

CURRICULUM VITA TUAN VO-DINH

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EDUCATIONAL BACKGROUND

B.S. in Physics Engineering, 1971, Swiss Federal Institute of Technology- EPFL (Ecole Polytechnique Federale), Lausanne, Switzerland.

Ph.D. in Biophysical Chemistry, 1975, Swiss Federal Institute of Technology- ETH (Eidgenosische Technische Hochschule), Zurich, Switzerland.

AWARDS AND ACADEMIC HONORS

1981, *RD-100 Award for Most Significant Technological Advance in Research & Dev (PNA Dosimeter)*
1986, *Award for Excellence in Technology Transfer*, Federal Laboratory Consortium
1987, *RD-100 Award for Most Significant Technological Advance in R&D (Fluoroimmunosensor)*
1988, *Gold Medal Spectroscopy Award*, Society for Applied Spectroscopy
1989, *Languedoc-Roussillon Medal*, University of Perpignan (France)
1992, *Scientist of the Year*, Oak Ridge National Laboratory
1992, *Thomas Jefferson Award*, Martin Marietta Corporation
1992, *RD-100 Award for Most Technologically Significant Product of the Year (SERODS Technology)*
1992, *Inventors International Hall of Fame Award*, Inventors Clubs of America
1994, *RD-100 Award for Most Technologically Significant Product of the Year (PCB Spot Test)*
1995, *Award for Excellence in Technology Transfer*, Federal Laboratory Consortium (SERODS)
1996, *Inventor of the Year Award*, Tennessee Inventors Association
1996, *RD-100 Award for Most Technologically Significant Advance in R&D (SERS Gene Probe)*
1997, *AMSE Award*, American Museum of Science and Technology (BiOptics)
1997, *BER-50 Award for Exceptional Service for a Health Citizenry*, US Department of Energy
1998, *Lockheed Martin Commercialization Award*, Lockheed Martin
1999, *RD-100 Award for Most Technologically Significant Advance in R&D (Multifunctional Biochip)*
2003, *Distinguished Inventors Award*, Battelle Memorial Institute
2003, *Director's Award for Outstanding Accomplishments in Science and Technology*, UT-Battelle
2003, *RD-100 Award for Most Technologically Significant Advance in R&D (RAMITS)*
2003, *Distinguished Scientist of the Year Award*, Oak Ridge National Laboratory
2007, *R. Eugene and Susie E. Goodson Distinguished Professor of Biomedical Engineering*, Duke University
2011, *Award on Spectrochemical Analysis*, American Chemical Society
2017, *Induction to the National Academy of Inventors (NAI)*
2019, *Sir George Stokes Award*, Royal Society of Chemistry (United Kingdom)
2022, *SPIE President's Award*, SPIE The International Society for Optics and Photonics

EDITOR/EDITORIAL BOARD OF SCIENTIFIC JOURNALS:

Editor-in-Chief, NanoBiotechnology (2005-2009)
Associate Editor, Journal of Nanophotonics (2006-2013)
Associate Editor, Plasmonics (2006-2020)
Associate Editor, Ecotoxicology and Environmental Safety (2003-2009)
Associate Editor, Analusis (1991-1998).
Editorial Board Member of Applied Physics Reviews (2015-2020).
Editorial Board Member of Applied Spectroscopy Journal (1987-1999).
Editorial Advisory Board Member of Talanta Journal (1990-1994).
Editorial Advisory Board Member of Spectrochimica Acta Review (1990-1993).
Editorial Board Member of Journal of Biomedical Optics (1995-2005)

Editorial Board Member of Journal of Analytical and Bioanalytical Chemistry (1999-2007)
Editorial Board Member of Expert Review of Molecular Diagnostics (2001-2011)
Editorial Board Member of Journal of Luminescence (2002-2012)
Editorial Board Member of Nanomedicine (2006-2016)
Editorial Board Member of Journal of Science-Advanced Materials and Devices (2017-present)
Topical Editor, Polycyclic Aromatic Compounds Journal (1988-present).

