

GEOFFREY L. AMANN

PROFESSIONAL EXPERIENCE

Argonne National Laboratory, Argonne, IL **2001-present**

Argonne is one of the nations leading research laboratories operated by the U.S. Department of Energy

Technician JR; Advanced Photon Source (APS), Technical Operations **2001-2002**

Designed, constructed, calibrated and modified precision x-ray beamline monitoring systems hardware

- Installation and maintenance of VMI based test and monitoring equipment for vacuum and water systems
- Circuit level troubleshooting of custom circuit boards designed at Argonne
- Monitoring of APS beamline systems using UNIX based EPICS software

Technician Sr; Energy Systems, Center for Transportation Research **2001-present**
Advanced Powertrain Research Facility

Provide testing, electronic and electrical support for the group, maintain equipment calibration

- Installation of data acquisition and signal conditioning equipment on Hybrid, Hydrogen and conventional powered vehicles
- Design and construction of custom computer based data acquisition and signal conditioning equipment.
- Calibration of facility Lab Equipment and gas detector (combustible and toxic) systems.
- Test operator and vehicle driver for Hybrid, Hydrogen and conventional powered vehicles on 4WD dynamometer utilizing LEV (low emission) and ULEV (ultra low) vehicle emissions measuring capability.
- Coordination of facility expansion for Hydrogen test capability.
- Procurement and inventory of electronic and electrical parts for automotive research.

Aksys, LTD, Lincolnshire, Illinois **1995 – 4/2000**

Laboratory, Calibration and Safety Coordinator, Quality Assurance Department

Responsible for company OSHA compliance, laboratory organization and management, and calibration program.

- Managed operations and GLP compliance for assorted types of laboratories. Duties include specifying and procuring test equipment, lab supplies and chemical inventory. Coordinated test and data acquisition set-ups, lab system and equipment repairs, managed facilities issues. Coordinated lab design and facilities changes.
- Maintained OSHA compliance for entire company, with 24 months of an injury free workplace.

- Developed and managed the Calibration Program.
- Participated in the design of 25,000 square feet of R&D, electronics, software, microbiology, chemistry laboratories and a machine shop. Procured all lab systems and equipment.

Baxter Healthcare Corporation, McGaw Park, Illinois

1993 – 1995

Technician Specialist, Renal Division, Advanced Development/New Business

Technical support and resource to the research and development group. Responsible for building research prototypes, including design and construction of circuit boards, testing and evaluation, ordering laboratory supplies and compiling final reports with necessary changes and improvements.

- Evaluated prototype hardware concepts including micromachined valves, flow, pressure and infrared temperature sensors.
- Constructed and conducted computer based experiments utilizing PC based data acquisition software and signal conditioning equipment.
- Maintained laboratories in a functional state, prepared solutions to specifications, calibrated equipment including Nova Blood Gas Analyzer.
- Participating member of the Environmental, Health and Safety Committee. Waste Minimization Committee.

Sola Incorporated, Elk Grove, Illinois

1991 – 1992

Technical Assistant, Research and Development

- Constructed, tested and analyzed prototype computer, mainframe power supplies including Design Verification Testing, UL Certification and environmental tests.
- Tested prototype Uninterruptible Power Supplies.
- Constructed automated test fixtures.

Newman-Haas Racing, Lincolnshire, Illinois

1990 – 1991

Newman-Haas Racing is the CART racing team of Mario and Michael Andretti.

Electronic Systems Technician

Installed and maintained electronic systems that included engine management, data acquisition and Motorola two-way communications systems. Attended test sessions and races to support electronics systems.

- Fabricated and assembled dashboard.
- Procured parts and maintained sufficient inventory.
- Devised an inventory database.

Motorola Incorporated, Arlington Heights, Illinois 1977 – 1990

Test Equipment Senior Technician, Cellular Infrastructure Division, Technical Operations 1982 – 1990

Designed, constructed, calibrated and modified Automated RF Test Equipment systems for cellular base stations, transceivers and circuit level testing for production use. These duties included:

- Construction, calibration and maintenance of Hewlett-Packard RF automated test systems including coaxial cabling, RF switching networks and AC/DC wiring.
- Procuring test equipment from various vendors such as HP, Fluke, Boonton and Bird.
- Compiling calibration test procedure documents for production test purposes.
- Preparing maintenance documentation packages for test systems.

Quality and Field related duties:

- Reduced field defects for a major customer. Issued semi-monthly report that included breakdown of field defects and reliability testing results.
- Devised a troubleshooting guide for field technicians. Supervised rework operations and held training at field site.

Engineering Technician 1977 – 1982

- Construction, testing and component level troubleshooting of prototype RF low power amplifiers and power supply assemblies. Final and systems testing and component level troubleshooting. 150/450 Mhz Mobile Telephones

EDUCATION

Associates Degree, ITT Technical Institute, Dayton, Ohio

Electronics Engineering Technology

Courses included: Transistor Theory, Industrial Electronics, Television, Digital Circuitry, Communications, Electronics, Economics and Technical Writing

ADDITIONAL TRAINING

University of Wisconsin Extension – Planning and Designing Functional R&D Facilities, OSHA Compliance Seminars 1995 – 1999, Quality Assurance Concepts, Data Acquisition, Statistical Process Control, Spreadsheet, 68000 Microprocessor, Word Processing and Drawing Programs, Design for Manufacturability