

## UNIVERSITY OF MARYLAND MATERIALS RESEARCH SCIENCE AND ENGINEERING CENTER SUMMER 2011 RESEARCH EXPERIENCE FOR UNDERGRADUATES APPLICATION FORM



Mr. or Ms. (circle)	
First name:	Family name:
Date of birth:	
Citizenship Status (circle one): US Citizen US F By NSF Guidelines, this program is available to US Citizens	
Address where you can be reached through May	1, 2011:
Home or permanent address if different from abo	ve: Home Phone:
	Cell Phone:
Email Address:	
College/University you are attending:	
Department in which you are majoring:	
Grade-point average for science/math/engineerin	g:
Overall grade point average for all courses:	
Expected date of graduation from college:	
Current academic year (circle one): sophomore	junior
Have you participated in other NSF REU program If "yes", please list the program(s)	ns in the past?YESNO





## **RESEARCH PROJECTS**

[Please rank your top 5 interests from 1 (most interested) to 5 (least interested) and place an "X" next to those topics that do not interest you.] See <a href="http://mrsec.umd.edu/REU/Projects/2011Projects.html">http://mrsec.umd.edu/REU/Projects/2011Projects.html</a> for project details.

- \_\_\_\_ Synthesis of nanomaterials for solar generation of hydrogen
- \_\_\_\_ Synthesis and electronic transport properties of graphene: single graphite layers
- \_\_\_\_ Multifunctional atomic layer deposition (ALD) films as oxidant barriers
- \_\_\_\_ Graphene metamaterials
- \_\_\_\_ ZnO nanowires and nanoparticles with liquid crystal for photovoltaic applications
- \_\_\_\_ Embedded computing of Arduino

## **STATEMENT OF INTEREST**

In order to help us learn more about you, please write a brief essay describing:

- 1. Your research interest and experiences.
- 2. Which REU projects interest you and why? See above and website
- 3. Expectations for summer experience at UMD MRSEC
- 4. Graduate school plans, and your career plans and goals.
- 5. Why do you want to do research in a materials research center and why particularly at the Maryland MRSEC?

## **ADDITIONAL MATERIALS**

- A. Please have one copy of your <u>official transcripts</u> mailed to the address below.
- B. Please arrange for two letters of recommendations to be sent to the address below.

MRSEC-REU Summer Program Physics Building 082, Room 2120 University of Maryland College Park, MD 20742-4111 FAX: 301-405-7993

Optional: *This information is strictly confidential and required for NSF statistical purposes.* Ethnic Group/Racial background (circle one):

White/not Hispanic origin	African American/Black	Asian
Native American or Alaskan Native	Hispanic	Pacific Islander

THE UMD-REU OPPORTUNITY IS SUPPORTED PRIMARILY BY THE MRSEC PROGRAM OF THE NATIONAL SCIENCE FOUNDATION (NSF) UNDER AWARD NO: DMR 0520471