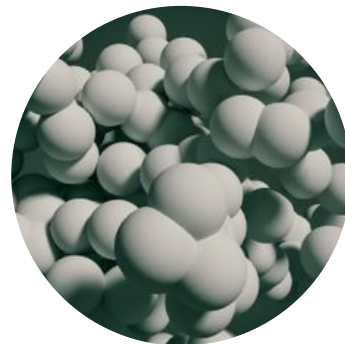


## Biodegradable Micro-encapsulation of Agricultural Active Ingredients

BASF is an **industry leading chemicals company creating solutions for a sustainable future**. The company is seeking **biodegradable micro-encapsulation technologies for agricultural active ingredients**. BASF is particularly interested in **non-microplastic core/ shell particles to encapsulate hydrophobic active ingredients**.



### Approaches of Interest

- **Biodegradable encapsulation materials for hydrophobic active ingredients**
- Polymers from **natural sources/** resources are preferred
- Capsule sizes should ideally be **d(50) < ~ 5 µm** and **d(90) < ~15 µm**
- **Core/ shell morphologies are of high interest** but relevant matrix capsules and other morphologies will be considered
- The active ingredient concentration to be encapsulated is >10%
- A **>90% encapsulation efficiency** is ideal
- Goods should be cost-effective and ideally **<~20 \$/kg for the capsule material** and **< ~2 \$/kg for manufacturing**
- Measurement of biodegradability should follow ISO 17556:2012: **90% ultimate degradation in soil at 12 °C within 24 months**
- Applicable encapsulation technologies developed for other applications are also of interest

### Out of Scope

- Microplastics

### Developmental Stages of Interest

- Technology readiness level at TRL 3 and above is of interest, with a particular interest with technologies that have been developed for licensing/ commercialisation, however this is not a requirement
- Successful feasibility validation of the technology is required for this campaign
- Funded co-development research activity could be considered on a case-by-case basis





### Submission Information

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

### Opportunity for Collaboration

The 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 and research collaborations. Successful opportunities could also gain access to BASF's diverse scientific network to develop a range of encapsulation applications in other areas of agriculture, as well as life sciences (e.g., cosmetics, vitamins, biological materials).

### Opportunities sought

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

### Submissions

Please submit relevant, non-confidential opportunities online via: [discover.in-part.com](https://discover.in-part.com)

Deadline: **5th July 2022 - 10:59 pm GMT**

#### Have any questions?

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

