

TechConnect Ventures Sprint Challenge Brief: Heating and cooling technologies for personal wearable applications

Sprint Submissions Closed

DESCRIPTION

In collaboration with a Non-Profit Leader in R&D collaboration management, TechConnect Ventures is seeking innovative thermal management technologies and materials that enable heating and/or cooling capabilities for personal apparel, accessories, protective gear and wearable devices. Both active and passive technologies are of considerable interest to the client.

Innovators from every sector are invited to submit a response, including – but not limited to – industry, national labs, non-profits, consultants, start-ups, small business and medium to large corporations.

OPPORTUNITY

Top technologies will be considered for both current and future development, funding, licensing and acquisition Opportunities. The Sprint Sponsor may also consider select responses for additional support, coaching and/or matching of technologies to future technology development needs and opportunities within its portfolio of corporate and government funding programs.

TechConnect Top Innovators: TechConnect may select one or more highly impactful responses ("Top Innovators") to participate in an upcoming TechConnect Conference, Expo, Showcase, or Virtual Pitch Event.

BACKGROUND

The ability to individually regulate one's thermal environment is an increasingly complex and important feature in next-generation apparel and wearable technologies, particularly for applications in hazardous or extreme environments. By maintaining optimal temperatures, these technologies may have the ability to boost personal performance metrics, including response time and cognitive performance. With the advent of stretchable electronics and smart materials, TechConnect Ventures' client believe that a new generation of smart thermally regulating solutions may be emerging across the consumer and industrial sectors.

The objective of this request is to identify emerging technologies, innovations and other alternative solutions that can deliver heating or cooling capabilities in challenging thermal environments. Durable, self-powered, comfortable and lightweight solutions that deliver thermal regulation for long time periods are especially desired. Devices that produce either heating, cooling or both will be considered.

INNOVATION REQUIREMENTS

TCV invites any and all solutions for a wearable device that can measure and monitor any of a wide array of biomarkers. Submissions should seek to address any or all of the following client requirements:

1. Ability to maintain setpoint, safe-for-skin temperatures for the duration of use
2. Have a clear application for wearables, including all manner of apparel and garments, gloves, shoes, boots, helmets, wristwear, etc.
3. Operate in a variety of environmental conditions including temperature and weather
4. Be self-powered or powered by another readily-available wearable power source
5. Reliably operate for long periods of time
6. Wherever possible, prioritize lightweighting and personal comfort

POTENTIAL SOLUTIONS

TCV is seeking potential partners of all types and from all industries to propose solutions that may include, but are not limited to:

- Active cooling systems
- Devices (wearable or garment integrated)
- Miniaturized systems
- Advanced materials and smart materials solutions of all types
- Passive cooling materials, textiles, fibers fabrics, etc.
- Printable technologies
- Novel thermally-responsive materials and systems

REMEMBER... We don't know what we don't know!

If your technology is not highlighted above, please consider submitting a response in order to enhance your exposure to new commercial opportunities.

SUBMISSION REQUIREMENTS

All Submissions must include a completed Submission Webform. Submit only NON-CONFIDENTIAL information

Within the Submission Webform your Entry should address the Problem Statement through the following:

- A non-confidential summary of your technology or innovation, including any technical data and details on performance as it applies to the Problem Statement
- Value proposition and (potential) commercial impact
- Development status and readiness level
- Development and scale-up pathway (if available)
- Intellectual property position
- Funding and award status (if applicable)
- Type of partnership or commercial relationship sought with Innovation Seekers
- Company or organizational profile
- Contact, team and organizational information

Respondents are also invited to upload one (1) supplemental file (max. size 10MB) containing their unique technology pitch, presentation or overview.

EVALUATION

TechConnect Ventures and its client will evaluate all responses. Based on the nature of the innovation and strength of the response relative to all submissions received, top innovators may be selected for further discussions or pitches which may lead to contractual or commercial engagements for the research, development or commercialization of the most promising technologies.

QUESTIONS?

Contact info@techconnectventures.com and reference the Sprint Topic.

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