Clemson University, in partnership with Rutgers University, was recently named a National Science Foundation Industry/University Collaborative Research Center (NSF I/UCRC).

The purpose of an I/UCRC is to provide the means to leverage research and development (R&D) investments with multi-university centers renowned for their innovative research capabilities. Along with the storied legacy of industry-relevant ceramic and composite innovation at Rutgers University, Clemson University brings to this new center its distinctive infrastructure and expertise in optical materials, particularly its strength in crystal growth, transparent ceramics, specialty glasses and optical fibers.

In particular, while the need for high energy lasers and optoelectronic materials and systems continues to expand, the United States has experienced two countervailing trends: the significant reduction in industry-basic R&D investments and the decline in domestic academic expertise in the materials and devices critical for practical next-generation solid-state-directed energy systems.

In order to remedy these present limitations and maintain U.S. leadership, Clemson is forming a Directed Energy Working Group within its NSF Industry/University Collaborative Research Center. This would be the only NSF center with a focus on directed energy materials (crystals, ceramics and optical fiber) and related structures, and solid-state lasers.
Value Proposition to Industrial Partners

• First access to center-generated intellectual property
• Reduced overhead costs charged to center projects
• Targeted pre-competitive application-inspired research that is highly leveraged financially by NSF, institutional and federal support
• Proprietary-directed research projects
• Unique industry-grade infrastructure maintained and managed by full-time U.S.-citizen staff with decades of experience
• Undergraduate and graduate students trained in optical materials synthesis, optical fiber fabrication and laser development
• Access to SCIF for restricted-access classified programs
• Designer online curriculum for an M.S. degree in photonics
• Participation on a program steering committee
• Additional support from NSF for SBIR and STTR grants

Partnership Fees

• $15,000 annually for SBIR-sized companies
• $40,000 annually for non-SBIR-sized companies, national laboratories, federal services or agencies
• The majority of base membership funds support graduate students working on industry-targeted projects
• Proprietary-directed research projects negotiated based on scope

For More Information:

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