

TechConnect Ventures

Sprint Challenge Brief:

Visualization or 3D-mapping of environmental chemical sensor data

Sprint Submissions Closed

DESCRIPTION

In collaboration with a Non-Profit Leader in R&D collaboration management, TechConnect Ventures is seeking innovative solutions that enable the visualization or 3D mapping of real-time data inputs to monitor, measure, and visualize chemical vapor release in the atmosphere.

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, 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

Sensing and monitoring of atmospheric chemical agents (including pollutants and toxins) are essential elements of risk detection and management for workers in many environments (power and energy, mining, hazard response, military, etc.). As sensor hardware becomes more sophisticated in its ability to detect a variety of analytes in real-time, the analysis, interpretation and visualization of this data becomes essential to translate into meaningful and timely action. Effective visualization and mapping is particularly important in predicting the spread and future state (e.g. location, distribution, concentration, trajectory, etc.) of such agents in order to provide warnings or mitigation tactics.

The objective of this request is to identify innovative approaches for accurate 3-D mapping or visualization of the concentration and distribution of atmospheric agents in (near) real-time. Potential solutions should focus primarily on data visualization, such as through processing algorithms, image processing, or hyperspectral data analysis. However, descriptions of fully integrated systems (particularly for chemical sensors) are of considerable interest. Please note that for the purposes of this Sprint, solutions – full or partial – applicable to mapping any target analyte with a high degree of confidence are of interest, including those broadly applicable to atmospheric pollutants, gases, toxins, synthetic chemicals, and hazardous chemical agents.

INNOVATION REQUIREMENTS

Submissions describing technologies at every stage from concept through commercial product are invited. Ideal responses will include a discussion of any or all of the following requirements:

1. Ability to rapidly visualize one or more of:
 - a. An existing cloud or distribution
 - b. A release event in (near) real-time
 - c. A cloud and its progression in (near) real-time
2. Ability to discriminate by concentration distribution
3. Compatibility with large data sets
4. Discussion of the chemical analytes for which the approach applies

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 ([link](#)). 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