Background

Global food demand is expected to increase 50% by 2050. This challenging demand is too large for anyone to solve alone. One way Valent aspires to solve the challenge is by collaborating with the global scientific and innovation communities to develop new sustainable and creative solutions to help our growers meet the surging food demand.

What we're looking for

We are looking for existing or emerging technologies that enhance the performance or provide complementary benefits to Valent's proprietary portfolio that includes herbicides, insecticides, fungicides, and plant growth regulators. Technologies of interest include formulation methods, field application methods and tools, conventional active ingredients, biorationals, biostimulants, synergists, and product packaging.

Solutions of interest include:

- Package barriers that replace PFAS for improved sustainability
- Active ingredients or additives that impart new features/benefits when mixed with herbicides, insecticides, fungicides, or biostimulants
- Green co-formulants and other ways to enhance the sustainability of pesticide products
- Formulation technologies to support pesticide development for ultra-low volume use, such as with drone applications
- Technologies that support formulation integrity, controlled pesticide application, or delivery
- Pest control technologies with nontoxic modes of action that can be incorporated into traditional pesticide formulations
- Biologically derived or conventional chemistries
- Pesticides with new modes of actions
- Seed treatment technologies

Our must-have requirements are:

- Clarity on whether solutions require EPA registration for use in agriculture
- Clear path for EPA registration if the solution requires it

Our nice-to-have's are:

- Registered for use in agriculture by the EPA, if required
- Does not require EPA registration

What's out of scope:

- Technologies or methodologies tailored for development of new plant traits

Acceptable technology readiness levels (TRL): Levels 3-9

1. Basic principles observed
2. Concept development
3. Experimental proof of concept
4. Validated in lab conditions
5. Validated in relevant environment
6. Demonstrated in relevant environment
7. Regulatory approval
8. Product in production
9. Product in market

What we can offer you

Eligible partnership models:

- Sponsored research
- Co-development
- Equity investment
- Supply/purchase
- Licensing
- Material transfer

Benefits:

Sponsored Research

Funding of up to $100,000 for 6-12 month to initiate a pilot project with the potential for continued funding. Specific funding level is commensurate upon scope of proposal.

Expertise

Work with Valent U.S.A. LLC R&D teams that have a successful track record in bringing new technologies to market. Our personnel have technical expertise in agriculture, plant health, biology, chemistry, and formulations.

Facilities and Services

Valent is equipped with technical resources such as field research stations, greenhouses, growth chambers, and advanced laboratory facilities.

Who we are

As subsidiaries of Sumitomo Chemical Co., Valent U.S.A., Valent BioSciences, and Pace International are global leaders in the development and commercialization of products using biorational, botanical, and traditional chemistries. These products protect agricultural crops, enhance crop yields, improve postharvest quality, beautify the environment, reduce food waste and safeguard public health. Our technical expertise, state-of-the-art facilities and decades of agricultural industry experience help foster a culture of innovation and sustainability.

Reviewers

Brian Lin

Technological Innovations

Please contact the University of South Florida Technology Transfer office representative for submission – Roisin McNally at rmcnally@usf.edu