

Photocatalytic materials for air purification from organic, inorganic compounds and microorganisms

About the invention

The technology relates to the production of photocatalytic material (paste) for purification of air from harmful volatile organic compounds, inorganic compounds and microorganisms, and how to obtain porous materials with a photocatalytic paste layer.

The photocatalytic paste is characterized by such features as low-cost components, good mechanical properties of photocatalytic layers, lack of toxicity, high photocatalytic activity in the presence of low-intensity UV radiation, high rheological stability and photostability during use, and the possibility of regeneration by irradiation with UV radiation at a certain intensity.

The invention may find application in the removal of volatile organic compounds, inorganic compounds and airborne pathogenic microorganisms, e.g.: bacteria, fungi, fungal spores or viruses.

Sectors

- Sewage treatment plants
- Public transport
- Air conditioning systems



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IP protection

The invention is protected by the European patent **EP4110520** and is the subject of applications at the Patent Office of the Republic of Poland No. **P.433102** and international application **PCT/PL2021/050011**

Possible cooperation

- Licensing agreement
- Transfer of ownership
- Partnership in order to further research or commercialization