PROFESSIONAL SOCIETIES:

- Fellow, National Academy of Inventors (NAI)
- Fellow, Royal Society of Chemistry (RSC)
- Fellow, SPIE, The International Society of Optical Engineering
- Fellow, American Institute of Medical and Biological Engineering (AIMBE)
- Fellow, American Institute of Chemists (AIC)

Member: American Association for the Advancement of Science, American Chemical Society, Society for Applied, Spectroscopy, ASTM, American Society for Testing Materials, International Society on Polycyclic Aromatic Compounds, Optical Society of America

PROFESSIONAL POSITIONS:

(* *Concurrently held positions*)

- 2006-present Duke University, Durham, North Carolina, U.S.A.
Director (*), **Fitzpatrick Institute for Photonics (FIP)** [www.fitzpatrick.duke.edu]. Provide leadership and management to the FIP, which was established at Duke University in 2000 by a \$25,000,000 gift from Michael and Patty Fitzpatrick [www.fitzpatrick.duke.edu/Fitzpat5.pdf]. The research activities of the FIP involve over 150 faculty members from over 40 departments at the Edmund Pratt Engineering School, the Arts & Sciences School, and the Medical School at Duke University. The research programs are organized into various areas, including Biophotonics, Nano & Micro Systems, Nanophotonics, Quantum Optics & Information Photonics, Theoretical Modeling, and Novel Spectroscopies.
R. Eugene and Susie E. Goodson Distinguished Professor of Biomedical Engineering (*)
Pratt School of Engineering, Duke University: July 1, 2007 – present
[<http://www.bme.duke.edu/faculty/vodinh/index.php>]
Professor of Chemistry (*), Department of Chemistry, Arts & Sciences and Trinity College, Duke University
[<http://fds.duke.edu/db/aas/Chemistry/faculty/tuan.vodinh>]
- 1977–2006 Oak Ridge National Laboratory (ORNL), Oak Ridge, Tennessee, U.S.A.
2003–2006 **Director**, Center for Advanced Biomedical Photonics (CABP): In coordination with the ORNL Associate Director, is responsible for the development and implementation of the Laboratory programs and strategic plans on bioengineering research initiatives [www.ornl.gov/sci/cabp]. This position involves the development of complex, multi-disciplinary research programs, involving integration and coordination of research activities and interactions of scientific staff from 4 different ORNL divisions and investigators from over 10 academic and research institutions.
1994–2006 **Corporate Fellow**: one of the highest honors for distinguished scientists at ORNL; Member of the Corporate Fellow Council, which assists the ORNL Laboratory Director in formulating effective scientific program strategies consistent with the overall goals of the laboratory.
1984–2006 **Group Leader**, Life Sciences Division, ORNL: Responsible for leadership and management of research groups. Responsible for all financial, human, equipment, and facility

resources for research groups in environmental monitoring systems, bioengineering, and medical applications. This line management position provides the opportunity to creatively manage and motivate staff, leveraging diversity, promoting developmental opportunities for staff, and fostering commitment and team spirit.

- Advanced Biomedical Science & Technology Group (2000-present)

- Advanced Monitoring Development Group (1984-2000)

[www.ornl.gov/sci/biosensors]

1977–1984 **Staff Research Scientist**, Health and Safety Research Division, ORNL. Responsible for the research and development of environmental and biological monitoring of chemical pollutants and biomarkers of health effects associated with energy technologies

Summer 2010 **Visiting Professor**
University of Paris Diderot- Paris 7
Paris (France)

Spring 2004 **Distinguished Visiting Professor**
Department of Chemistry
University of Florida
Gainesville, Florida, U.S.A.

2000–2006 **Adjunct Professor** (*)
Department of Neurosurgery
University of California – San Francisco Medical School
San Francisco, California, U.S.A.

1987–2006 **Adjunct Professor** (in three Departments)
Graduate School of Genome Science and Technology (formerly Graduate School of Biomedical Sciences); Department of Chemistry, and Department of Environmental Practice
University of Tennessee
Knoxville, Tennessee, U.S.A.

