

Materials Research Proto-IRG Seed Program

2026-2027 Request for Proposals

Key Dates

- Request for Proposals Issued: Thursday, July 23rd, 2026
- Team-Building Materials Brainstorming Lunch: Tuesdays, August 4th, August 18th, September 1st, 12-1pm, CBEC 267
- Team-building Poster Session: Wednesday, August 26th, 2026, 4138 PRB, 4:00-6:00 pm
- Letters of Intent Due: Thursday, September 3rd, 2026 at 5:00 PM ET
- Notice of Proto-IRG Appropriateness: Friday, September 4th, 2026
- Proposals Due: Monday, September 25th, 2026 at 5:00 PM ET
- Awards Announced (anticipated): October 15th, 2026
- Funded Projects Start Date (anticipated): January 1st, 2027 (12-month project period)

Materials Research Proto-IRG Seed Program

2026-2027 Request for Proposals

Program Description

We are pleased to announce the **2026-2027 Proto-IRG Seed Grant Program Request for Proposals (RFP)**, which is open to The Ohio State University (OSU) materials community. The goal of this program is to seed innovative, collaborative directions and teams in materials research that will position OSU as a world leader in emerging fields. These teams are expected to form the basis of Interdisciplinary Research Groups (IRGs) for the FY29 National Science Foundation (NSF) supported Materials Research Science and Engineering Center (MRSEC) competition.

These Proto-IRG Grants will provide funds to support teams of researchers at \$100,000/yr (Tier 1) and \$150,000/yr (Tier 2) in direct costs (GRA positions, postdocs, research). Tier 1 requires one Principal Investigator (PI) and at least one co-Principal Investigator (co-PI). Tier 2 requires one PI and at least two Co-PIs. Both tiers may have unfunded collaborators. The Proto-IRG grant seeks to support new teams from across the interdisciplinary materials research space, especially encouraging those who have not yet been a part of former MRSEC or seed grant cycles.

Detailed description of the Proto-IRG Grant

These grants seek to seed leading interdisciplinary research teams with innovative, leading ideas that can form the basis of the next MRSEC competition. The proposal topics should fall within the scope of programs funded by NSF materials research areas. Each topic should be *"distinguished by intellectual excellence and driven by a clear vision that could lead to fundamental advances, new discoveries, and/or technological developments of national and international significance."* The NSF MRSEC RFP is expected in Late 2027/Early 2028, and the pre-proposal will be due to the NSF in June 2028. Therefore, it is envisioned that this proto-IRG seed funding will lead to highly visible publications before this date to solidify these teams as world leaders.

These grants will support materials research by small interdisciplinary groups of 2-4 PI's and include unfunded collaborators. Each Proto-IRG team is expected to form the core membership of a future IRG; additional collaborators may be included. Proposed research projects should be broad and interdisciplinary while maintaining a focus on a central theme to meet the requirements of a full IRG. Awards will be \$100,000 or \$150,000 in direct costs per grant per year. The initial funding period is one year, but successful Proto-IRGs may apply for additional funds in next year's open competition for MRSEC IRGs that will occur in late 2027/early 2028. Funded Proto-IRGs are expected to actively pursue team building activities.

Although not required for Proto-IRGs, a strong synergy between experimental and theoretical components, which can include artificial intelligence and/or automated experimentation, is essential for full IRGs. Proposers are encouraged to review the most recent RFP from the NSF for further information on what is expected of a full 6-10 PI IRG, in particular the specification that there are *"clear benefits of a multi-investigator, interdisciplinary, and collaborative approach to address a major materials topic or area"* at: <https://www.nsf.gov/funding/opportunities/mrsec-materials-research-science-engineering-centers/nsf26-500/solicitation>

How to Apply

Eligibility

An applicant may serve as Principal Investigator on only one proposal in response to this RFP. The PI must hold a faculty-level appointment at OSU. All proposed research must be clearly distinct from ongoing externally or internally funded research. It is strongly encouraged for each team to have a PI or co-PI who has not been part of an NSF-funded IRG in previous cycles of the Center for Emergent Materials (CEM).

Team Building Activities:

To facilitate brainstorming, networking, and idea generation across OSU's materials science disciplines, CEM will host the following optional team-building activities for all interested faculty. We especially encourage faculty who have not been part of an NSF-funded IRG to attend.

Team-Building Materials Brainstorming Lunch

CEM will host informal (bring your own) lunch meetings from 12-1 pm in CBEC 267 on Tuesdays; August 4th, 18th and September 1st.

Team-Building Poster Session

CEM will also host a team building poster session on 4:00-6:00 pm on Wednesday, August 26th 2026. PIs can present their research ideas, receive feedback from different faculty, and recruit additional members. Light Refreshments will be served

Letters of Intent

Applicants planning to submit a proposal in response to this RFP are required to submit a Letter of Intent (LOI) as one file in PDF format via email to cem@osu.edu with Rachel Page at page.257@osu.edu and Joanna Gardner (gardner.306@osu.edu) by Thursday, September 3rd, 2026 at 5:00 PM ET for funding consideration. The Letter of Intent is required to include: names, titles, and departmental affiliations of PI, Co-PIs and collaborators (if any); the funding tier; contact information for the PI only (mailing address, email, and phone numbers); tentative project title; a short description of the proposed research (100 words maximum) and; a short statement (100 words maximum) describing how the research will lead to fundamental advances, new discoveries, and/or technological developments of national and international significance. Proposers will be informed if their LOI is an appropriate topic that is eligible for full proposal submission by Friday, September 4th, 2026.

