**Chief Technology Officer**

**Reports to: President**

**Date: June 2022**

**Job Description**

The Chief Technology Officer’s goal is the successful execution of the company’s business mission through development and commercialization of RASIRC technology. This requires understanding the company’s products and technology, identification of marketplace opportunities that fit potential RASIRC technology, creation of the strategy and business plan capture the opportunity, and organizational guidance to implement the plan.

**Responsibilities**

Strategy & Planning

* In partnership with the company’s founders, identify opportunities and risks for delivering the company’s products and future technologies, including identification of competitive technologies, opportunities for innovation, and assessment of marketplace obstacles and technical hurdles to the business success. Identify technology trends and evolving business climate that may support or impede the success of the business.
* Evaluate and identify appropriate technology platforms for delivering the company’s services. Identify, recommend, and support potential acquisitions and partnerships.
* Lead strategic planning to achieve business goals by identifying and prioritizing development initiatives and setting timetables for the evaluation, development, resource requirements, and deployment of technology.
* Participate as a member of the senior management team in establishing governance processes of direction and control to ensure that objectives are achieved, risks are managed appropriately and the organization’s resources are used responsibly, particularly in the areas of research and product development.
* Develop patent based business strategies and oversee intellectual property management. Assist in trademark management.
* Communicate the company’s technology strategy to investors, management, staff, partners, customers, and stakeholders.
* Risk analysis for technology direction and from competition

Implementation & Deployment

* Collaborate with the founder and potential customers to develop product specifications that describe the implementation of the company’s technology.
* Supervise technology development by providing scientific leadership, setting technical direction, setting short-term objectives and assessing progress.
* Work with the senior management team to review and approve proposed development releases and manage the release process. Assist the senior management team to monitor product performance.
* Lead the marketing department to create opportunity relevant technical data that creates interest at target customers through direct customer interaction.
* Work with Sales to develop tools needed to commercialize the technology
* Lead RASIRC’s public and private effort to be a leader in oxidation, humidification, and nitridation.
* Directly manage University sponsored research programs to achieve the previous three requirements

Operational Management

* Maintain up-to-date knowledge of industry technology standards, industry trends, and emerging technologies
* Ensure company technical problems are resolved in a timely and cost-effective manner.
* Work with the senior management team to develop, track, and allocate resources for annual operating, R&D, and capital budgets.
* Assist in recruitment, training, retention, and organization of all development staff in accordance with the company hiring process, personnel policies, and budget requirements.
* Manage marketing to achieve technical leadership in the semiconductor and related industries

**Position Requirements**

Experience: 15+ years in the semiconductor industry

Formal Education: An advanced University degree in a Science or Engineering discipline.

Knowledge & Experience

* Demonstrated ability to envision technology that meets customer and industry needs.
* Ability to discern application requirements and develop specifications.
* Exposure to business theory, business process development, governance processes, management, budgeting, and administrative operations.

Personal Attributes

* Excellent leadership ability and interpersonal skills.
* Excellent written and oral communication skills.
* Ability to articulate ideas to both technical and non-technical audiences.
* Superior analytical, evaluative, and problem-solving abilities