REQUEST FOR PROPOSALS (ver. 221017)

Advanced Materials and Manufacturing Grants

Mission: Develop and strengthen the materials processing and manufacturing capabilities at Michigan Tech to meet next-generation research opportunities.

Strategy: Provide materials and manufacturing grants to assist university researchers in demonstrating unique and enabling capabilities related to advanced materials and manufacturing

Description: The Advanced Materials and Manufacturing Tech Forward (AMMTF) initiative, now operating as the Institute of Advanced Materials and Manufacturing (IAMM), seeks proposals from university researchers that will advance its mission. Proposals from faculty and/or staff with relevant interests and expertise across all university units are welcomed and encouraged.

All materials- and manufacturing-relevant topics are welcomed. The initiative has particular interest in developing capabilities in the following contemporary and emerging areas:

- Manufacturing for a circular economy, i.e., eco- or sustainable manufacturing
- Data-driven manufacturing and materials synthesis
- Cyber manufacturing (manufacturing enhanced by the advanced application of computing, networking, sensing, and/or artificial intelligence)
- Manufacturing process controls derived from massive data streams
- Biomanufacturing (bio-inspired fabrication/manufacturing)
- Any new capabilities or facilities that are available to university researchers

Of less interest would be proposals that are substantially

- Supplies, maintenance, repair, or incremental improvements of existing facilities that do not significantly extend nominal research capabilities
- Undergraduate project support that does not lead to a strong and significant faculty research proposal
- Projects that are primarily data collection that do not extend current knowledge or discovery
- Project budgets that contain summer salary

Proposal Information, preparation, and formatting: Projects will be funded at a $10K level for up to a 6-mo. period of performance.

Proposals should be limited to 2 pages in length. Proposals should contain a summary description of the project, a discussion and analysis of the return-on-investment opportunities in service to the mission (above), and a brief description of budget items. Proposals that demonstrate significant opportunities for external follow-on funding involving several investigators and units will be favorably reviewed.

Proposals are due COB 12/01/2022; email to iamm@mtu.edu. Deliverables will be negotiated with the AMMTF working group during the final project discussion. Contingent on availability of remaining funds, a second proposal campaign with a due date of 3/1/23 for follow-on, or new start, grants is anticipated at the same funding level and period of performance.

For more information, contact Steve Kampe, MSE: kampe@mtu.edu or other members of the IAMM working group:

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