Spring 1999 **Visiting Professor**
Department of Chemistry
University of Rome *La Sapienza*
Rome (Italy)

PROFESSIONAL EXPERIENCE:

In Biomedical Engineering, Biophotonics, Molecular Imaging, Plasmonics, Nanophotonics, Photothermal Therapy, Photo Immunotherapy:

- Developed screening techniques for measuring human exposure to carcinogens (DNA adducts).
- Developed laser "optical biopsy" for cancer diagnosis: esophageal and cervical cancer (US Patent, licensed to Optical Biopsy, LLC; and SpectroDiagnostics, Inc.)
- Developed nanoprobe for molecular imaging based on plasmonics (US patent pending)
- Developed nano-biosensor for single living cell analysis.
- Developed a continuous SERS monitor for analytical, environmental, and medical analysis with filter paper-based substrates (U.S. Patent) (Licensed to Gamma-Metrics, Inc.).
- Developed an antibody-based fluoroimmuno sensor for the detection of toxicologically important compounds in microsamples of body fluids (US Patent).
- Developed SERS Nanoprobe 'Molecular Sentinel' for biomedical diagnostics (US Patent).
- Developed molecular probe for biomedical diagnostics using Plasmonic Coupling Interference (PCI) (US Patent).
- Developed advanced molecular probes ('Inverse Molecular Sentinel') for biomedical diagnostics (US Patent).
- Developed advanced ultrasound technique for brain injuries and brain disease monitoring (US Patent).
- Developed non-invasive spectroscopic techniques (fluorescence, Raman, SERS) for disease diagnostics: cancer, heart diseases, infectious disease, diabetes, etc. (US Patents).

- Developed DNA Biochip for gene diagnostics and pathogen detection (US Patent; licensed to NanoDetection Technologies); RD-100 Award.
- Developed a new enhanced photonic modality for non-invasive photothermal therapy (US patent)
- Developed a new photonic technique for Synergistic Immuno Photo Nanotherapy (SYMPHONY) (US patent)

In Analytical Chemistry, Chemical Engineering, and Biological Sensing:

- Developed ultrasensitive spectroscopic technologies (synchronous luminescence, room temperature phosphorescence, SERS techniques) to detect byproducts and environmental pollutants associated with energy production (petroleum, synfuel, biofuel technologies)
- Established a new methodology for multicomponent analysis of complex systems for use as cost-effective monitoring technique in process and environmental control, energy production, pharmaceutical analysis, industrial hygiene, and cancer diagnostics applications.
- Investigated plasmonics systems for advanced solar energy conversion systems
- Developed a novel laser-based technique for trace analysis based on surface-enhanced Raman scattering (SERS) (U.S. Patent), licensed to IdentiChem, Inc.
- Invented a new passive dosimeter for sensitive detection of hazardous vapors produced during industrial and energy-related processes (U.S. patent); RD-100 Award.
- Developed a fiber-optics lightpipe luminoscope for monitoring skin contamination of workers in petrochemical, coal-related, and agricultural industries (licensed to Environmental Systems, Inc.).

Physical Chemistry and Optical Engineering:

- Investigated molecular and electronic spectroscopies of organic compounds of environmental, industrial, biological, and medical importance.
- Developed a laser-induced site-selection method using the "Shpolskii" technique for organic analysis of complex mixtures.
- Investigated structural characterization of biological compounds such as carcinogens and drugs in biomembrane systems.
- Acquired extensive practical experience in cryogenic technology (liquid nitrogen and liquid helium temperature techniques) and laser spectroscopy.
- Developed a New Optical Data Storage Technology based on SERODS (U.S. Patent)
- Developed applications for solid-state acousto-optic tunable filters (AOTF) for optical detection (multispectral molecular imaging).

SCIENTIFIC CAREER SUMMARY

Dr. Vo-Dinh's research has profoundly impacted many fields involving biophotonics, laser-excited luminescence spectroscopy, room temperature phosphorimetry, synchronous luminescence spectroscopy, surface-enhanced Raman spectroscopy, field environmental instrumentation, fiberoptics sensors, nanosensors, biosensors and biochips for the protection of the environment and the improvement of human health. The numerous national and international awards reflect the impact and recognition of his scientific achievements.

Fundamental research on the synchronous luminescence (SL) methodology by Dr. Vo-Dinh has set the foundations of the technique for a variety of applications. The SL technique he developed for multicomponent analysis of complex samples can be used as a cost-effective monitoring for chemical analysis. This work has also led to numerous environmental, biological, and medical applications. The SL technique is being used by U.S. companies to lower the cost of quality assurance and environmental control procedures. It was applied at the National Cancer Institute to detect carcinogen-DNA adducts. Synchronous luminescence is a simple and cost-effective technique that can be used to detect carcinogen-DNA cancer in animals and disease humans. His SL technique was applied at the National Cancer Institute to detect carcinogen-DNA adducts. The significance and impact of this SL technique are reflected by the fact that, since the early 1980s, most spectrometer companies (Perkin-Elmer, SPEX Industries, etc.) have now incorporated SL as a standard feature in modern luminescence instruments citing Dr. Vo-Dinh SL studies. The proprietary SL technique is currently developed for multispectral imaging of cancer (gastro-intestinal cancer) and precancerous conditions (Barrett's dysplasia).

