Creating Closer Collaborations
Agreements, research strengthen our ties with Sandia National Laboratories

The Next Wave in Pulsed Power
For years UNM researchers have collaborated with both the Air Force Research Laboratory Directed Energy Directorate and the Pulsed Power Science Center at SNL on fusion, plasma and other diagnostics, and stockpile stewardship studies. Now the partnership is poised for renewed research in high-energy density plasma physics that will shape the way we create energy and even what we know about the planets in our solar system.

Edl Schamiloglu, Distinguished Professor in the Department of Electrical and Computer Engineering and one of the world’s top researchers in the field, is leading the university in the SNL partnership. “There’s a lot of synergy between what we do here and what Sandia does,” he says, “There aren’t that many universities working in pulsed power - it’s a niche. But it’s important to New Mexico, because we have a lot of activity in this area due to the national labs.”

Beyond the potential for important scientific findings from the partnership, Schamiloglu points to the many educational and career opportunities available for a very specific kind of UNM engineering student. “Pulsed power and high energy density plasma physics is not a very common topic. The students who go in to this area have a real passion for it,” he explains. “They want to contribute to the big science that Sandia does. We’re one of Sandia’s resources that train graduate students who end up working there and helping to solve these large, complex problems.”