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| <b>Project Id</b>                           | 111  |
| <b>Project Title</b>                        | Improving Low Cost Polymer Solar Cell Power Conversion Efficiency  |
| <b>IName</b>                                | Echols   |
| <b>fName</b>                                | Robert   |
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| <b>Additional Faculty</b>                   |  |
| <b>Faculty Department</b>                   | Physics  |
| <b>Project Description</b>                  | Polymer solar cells show great potential for providing a low cost renewable energy future as efficiencies continue to increase. Students will design, build and test polymer solar cells with the goal of improving device power conversion efficiency.                              |
| <b>Interdisciplinary Nature Description</b> | Generally, chemists create polymers, materials engineers characterize the product, and physicists or electrical engineers design and build new devices. However, experience demonstrates that students in all disciplines enjoy designing, building and testing polymer solar cells. |
| <b>Links</b>                                |  |
| <b>Number of Honors Students Requested</b>  | 2  |
| <b>Applicable Majors</b>                    | PHYS, MATE, EE, CHEM   |
| <b>desired_res</b>                          | Interested students should have a knowledge of circuits and electricity at the minimum level of Physics 133, an understanding of how a diode works, and an interest in renewable energy, particularly solar cells.   |
| <b>Date Added</b>                           | 2008-10-19 21:13:39  |
| <b>Active</b>                               | 1  |