Dr. Vo-Dinh was one of the first scientists to develop and effectively utilize the Room Temperature Phosphorescence (RTP) technique for the rapid and cost-effective analysis of trace organic compounds adsorbed on filter paper. The RTP technique is a significant advance because it provides a new, practical, cost-effective, and much-needed screening tool. Unlike conventional low-temperature phosphorimetry, the RTP technique does not require expensive cryogenic equipment and low-temperature refrigerant. The RTP instrumental features and capabilities are highlighted by several spectrometer manufacturers (Spex Industries). *He was invited to write the first textbook book on RTP (Wiley, 1984).*

He has developed the RTP technique for use in a passive personnel dosimeter (the PNA monitor, US patent, 1987) that is designed to detect potentially toxic organic chemicals in occupational and residential environments. He was awarded his first RD-100 Award in 1981.

Recognizing the potential of the use of laser in vibrational spectroscopy, Dr. Vo-Dinh has focused his research activities on the development of the surface-enhanced Raman scattering (SERS) technique for trace organic analysis. *He published the first paper on the analytical use of SERS for organic analysis.* Prior to this work, most SERS studies were limited to basic research and were restricted to a few molecules. *He was awarded one of the first SERS-related U.S. patents (1987) for the instrument he developed to continuously monitor and analyze complex chemical and biological samples.* This invention is an important advance for the SERS technology in organic analysis because it successfully demonstrates that practical, simple-to-prepare, and cost-effective metal-covered filter materials coated with nanoparticles can provide efficient SERS substrates to detect chemical and biological compounds. The SERS technology was further developed to analyze environmental samples, cosmetics, drugs, and food products to make these products safer or to detect diseases, as well as for optical data storage. The SERS technique has led to the development of a new generation of molecular gene probes for the detection and molecular imaging of multiple diseases simultaneously (e.g., cancer, pathogens).

Always at the frontier of chemical instrumentation using light-matter interactions, his recent research endeavors have been focused on integrating biotechnology, fiberoptics, laser techniques, and molecular spectroscopy to develop the first antibody-based fiberoptics fluoroimmunosensor (FIS) device. The fiberoptics fluoroimmuno-sensor (FIS) with a micro regenerable probe is a breakthrough in chemical and biological sensing technology for a wide spectrum of biochemical and clinical applications, such as the assessment of an individual's exposure to chemical carcinogens, biomarkers for precancerous DNA damage (DNA adducts), response to drug therapy, and characterization of naturally occurring biologically active substances. The FIS will also open new horizons to a fundamental "smart catheter/sensor" technology for *in vivo* analysis. He was awarded his second *RD-100 Award* for this achievement in 1987.

In 1988, he received the Gold Medal Award from the Society of Applied Spectroscopy (SAS). The SAS award committee cited his notable achievements, including his pioneering work in "*solid-substrate room temperature phosphorescence, adaptation of laser-induced site selection spectroscopy to analysis of complex mixtures, and development of trace analysis techniques based on surface-enhanced Raman scattering spectroscopy.*"

In 1989, Dr. Vo-Dinh received the *Languedoc-Roussillon Medal* from the President of the University of Perpignan (France) for this scientific achievement.

In 1992, he received the *Inventor-of-the-Year Award* from ORNL and the Thomas Jefferson Award, the highest honor for technical achievement from Martin Marietta Corporation. He also received the International Hall of Fame Award in Advanced Technology from the Inventor Clubs of America and his third *RD-100 Award* for the development of the SERODS optical data storage.

