

Sprint Challenge Brief: **High Performance Polymers For Oil & Gas Applications**

BACKGROUND

The refinement and distillation of crude oil into functional materials requires complex chemical processing and infrastructure. The equipment for chemical processing is increasingly shifting from metal to non-metal materials in the various structural components, coatings, etc. High performance polymers are an attractive material for these applications as they are able to last during harsh conditions while maintaining their properties and function.

TechConnect clients seek innovative high performance polymers for usage in such oil & gas applications. Proposed technologies should be:

- Suitable for usage in:
 - Extreme temperatures: high and low
 - Chemically aggressive environments
- Non-reactive
- Durable and strong
- Protective against mechanical degradation and corrosion
- Not susceptible to leeching
- Capable of long operational lifespans

Technologies which are closer to commercialization are preferred but all maturities are of interest.

Respondents to this Sprint will be considered for engagement by multiple TechConnect clients, representing a variety of industries and applications. Furthermore, select respondents may also be invited to demo, present, or showcase their proposed technology at the upcoming [TechConnect World Conference](#) in July 2023. Respondents are not obligated to participate in the Conference and non-participation will not negatively impact any potential engagement with any TechConnect clients. Event participation fees may apply. There is no cost to submit a response.

The goal of this sprint is to facilitate contact and interactions between the Sprint sponsor and commercial entities (including Start-ups) or technology developers or research organization/university in this space. Submissions from all viable subject matter experts are of interest including those from academia and commercial entities.

REQUIREMENTS

Solvers submitting an Entry are encouraged to highlight capabilities in their Submission that meet criteria including:

- Functional role(s) anticipated in a petrochemical plant
 - Enhanced properties (protective, durable, anti-corrosion)
 - Anticipated performance in harsh environments
 - Anticipated operational lifespan
 - Technical maturity
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BUSINESS OPPORTUNITY FOR SOLVERS

All complete and eligible Entries will be included in an exclusive Innovation Opportunity Report that will be presented to our client. Solvers with well-matched capabilities may be contacted directly by either TechConnect Ventures or the client to discuss potential partnership opportunities, including – but not limited to – demonstrations, consulting, contract research, licensing, and more. Top-rated Entries may also be invited to register or participate in an upcoming TechConnect Ventures event or pitch program.

PARTICIPATION RULES & GUIDELINES

Solvers are encouraged to review the [Rules](#) and [Guidelines](#) provided on the Sprint page for details about participation, including submission criteria, eligibility information, and more.

QUESTIONS? Contact Executive Director, Nick Kacsandi at info@techconnectventures.com