For the wireless generation, the faster innovative technology is developed, the better, and the next generation in wireless technology is fast approaching thanks to two Corridor innovators.

Dr. Weng-Qing Xu, general manager of platform technology development and incubation at II-VI Incorporated, and his team have been growing and fabricating a thin-film diamond, which has properties that could enable next-generation, high-speed electronic components in 5G wireless handsets.

Xu’s team collaborated with Dr. Jing Wang, an associate professor in the department of electrical engineering at the University of South Florida (USF), through the Matching Grants Research Program (MGRP) project to design, model, fabricate and characterize prototype devices. This new generation of wireless technology will achieve higher bandwidth, meaning faster-than-ever wireless communication.

"II-VI is a leader in engineered materials and thin-film technologies for communications," said Xu. "Our work with USF accelerates the development timelines and will enable us to be ready in time to serve the market for 5G wireless components."

Having received funding from The Corridor’s MGRP for over a dozen projects in recent years, Wang was familiar with the benefits the project would have by partnering with Xu’s team.

"Without The Corridor, we could not have gotten to this point and the fact that it doesn’t take forever to get reviewed and approved is such a great thing," said Wang. "Especially when we are talking about 5G wireless communication, we need to move fast and not miss the window of opportunity for this type of technology."