Researches, designs and develops new microelectronic, optoelectronic, micro-electromechanical and sensor manufacturing processes, devices, components, or systems, semiconductors, semiconductor-based integrated and hybrid approaches with Si, GaA's and related III-IV materials, and other materials (e.g. quartz, Si-based and compound semiconductor and related materials), materials growth and processing. Develops and applies inspection and test procedures for micro-components and micro-systems.

Discretion/Latitude

Works under consultative direction toward predetermined long-range goals and objectives. Determine and pursue courses of action necessary to obtain desired results.Completed work is reviewed from a relatively long-term perspective, for desired results.

Knowledge, Skills and Abilities

Applies advanced technical principles, theories and concepts. Contributes to the development of new principles and concepts. Identify, analyze and develop new business opportunities. Answer unusually complex technical questions regarding products and services, and take part in putting together proposals, configurations, and product offerings.

Problem Solving

Works on unusually complex technical problems and provides solutions which are highly innovative and ingenious.

Impact

Develops technological ideas and guides their development into a final product. Erroneous decisions or recommendations would typically result in failure to achieve critical project objectives. Leads the planning and implementation of large projects/programs. Contributes to department goals and planning efforts.

Liaison

Serves as organization spokesperson on projects and/or programs. Acts as advisor to management and customers on advanced technical research studies and applications.

Minimum Education and Experience

12+ years with BS in designated Engineering or related field. Employees usually have advanced degree in field of specialization.