymer Materials



Model of crashing materials in mortars



Content:

Models are ways to understand what are materials, phenomena, relations, and so on. It is one of models to consider that materials are made of molecules. This is a basic standpoint of my research for science and engineering of materials. Everything is tried to connect to motion and structure of molecules in my consideration. What types of molecules are important for development of novel liquid crystal material ? How can we express starch molecules in the process of cooking of rice ? These are examples of my curiosities in the world.

Figures in the left-hand side show examples of models. The upper half is an atomistic model of a system of cellulose and water. The lower half is a model to consider how materials are processed in a mill machine.

Appealing point:

- New finding and originalities.
- Unique ideas.
- To be interdisciplinary.

Yamagata University Graduate School of Science and Engineering Research Interest : modeling of polymer materials

E-mail : koda@yz.yamagata-u.ac.jp Tel : +81-238-26-3066 Fax : +81-238-26-3066

HP :https://nishioka-lab.yz.yamagata-u.ac.jp

