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OBJECTIVE: To represent the qualification in engineering, research or development that need background in physics, experience with design of new instrumentation and computer related skills.

SUMMARY OF QUALIFICATIONS:

Engineer (MSEE) / Physicist (Ph.D.).

Professional skills and experience in electronics, diagnostic devices and systems, materials (testing and quality control), solid-state physics, semiconductors and vacuum technology.

Computer related skills: C/C++, MATLAB, Visual Basic, VBA.

PROFESSIONAL EXPERIENCE:**2001 – Present:** Physical Optics Corporation, Torrance, CA, USA

Senior Research Scientist

Principal Investigator and Manager of a number of SBIR awarded projects in field of nanotechnology, fiber optics sensors and LEDs, electrostatical and heat transfer devices:

DACA42-02-C-0021 “Vapor Electrostatic Condensator System”;

F33615-02-C-5032 “Two-Photon Photocuring for Non-Autoclave Fabrication” etc.

Carrying the computer simulation by MathCAD, MatLab and Maple. Developing and hands-on evaluate the design. Theoretically substantiate the project approach and technical parameters of the practical implementations.

1999 – 2001 Intramedical Imaging LLC, Santa Monica, CA, USA

Applied Physicist/Engineer

Managed the design of surgical probes: signal processing, light collection and photoelectric conversion. Database (MS Access 97) and gamma-probe interface (Visual Basic 6) programming. Researched scintillation detectors of gamma rays and digital modeling (Visual C++ 6).

1967 - 1998 ACADEMY OF SCIENCES OF UKRAINE, Kiev, Ukraine:

1997 – 1998 Department of the Biotechnic Problems of the Diagnostics

Laboratory Head

Managed the team of scientists and engineers. Designed device for registration of emitted charge at the surface of dielectrics for medical diagnostics. Researched a transfer of charge at high frequency discharge in air.

1994 - 1997 Research and Engineering Center "Sonar"

Laboratory Head

Managed the team of scientists and engineers. Developed system for relaxation spectrometry of polymer composites and the tester of insulation impedance of high voltage leads in by analysis of leakage current.

Researched dielectric losses at power engines insulation for detection of degradation.

1967 - 1994 ACADEMY OF SCIENCES OF UKRAINE, Kiev, Ukraine
Institute of Physics

Department of Scientific Devices

Laboratory Head, (1980 - 1994)

Managed the team of scientists and engineers. Developed devices for time-domain relaxation spectrometry. Researched of electron equilibrium of small metal clusters on the crystal substrate.

Chief Engineer, (1976 - 1980)

Developed new methods and devices for non-destructive quality control of dielectric layers, and implemented it in industry and for studying of material degradation at space stations "Saljut-6" and "Saljut-7" (Experiment "Electrotopograph").

Senior Engineer, (1971 - 1976)

Developed and implemented the new method for control of pinholes in thin dielectric layers.

Department of Physical Electronics

Engineer, (1969 - 1971)

Created modeling devices for high-density electron emission. Researched the photo- and thermo-activated electron auto-emission from silicon.

SIGNIFICANT ACCOMPLISHMENTS:

Author of 12 patents and 37 publications.

Awarded the State Prize (Sciences and Technology) of the Ukraine in 1986.

PROFESSIONAL MEMBERSHIP: American Physical Society, Institute of Electrical and Electronics Engineers, Electrostatics Society of America

EDUCATION:

1972 - 1980 Institute of Physics, Academy of Sciences of Ukraine, Kiev, Ukraine

Ph.D. in physics and mathematics, major in solid state physics.

1966 - 1972 Kiev Polytechnic University Kiev, Ukraine

MS Electronic Engineering, major in semiconductors and dielectrics.

1998-2000 **Continuing Education** Units:

WEB based training - C++, VB 6, SQL - 103 unit (100 hours).

USLA Extension - C/C++ (8 unit)

Personal information: DOB: 11/28/1948.

Permanent resident of the USA. Employment authorized.

List of Publications and References: Furnished upon request.