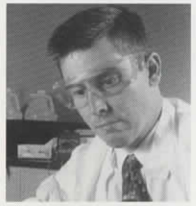
Department of Energy, the Environmental Protection Agency, the Centers for Disease Control and Prevention, and the Department of Defense. This means assessing future demands for scientists, engineers, and technical personnel. It means connecting more than **3,000 students and faculty** to the right opportunities at **100 national laboratories** and research facilities each year. It means providing full-time opportunities for **127 postdoctoral research participants**. It means involving the university community in the nation's research activities. **Autonomy has its place; it's just not with us.**

We are a catalyst.

Just ask Dr. Ryne Rafaelle, associate professor of physics and space sciences at the Florida Institute of Technology and 1994 winner of our Junior Faculty Enhancement Award. "As a young faculty member, funding for preliminary research is hard to come by," says Dr. Rafaelle. "The Junior Faculty Enhancement Award was invaluable. It allowed me to initiate small research projects that in turn attracted more funding and led to larger ones."



These awards, now known as the Ralph E. Powe Junior Faculty Enhancement Awards, provide seed money that allows fledgling faculty members of ORAU member institutions to pursue research. The awards are for $5,000, and each recipient's institution matches that amount. Throughout the program's seven-year history, ORAU has awarded 95 grants totaling more than $450,000.

Dr. Rafaelle's award allowed him to research the growth of thin films used in solar cells . . . which led to his participation at an Oak Ridge National Laboratory summer research program in materials science during the summers of 1994 and 1995 . . . which led to an American Society for Engineering Education fellowship at NASA's prestigious Lewis Research Center in Cleveland, Ohio, in 1997 and 1998. Dr. Rafaelle credits his Junior Faculty Enhancement Award with kicking off this chain of events. You could call it a domino effect.

We call it making connections.

A proud association. Since 1993, we have managed one of this country's most esteemed graduate fellowship programs: the National Science Foundation (NSF) Graduate Research Fellowships. The NSF awards approximately 1,000 new graduate fellowships each year to students from colleges and universities across the United States.

Established in 1952, the program offers three years of funding for students to pursue graduate study in the mathematical, physical, biological, engineering, behavioral, and social sciences, and in the history and philosophy of science. The program also offers awards for women in engineering and computer and information science.

Each year we manage the application and panel review processes for about 6,000 fellowship applications. We also coordinate program outreach efforts. We were recently awarded a new two-year contract with the option of three one-year extensions—proof that NSF views us as **a trusted and respected partner.**

A new era. This is an exciting time for us at ORAU. We are proactively expanding our initiatives into areas such as environmental management, global issues, and biological life sciences. For example, we are developing partnerships in such diverse, emerging technical areas as **wireless communications, neutrino physics, atmospheric turbulence modeling, materials microcharacterization collaboratories,** and **biomedical imaging.**

We've got connections; let us put them to work for you.

To explore partnership opportunities with ORAU, contact John Nemeth, Vice President for Partnership Development, at (423) 576-1898, e-mail nemethj@orau.gov, or fax (423) 576-3816.

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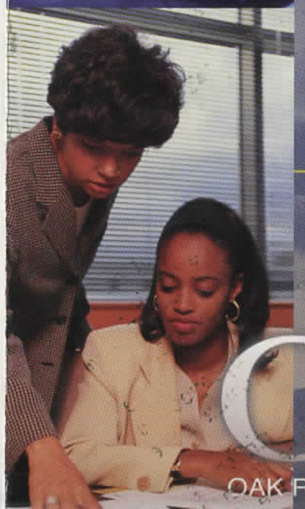
For more information, visit our web site at
http://www.orau.gov

Oak Ridge Associated Universities was established in 1946 to open federal Manhattan Project-era research facilities to faculty and students from colleges and universities in the South. Today its 87 sponsoring institutions and nine associate member institutions encompass 27 states and Puerto Rico. ORAU is headquartered in Oak Ridge, Tenn., and has 468 employees.



