

Special Notice (SN) DARPA-SN-24-56
Structures Uniquely Resolved to Guarantee Endurance (SURGE)
Proposers Day
April 18, 2024

The Defense Advanced Research Projects Agency (DARPA) Defense Sciences Office (DSO) is sponsoring a Proposers Day to provide information to potential proposers on the objectives of an anticipated Broad Agency Announcement (BAA) for the Structures Uniquely Resolved to Guarantee Endurance (SURGE) program. The Proposers Day will be held on April 18, 2024, from 9:00 a.m. to 4:45 p.m. (Eastern Time) in Arlington, VA. The event will be webcast for those who would like to participate remotely. Advance registration is required for attending the Proposers Day in person and viewing the webcast. Note that all times listed in this announcement and on the registration website are Eastern Time.

The goals of the SURGE Proposers Day are to: (1) introduce the research community (industry, academia, and Government) to the SURGE program vision and goals; (2) explain how to work with DARPA and the milestones of this particular effort; and (3) encourage and promote teaming arrangements among potential organizations that have the relevant expertise, facilities, and capabilities for executing a research and development program responsive to the SURGE BAA.

DARPA anticipates releasing the SURGE BAA in April 2024. If released, the BAA will be available on <https://sam.gov/> and <http://www.grants.gov/>. Following Proposers Day, DARPA may post the presented materials and the list of Frequently Asked Questions (FAQ) to the DARPA/DSO Opportunities website.

To maximize the pool of innovative proposal concepts, DARPA strongly encourages participation by non-traditional proposers (including small businesses, academic and research institutions, and first-time government contractors) in events such as this and any subsequent solicitation.

PROGRAM OBJECTIVE AND DESCRIPTION

SURGE aims to unlock the full potential of additive manufacturing (AM) for distributed production of mission-critical hardware anywhere in the world, on any machine, at any time. The program will develop and test transferable model-based part life prediction methods derived from data captured during manufacturing. Research will merge in-situ sensing technologies, process modeling, and microstructure-based fatigue life methods to quantify the useful life of manufactured hardware. Predictions will be backed by extensive experimental validation to demonstrate a new paradigm for efficient qualification. If successful, SURGE will disrupt today's legacy process qualification approach that relies on extensive prior testing for every new part, machine, and material combination.

TEAMING

DARPA highly encourages teaming before proposal submission and will facilitate the formation of teams with the necessary expertise. Potential proposers may choose to participate in either, none, or both of the following options:

1. Attendee List (limited distribution): Participant contact information (name, organization, email address) will be distributed to all other SURGE Proposers Day attendees. The registration website will ask registrants to indicate whether they approve distribution of their contact information.
2. Proposer Profile List (limited distribution): Interested parties will submit a one-page profile consisting of their contact information (name, organization, email, telephone number, mailing address, and, if applicable, organization website), a brief description of their technical competencies, and, if applicable, their desired expertise from other teams/organizations. All profiles must be emailed to SURGE@darpa.mil no later than 5:00 p.m. on **April 23, 2024**. Following the deadline, the consolidated teaming profiles will be sent via email to the proposers who submitted a valid profile. Specific content, communications, networking, and team formation are the sole responsibility of the participants. Neither DARPA nor the Department of Defense (DoD) endorses the information and organizations contained in the consolidated teaming profile document, nor does DARPA or DoD exercise any responsibility for improper dissemination of the teaming profiles.

LIGHTNING TALKS

Attendees may be afforded the opportunity to give an in-person or virtual Lightning Talk (a brief, 3-minute oral presentation with no slides) outlining their interests and capabilities. The purpose of these presentations is to facilitate teaming discussions among the attendees. Upon registering, attendees may indicate if they would like to give a Lightning Talk. Due to limited availability, DARPA will accept submissions on a first-come, first-served basis and does not guarantee that an attendee's request to brief will be fulfilled. Presenters must follow the SURGE Lightning Talk Guidance found on the meeting website. Content must be appropriate for public release and will be presented in front of the entire in-person and virtual audience.

POSTER SESSION

Attendees will be afforded the opportunity to present a poster in the afternoon describing areas of interest and capabilities. The purpose of the poster session is to facilitate teaming discussions among the attendees. Upon registering, attendees may indicate whether they would like to present a poster. Due to limited availability, DARPA does not guarantee that these requests will be fulfilled. Digital versions of posters must be emailed to SURGE@darpa.mil for approval no later than **4:00 p.m. on April 12, 2024**. DARPA will notify attendees if their poster has been approved for presentation no later than **4:00 p.m. on April 15, 2024**. Attendees are required to bring their own printed poster no larger than 24x36 inches. An easel or wall space will be provided to display the poster during an open session with all other attendees. No proprietary information should be included in the poster content. Posters are limited to one submission per organization and are in-person only (there will be no virtual poster option).