Proposal Submission

All proposals are due by **Monday, September 25th, 2026 at 5:00 PM ET**. Submit your proposal as an email attachment in **one PDF file** to cem@osu.edu and CC: Rachel Page (page.257@osu.edu) and Joanna Gardner (gardner.306@osu.edu). **Any proposal that does not meet the deadline will not be considered.**

Proposal Preparation Instructions

1. **Cover Page** (1 page maximum) including: Proposal title; Names, titles, and departmental affiliations of PI, Co-PIs, and collaborators (if any); Tier 1 or Tier 2; contact information for the PI only (mailing address, email, phone numbers); proposal abstract (200 words maximum)
2. **Project Description** (5 pages maximum) including:
 - a. Objectives of the proposed research project
 - b. Description and scope of research, explicitly defining its novelty.
 - c. Work plan and methodology. Also, detail research facilities that will be used to conduct the research

- d. Expected outcomes. Include descriptions of envisioned high-visibility, short term publication(s) that will position this team as leaders for the June 2028 pre-proposal due date of the FY2029 MRSEC competition.
 - e. Expertise of the team and synergy among team members to enable research of a scope and complexity requiring the advantages of scale and inter-/multi- disciplinarily provided by a team
 - f. A management plan detailing how the project will be executed as a team effort.
 - g. Plan for expanding to a full IRG with experimental and theoretical components.
3. **References Cited** (no page limit)
 4. **Budget Information** (1 page maximum): Provide a detailed budget for the proposed project and a brief explanation of the proposed budget items.
 5. **Curriculum Vitae** (2 pages maximum each) for PI and all co-PIs (if applicable)
 6. **Current & Pending Support** (no page limit) for PI and all co-PIs (if applicable)
7. Use a minimum 11-point font size, single line-spacing, and 1" margins throughout your written proposal. **Proposals longer than the stated page limits and/or omitting information requested above will not be reviewed.**

Budget Restrictions

These seed grants are intended to support primarily student and postdoctoral researcher salaries and benefits; tuition; materials and supplies; and facility user fees. The following expenses are **NOT** allowed: faculty salaries and benefits or release time; travel; computers and equipment purchases; and food and entertainment.

Terms and Conditions

All selected proposals are subject to terms and conditions, including reporting requirements, that will be specified when the awards are made.

- All publications that result from seed funding must appropriately acknowledge OSU's Materials Research Grant Seed Program support. Which include this language *"This work was supported in part by The Ohio State University Materials Research Seed Grant Program, funded by the Center for Emergent Materials, the Center for Exploration of Novel Complex Materials, and the Institute for Materials and Manufacturing Research."*
- Investigators are required to submit reports consisting of one page of text and one "highlight" slide for inclusion in annual reports. The exact deadline and requirements will be communicated to PI's of the awarded seed grants.
- All purchases, travel, and HR appointments will be conducted in the home departments of the investigators.
- Funds cannot be transferred from this project to another internal fund.

Review Process

Proto-IRG Board

- Joshua Goldberger, Proto-IRG Chair, CEM Director, Professor, Dept. of Chemistry and Biochemistry
- Fengyuan Yang, MRSGP Chair, ENCOMM Director, Professor, Dept. of Physics
- Steven A. Ringel, ERIK Oversight, Senior Associate Vice President for Research
- TBD, Director, Institute for Materials and Manufacturing Research

Each proposal will be reviewed by a panel of external reviewers, which will form the basis of decisions made by an internal committee.

At the time of award notification, PI(s) will receive an anonymous copy of the reviews.

Review Criteria

- Intellectual merit of proposed research activity, including originality, novelty, and clarity of how this research will lead to fundamental advances and new discoveries, and/or technological developments of national and international significance.
- Potential for the proposed research to form the basis of a highly-competitive IRG for the FY2029 MRSEC competition
- Potential for the team to seed transformative advances involving materials research.
- Descriptions of initial short term scientific publication target(s) that will provide the immediate visibility necessary for the FY29 MRSEC competition.
- Clearly distinct from ongoing externally or internally funded research including recent OSU Materials Seed Grant Program funding and previously funded IRGs in the CEM (these are not meant to be continuation grants)

Post-Award Spend and Reporting Compliance

Award Spending

Teams will have 12 months to expend all funds from 1/1/2027 to 12/31/2027. Any remaining funds will be retrieved and used towards the final teams to be funded in the MRSEC competition

Extensions

If you cannot complete your project aims within the specified project period, CEM will allow no more than **(1) request** to extend your project by **one semester**. We refer to this as a no-cost extension (NCE). A NCE extends the original project period, allowing the completion of project aims without additional funds being provided. Extensions will not be granted for the sole purpose of spending remaining funds.

Requests containing award information and detailed justification must be emailed to cem@osu.edu and CC: Rachel Page (page.257@osu.edu) and Joanna Gardner (gardner.306@osu.edu) no later than 60 days prior to the end of the award.

Reporting

- Teams are expected to provide data on any associated awards/funding, publications, professional awards and invited talks that have fully or partially resulted from this award.
Papers must site program: *"This work was supported in part by The Ohio State University Materials Research Seed Grant Program, funded by the Center for Emergent Materials, the Center for Exploration of Novel Complex Materials, and the Institute for Materials and Manufacturing Research."*

Questions:

Direct all questions and inquiries about the Materials Research proto-IRG seed grant program to Joshua Goldberger (Goldberger.4@osu.edu).