

# LICENSING OPPORTUNITY

## Innovative insulation panels in PET foams

### Keywords

Building Materials, Components and Methods, Materials Technology, Plastics, Rubber, Polymers and Composite Materials.

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### Licenses / collaborations

Bühler AG

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An academic institution has developed an innovative technology to produce PET (Polyethylene terephthalate) foams panels in a continuous extrusion process. Thick panels with a homogeneous foam microstructure through thickness present considerable interest for applications as insulation panels or foam core sandwich structures.

### Innovative aspects

- Production of thick (several cm) foam panels, from either virgin or recycled PET
- Generation of a long chain-branched (LCB) PET material
- No need of catalyst compounds and of nucleating agents.

### Main advantages

- Low-cost method to increase the melt viscosity of polyester resins, allowing the resins to be processed in molding or foaming techniques.
- Production of polyester foamed materials avoiding toxicity problems.
- Homogeneous polyester foamed materials, having numerous fine-foamed cells having uniform volumes, shapes and distribution. The process avoids the use of catalyst compounds or nucleating agents, which provides cost-effectiveness to the manufacture of foam sheets and panels.

### Potential Commercial Applications

- Plastic fabricators
- Polymer (plastics) materials
- Transportation
- Construction and Building Products.