

8 March 2021

## BluGlass presents RPCVD laser diode paper at Photonics West

- BluGlass will be exhibiting at the virtual **SPIE Photonics West** conference
  - showcasing laser diode product suite
  - publishing new paper on RPCVD laser diode development

Australian semiconductor developer BluGlass Limited (ASX: BLG) will be exhibiting at the virtual **SPIE Photonics West** 2021 conference ([www.spie.org](http://www.spie.org)) from 8 – 11 March. Photonics West is the leading global event for the photonics and laser industries.



BluGlass will be showcasing its latest laser diode product development progress and custom GaN epitaxy services with customers and industry participants.

The Company will be hosting a virtual booth, where technical staff will be available throughout the conference to chat live and answer questions on product development, custom GaN services and the advantages of remote plasma chemical vapour deposition (RPCVD) material growth.

Registered conference attendees can visit the Company's virtual booth at the SPIE Photonics Digital Marketplace or book a meeting with our senior technical staff via the SPIE Connect portal from 8-11 March between 10am and 10pm Eastern Standard Time (US).

BluGlass will also be presenting a new RPCVD laser diode paper at the virtual conference. The paper outlines recent laser diode development work, utilising both the industry incumbent MOCVD technology and the company's unique RPCVD technology to enhance the performance of laser diodes.

The paper, titled '*InAlGaN based ridge-guide laser diodes using remote plasma chemical vapour deposition for enhanced performance*' is being presented by Dr Josh Brown Head of Epitaxy and highlights the benefits of BluGlass' proprietary RPCVD technology for the manufacture of both traditional and novel structure laser diodes. The paper features the Company's latest MOCVD laser diode development results and progress on the development of enhanced laser diode structures utilising RPCVD.

BluGlass' RPCVD technology offers laser diode manufacturers a number of performance and cost advantages for the growth of high-brightness GaN laser diodes, including higher performing devices.

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RPCVD is a low-temperature, ammonia-free approach to GaN-based epitaxial growth, with advantages not possible with conventional metal-organic chemical vapour deposition (MOCVD).

High-brightness GaN laser diodes are used in a growing number of applications that include industrial lasers (cutting and welding), scientific applications, automotive and general lighting and displays.

The technical presentation outlines BluGlass' latest laser diode developments using both MOCVD and low temperature RPCVD. A copy of the presentation is available to download from the Company's website here [www.bluglass.com.au/laser-diodes](http://www.bluglass.com.au/laser-diodes).

BluGlass continues to advance its MOCVD standard laser diode product suite ahead of its first product launches (405nm & 420nm laser diodes) in early 2021. The Company also continues to advance its breakthrough RPCVD low resistivity p-GaN and tunnel junction laser diode designs for enhanced laser products. His

This announcement has been approved for release by the Board.

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## 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.

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