Novel Inorganic Fillers for Next-generation Semiconductor Packaging

A global chemical and materials company is seeking novel inorganic fillers for semiconductor packaging. Traditionally, inorganic fillers are used with polymer binders such as epoxy resin for semiconductor packaging, however some new properties are required for the next generation. Our client is seeking improved or novel inorganic fillers for this purpose. Inorganic fillers developed for other applications (e.g. solar energy) that have suitable properties for use in semiconductor packaging are also of interest.

Approaches of Interest:

- Materials with a low dielectric constant and low or negative coefficient of thermal expansion are of highest interest. High thermal conductivity is also preferred.
- The size of the filler should range from tens of nanometers to tens of micrometers.
- Spherical, rod, plate, and needle shaped fillers are of interest. Preparation methods that allow for control over the particle shape are of highest interest.
- Ceramic-based materials are of particular interest.

Out of Scope:

- Conductive metals and carbon fillers are out of scope for this campaign.

Developmental Stages of Interest:

Our client is interested in opportunities at all stages of development.

Submission Information

Submission of one page, 200-300 word briefs are encouraged, along with any optional supplementary information e.g. relevant publications. In submitting to this campaign, you confirm that your submission contains only non-confidential information.

Opportunity for Collaboration

Our client is open to a range of collaboration opportunities, with the most appropriate outcome being decided on a case-by-case basis. Example outcomes include licensing assets, project funding/PhD, and research collaborations.

Opportunities sought

- Technologies
- Academics and expertise
- Centres of excellence
- Research projects
- Spinout companies

Submissions

Please submit relevant, non-confidential opportunities online [here](#).

Deadline: 29th January 2024 - 11:59 pm GMT

Have any questions? Contact our team at [discover@in-part.co.uk](mailto:discover@in-part.co.uk)