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 with Business Areas in an engineering leadership capacity to uncover and resolve issues associated with the development and implementation of operational programs and business pursuits. Identifies, recommends and aligns R&D programs and technological applications to accomplish long-range business objectives. Develops and maintains the Business Area's Technology Roadmap. Work is reviewed only to determine the effectiveness of the results obtained, typically from a short-term perspective for operational issues and a long-term perspective for technology alignment to the Business Area's strategies.

# Knowledge, Skills and Abilities

Exhibits an exceptional degree of ingenuity, creativity, resourcefulness and technical leadership. Applies and/or develops highly advanced technologies, scientific principles, theories and concepts to meet the needs of the Business Area. Viewed as a leading expert in applying technology and solving operational issues in support of the Business Area's objectives. Establishes long-range marketing plans and technology Roadmaps for the Business Area's products and services by identifying, analyzing and developing new business opportunities. Establishes customer contacts, develops proposals, and delivers technical marketing presentations. Cultivates and maintains relationships with key decision makers.

### **Problem Solving**

Applies technology and engineering and performs a leadership role to achieve the Business Area's operational and strategic goals. Applications may be diverse and include newly developed concepts, theories and products, or engineering discipline.

### Impact

Sets the technology direction for the Business Area and corrects the course of current errant technology direction when warranted. Erroneous decisions or recommendations would have a long-term negative effect on the organization's reputation and business posture. Leads development and implementation of key programs and/or processes for the Business Area.

### Liaison

Serves as a consultant to the Business Area's top management in long-range company planning concerning new or projected areas of technological research, advancement, and the current program's technical performance. Prime spokesperson on the Business Area's technical capabilities and future direction. Often instrumental in attracting and obtaining major new company business.

## **Minimum Education and Experience**

20+ years of broad and extensive professional experience with BS in designated Engineering or related field. Employees usually have an advanced degree in field of specialization.