WE'VE GOT CONNECTIONS

INDUSTRY

IMAGINATION

VISION

LABORATORY

COLLABORATION

UNIVERSITY

ORAU

OAK RIDGE ASSOCIATED UNIVERSITIES

Imagine

how pooling resources with a major research university, a federal lab, or private industry could benefit your organization. By complementing your strengths with theirs, dynamic new achievements result.

At Oak Ridge Associated Universities, we take it from imagination to reality. Creative collaboration is our maxim, and we've got the contacts to make it happen.

We start with a research consortium of *87* colleges and universities, major schools that account for one-third of our country's Ph.D.s and university research—and nearly *$3.7 billion* (27 percent) of all federally financed science and engineering R&D expenditures at colleges and universities.

Add to that our role as a Department of Energy contractor. We run the Oak Ridge Institute for Science and Education, an internationally respected facility with programs in education, training, health, and the environment. Through ORISE, we hold the keys to more than 50 national labs and facilities.

And finish with our mission. We are a nonprofit corporation, dedicated to furthering research and education in science and technology and creating partnerships among our member universities, national labs, and industry. These partnerships prove a sum is greater than its parts.

So dream. If you could have access to *any* technology, *any* federal lab, *any* research, what would it be? Think mathematically. Your strengths increase exponentially when multiplied with someone else's.

Let ORAU help you fill in the equation.

ORAU
OAK RIDGE ASSOCIATED UNIVERSITIES
World Wide Web: http://www.orau.gov

Synergy

That's what transpires between nine universities seeking to better understand the physical universe. Each institution contributes its own unique combination of scientists, postdocs, students, technicians, money, and equipment. Their tool is the Recoil Mass Spectrometer, an instrument that took 10 years to design and build and is one of just five in the world. **The result is groundbreaking research that would be impossible for one or two institutions acting alone.**

Such is the story of the University Radioactive Ion Beam (UNIRIB) consortium. UNIRIB started 25 years ago; this collaboration's emphasis has changed from stable to radioactive ion beams at the Holifield Facility at the Oak Ridge National Laboratory.

The Recoil Mass Spectrometer is used to study exotic nuclei that are far from stability and currently inaccessible by stable beams. Experiments and research programs on these unstable nuclei open new fields of research in nuclear physics and nuclear astrophysics.

The UNIRIB consortium includes Furman University, Georgia Institute of Technology, Louisiana State University, Mississippi State University, Tennessee Technological University, Texas A&M University, University of Maryland, University of Tennessee, and Vanderbilt University.

Field of dreams. Right now, it is 110 acres of Tennessee countryside. But seven years and $1.3 billion from now, this will be the location of the **Spallation Neutron Source** at Oak Ridge National Laboratory. Funded by the Department of Energy, the Spallation Neutron Source will provide the most intense pulsed neutron beams in the world for scientific and industrial development—and it will attract researchers and engineers from the international neutron-scattering community.

SNS
SPALLATION NEUTRON SOURCE

Neutron-scattering research affects all of us. Do you use credit cards, calculators, CDs, and computer disks? Do you travel by plane and enjoy adjustable seats and shatterproof windshields in your car? Do you plan your weekend around weather forecasts based on satellite information? Neutron-scattering research has played a role in the development of these and many other daily amenities.

When you combine industry, science, and academia, you get modern conveniences. And through a strategic partnership with Oak Ridge National Laboratory Spallation Neutron Source, we will continue our 50-year tradition of encouraging such collaborations by promoting university research partnership opportunities with government and industry.
We've got connections, and we will use them to provide coordination with the neutron-scattering community (we've already cosponsored one workshop), educational outreach, and experimental design and development.

In a sense, we are matchmakers, especially in our mission of furthering research and education in science and technology. As manager of the Oak Ridge Institute for Science and Education, we have developed and coordinated graduate and postgraduate fellowship programs for **13 federal agencies**, including the