Controlled Activation of Amine or Amide Hardeners for Industrial Coatings

Ashland provides a full range of additives used to enhance the performance and efficacy of many different speciality coatings. The line includes organic and inorganic polymers and products used to affect rheology, gloss, application, and foam control. Ashland is looking to develop IP protected, scalable, ingredient delivery technology that enables the controlled activation of amine or amide hardeners for industrial coatings within a one-component system.

Approaches of Interest:

- The materials of interest include, but not exclusive to: modified cycloaliphatic amine adducts, modified cycloaliphatic polyamines, modified aliphatic amines, and polyamidoamine adducts
- As a first step, the technology should be in a physical form (slurry or powder; >80% a.i./kg product) that can demonstrate capsule or payload stability (retain >99.8% a.i. for 30 days at 25°C and 60°C) for retention of the active ingredient
- As a second step, the technology should then be able to demonstrate payload release mechanism (release 100% a.i., due to shear, pH, coalescence, radiation, etc.), shear stability (retain >99.8% a.i. for coating manufacturing, storage, application e.g., spray, brush, roll), chemical stability (retain 99.8% a.i. in water, polar or non-polar solvents for 30 days at 25°C and 60°C) and have a particle size of <= 50µm
- Technologies of the highest interest will possess dry coating film properties (evaluate effects on gloss, haeze, hardness, DOI, transparency, hiding, film defects, grit, cratering, viscosity), a cost guidance of $1.5 USD/kg, but not higher than $5 USD/kg, lack toxicity (i.e., no systemic health hazards, non-carcinogenic, non-mutagenic, and no VOC increase), and be registered or exempt from the target market chemical inventories (TSCA, REACH)

Stage of Development:

- Technology readiness level at TRL 3 and above is of interest, with a particular interest with technologies that have undergone testing, however this is not a requirement
- It is not a requirement to hit all of the points mentioned in the brief. A suitable technology should fulfil different aspects of the brief depending on the stage of development

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:

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

Opportunities sought

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

Submissions

Please submit relevant, non-confidential opportunities online via: discover.in-part.com

Deadline: 30th May 2022 - 10:59 pm GMT

Have any questions?
Contact our team at discover@in-part.co.uk