In cancer diagnostics, Dr. Vo-Dinh and his coworkers have developed a unique *laser-induced fluorescence (LIF) technique* that can provide effective indices to diagnose malignant tumors in the esophagus without biopsy. The method was successfully tested with over 200 patients with nearly 100% accuracy for detecting gastrointestinal cancer in collaboration with The Thompson Cancer Survival Center. The DNF method led to the development of a rapid *in-situ* technique for non-invasive cancer diagnosis that does not require biopsy surgery, thus decreasing time and cost and improving the effectiveness of cancer prevention and treatment.

Dr. Vo-Dinh has developed a novel integrated *Multi-functional Biochip (MFB)* that allows simultaneous detection of several disease endpoints using different bioreceptors such as DNA, antibodies, enzymes, and cellular probes) on a single biochip platform. An essential element in the MFB development involves designing and developing an integrated circuit (IC) electro-optic system for the microchip detection elements using the complementary metal oxide silicon (CMOS)

technology. The biochip has applications for rapid diagnostics and screening of multiple medical diseases (cancer, BRCA1, HIV, tuberculosis, etc.) and infectious pathogens (B. anthracis, B. globigii, E. coli, etc). The technology has been licensed to *HealthSpex, Inc.* and *NanoDetection, Inc.*

Advances in nanotechnology and photonics have recently led to a new generation of devices for probing the cell machinery, elucidating intimate life processes occurring at the molecular level that were heretofore invisible to human inquiry. Recently, with the advent of nanotechnology, Dr. Vo-Dinh developed *the first antibody-based nanobiosensor* for monitoring biochemical species in a single living human cell (publication in *Nature Biotechnology*).

He recently developed a new generation of *plasmonics-based nanoprobes* (“molecular sentinels”-MS) for use in molecular imaging and medical applications (US patent pending). The MS nanoprobes have been successfully used to detect genomic biomarkers for cancers (e.g., breast, gastrointestinal, head, and neck cancer) and infectious diseases (e.g., HIV, malaria, dengue).

With the development of a novel two-pronged modality referred to as Synergistic Immuno Photothermal Nanotherapy (SYMPHONY), which combines immune-checkpoint inhibition and plasmonic gold nanostar (GNS)-mediated photothermal therapy, Vo-Dinh and his clinical collaborators were able to achieve complete eradication of primary treated tumors and distant untreated tumors and induce a long-term ‘anticancer vaccine’ effect in mice implanted with the MB49 bladder cancer cells.

His scientific achievements and impact have led to numerous invitations to organize and chair over 20 national and international conferences. In 1993, he was invited to serve as the *Honorary Chairman* of the first International Symposium on Analytical Sciences (SAS) held in Deauville (France). In 1994, he served as the *Honorary Chairman* of the second SAS international conference in Montreux (Switzerland).

In 1994, for his distinguished achievements, Dr. Vo-Dinh was promoted to *Corporate Fellow*, one of the highest honors for distinguished scientists at Oak Ridge National Laboratory.

In 1997, Dr. Vo-Dinh was selected as *one of the 12 scientists nationwide* to receive the prestigious *Biological and Environmental Research BER-50 Award* from the US Department of Energy (DOE) for Distinguished Service to a Healthy Citizenry at the 50th Anniversary of the DOE Biological and Environmental Research (BER) Program. [<http://genome.gsc.riken.go.jp/hgmis/publicat/berawards/index.html>]

In 2002, the Department of Commerce's United States Patent and Trademark Office (USPTO) recognized Dr. Vo-Dinh as “one of the four Asian Pacific Americans whose inventive abilities led to patents of products of benefit to all Americans and “*whose inventions have contributed to making this country the most technologically advanced in the world*”.
[<https://web.archive.org/web/20080414070744/http://www.uspto.gov/web/offices/com/speeches/02-37.htm>]
[<http://www.uspto.gov/web/offices/com/speeches/02-37.htm>]

In 2003, Dr. Vo-Dinh was named *Distinguished Scientist of the Year* at Oak Ridge National Laboratory for “*his extraordinary scientific contributions over a 26-year career at ORNL, which includes numerous publications and innovations in the field of human health improvement and environmental protection*”.
[http://www.ornl.gov/info/press_releases/get_press_release.cfm?ReleaseNumber=mr20031125-00]

In 2007, one year after joining Duke University, Dr. Vo-Dinh was awarded the *R. Eugene and Susie E. Goodson Distinguished Professorship of Biomedical Engineering* for “*his many accomplishments and advancements in the field of biomedical engineering*”. The distinguished professorship is the highest honor Duke University can award its faculty.

