

Acknowledgments

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SECTION NEWS

Greater Pittsburgh Section Hosts Lecture on Smart Materials

On November 13, members and guests of the MRS Greater Pittsburgh Section were treated to an informative, entertaining lecture on "Smart Materials" by Dr. Robert Newnham, who will soon celebrate his 25th anniversary as Alcoa Professor of Solid State Science at the Pennsylvania State University.

After defining smart materials as those that can respond actively to some type of input, Newnham focused on the role of piezoelectric and magnetostrictive ceramics in various applications. These materials already perform several functions in automobiles; an example is the shock absorber in Toyota's new Lexus. In underwater communications, Newnham showed how technologists have studied the natural "talking" and "listening" mechanisms observed in fish and have imitated these de-

signs to fabricate a class of biomimetic materials for potential use in Naval communication and fish farming. He concluded by pointing out needs in the medical and residential markets that can be filled by smart materials, showing the growth potential for this segment of the advanced materials arena.

Interest and participation in the activities of the Greater Pittsburgh Section has grown since the group was organized about two years ago, as shown by the turnout of about 75 scientists, engineers, and students for Newnham's lecture. The section officers, Deborah Partlow of Westinghouse STC, Pradeep Phule of the University of Pittsburgh, Michael McHenry of Carnegie Mellon University, and John Basil of PPG's Glass Research Center, have welcomed the contributions

of three board members at large since the spring of 1991: Prashant Kumta, assistant professor in the Mechanical Engineering and Materials Science Department at Carnegie Mellon University; Devki Talwar, associate professor in the Physics Department at the Indiana campus of the University of Pennsylvania; and S.G. Sankar, senior scientist in the Data Storage Systems Center at Carnegie Mellon Research Institute. Sankar is also adjunct professor in the Mechanical Engineering and Materials Science Department at Carnegie Mellon University and executive vice president of the Advanced Materials Corporation. New officers for the Greater Pittsburgh Section will be elected in February 1992.

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