

This month's news stories - May 2001

RESEARCH NEWS

Natural clays for improved plastics

A Penn State researcher, Dr **Evangelos Manias** has developed an environmentally friendly and inexpensive plastic composite by adding small amounts of well-dispersed natural clays. The research has shown that improved plastic properties, such as lower permeability to liquids and gases, higher flame retardancy and improved toughness, can be achieved by adding these clays.

While natural and synthetic clays could provide a broad spectrum of enhanced plastics, Manias is also looking at polymer nanocomposites that contain platelets of metals and ceramic nanoparticles instead of clay. These ultra-fine fillers require different surfactants and offer much more flexibility for tailoring material property. (<http://zeus.plmsc.psu.edu/>)

