

## **Influence of montmorillonite on the mechanical properties and microstructure of extruded polypropylene**

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The production of polypropylene composites filled with nanodispersed montmorillonite clay was carried out by twin screw extrusion. The mechanical and thermal properties at different clay loadings and different operating conditions were characterized. The influence of the clay loading on the crystal morphology was studied using optical microscopy. It was found that crystal growth was affected by the incorporation of nanoparticles. Variations in mechanical and thermal properties were observed for different screw speeds and for different compositions of the starting materials.

### **Biography**

Laurens Delva is a doctoral researcher at the Centre for Polymer Materials and Technologies at Ghent University, Belgium. He received Master in Applied Engineering Sciences with a specialization in Polymer Processing at the University College Ghent, Belgium in 2010. His research interests include polymer processing, recycling of polymers and processing and characterization of nanocomposites.

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