

## SEMICONDUCTOR MATERIALS SCIENTIST

The University of Dayton Research Institute has an immediate requirement for a solid state physicist/detector and electronic materials research scientist to lead an experimental effort to study the electrical transport properties of extrinsic Si materials. Will develop and apply photo-Hall experimental techniques to the study of Si detector materials, plan and implement experiments including data acquisition and analysis necessary for obtaining majority carrier lifetimes, and analyze other transport properties including mobility and carrier concentrations as determined from resistivity and conventional Hall experiments.

Require PhD. in Physics, Electrical Engineering, or Electronic Materials with minimum of 5 years related research experience. Desire strong background in experimental measurements of electronic materials and devices. Must have demonstrated ability to lead, plan, conduct, and report independent experimental research including interactions with theorists and other collaborators.

U.S. Citizenship required.

Please send detailed resume to:

Robert D. Artman  
Personnel Administrator  
KL 521D  
UNIVERSITY OF DAYTON  
RESEARCH INSTITUTE  
Dayton, Ohio 45469

*An Equal Opportunity/Affirmative Action Employer*

## LOOKING FOR SOMEONE?

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Ceramist . . . Metallurgist . . .

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For information on placing your classified advertisement in the BULLETIN, contact Materials Research Society, 9800 McKnight Road, Suite 327, Pittsburgh, PA 15237; telephone (412) 367-3003.



## ARMY SCIENCE AND TECHNOLOGY FELLOWSHIPS

The U.S. Army Research Office announces graduate fellowships for study and research leading to doctoral degrees in areas of science and technology in which there is a critical shortage of highly trained scientists and engineers.

The program will be implemented through grants to host institutions, typically for one to five fellows in one or two academic departments. The program is limited to U.S. citizens.

A minimum of \$12,000 will be provided each year for each fellow's stipend. Total cost to the Government, to include tuition and other charges made by the institution, shall not exceed \$20,000 for each fellowship.

Selection of the fellows and administration of the fellowships will be the responsibility of the host institution. A commitment for three years will be recognized, subject to the annual appropriation of funds. Those institutions wishing to extend a currently active fellowship should clearly indicate their intention on their proposal and include in the proposal an evaluation of the fellow's progress and the reason for the extension. The university may administer the program through its fellowship office, and need not establish an employer-employee relationship.

Proposals will be considered in the following disciplines and sub-areas:

- Electronics/Electrical engineering: Communications, Fiber optic networks, Optoelectronics, Microelectronics, Monolithic millimeter wave integrated circuits.
- Physics: Modern optics and Quantum electronics.
- Chemistry: Kinetics and mechanisms of fast reactions, Transport theory, Nucleation and aggregation phenomena.
- Mathematics: Parallel and distributed computing, Fast algorithms, Large scale scientific computing and supercomputers, Computational geometry for robotic applications, Novel approaches to pattern theory, Intelligent control systems.
- Engineering Sciences: Solid lubricants, High strain rate phenomena, Tailored composite design, Aeropropulsion for small gas turbines, Rotorcraft flight mechanics, stability and control, Hypersonics.
- Life Sciences: Basic research in biotechnology.
- Materials Science: Composite materials, Nondestructive evaluation, Magnetic materials, Optical materials, Characterization of materials, Surface modification studies, Properties of high temperature thermoplastics, Processing and dynamic behavior of materials.
- Interdisciplinary: Image processing and image analysis, Computer Science, Artificial Intelligence.

Five copies of proposals containing the information listed below must be received at the Army Research Office not later than 5:00 p.m. on 15 October 1985. Proposals should be no more than 5 pages in length, to include a one-page budget and a one-page vita of the principal investigator (Thesis Advisor). Proposals will be competitively evaluated. Criteria for evaluation will include relevance to areas of critical need, planned research program, the method used for fellow selection, and the plans for implementation of the fellowship program.

*Required information for proposals:*

- 1) Title; 2) Name and Address of Institution; 3) Requested starting date and duration of grant; 4) Name, Address and Title of Institution's Technical Representative (Principal Investigator); 5) Name, Address and Title of Institution's Administrative Representative authorized to conduct negotiations; 6) Academic Department(s); 7) Number of fellowships requested; 8) Discipline/Sub area of research; 9) Academic program of Fellows; 10) Research program in which Fellow is to participate; 11) Plans for implementation and management of the program, to include procedures for recruiting, selecting, and supervising the Fellows; 12) Budget (one page); and 13) Vita (one page).

Direct proposals and inquiries to: Director, U.S. Army Research Office, ATTN: AMXRO-TS (Fellowship), PO Box 12211, Research Triangle Park, NC 27709-2211; Telephone: Commercial (919) 549-0641, X206