20 July 2020

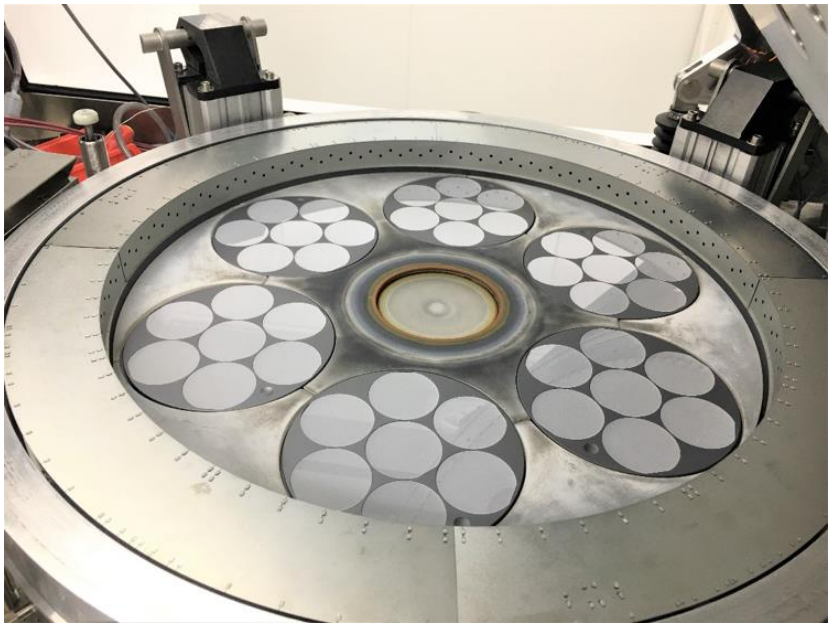
BluGlass commissions commercial scale RPCVD system

- BluGlass has successfully commissioned its commercial scale RPCVD platform - the BLG-500
  - This largest ever RPCVD platform is a retrofitted AIXTRON AIX-2800 G4
  - Capable of up to 6 x 6-inch or 42 x 2-inch wafer deposition
  - Designed to demonstrate the industrial scalability of BluGlass' unique technology

Australian semiconductor technology developer, **BluGlass Limited (ASX:BLG)** has today announced the commissioning of the largest remote plasma chemical vapour deposition (RPCVD) manufacturing platform to date, the BLG-500. The commercial scale RPCVD system has been successfully retrofitted onto a modern generation manufacturing platform, the AIXTRON 2800 G4. This successful commissioning forms a major part of the Company's commercial scaling activities.

BluGlass is commercialising a breakthrough semiconductor technology called RPCVD in the global laser diode, LED and microLED industries. BluGlass' patented hardware and processes offers semiconductor manufacturers unique performance advantages due to RPCVD's low temperature and hydrogen growth conditions.

This new planetary deposition platform, completed in collaboration with global semiconductor leader, AIXTRON SE, is capable of 6 x 6-inch wafer deposition or 42 x 2-inch wafers; several times the capacity of the previous largest RPCVD system, the BLG-300, capable of 1 x 6 inch or 19 x 2 inch wafer deposition. The new platform, now named the BLG-500, features dual axes of rotation to improve deposition uniformity of the thin film properties across revolving and rotating wafers.

