Materials Research Science and Engineering Center (MRSEC) and Broader Impacts

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**IRG1**: New Semiconductors from an Unstable World

**IRG 2**: Molecular and Electronic Dynamics at Organic-Inorganic Interfaces

**IRG 3**: Functional Liquid Crystalline Assemblies, Materials and Interfaces

**IEG**: Innovating through materials
Vision and Approach

Excite people of all ages and backgrounds about science and engineering and encourage them to pursue careers in these fields

• Create and disseminate research-inspired education resources
• Provide professional development for people at all stages of education
• Broaden participation of people underrepresented in science and engineering.
Research-inspired education resources

- Online activity guides, education videos, apps
- Outreach events
- Kits
- On-campus field trips
- Demonstrations

UW MRSEC’s philosophy: Education, outreach, and human resource development require the same level of creativity and dedication as research.
Professional Development

Teachers

• Research Experience for Teachers (RET)
  o Laboratory experience,
  o Professional development
  o Classroom curriculum
  o New MRSEC resources

• Teacher workshops
  o Disseminate MRSEC resources
Professional Development

Undergraduate students

- Research Experience for Undergraduates (REU) – laboratory experience, professional development

Graduate students

- Mentoring through the REU and RET programs
- Communication experience through outreach
Broadening Participation

- RET program focuses on teachers of underserved students
- REU program is minority student focused
- Outreach events targeted at underserved populations
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Thank You

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