In 2011, Dr. Vo-Dinh received the *Award on Spectrochemical Analysis* from the American Chemical Society (ACS) Division of Analytical Chemistry. The ACS Division of Analytical Chemistry presents annually this award to “*recognize an individual who through scholarly activity has definitely and uniquely advanced the field of spectrochemical analysis and optical spectrometry*” [<https://acsanalytical.org/awards-resources/national-acs-awards/spectrochemical-analysis-2/>].

In 2013, Dr. Vo-Dinh was selected to *The Analytical Scientist Power List*, which recognizes the *100 Most Influential People* in the Analytical Sciences [<https://theanalyticalscientist.com/the-power-list-2013>].

In 2015, Dr. Vo-Dinh chaired the *World Photonics Forum*, organized on March 9-10, 2015, at the Fitzpatrick Institute for Photonics (FIP) to celebrate the 2015 *International Year of Light* (IYL), which was proclaimed by the United Nations. Key events included a roster of distinguished speakers – including two Nobel laureates – and a pre-symposium open house to expose the latest light-based science and technologies to the public.

In 2017, Dr. Vo-Dinh was inducted as a *Fellow of the National Academy of Inventors* (NAI). [<https://academyofinventors.org>]. Dr. Vo-Dinh was recognized for his pioneering development of a new generation of SERS gene probes that can detect nucleic acid biomarkers miRNAs to improve the early detection and diagnosis of cancer, with additional applications in high-throughput screenings and systems biology research. With over 49 patents, Vo-Dinh has also developed a wide variety of biophotonics technologies ranging from laser-induced fluorescence for direct detection of tumors without physical biopsy and a multifunctional biochip for global health and point-of-care disease diagnosis to plasmonics systems for nanoparticle-mediated photothermal therapy and immunotherapy to treat cancer and induce a long-term anti-cancer ‘vaccine’ effect.

In 2018, Dr. Vo-Dinh was invited to speak at UNESCO, the United Nations Educational, Scientific and Cultural Organization headquarters in Paris, France, on May 16, 2017, for the Inaugural Ceremony celebrating the first “*International Day of Light*” [<https://www.lightday.org>]. The annual event is intended to raise worldwide awareness of the many ways that light impacts modern society and to consider how advances in light-based science and technology can aid in achieving goals in education and sustainable development. Dr. Vo-Dinh’s talk at UNESCO is entitled “*Light Empowering Humanity*”: <https://www.youtube.com/watch?v=2FniAukiy0A>

In 2019, Dr. Vo-Dinh was awarded the *2019 Sir George Stokes Award* by the Royal Society of Chemistry (RSC), Analytical Division, United Kingdom. Vo-Dinh was recognized for his "*outstanding and sustained contributions to analytical science through innovations in the field of photonics, spectroscopy, molecular biology, and nanotechnology.*" The Sir George Stokes Award is an award presented every two years by the RSC that recognizes outstanding and sustained contributions to analytical science by someone demonstrably working in a complementary field, which has led to developments of seminal importance to chemical analysis.

<https://pratt.duke.edu/about/news/vo-dinh-george-stokes-award>

The *RSC Sir George Stokes Award Symposium Honoring Tuan Vo-Dinh* was organized at the 2021 Annual SciX Conference, the premier meeting for analytical chemistry and allied sciences, on September 30, 2021, in Providence, Rhodes Island. <https://www.scixconference.org/RSC-Sir-George-Stokes-Award/>

In 2022, Dr. Vo-Dinh received the *2022 SPIE President’s Award* from SPIE, the International Society for Optics and Photonics, an international scientific society serving more than 250,000 people from 184 countries. The SPIE President’s Award is presented to an individual who, in the opinion of the President and the Board of Directors, has rendered a unique and meritorious service of outstanding benefit to the Society. <https://spie.org/news/tuan-vo-dinh-the-2022-spie-presidents-award>

