

Nanocomposites based on oxovanadium(IV) dipicolinate complexes

About the invention

The subject of this offer is a new series of heterogeneous catalytic systems in the form of nanocomposites based on oxovanadium(IV) dipicolinate complexes deposited on anodised TiO_2 nanotubes (TiO_2 NTs). The invention also relates to a method for their preparation and their use as highly active catalysts in microwave-assisted aqueous radical polymerisation and the insertion polymerisation of methyl methacrylate.

The purpose of this invention is to provide a new class of nanocomposites and a method for their use, which addresses the problem of toxicity and low efficiency in traditional polymerisation processes; this has been achieved to a significant extent in the present invention.

This technology can be used in industries that require polymers of the highest purity and structural consistency.

**TRL 4**

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IP protection

The invention is protected by patent application No. **P.455130**, filed with the Polish Patent Office.

Technology readiness level

TRL 4 – Technology validated in laboratory conditions

Possible cooperation

- Licence
- Sale of ownership rights
- Partnership for further research and commercialisation