

## Materials Science Research Priority Area (*m*-RPA) *Research Priority Area for the University of Kentucky*

### FY2025 Call for Proposals

The Materials Science RPA (*m*-RPA) offers a variety of funding mechanisms to support materials research across UK. These are described below, and we welcome funding requests from all eligible *m*-RPA members. You may submit proposals via any combination of funding mechanisms that will ultimately advance externally funded materials science research activity at UK. Projects proposed for FY2025 may continue into the next fiscal year, if needed and justified.

Please note that the request for FY2025 proposals related to equipment is not included here and was disseminated separately in a co-sponsored solicitation with the Energy RPA.

#### **Background**

A key part of the *m*-RPA's mission is to expand the breadth and impact of UK's materials research portfolio. Therefore, funding has been allocated to support materials research in several ways. We aim to support both individual PI's as well as groups of researchers. We also aim to cover both modest funding requests as well as more substantial investments. Our overall goal is to support ***compelling opportunities for advancing the materials research enterprise.***

While the funding mechanisms outlined below were developed to address a broad range of anticipated requests, we realize there may be specific ideas that do not fit neatly into one of these categories – if you have an idea or need that may not directly address one of the funding program calls, please reach out to us and we will be happy to discuss your request.

#### **Funding Mechanisms**

Each funding category is described below, along with the typical award size/range and the total anticipated funding level within a given category. These numbers are meant as helpful guidance, but we encourage you to ***ask for the support that you need to be successful*** (and provide a convincing justification for the requested funding). We understand that different researchers (and research areas) need different levels of funding support, but we ask that you tailor your budget to the scope of work and request only the funds that are needed for successful work.

We understand that your proposals may include requests for funding from more than one category below. This is fine, and we do not require a separate proposal for each category, but we ask that you include distinct and clearly labeled sections in your proposal so that reviewers understand the related parts of your overall funding request; also, you should address the relevant aspects for each of the funding categories.

1. **Seed Grants**: Awards will support pilot projects that will ultimately lead to ***new*** externally funded research, ideally grants from a federal agency. The project scope of work is anticipated to include preliminary studies, efforts to obtain new results that support new

proposals, exploration and development of new materials research areas, etc. Submission of at least one full proposal to a federal funding agency is expected as a deliverable for each seed grant, within one year of the award end date.

- Anticipated award amount: \$10,000 to \$25,000 (for a project that lasts 6 to 9 months); \$50,000 maximum; cost share will be viewed favorably for awards approaching \$50,000
- Anticipated funding level in this category: \$160,000

2. Vouchers for User Center Access: Awards should support preliminary work that requires access to equipment and capabilities in cost-recovery centers including the [Electron Microscopy Center](#), [Light Microscopy Core](#), [Mass Spectrometry Facility](#), [Mass Spectrometry and Proteomics Core](#), [A&S Imaging Center](#), external fee-for-service centers, etc.

- Anticipated award amount: \$2,000 to \$3,000; \$5,000 maximum
- Anticipated funding level in this category: \$20,000

3. Conferences and Meetings: Awards will support travel including, but not limited to, travel to conferences, planning meetings, or retreats for groups of researchers developing large proposals (e.g. MRSEC). Awards will also offset costs associated with inviting high-profile materials scientists for seminar presentations, and will support the *m*-RPA Research Day at UK. This funding mechanism is not intended for currently funded research areas where travel can be supported by existing grant funds. Proposers must justify funding need and anticipated research impact from the travel/meeting.

- Anticipated award amount: \$2,000 to \$3,000; \$5,000 maximum
- Anticipated funding level in this category: \$15,000

4. Faculty Success: Awards will enhance faculty recruitment efforts by contributing to startup package requests and may also help with faculty retention. Awards will also support staff positions that improve the support structure for faculty research success. Ideally, awards will be short-term, but it is understood that they may need to extend across multiple fiscal years. Funding requests should be submitted in the fiscal year before the funds are needed. We also anticipate rapid turnaround requests for this category of funding, and we will be as responsive as we can.

- Anticipated award amount: \$20,000 to \$50,000
- Anticipated funding level in this category: \$80,000

### **Due Date and Portal for Proposal Submission**

January 17, 2025, is the submission date for all proposal types, with the exception of voucher proposals which will be accepted on a rolling basis through the end of the fiscal year.

