**CALL FOR MRSEC IRG PRE-PROPOSALS**

The Illinois Materials Research Science and Engineering Center (I-MRSEC) is soliciting Interdisciplinary Research Group (IRG) proposals for the MRSEC re-competition. MRSECs are a major program of the NSF’s Division of Materials Research (DMR), and aim to support interdisciplinary materials research and education while addressing fundamental problems in science and engineering. MRSECs typically comprise 2-3 IRGs, together with education and outreach initiatives, collaborations with industry, and shared instrumentation. PIs are typically located at a single institution, although strategic partnerships are valued. Typical total funding is ~ $3M per year for six years. The I-MRSEC website, <https://mrsec.illinois.edu/> shows the scope of the Illinois Center. The federal solicitation is available here: <https://www.nsf.gov/pubs/2021/nsf21625/nsf21625.htm> , with pre-proposals due in June 2022, and full proposals due in Fall 2022.

Internal IRG pre-proposals for the campus-level competition are due on December 15, 2021, with decisions by mid-January. . Each IRG should address a fundamental materials science topic aligned with DMR. A typical IRG should include 6-8 faculty members, with no more than half from the same department. Faculty may be included in more than one IRG pre-proposal.

**IRG pre-proposal requirements**

1. Proposed IRG research plan (2 pages of text maximum, following NSF proposal formatting guidelines). Please include:

* Motivation and potential outcomes of the research
* Background, context, and novelty of proposed work
* Planned research activities
* Distinction from existing MRSEC IRG activities across the entire NSF MRSEC program (see list here: <http://www.mrsec.org/research>).

2. IRG Team and additional contributions (1 page of text maximum). Please include:

* Unique contributions of each PI, existing collaborations between researchers, and necessity of an interdisciplinary, collaborative approach
* Development of shared experimental or computational facilities
* Potential partnerships with industry, international organizations, or other sectors (e.g., national labs, government)
* Diversity of IRG team and potential contributions to diversity, equity and inclusion

**Please email this proposal to Pam Pena Martin, pmartin9@illinois.edu, by December 15, 2021 at 5:00pm CT.**

The current MRSEC Director, Nadya Mason, will be holding a Town Hall meeting to answer questions on Thursday, September 30 at 2:30pm in MRL 2008. Virtual participants can use this Zoom link: <https://illinois.zoom.us/j/87323466161?pwd=QnE2YXZ0aHVXT2ROdmpWa1YrdUtXUT09>.

Prof. Mason strongly encourages teams to contact her (nadya@illinois.edu) to discuss IRG concepts and to help with team formation.

**IRG Review Criteria**

1. Does the IRG describe a well-integrated research program distinguished by intellectual excellence and driven by a clear vision leading to fundamental advances, new discoveries, and/or technological developments that could have national and international significance?
2. Are the capabilities of the investigators, technical soundness of the proposed approach, and adequacy of the resources (available or proposed), including instrumentation and facilities appropriate for a center?
3. Are the benefits of a multi-investigator, interdisciplinary approach to address a major topic or area normally supported by the Division of Materials Research for the IRG clearly laid out? Does cooperation and interdependence of the investigators within the IRG come across?
4. Is the work of a scope and complexity that requires Center support?
5. Is the IRG addressing cutting edge science?