

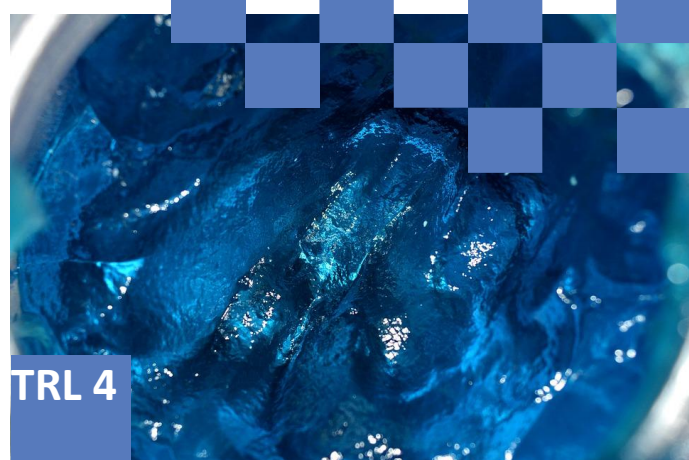
Method of producing carbon layers containing graphene on nanoparticles, in particular quantum dots, containing semiconductor material, and reaction vessel for producing these layers

About the invention

The subject of the invention is a **method for producing carbon layers** containing **graphene** on nanoparticles, especially in the form of powder and quantum dots, containing at least one semiconductor material, especially on metal oxides or composite materials such as semiconductor and/or metal – i.e. semiconductor-metal composite.

The invention also relates to a **reaction vessel** for producing carbon layers containing graphene on nanoparticles containing at least one semiconductor material, in particular on metal oxides and composite materials.

The reaction vessel containing the reaction chamber according to the invention enables the deposition of a graphene-containing carbon layer on nanoparticles in a fluidised bed using chemical vapour deposition



TRL 4

Applications

- Production of graphene-containing carbon layers on nanoparticles,
- Possibility of modifying the properties of semiconductor materials.

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IP protection

The invention is protected by a patent application filed with the Polish Patent Office No. P. 430994.

Possible cooperation

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