

Riber Opens New GaN Process Technology Center



The significant market opportunity of Gallium Nitride (GaN) based materials makes it an exciting area of development. From its physical nature, GaN is a material of choice providing performance advantages for optoelectronic and microelectronic device applications.

n New GaN Process Technology Center

Considering GaN's performance capabilities and its commercially relevant applications, Riber has signed another collaboration agreement with the CNRS/CRHEA at Sophia Antipolis, Valbonne, France. The aim is to develop new processes including GaN based HEMTs, HFETs, LEDs and blue laser diodes.

Riber's new Process Technology Center (PTC) is based in the CRHEA facility which benefits from:

- CRHEA's scientific knowledge in GaN growth, 10 years of experience in optoelectronic and microelectronic applications (on Riber MBE 32 and Compact 21 research systems),
- State-of-the-art characterization equipment: electrical; optical; structural; providing rapid feedback on properties of any grown structure.

n Specific GaN working environment

Riber's MBE customers and prospective users are now able to use the recently installed tool for growth of specific test structures to evaluate the MBE system, or to target specific device properties in order to enhance and accelerate their process knowledge. Further, training courses may be tailored to meet individual requirements. Experience accumulated in advance of system delivery can save months of post-installation process development.

The GaN Process Technology Center is equipped with the Compact 21 GaN research system. A NH_3 gas module or a N-plasma source are employed for nitride deposition. The system is run by one of Riber's "in-house" PhD MBE scientists ensuring efficient support and high level service to our MBE users. All aspects of growth, sample characterization and in some case device processing, are covered by our team of experts.