TITLE: Physical Science Technologist

SALARY CLASS: SA
SCHEDULE: Staff
CODE: SA503

UNION: Staff Association – Local 2071, U.A.W.
GRADE: 11
CODE: 50

EEO CLASS: SA

POSITION PURPOSE
Provide a variety of specialized technical support in the areas of manufacturing and superconductivity research through the operation, maintenance and modification of complex electronic instrumentation and computer controlled devices.

ESSENTIAL JOB FUNCTIONS
- Operate, maintain and modify electronic instrumentation, computer controlled devices and related research equipment for teaching and experimental research. Design, fabricate and install technical equipment and apparatus.

- Monitor and maintain all teaching and research laboratory apparatus. Design, assemble, construct and demonstrate usage of electronic instrumentation and other technical devices. Troubleshoot and repair malfunctioning and inoperable equipment.

- Operate and maintain specialized technical equipment utilized in superconductivity research, e.g. thin film disposition. Monitor construction, repair and adjustment of test equipment and research machines, e.g. vacuum leaks.

- Monitor and maintain equipment and material inventory. Contact appropriate vendor representatives regarding procurement of specialized equipment and supplies; obtain price quotations. Research current literature and contact field specialists to replace antiquated equipment; keep abreast of current technological advancements.

- Compile statistical data; prepare analysis, evaluation and summary reports on test results. Interact with research faculty and students to review and assess project findings.

- Provide functional supervision to research and graduate students support personnel. Provide work direction and guidance. Train in appropriate technical methods, procedures and equipment operations.

- Perform related work as assigned.

THIS DESCRIPTION IS INTENDED TO INDICATE THE KINDS OF TASKS AND LEVELS OF WORK DIFFICULTY THAT WILL BE REQUIRED OF POSITIONS THAT WILL BE GIVEN THIS TITLE AND SHALL NOT BE CONSTRUED AS DECLARING WHAT THE SPECIFIC DUTIES AND RESPONSIBILITIES OF ANY PARTICULAR POSITION SHALL BE. IT IS NOT INTENDED TO LIMIT OR IN ANY WAY MODIFY THE RIGHT OF ANY SUPERVISOR TO ASSIGN, DIRECT AND CONTROL THE WORK OF EMPLOYEES UNDER THEIR SUPERVISION. THE USE OF A PARTICULAR EXPRESSION OR ILLUSTRATION DESCRIBING DUTIES SHALL NOT BE HELD TO EXCLUDE OTHER DUTIES NOT MENTIONED THAT ARE OF SIMILAR KIND OR LEVEL OF DIFFICULTY.
ADDITIONAL COMMENTS
This classification level is designed to perform technical procedures operating complex electronic instrumentation and equipment in a research laboratory. Work activities involve thinking within clear and substantially diversified procedures and precedents. Work activities necessitate considerable knowledge of and experience in electronic design, operation, modification and maintenance. The incumbent is expected to operate a variety of complex electronic equipment and machine shop and computer controlled devices. Functional supervision may be exercised over a small number(1-3) of research or graduate student support personnel. This classification is generally located in a research laboratory in a School, College, Division or Center/Institute of the University. This classification reports to and receives work direction from a Department Chair or faculty member.

MINIMUM QUALIFICATIONS
- High school graduate or an equivalent combination of education and/or experience; supplemented by advanced coursework in electronic and mechanical engineering and technology or related science field. Bachelor of Science preferred.
  
- Extensive experience in electronic design, modification and maintenance.
  
- Extensive experience in vacuum disposition; electronic circuit designs, etc.
  
- Strong mechanical or machine shop skills.
  
- Ability to communicate effectively with others.
  
- Keen attention to detail.
  
- Typically, incumbents have worked in a machine shop.