Proposals should be submitted through the VPR's Internal Funding Portal ([VPR Support Grants](#)): <https://ris.uky.edu/pdo/fundingportal/Competitions/?q=2>

## **Eligibility**

We welcome proposals from all researchers who are eligible to serve as PI (or co-PI) on externally funded grants. **Proposers must also be members of the m-RPA at time of submission.**

You can [apply for membership](#) on the [RPA website](#):

<https://www.research.uky.edu/materials-science-research-priority-area>

## **Budgets**

The ranges for typical award amounts listed above are for traditional science and engineering projects involving experiments and dedicated personnel for a short-term project. Proposals that address additional aspects such as economic considerations, studies of societal impact, etc. may still be compelling but not require funding at comparable levels. There is no minimum for a funding request – small budgets will be considered along with all others.

Of course, there is a limit to the total funding that *m*-RPA can award. Cost sharing is welcome and will allow the *m*-RPA to support an increased amount of overall research activity – it will be viewed positively, especially for significant funding requests that approach or exceed \$50,000 in *m*-RPA funds. Proposers may want to leverage existing grants as cost-share sources, if that enables PI's to acquire enhanced capabilities that go beyond the current grant needs and also facilitate the success of additional proposals and new materials research beyond the current grant scope. If multiple PI's combine existing funds to provide cost-share for a large budget request, that will amplify the ability of *m*-RPA to increase its research impact.

## **Proposal Format**

Proposals should be prepared according to standard guidelines for federal proposals (NSF, DOE, NIH), albeit in an abridged form. Requested sections of the proposal include the following:

- I. Cover Sheet, with list of PI, co-PI's, participating departments/centers and colleges
- II. Abstract (limit of 250 words)
- III. Proposal Narrative (up to 3 pages, as needed; some categories may only need 1 page)
  - a. Goals/objectives for the proposed project
  - b. Background – please help us understand the relevant context for your request
  - c. Significance and impact of the proposed work/activity
  - d. Work plan, including scope of work, timeline, and deliverables
  - e. Compelling justification – explain why this award would represent a worthwhile investment of *m*-RPA funds, and how will it enhance materials research at UK
  - f. References (if appropriate); these are not included in the page count
- IV. Budget, including appropriate detail for evaluating suitability of the proposed funding
  - a. Do not include F&A, as awards will be made via a UK internal transfer of funds
  - b. Significant amounts of graduate student tuition/fees are not intended to be supported, but will be considered with appropriate justification (e.g., for a post-qual PhD student who can devote significant time to a seed project)
  - c. Faculty salary is not intended to be part of an award; if requested, it should be accompanied by a convincing justification

- d. Budget period should not exceed 12 months, and ideally will conclude before the end of the current fiscal year in which the award is made (given the timeline and roll-out of this funding call, it is not expected that projects conclude in FY2025)
  - e. If significant funding levels are requested (greater than \$50,000 in *m*-RPA funds), cost sharing will make the proposal more competitive
  - f. If cost share is included in the proposal, please specify the amount and source
- V. Biographical sketch for the PI, using a standard format, e.g., NSF or NIH
- VI. Current & Pending support form (i.e. "Other Support" form) for the PI and co-PI's; please just submit a copy of the form that was included in your most recent external proposal (there is no need to generate a new version of this form for an *m*-RPA application).

### **Reporting**

Award agreements will include expectations for follow-up reporting on the activities/purchases that were supported by *m*-RPA funding. It is expected that awardees will provide updates via summary reports that describe the impact of this funding, including publications, follow-on proposals, external grant awards, intellectual property disclosures, patents, etc. While submission of a full external proposal is expected following seed grant awards, enhanced proposal activity is desired as a follow-on to all funding mechanisms and will be viewed favorably. You should target outcomes that are appropriate for your project and funding.

Return on investment (ROI) and overall increases in extramural funding for materials research are metrics that will be used to assess performance of the *m*-RPA. Therefore, funding requests that hold promise for enhancing these metrics will be viewed favorably.

Within one month of the award end date, a one-page summary report must be submitted. Topics to be addressed in the report include progress/outcomes related to project goals, list of all publications, presentations, and proposals that have been supported (at least partially) by *m*-RPA funding. Additional requirements may be specified in the award letter.

### **Review**

All proposals will be reviewed by the *m*-RPA leadership team, along with input/review by additional non-conflicted UK researchers, if needed.

### **Questions and Feedback**

Please reach out to us if you have questions or comments. We are happy to provide feedback about your proposal ideas and their suitability for *m*-RPA funding.

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