

JEREMY R. KOVAK, MSEE, BSEE

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Product/Business Development Engineer

Instrumentation Systems Design ■ Product Development & Marketing
Consultative Sales ■ R&D ■ Web-Based Training

Innovative Technical Manager with cutting-edge research experience; application-specific knowledge across multiple industries; and proven results in new product development, business development and solution sales. Skilled communicator and presenter: effective in conveying value, benefits and economics at all levels from the shop floor to the executive suite. Analytical, systematic and decisive problem solver. Hands-on, working team leader with a reputation for technical acumen, sound judgment and aggressive goal attainment. Proficient in ORCAD and analog simulation, National Instruments LabView and MS Visual Basic. Intuitive ROI contributor with a passion for solving sophisticated problems.

>> EXPERIENCE <<

AEROSPACE TECHNOLOGIES, LLC, Chicago, IL

2005-present

Aerospace Lead Electrical Research & Design Engineer

Conceptualize, define and design products incorporating analog and digital circuits, optical instrumentation and embedded control systems for use in federal aerospace applications.

- Executed two major research projects: 1) Packed Bed Reactor Experiment flown on NASA's International Space Station, and 2) Supercritical Water Oxidation in Microgravity including raman spectroscopy system for *in situ* monitoring of chemical reaction kinetics in supercritical water oxidation reactor.

RSI, Naperville, IL

1997-2005

Played a key role in developing several innovative new products that delivered over \$10 million in new business over 4 years. Initiated customer relationships and co-development projects with global technology leaders including Motorola, Phillips, 3M, Samsung and Sony.

Product Development and Applications Engineering Manager

Solved customers' advanced measurement needs while making significant product development and revenue contributions to three business groups: RF Telecom, Optoelectronic Components and Flat Panel Display. Conducted custom, application-specific demonstrations at customer sites and product-evaluation trials that resulted in penetration of profitable international accounts.

- Developed and introduced RF signal-routing and switching product line generating \$5.6 million in new business in under three years, 1999-2001.
- Played a key role in developing and introducing Model 4032 Telecom Power Supply, adding \$5 million in new business over two years, 1998-1999.
- Co-developed first commercially available integrating sphere to measure optical power from pulsed NIR wavelength sources for fiber-optic telecom applications.
- Developed and delivered Web-based training seminars that educated customers, fueled interest in development projects and generated new business.
- Authored numerous articles, technical application notes and white papers on emerging measurement techniques for optical-component, telecom and OLED display applications that enhanced RSI's name recognition, market presence and industry thought leadership.

- Cultivated global customer relationships at trade shows in Las Vegas, Los Angeles, San Francisco, Taiwan and throughout Europe.
- Earned President's Awards for leadership in Quality, Service, Innovation and Integrity, 1998 and 1999.

ROBERTSON RESEARCH CENTER, Palatine, IL

1990-1997

Research Engineer

Operated energy conversion laboratory; designed and conducted applied research focusing on advanced photovoltaics and IR spectroscopy under the auspices of Purdue University and University of Chicago.

- Developed and implemented electro-optical measurement techniques using high-power continuous wave and pulsed lasers to investigate pulsed response of solar cells to laser light.
- Designed and constructed custom experimental test facilities and virtual instrumentation.
- Performed simulation and modeling of radiative heat transfer for energy conversion systems.
- Designed, constructed and programmed ultra-light, high-speed microprocessor-based data-acquisition system for use on high-altitude solar-powered aircraft.
- Designed and built experimental measurement systems for high-resolution infrared spectroscopy and spectroradiometry of high-temperature emitters using InGaAs, PbS, PbSe, and InSb detectors.

FORD MOTOR CORPORATION, Arlington Heights, IL

1987-1990

Quality Assurance Engineer

Oversaw quality assurance on design, development and final acceptance of tooling and automated process equipment for new vehicle programs. Served as product design and quality assurance liaison to central design groups in Detroit and Italy.

BLACKALLOY TOOL & DIE COMPANY, Arlington Heights, IL

1982-1986

Developed customer quality and technical support systems that improved competitiveness and led to a doubling of sales volume each of four consecutive years. Facilitated company growth from \$5 million to \$30 million in annual sales and from 30 to 150 employees.

Quality Assurance Manager

Managed quality assurance for manufacturer supplying metal stampings and precision machine parts to automotive manufacturers and the federal government.

>> PROFESSIONAL LEADERSHIP <<

Commendation for Excellence in Technical Communications, 2002: "Practical Testing Methods Enhance Laser Production," *Manufacturing News, February 2003*.

>> EDUCATION <<

- M. S., Electrical Engineering, Illinois Institute of Technology, Chicago, IL
- B. S., Electrical Engineering, Embry-Riddle Aeronautical University, Prescott, AZ