

# NEWSLETTER

NOVEMBER 1980

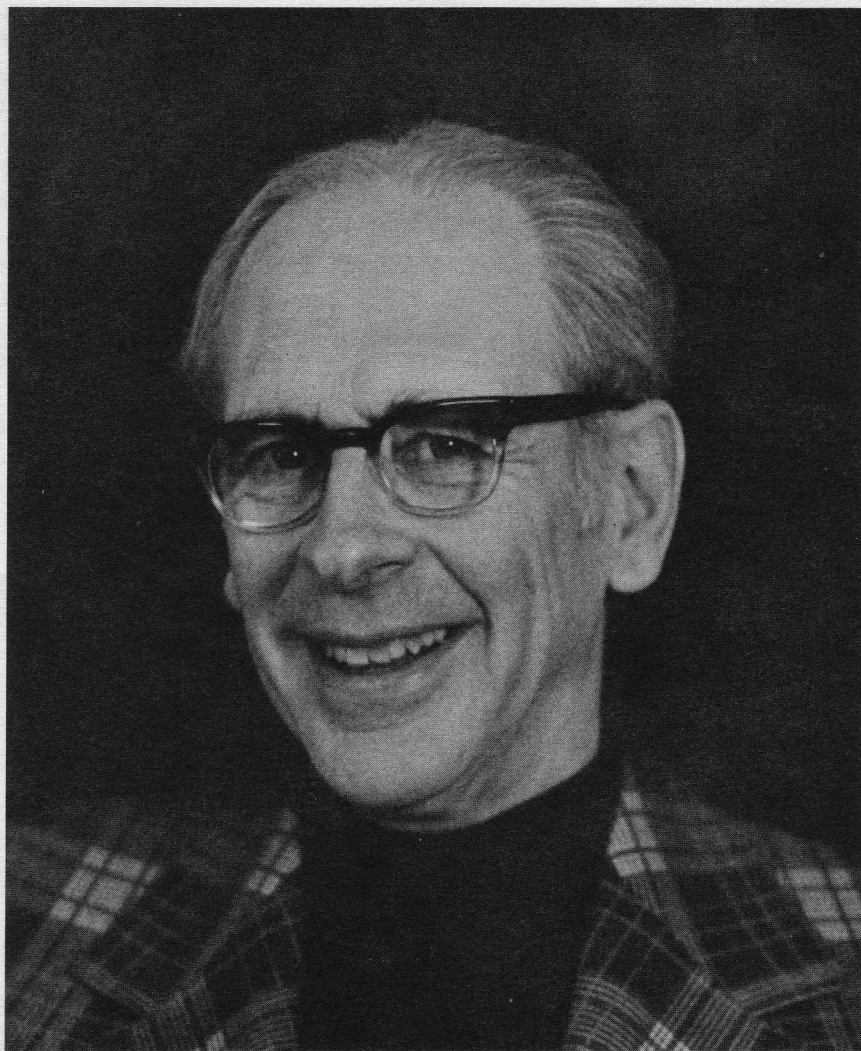
## Materials Research Society

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### HERRING TO RECEIVE VON HIPPEL AWARD



*W. Conyers Herring, 1980 recipient of the Materials Research Society Von Hippel Award recognizing outstanding accomplishment in Materials Research. Dr. Herring will be honored at the Special Award Reception to be held in the Copley Plaza Hotel Ballroom, Tuesday, November 18, 1980, beginning at 5:30 p.m.*

## CONYERS HERRING TO RECEIVE 1980 VON HIPPEL AWARD

The Materials Research Society is pleased to name Professor Conyers Herring, Professor of Applied Physics, Stanford University, as recipient of its annual Von Hippel Award for 1980. This prize recognizes outstanding accomplishment in the multi-disciplinary endeavor of materials research, and is intended to honor pioneers who have shaped our understanding of the various disciplines which comprise the study of materials. The prize was named after its first recipient, Arthur Von Hippel, emeritus Professor at the Massachusetts Institute of Technology, and consists of a \$1,000 award and decorative ruby crystal. Presentation of the prize and acceptance remarks by Dr. Herring will take place beginning at 5:30 p.m. Tuesday, November 18, 1980 at the Special Awards Reception in the main ballroom of the Copley Plaza Hotel.

Conyers Herring has enjoyed a long and distinguished scientific career. He obtained his Ph.D. in Physics from Princeton University in 1937, and from 1937-1941 taught at MIT, Princeton, and the University of Missouri. During the years 1941-1945 he was a Member of Staff, Division of War Research, Columbia University. From 1946 to 1976 Dr. Herring was a Member of Technical Staff at Bell Laboratories, Murray Hill, New Jersey, and since then has been Professor of Applied Physics at Stanford University.

Professor Herring has had a profound and seminal influence on the development of Materials Science and Solid State Physics. His contributions to the understanding of solid surfaces underpin the entire fields of crystal growth, sintering, and plastic flow at high temperatures. He, together with J. K. Galt, realized and demonstrated that whiskers of high crystalline perfection would exhibit extraordinary mechanical properties. He has contributed importantly to our understanding of transport in semiconductors, and his work on exchange interactions in ferromagnetism is regarded as classic. Dr. Herring's sustaining concern with scientific and social responsibility is exemplified by his

current chairmanship of the Committee for a Literature Survey of Nuclear Power, sponsored by the National Academy of Sciences.

