

RIBER and Comptek Solutions sign a commercial partnership

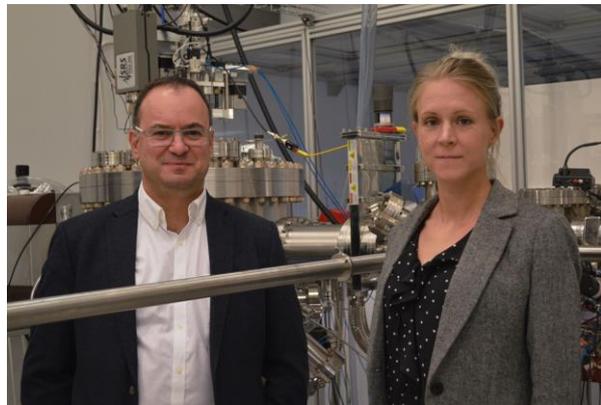
Bezons and Turku, October 6, 2020 – 8am - RIBER, a global market leader for semiconductor industry equipment, and Comptek Solutions, a forerunner in III-V compound semiconductor quantum surface engineering, are announcing to have signed a commercial partnership deal to develop joint technological solutions.

Founded in 2017, Comptek Solutions is a Finnish company that addresses the oxidation issue in III-V compound semiconductors with its novel Kontrox™ technology.

Devices based on III-V compound semiconductors have a natural tendency to oxidize almost instantly once exposed to air, which results in the formation of an amorphous oxide layer leading to a range of defects that limit their performance and manufacturing yields. Comptek Solutions tackles this problem with Kontrox™, a patented innovative passivation process which creates a thin layer of stable crystalline oxide with a dry vacuum approach, preventing the amorphous oxidation layer from forming. Compared to existing methods, Kontrox™ drastically reduces the density of interface defects and delivers an unprecedented increase in efficiency and higher manufacturing yields for III-V compound semiconductor devices.

The solution enables manufacturing of new generation compound semiconductor devices that are increasingly efficient, smaller and more reliable, thus meeting the needs of new technologies, such as 5G, facial recognition (3D sensors), augmented reality, virtual reality and autonomous vehicles.

Kontrox™ sets a new bar for efficiency in a wide range of applications; for instance, it can be used to significantly boost performance of high electron mobility transistors (P-HEMT) and HBT's, enabling next-generation communication circuits for 5G. Kontrox™ also contributes to the development of next-generation CMOS processors, where the quality of the interface between the gate oxide insulator and the III-V materials for transistors performs a crucial role in CMOS operations. The technology has also proved to boost the performance of optoelectronic devices - such as mini- and micro LEDs, high-power lasers, VCSELs and infrared sensors, considerably improving the efficiency, brightness, and lifespan.



Comptek's CEO Vicente Calvo and Research Leader Marjukka Tuominen

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Partnership's objective: developing a joint offering of Kontrox™ solutions

The partnership between RIBER and Comptek Solutions aims to build a long-term collaboration to support and accelerate Kontrox™ technology transfer to industrial clients by delivering customized, highly efficient ultra-high vacuum equipment along with expert technical support and lifecycle management services.

This collaboration makes it possible to customize and optimize the specifications for equipment to deploy Kontrox™ technology according to user needs. This will enhance the technology industrialization featuring a process control developed specifically for Kontrox™.

This commercial partnership helps expand and increase market opportunities for both parties by combining their technological solutions and optimizing delivery times. The partnership enables RIBER to promote and develop its expertise, while diversifying its product range with a novel, break-thru technological solution.

About RIBER

RIBER is a global market leader for semiconductor industry equipment. It designs and produces molecular beam epitaxy (MBE) systems as well as evaporation sources and cells for the semiconductor industry. It also provides technical and scientific support for its clients, maintaining their equipment and optimizing their performance and output levels. Through its high-tech equipment, RIBER performs an essential role in the development of advanced semiconductor systems that are used in numerous consumer applications, from information technologies to 5G telecommunications networks, OLED screens and next-generation solar cells.

RIBER is a BPI France-approved innovative company and is listed on the Euronext Growth Paris market (ISIN: FR0000075954).

www.riber.com

About COMPTÉK SOLUTIONS

Comptek Solutions is a forerunner in III-V compound semiconductor quantum surface engineering. Our innovative Kontrox™ technology delivers up to 98 % reduction of interface defect state density compared to existing methods, which results in an unprecedented boost of efficiency and significant increase in manufacturing yield of devices.

Comptek Solutions currently holds 2 registered patent families with three more under review.

www.comptek-solutions.com

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