REGISTRATION INFORMATION

The SURGE Proposers Day will be held on April 18, 2024, from **9:00 a.m. to 4:45 p.m.** in Arlington, VA and virtually via webcast. There is no registration fee for the Proposers Day meeting or webcast.

Registration opens: As of publication of this announcement.

Registration website: <https://events.sa-meetings.com/SURGEProposersDay24/>

Registration closes (in person attendance): April 12, 2024, at 12:00 p.m. or when capacity is reached, whichever comes first.

Registration closes (webcast): April 12, 2024, at 12:00 p.m. or when capacity is reached, whichever comes first.

Advance registration via the above website is required for attending the Proposers Day in person and for receiving access to the webcast. The advance registration requirement applies to every individual intending to view the webcast alone or as part of a group.

Due to the limitations of the conference facility space, in-person attendance is restricted to the first 100 registrants with a maximum of four (4) individuals from any one organization and no more than two (2) representatives per division/department of that organization. Webcast registration is limited to no more than five (5) individuals from any one organization. Interested parties must coordinate attendance internally within their organizations prior to registration. It is also encouraged that a contracting representative from potential proposing organizations attend the webcast.

Registrants in excess of the maximum capacity limitations (100 for in-person attendance and 350 individuals for the webcast) may be added to a waitlist. Individuals who are unable to register for in-person attendance because the deadline has passed or capacity has been reached may have the option of choosing to be added to the waitlist OR registering for attendance via webcast. If slots become available due to cancellations, the slots may be filled on a first come, first served basis from the waitlist.

ELIGIBILITY

DARPA hosts Proposers Days to: (1) promote teaming arrangements between researchers; (2) provide potential proposers with information on whether and how they might respond to the Government's research and development solicitations; and (3) increase efficiency in proposal preparation and evaluation. Therefore, Proposers Days are only open to registered potential proposers, i.e., the events are closed to the general public and media. For this particular program, Proposers Day registration is open to potential proposers who are U.S. citizens, U.S. permanent residents, and foreign nationals.

All registrants who are not U.S. citizens must complete and submit either a DARPA Form 60 (U.S. Permanent Resident and Foreign National Visit Request – e.g., industry or academia) or an Official Visit Request (foreign government personnel, only) through their country's embassy based in Washington, DC, no later than 12:00 p.m. on April 12, 2024. Form 60 submission instructions are provided on the registration website and in the registration confirmation email. Contact your embassy staff for assistance in submitting the Official Visit Request. Upon entry to the physical meeting, all attendees must present valid, Government-issued photo identification.

Q & A

Administrative, technical, and contractual questions about SURGE should be emailed to SURGE@darpa.mil. All questions must be in English and must include the name and email address of a point of contact. Following Proposers Day, DARPA may post an FAQ list on the DARPA/DSO Opportunities website.

CONTACT INFORMATION

Please refer to the SURGE Proposers Day in all correspondence.

- Technical Point of Contact: Andrew Detor, Program Manager, SURGE@darpa.mil
- Registration Website: <https://events.sa-meetings.com/SURGEProposersDay24/>
- DARPA/DSO Opportunities Website: <https://www.darpa.mil/work-with-us/opportunities>

DISCLAIMERS AND IMPORTANT NOTES

Attendance at the SURGE Proposers Day or viewing the webcast is voluntary and is not required to propose to the anticipated SURGE BAA. Interested parties to this notice are cautioned that nothing herein obligates the Government to issue a solicitation. The Proposers Day does not constitute a formal solicitation for proposals or abstracts. This announcement is issued solely for information and program planning purposes and is not a Request for Information (RFI). Since this is not an RFI, the Government will not accept submissions against this notice, with the exception of the one-page profile referenced in the Teaming section above and verbal talk outline associated with Lightning Talks. No classified, International Traffic in Arms Regulations or Export Administration Regulations controlled, or proprietary information shall be presented by the Government at Proposers Day. Inclusion of proprietary information during Lightning Talks is at the presenter's discretion. DARPA will not provide reimbursement for costs incurred to participate in this Proposers Day. Recording the Proposers Day is not permitted.