All Symposia attendees are cordially invited to participate in honoring Conyers Herring by attending the 1980 Von Hippel Award Reception on Tuesday, November 18, 1980 at 5:30 p.m. in the Copley Plaza Hotel Ballroom.

## MATERIALS RESEARCH SOCIETY GRADUATE STUDENT AWARD WINNERS NAMED

The Materials Research Society has initiated a student award program to recognize outstanding performance and promise for future substantial achievement in materials research at the graduate level. Selection criteria and areas of research for award consideration may be found in the July 1980 MRS Newsletter. Each award consists of a fifty dollar cash grant, waiver of the annual meeting registration fee and, where applicable, a grant to substantially underwrite travel expenses required to attend the meeting.

Award presentations for 1980 will be made at the Von Hippel Award Reception (Tuesday, November 18, 1980, 5:30 p.m.) by Dr. Kathleen Taylor of General Motors Research Laboratories, to the following students:

- Perry R. Skeath  
Stanford Electronics Laboratories  
Stanford University  
Stanford, California  
*Areas of research:*  
*Semiconductor Interfaces*  
*Synthetic Modulated Materials*
- John G. Pepin  
Materials Research Laboratories  
Penn State University  
University Park, Pennsylvania  
*Areas of Research:*  
*Scientific Basis for Nuclear*  
*Waste Management*

- Mark E. Lowry  
Physics Department  
Iowa State University  
Ames, Iowa  
*Area of Research:*  
*Nuclear and Electron  
Resonance Spectroscopies  
Applied to Materials Science*

#### SPECIAL SESSION OF SYMPOSIUM ON RADIOACTIVE WASTE MANAGE- MENT

John Moore, Oak Ridge National Laboratory, and S. V. Topp, Savannah River Laboratory, will preside over a topical session on the pressing and controversial problems confronting radioactive waste management. This session will be held Thursday afternoon, November 20, 1980, from 2-5 p.m. in the Copley Plaza Hotel Ballroom. The featured speakers and their topics are:

- *Clean-up Problems at Three Mile Island*, **R. E. Brooksbank**, Oak Ridge National Laboratory, Oak Ridge, TN
- *Activities of the State Planning Council on Low-level Radioactive Waste Management*, **John Stucker**, Executive Director, State Planning Council, Washington, DC
- *EPA's Environmental Standards for Management and Disposal of High Level Radioactive Waste*, **Daniel J. Egan, Jr.**, Environmental Protection Agency, Washington, DC

#### MRS SYMPOSIUM PROCEEDINGS: PUBLICATION AGREEMENT WITH ELSEVIER-NORTH HOLLAND

The 1980 Annual Meeting marks the inception of a society program which will result in the publication of a uniformly formatted series of MRS Symposium Proceedings. The series, which is to be published by Elsevier-North Holland, will consist of

individually numbered volumes, each of which will contain the proceedings of a single symposium. With one exception, all MRS symposia approved for publication by the councillors will be included in the series. The symposium on the Scientific Basis for Nuclear Waste Management, which has previously instituted a successful proceedings series and an established readership, will continue to publish its proceedings through Plenum Press.

In the past, proceedings of selected symposia have been published on an individual basis. These volumes have been very well received and constitute a valuable record of current activity in the materials sciences. The continuing positive reception of these proceedings has established a solid basis for future publication and has led the officers and councillors of the Society to institute a more consolidated publication program. A publication committee organized by H. J. Leamy of Bell Laboratories held discussions with several prominent science publishers, ultimately selecting Elsevier-North Holland, which has a major publishing effort in the materials science field. The series will be marketed worldwide, and should find its way into every major technical library. Initial titles in the series include:

- Laser and Electron-Beam Solid Interactions and Materials Processing  
**Editors:** J. F. Gibbons, L. D. Hess, and T. W. Sigmon
- Defects in Semiconductors  
**Editors:** J. Narayan and T. Y. Tan
- Nuclear and Electron Resonance Spectroscopies Applied to Materials Science  
**Editors:** E. N. Kaufmann and G. K. Shenoy

The aim of this program is to ease the organizational and editorial effort required of proceedings editors, as well as to consistently produce high quality publications with which the Society will be identified.

**OPTICAL CHARACTERIZATION  
TECHNIQUES CONFERENCE  
ANNOUNCEMENT**

The Society of Photo-Optical Instrumentation Engineers (SPIE), for which the Materials Research Society is a cooperating organization, has announced a conference on Optical Characterization Techniques for Semiconductor Technology to be held April 1-2, 1981 at the San Jose Hyatt House, San Jose, California. This technical conference will be devoted to optical characterization techniques with special emphasis on process control and examining and monitoring bulk materials, thin films, surfaces and interfaces. Applications and recent developments will be discussed through tutorials and contributed papers.

Selection of papers will be based on abstracts limited to 200-300 words. The abstract deadline is November 24, 1980. Further information regarding suitable topics, abstracts and manuscript requirements may be obtained by contacting the Seminar Chairman, D. E. Aspnes of Bell Laboratories, Murray Hill, New Jersey 07974.

*Suggestions and comments relevant to the format and content of this Newsletter are welcomed, and may be sent to:*

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