

# *Research Scientists*

## FOR BASIC & APPLIED RESEARCH AT

# *Sylvania's Research Laboratories*

Significant expansion of company-supported research in solid state physics, physical electronics, metallurgy and physical chemistry has created a number of exceptional opportunities at several levels, up to Senior Scientist or Section Head. Inquiries are invited from persons with appropriate training and experience who would be interested in participating in one of the following programs:

### **REFRACTORY METALLURGY**

Theoretical and experimental investigations of all phases of the metallurgy of refractory metals and alloys including process, fabrication, physical and mechanical metallurgy.

### **ELECTRONIC MATERIALS**

Synthesis and evaluation of materials and studies of the basic mechanisms involved in magnetism, ferrites, phosphors and dielectrics.

### **ELECTRONIC COMPONENTS**

Investigations of techniques and materials involved in microminiaturization and integrated circuits.

### **ANALYTICAL CHEMISTRY**

Analysis of ultra-trace impurities in electronic materials, semiconductors and metals including the development of new analytical techniques.

### **THERMIONIC EMISSION**

Studies of the basic mechanisms of electron emission from high and low temperature surfaces; experimental evaluation of emission properties of base alloys, films and matrix forms.

### **MICROWAVE & ULTRA-MICROWAVE ELECTRONICS**

Theoretical and experimental investigations of Maser-like devices and parametric amplifiers, including microwave spectroscopy studies of paramagnetic crystals.

### **SEMICONDUCTOR DEVICES**

Theoretical and experimental studies of new devices and device concepts, new fabrication techniques and the applications of new semiconductor materials and phenomena.

### **SEMICONDUCTOR MATERIALS & POLAR CRYSTALS**

Studies of the basic phenomena and properties of existing and new materials with these characteristics.

*Modern, fully equipped laboratories, considerable scientific freedom, and association with staff members of established scientific prestige afford realistic opportunities for professional growth and recognition.*

*Please submit resume in confidence to Mr. A. E. Powell, Dept. PG-1*

### **RESEARCH LABORATORIES**



Subsidiary of

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