

National Science Foundation awarded CMRR \$1.65 million grant to study microscopic properties of magnetic materials

September 21, 1987

Media Contact: Paul Lowenberg, 534-3120

UCSD RECEIVES \$1.6 MILLION GRANT FOR MAGNETIC RECORDING RESEARCH

The National Science Foundation has awarded the University of California, San Diego a \$1.65 million grant for a three-year period to study the microscopic properties of magnetic materials.

The research will be carried out through the Center for Magnetic Recording Research at UCSD, and represents the largest grant to CMRR in its four-year history.

CMRR began funding the research about three years ago, and will provide significant funding during the next three years for a total contribution of about \$1.5 million.

Ami Berkowitz, project director and holder of an endowed chair at CMRR, said the goal is to "understand more definitively the behavior of magnetic materials used in recording media so we can more readily accommodate higher density information storage."

Sheldon Schultz, UCSD professor of physics and one of the co-investigators on the project, explained that the researchers were concerned about the next generation of magnetic storage.

The goal is to cram more information storage capability on magnetic media such as computer disks, audio and video tapes.

To accomplish this, they must learn more about the behavior of the microscopic magnetic units which make up magnetic recording media.

"The grant allows us to pursue a research program to understand the interaction of ultra-fine magnetic particles," Schultz said. "I feel very confident that we will come up with a rather good explanation of how these ultra-fine magnetic particles interact in the next three years."

UCSD was chosen by the National Science Foundation as one of four new national Materials Research Groups which are sharing funding of \$7.4 million.

Other members of the research team are H. Neal Bertram of Electrical Engineering, Donald R. Fredkin of physics, and Gareth Thomas of the Department of Science and Materials Engineering at UC Berkeley.

CMRR was established in 1983 with major industry backing to improve magnetic recording technology. Its research is devoted to increasing the amount of data that can be stored on a tape or disk, improving the reliability of computer disk recorders, laying the groundwork for smaller and lighter equipment, and increasing the speed and precision of magnetic tape and disk production.

(September 21, 1987)