

# the facts about E.M.I. SHIELDING

Design information from Mag-Shield's  
30 years experience in E.M.I. shielding.

## WHY IS IT NECESSARY TO SHIELD A PHOTOMULTIPLIER TUBE?

Even the earth's comparatively weak magnetic field can cause a definite decrease in the amplification factor of a photomultiplier tube. Most of the amplification loss occurs in the tube's low electron velocity region between the photocathode and first dynode.



Magnetic shielding assures optimum P.M. tube performance.

## WOULD IT HELP TO CHANGE THE TUBE'S ORIENTATION TO THE E.M.I. FIELD?

No. With the best possible orientation in a field of 10 gauss, a loss of up to 90% relative anode output current will occur.

## ARE STOCK SHIELDS AVAILABLE FOR THE MOST COMMONLY USED PHOTOMULTIPLIER TUBES?

Mag-Shield's photomultiplier tube shield line will accommodate 90% of all currently used P.M. tubes. Our standard P.M. tube shields eliminate tool expense and provide immediate delivery.

Just circle the reader service number, or write Mag-Shield direct to receive catalog sheet PM-2.

## MAGNETIC SHIELD DIVISION



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## obituaries

He was active in organizational matters such as the founding of the European Physical Society, he was a vice-president of the International Union of Pure and Applied Physics, a member of the research council of Switzerland and a consultant to many laboratories. He loved music, was a good violinist and enjoyed playing chamber music; he was a fine photographer, and he liked to sail.

But most of all he strove for intellectual beauty, beauty in science and beauty in mathematics. He was convinced that the "esthetic aspect of a well-expressed physical theory is just as indispensable as its agreement with experience. Only beauty can lead to that 'passionate sympathetic contemplation' of the marvels of the physical world which the ancient Greeks expressed with the orphic word 'theory'." There are few people who think this way in our time and fewer who act accordingly. Josef Jauch's scientific work is a living example of the tenets in which he believed. We shall miss him.

Fritz Rohrlach  
Syracuse University  
Syracuse, New York

## Vaden W. Miles

Vaden W. Miles, emeritus professor of Physics at Wayne State University, died on 24 July at the age of 62.

Miles was born on 25 September 1911 in Lewisville, Texas. He received his bachelor's degree from North Texas State College and his MA and PhD degrees from the University of Michigan. After teaching at the university of Michigan, Boston University, and Indiana University, Miles in 1948 joined the physics department at Wayne State University, where he taught physical science until his retirement in 1969. He was a Carnegie Fellow and Visiting Professor at Harvard University during 1954-55, a recipient of the Distinguished Service Award in Science Education from the National Association for Research in Science Teaching, and had served as president of that organization.

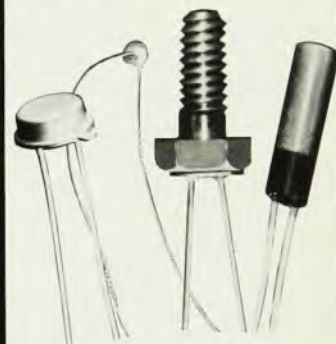
Miles was instrumental in establishing the current physical science sequence of courses at Wayne and had directed the Department of Physical Science. He is perhaps best known as the principal co-author of the widely used textbook *College Physical Science*; after retirement he continued to devote a major part of his efforts to revising this book, the third edition of which was recently released. □

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