Alternative Chemistries to Liquid PFAS

A worldwide manufacturing company is seeking alternative chemistries to liquid per- and polyfluoroalkyl substances (PFAS), specifically perfluoropolyether (PFPE), polyfluoroalkyl phosphate esters (PFAE) and fluorosilicones, which have raised environmental and health concerns due to their persistence, bioaccumulation, and potential toxicity. Ideally, these chemicals will be sustainable, cost-effective, and high-performance alternatives that can at least match the performance characteristics of PFAS-containing lubricants and research should comply with regulatory standards.

Approaches of Interest:

- Key performance features include lubricity, wide temperature performance, oxidative stability, anti-wear properties and material compatibility
- Existing materials and data that could be applied to the manufacturer’s formulations are of interest
- Collaborative researches that focus on specific applications where PFAS-containing lubricants are commonly used are also of interest
- Novel lubricants that can be used in applications related to semiconductors, space, medical and automatives are of highest interest, although alternative lubricants in adjacent industries will still be considered
- Plant based chemistries are considered

Out of Scope:

- Solid lubricants

Developmental Stages of Interest:

Our client is particularly interested in technology that has had a pilot stage and some level of validation (i.e TRL 3-6).

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/PhD funding, and research collaborations.

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

Deadline: 18th September 2023 - 10:59 pm GMT

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

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