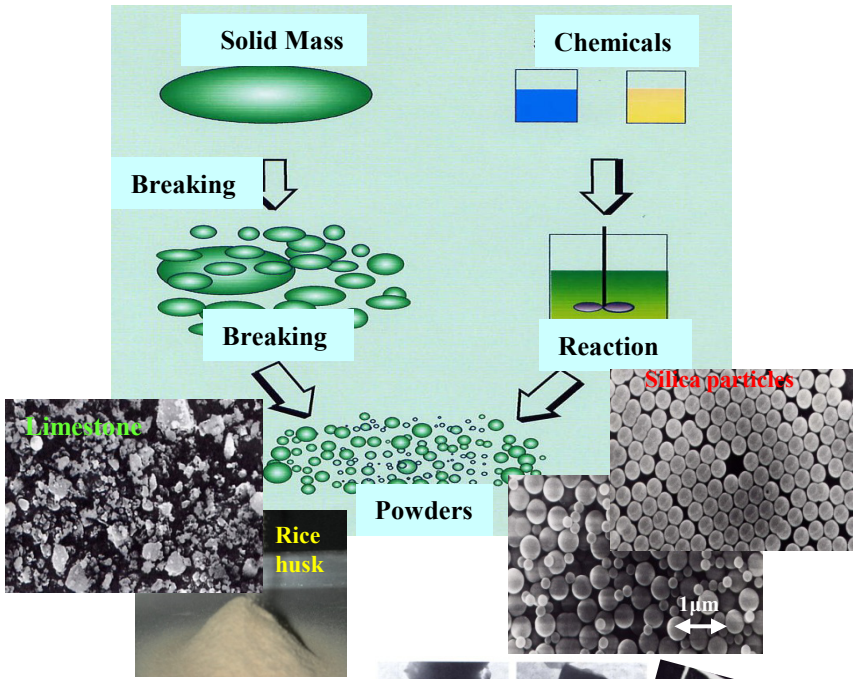


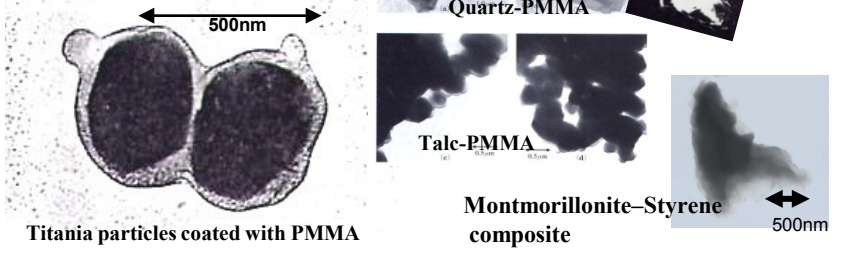
Production of Ultrafine Powders and Synthesis of Functional Fine Powders

Professor Masahiro Hasegawa

Production and Synthesis of fine powders



Synthesis of Functional Powders



Content :

The production method of fine powders is classified roughly in a breaking-down process and a build-up process. These both processes are investigated to produce fine powders and ultra fine powders in our laboratory, that is, a more efficient grinding method and a preciser synthesis method. Especially, the dry grinding method using grinding aids has ever achieved a lot of results in production of the ultrafine powders of nanometer size.

Moreover, not only the production of the fine powders but also the high functionalization of the fine powders is studied. The methods are the modification of the powder surface, the attachment of a novel functionality to the powder, and the composition of the powder and other materials. In particular, there are a lot of application examples in the polymer coating method using two polymerization reactions in the liquid phase; a soapless emulsion polymerization and a mechanochemical polymerization.

Yamagata University Graduate School of Science and Engineering
 Research Interest : Chemical Engineering

E-mail : mhase@yz.yamagata-u.ac.jp
 Tel : +81-238-26-3162
 Fax : +81-238-26-3162
 HP : vweb.yz.yamagata-u.ac.jp/k4/