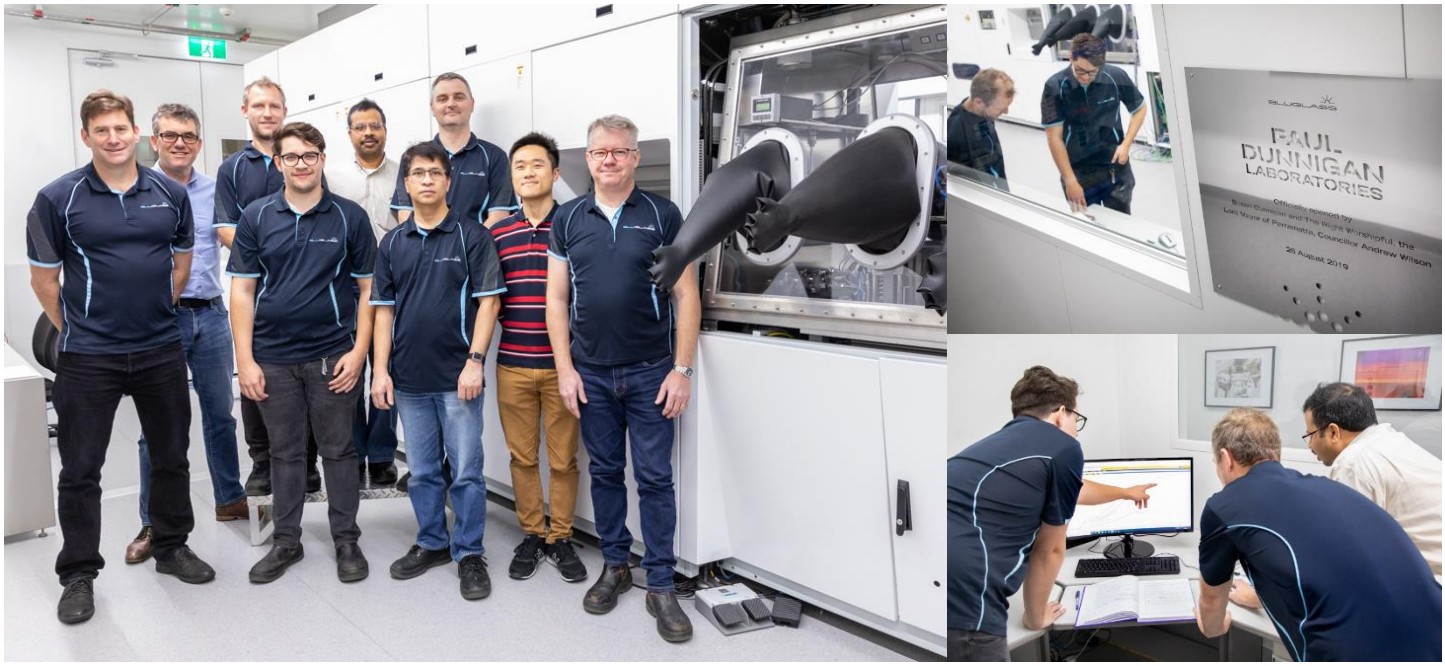


Managing Director, Giles Bourne said "The BLG-500 is the culmination of an enormous two-year design and build project to transform our unique R&D scale technology to one with commercial manufacturing capability. This step is critical to the future success of the company. The 500 is not an incremental next generation of our RPCVD platform, it is instead a radically re-engineered design to deliver ultra-precision uniformity and deposition quality at commercial scale".

The commissioning of the commercial scale RPCVD system is a significant technology demonstration milestone in the commercialisation of the low-temperature growth platform. The BLG-500's large scale will significantly increase BluGlass' foundry customer output capacity at its state-of-the-art Silverwater advanced

manufacturing facility. Performance testing and optimisation on the new system continues before the BLG-500 can start to contribute to the product development roadmap for laser diodes and LEDs.

“I’d like to acknowledge the incredible work and dedication of the BluGlass team, specialist consultants and the collaborative support from AIXTRON, all of whom have helped deliver this important milestone” finished Mr. Bourne.



This announcement has been approved for release by the board.

About BluGlass

BluGlass Limited (ASX: BLG) is a global leader commercialising a breakthrough technology using Remote Plasma Chemical Vapour Deposition (**RPCVD**) for the manufacture of high-value semiconductor devices such as **laser diodes**, next generation **LEDs** and **microLEDs**. BluGlass has invented a new process using RPCVD to grow advanced materials such as gallium nitride (GaN) and indium gallium nitride (InGaN). These materials are crucial to the production of high-efficiency devices used in next-generation devices from lighting, displays, virtual reality systems and industrial cutting and welding.

RPCVD’s unique low temperature, low hydrogen growth platform offers many potential benefits to electronics manufacturers over existing growth techniques; including higher efficiency, lower cost, greater substrate flexibility and has the potential to enable novel applications.

In 2019, BluGlass launched its direct-to-market Laser Diode business unit to exploit its unique tunnel junction technology capability in the high-value and high-margin laser diode market. BluGlass expects to launch its first laser diode commercial product in 2021. **Contact**: Stefanie Winwood +61 2 9334 2300 swinwood@bluglass.com.au