1980 EPS Hewlett-Packard Europhysics Prize

The 1980 Hewlett-Packard Europhysics Prize of the EPS has been awarded to two physicists for their separate contributions towards achieving a quantitative understanding of the physical and chemical behaviour of solid state materials through the development of original methods for the calculation of their electronic properties. The award winners are: Dr. O. Krogh Andersen of the Max-Planck-Institut für Festkörperforschung, Stuttgart; and Dr. Andries R. Miedema of Philips’ Research Laboratories, Eindhoven.

They will share the prize of 20,000 Sw. Fr. equally. The formal presentation will be made during the International Conference on the Physics of Transition Metals in Leeds, 18-22 August.

The prize, which is donated annually by Hewlett-Packard to EPS, is for "outstanding achievement in solid state physics".

ACAPPI/CMD Summer School

A new departure for EPS is the organization of a Summer School on Material Science and Technology (1st Course Applications of Ferroelectrics) which is being held at the Ettore Majorana Centre of Erice, 1-15 July, 1980. While some attention will be paid to the switching dipole properties of ferroelectrics, the principal topics discussed will be the exploitation of such phenomena as piezoelectricity and pyroelectricity, as well as the dielectric and optical properties of ferroelectrics, with particular emphasis on the enhancement effects that occur at or in the neighbourhood of phase transitions.

The Course is aimed at post-graduate students in research institutes and industry.

Inscriptions accompanied by personal details and background will be accepted until early in June by the Course Director, Dr. Anderson is honoured for his development of new methods for the numerical calculation of band structures. These have significantly increased the speed of making such calculations, transforming them into a highly efficient procedure and greatly extending the range of materials that can be studied. So effective is his approach, his method, and subsequent developments of it, are now used for elaborating the input data for more complex computations.

Dr. Miedema is honoured for his essentially empirical approach to similar problems, which have had a striking success even though the underlying theoretical justification is not understood. His empirical alloy models allow a number of properties, notably those of a thermo-dynamic nature, to be derived and provide a powerful tool for studying new alloys and tailoring their properties to engineering requirements.

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