



Padmanabhan came to the Department in 1981 as an Instructor, from a post-doctoral stint (Danida Fellow) at the University of Aarhus in Denmark (1979-81). He received his BS, MS and Ph.D. (1975) from the University of Poona (India). Other positions he has held include Research Engineer at Vidyut Metallics Ltd. (1975-77) and Research Officer at Associated Cement Cos. Ltd. (1977-79) both in Bombay, India. During the summer of 1984, he returned to the Institute of Physics at the University of Aarhus as a Visiting Research Professor. He was promoted to Assistant Professor here at WSU in 1983.

"Padu's" current work centers on the use of ion beams for material surface modification and analysis. Material surfaces modified by ion implantation, dynamic recoil mixing, and sputtering are characterized by techniques such as Rutherford backscattering and nuclear reaction analysis. He also is pursuing a program of *in situ* ion channeling studies of solid-gas and solid-liquid interfaces.

NATO HELPS SHRINK ATLANTIC!

Jerry Dunifer is the recent recipient of a NATO Cooperative Research Program grant, the second such award he has received in recent years. He is working on a project with Dr. Herve Hurdequint from the University of Paris entitled "Interfacial Coupling Between Magnetic Thin Films and Normal Metals." They have been studying microwaves and how they pass through normal metals, while observing how electrons react in the metal.

The grant from NATO has enabled Dunifer to make significant gains in his research and allows him to work more closely with Hurdequint who is working on ferromagnetic materials. It has provided funds for Hurdequint to visit WSU this past summer and again this November, covering his travel and living expenses during his visits. It will also allow Jerry to go to Paris in the near future for a reciprocal visit to Hurdequint's lab.

NATO grants are made available to the 16 countries, who are members of the alliance three times a year. Dunifer said the value of this program is not only in research advancements, but also in "establishing closer ties with other countries."

OUR SUCCESS STORIES!

During the 1986-87 academic year a number of students completed their degrees. Below you will find the names and statistics of the "fresh new Ph.D's" and students who have completed other degrees through the Department.

DOCTORAL DEGREES AWARDED:

Sultana Nurun Nahar (Ph.D. 5/87) "Electron and Positron Scattering From Atoms" directed by Dr. J. M. Wad-ehra. Sultana has accepted a post-doctoral position at Georgia State University in Atlanta, GA. She will be working with Professor Steve Manson in theoretical atomic and molecular physics.



Gary Walter Hunter (Ph.D. 12/87) "Spin-Density-Wave Transitions in Dilute YGd Alloys" directed by Dr. L. E. Wenger. Gary has accepted a position as Research Physicist with Engelhard Corporation in Edison, New Jersey. He will be working with Dr. Ken Voss in New Business Research and Development.



Steven Merrill Shepard (Ph.D. 12/87) "Theoretical and Experimental Approaches to the Thermoacoustic Problem" directed by Dr. L. D. Favro. Steve is currently working as a physicist in the research lab at the U.S. Army Tank Automotive Command in Warren, MI.

