MEng Projects

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Rheology and functionality of vegan cheese

The need for cheese analogues like plant protein based vegan cheeses has risen sharply in the last few years and the trend is projected to continue over the next several years. A combination of shear, temperature and pressure during extrusion processing creates opportunities for both conformational changes and chemical reactions in many proteins, especially plant proteins, to modify their rheological properties to mimic cheese-like viscoelastic behavior. This project is aimed at high-shear modification of selected plant proteins via supercritical fluid extrusion processing and fingerprinting their rheological and functional properties.