DenseLight Semiconductors
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Principal Engineer (MOCVD)

Job Objective/s
To develop and lead MOCVD team to maintain and improve MOCVD epigrowth and related processes and capabilities aligned to company's technology and product roadmap, and also aligned to and integrated with in-house manufacturing capabilities and outsource.

Duties and Responsibilities
· Operate MOCVD planetary reactor system and perform InGaAsP/InAlGaAs/InP epitaxial growth and regrowth runs as per specified layer structure for both production and NPI development projects, including both in-situ growth monitoring and post-growth characterization of photoluminescence, XRD rocking curve, ECV doping profile and others · Spearhead development, management and execution of all MOCVD epigrowth engineering and development activities of optoelectronics and photonics integrated circuits to meet NPI design goals and requirements · Improve MOCVD epigrowth process quality indices and systems such as Line Yield and Statistical Process Control, and manage process change control · Set up quality program for epigrowth runs, including creation and maintenance of control documentation of work instructions and process documentations, establishing process control and training of engineers · Track all MOCVD related material usage and drive cost reductions · Plan and ensure execution of scheduled maintenance together with the maintenance team · Ensure uptime of MOCVD epitaxial growth and characterization equipment · Lead in assessment and execution of reliability and process qualification of new MOCVD related materials, such as substrates, growth sources, scrubber solutions and so on · Maintain current knowledge of relevant technology as assigned; participate in special projects as required · Provide training and guidance to junior engineers · Regular reporting on process engineering and improvement updates · Overall in-charge of Environment, Health and Safety system of the MOCVD system and related material characterization tools · All other reasonable duties, as assigned

Qualification Guidelines	
Minimum Education	PhD Degree
Minimum Experience	A minimum 10 years of experience in MOCVD epigrowth process for III-V materials and based on planetary reactor systems with extensive experience in manufacturing/ process development, operations management in the field of photonics, semiconductors, telecommunications, company with similar or larger size and market capitalization.
Specific Knowledge / Skills	· Possesses strong communication skills and the ability to coordinate cross-functionally with R&D, Quality and Operations, · Understanding process validations. Experience using Lean Manufacturing tools. · Knowledge of up-to-date production and automation equipment, processes, designs and functions