

Diamond lasers based on stimulated scattering**Macquarie Univ., Australia ¹, MQ Photonics Research Centre ², °Richard P Mildren^{1,2}****E-mail: rich.mildren@mq.edu.au**

Laser action in diamond via stimulated scattering provides a pathway to access the extreme properties of diamond for laser beam generation. Since the first demonstrations of Raman lasers using CVD-grown diamond about 10 years ago, there has been rapid progress in understanding the basic optical properties of this extreme material and its range of capability. This presentation will review the latest developments and highlight future directions of outstanding promise including high-power single longitudinal mode lasers and Brillouin laser action.