Surface modification process on solid foams

- **Mild coating process for polyurethane (PU) foams**
- **Preserves mechanical properties of the PU foam**
- **Suitable for catalysis and water filtration**

KEYWORDS

Coating
Functionalisation
Catalysis

PATENT

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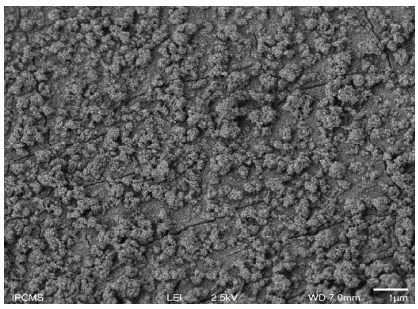
TECHNOLOGY

- Chemical coating process in 2 steps in mild conditions (<70°C)
- High loading of catalyst obtained



Surface of a TiO_2 grafted PU foam

APPLICATIONS

- Hydrogenation, hydroformylation, mild oxidation, photocatalysis
- Filtration of metalic species contained in water (depollution)

INNOVATION ADVANTAGES

- Cost-effective, simple and ready to use method
- No leaching of the catalytic species
- Large catalytic surface area
- Flexibility and resistance of the foams are preserved
- Metals can be recycled after carbonising the foam

Partnership: Seeking for partners to enter a co-conception programme

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