Corporate Overview

ARRADIANCE

Molecular Innovation™

Arradiance Corporation is enabling us to better perceive the hidden world all around us. Our functional film technologies greatly enhance the performance of imaging and detection systems, providing resolution, gain and lifetime improvements that were previously unattainable. Our enabling processes will open the door to a new world of flexible, robust, electro-optic systems that will change the way we see our world.

Founded in 2004, **ARRADIANCE®** has developed proprietary thin film technology with a wide variety of applications in areas such as:

- Night Vision
- Thermal and Fast Neutron Detection
- Alternative Energy
- Catalysis
- Medical Imaging
- Space Sciences
- Scientific Instrumentation

Our **Gain Enhanced MCP (GEM™)** process is a breakthrough, thru-pore engineered emissive film process which greatly enhances the performance and lifetime of microchannel plates (MCP) and other electron amplification devices. Our GEM™ process offers the ability to increase gain of the MCPs by up to 10X. Other benefits include:

- Improved array uniformity
- Reduced extracted dose degradation
- Reduced ion feedback
- Lower noise

Our **GEM-R2 High Resistance Film** is a tunable high-resistance coating that has many applications in critical charged and neutral particle detection applications.

The patent-pending Arradiance GEM-R2 process in conjunction with our engineered emissive film completely eliminates the need for lead-glass formulation substrates opening the possibility of MCP detectors made from non-lead glass, ceramic, silicon and even plastic.

Our **GEM D2 ALD Process Systems** deposit conformal metal, semiconductor, and insulating films on high aspect ratio (HAR) structures on a wide variety of substrates.

Some key features of the system include:

- Processing of up to 25 substrates in a batch
- Up to four distinct precursors
- Optimal performance on High Aspect Ratio substrates
- Precise temperature and gas flow control within reaction chamber
- Minimum chamber volume and surface area for efficient precursor usage
- Unique batch heating design
- Linear showerhead gas delivery to maximize uniformity
- 3 zone temperature control for each precursor
- Simultaneous two-sided wafer deposition

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Management Team

Kenneth Stenton

President, CEO, and Founder

With over 30 years of operations and engineering management experience in the semiconductor and ATE industries, Ken has most recently served as President of Robotic Vision Systems, Inc., President of Anorad Corporation and Vice President and General Manager of Veeco Process Equipment group. As an Arradiance founder, Ken has assembled a world-class management and development team and raised $8 million in private equity and government funding. Ken currently serves on the Advisory Board for V-Soft, Inc., is past Chair of the American Electronics Association, Long Island Council and is Adjunct Professor of Business and Technology at SUNY, Stony Brook. Ken holds a BS in Physics from UCLA and an MBA from the University of Pennsylvania, Wharton School.

David R. Beaulieu

Chief Operating Officer and Founder

David brings to Arradiance 25 years of technology and semiconductor capital equipment experience including General Management, RD&E, and Operations. Before founding Arradiance, He served as Chief Operating Officer of EM Logix. From 1996 to 2002 David served as a Corporate Officer of Brooks Automation and as Vice President and General Manger of the Vacuum Automation Division. From 1993 to 1996 he served as Vice President of Operations, Time/Data Systems Division at Simplex, Inc. Prior to Simplex. From 1979 to 1993, David served in multiple progressive roles including Vice President of RD&E at GCA/General Signal. He is named inventor of 9 US patents. David is a Cum Lude graduate from Northeastern University, and Wentworth Institute of Technology.

Neal T. Sullivan

Chief Technical Officer

Prior to Arradiance, Neal was the Vice President of Technology at Soluris Inc. From 1991 to 1998 he was a Principal Engineer in Digital Semiconductor's Advanced Semiconductor Development group. Neal has authored more than 50 publications and is a past Chairman of the SPIE Microlithography Symposium. He is named inventor on 5 US patents and is the recipient of several industry and academic honors, including a 2004 R&D 100 award Neal holds an MS in Physics from Purdue University and a BS in Physics / Philosophy from Boston College

Dr. Kourosh Saadatmand, Ph.D.

Vice President of Engineering

Prior to joining Arradiance, Kourosh was a Senior Development Engineering Manager of R&D at Varian, and from 1996-2005 he was Department Manger for Technology Development and Distinguished Technologist at Axcelis. He also held various research roles at Texas National Research Laboratory, Superconducting Super Collider Laboratory, and Grumman Aerospace Corporation. Kourosh has authored more than 75 publications and is named inventor on 9 US patents. Kourosh holds a PhD in Electrical Engineering from Rensselaer Polytechnic Institute.