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Taiyo Nippon Sanso and North Carolina State University Agree to Three-Year Collaboration to Enable New GaN Optoelectronic Technologies and Commercial Opportunities

Taiyo Nippon Sanso Corporation (TNSC) and North Carolina State University (NC State) announce a three-year agreement to collaborate on methods and equipment solutions to enable advanced GaN-based optoelectronic, photonic and electronic devices. NC State will use a TNSC SR2000 metal organic chemical vapor deposition (MOCVD) reactor for its research and development with support and expertise from TNSC. The goal of the three-year collaboration is to advance the state-of-the-art in GaN-based device epitaxy and device technology with a blend of complementary equipment, process, and device expertise.

"Taiyo Nippon Sanso is very proud to enter into a collaboration agreement with North Carolina State University. NC State has an excellent reputation for wide bandgap device and technology development and commercialization. Taiyo Nippon Sanso is looking forward to working with Professor Fred Kish, the NC State staff and students, and outside companies that work with the NC State Nanofabrication Facility," said TNSC Corporate Officer Kunihiro Kobayashi.

North Carolina State University is a leading institute in wide-bandgap and ultra wide-bandgap materials and devices. The university has been at the forefront of leadership in developing and commercializing wide-bandgap technology.

"North Carolina State is proud to enter into this collaborative agreement with Taiyo Nippon Sanso," said Fred Kish, the M.C. Dean Distinguished Professor of Electrical and Computer Engineering and director of NC State Nanofabrication Facility. "With the addition of the TNSC MOCVD system, NC State is now one of the very few research institutions with this state-of-the-art materials growth capability. The collaboration with TNSC will significantly impact advances in the realization of next generation wide-bandgap and ultra wide-bandgap materials and devices."

As applications for GaN lasers and LEDs continue to expand, TNSC expects its SR and UR MOCVD platforms to be the platforms of choice for advanced GaN optoelectronics fabrication.

About North Carolina State University

NC State is a preeminent teaching and research enterprise that excels across disciplines and contributes more than $6.5 billion annually to North Carolina's economy. More than 36,000 undergraduate and graduate students learn by doing — pursuing original research, starting new companies, forging connections with top employers, and serving local and global communities. NC State's 9,000 faculty and staff are world leaders in their field, bridging the divide between academic disciplines and training high-caliber students to meet tomorrow's challenges. Together, they forge powerful partnerships with government, industry, nonprofits and academia to remake our world for the better. For more information, visit www.ncsu.edu.

About Taiyo Nippon Sanso Corporation

Taiyo Nippon Sanso Corporation, founded in 1910 is a global supplier of industrial gases. In 1983, TNSC launched MOCVD operations alongside its conventional industrial gas operations. More information about TNSC MOCVD products and technology can be found at www.MOCVD.jp

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