RESEARCH MANAGEMENT AS PRINCIPAL INVESTIGATOR OR CO-PRINCIPAL INVESTIGATOR OF RESEARCH PROGRAMS AND GRANTS

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|-----------|---|
| 2022-2027 | RAPID System for Early Detection of Head and Neck Cancer in Low-Resource Settings, Sponsor: National Institutes of Health (NIDCR) # 1R01DE030455-01A1 (5 yrs; \$2.7M); Vo-Dinh (PI) and Walter Lee (MPI). |
| 2022-2025 | Nanoplasmonic Biosensor Using Olfactory Receptor System, Sponsor: Bill and Melinda Gates Foundation (INV-040790) (Phase I and II, 4 years: \$814K); PI: Vo-Dinh |
| 2023-2024 | Molecular Biomarker Study: Duke Pilot Project – Sponsor: Department of Veterans Affairs # 36C262-24-AP-5097, Department of Veterans Affairs (Phase I & II, 1 year; \$75K); PI: Vo-Dinh |
| 2019-2024 | Integrated Acoustofluidic Plasmonic Molecular Diagnostic System for Detecting MicroRNA Biomarkers. Sponsor: National Institutes of Health (NIGMS) #1R01GM135486-01 (4 yrs; \$1.7 M); PI: Vo-Dinh |

2019-2024 Plasmonic nanoparticle-mediated immunotherapy to treat metastatic cancer. Sponsor: National Institutes of Health (NIBIB) #1R01EB028078-01A1 (5 yrs; \$2.1 M); Vo-Dinh (PI) and Inman (MPI)

2020-2024 Product Development of the Vertical Integrated Flow Assay System Technology ("VERIFAST") for Multiplex Pathogens Detection. Sponsor: Advanced Technology International/Defense Threat Reduction Agency # OTA W15QKN-16-9-1002 (5yrs; \$450K); PI: Zenhausen; Duke Subaward PI: Vo-Dinh

2018-2022 Plasmonics-Enhanced Optical Imaging Systems for Bioenergy Research. Sponsor: Department of Energy (DOE) Office of Science # DE-SC0019393 (3 yrs; \$1.3 M); PI: Vo-Dinh

2018-2019 Gold Nanostars: Orchestrating a Shining SYMPHONY Against Cancer. Sponsor: Duke Chancellor Discovery Award (1yr; \$75K); PI: P. Fecci, co-PI: Vo-Dinh

2018-2019 Nanoplasmonic Molecular Sentinels for Targeting Oncogenic RNA Splice Variants Driving Aggressive Cancer. (1yr; \$30K); PI: S. Patierno, co-PI: Vo-Dinh

2015-2018 Nanoplasmonics-based Molecular Analysis Tool for Molecular Biomarkers of Cancer; Sponsor: National Institutes of Health (NIH) #1R21CA196426 (3 yrs; \$670K); PI: Vo-Dinh

2015-2018 Multi-functional Plasmonics Nanoprobes for Cellular Sensing and Imaging; Sponsor: Department of Energy (DOE) Office of Science # DE-SC0014077 (3 yrs; \$1.725M); PI: Vo-Dinh

2016-2019 Synergistic immuno-photo-nanotherapy for bladder cancer, Sponsor: Department of Defense # W81XWH-17-1-0567 (2 yrs; \$625K); PI: Inman

2016-2018 Bloodborne Tropical Pathogen Detection Using multiple Nanophotonic Arrays; Sponsor: National Institutes of Health (NIH) # 1R21AI120981-01 (2 yrs; \$440K); Co-lead PIs: Taylor & Vo-Dinh

2016-2018 Development of special-shaped, low-cost, metal nanoparticles; Sponsor: Luna Innovations, Inc.; No.3136.02DU-W911SR-16-C-0014 D0-C9; (2yrs, \$120K); Site PI: Vo-Dinh

2012-2016 Plasmonics-Active SERS Nanoplatfoms for *In Vivo* Diagnostics (PASNID); Sponsor: Department of Defense (DARPA) # HR0011-13-2-003 (5 yrs; \$3.4M); PI: Vo-Dinh

2014-2015 Development and Synthesis of Gold Nanostars for Plasmonics Applications (MIPR Supplement to Transformation Optical Materials); Sponsor: US Army Research Office (1Yr: \$60,000); PI: Vo-Dinh

2015-2016 Plasmon-Enhanced Hybrid Photovoltaic/Photocatalytic Hydrogen Generation: Sponsor: Duke University Energy Initiative Fund (1Yr: \$30,000); PI: Hotz; Co-PIs: Mitzi and Vo-Dinh

2014-2015 Hydrogen Generation by Enhanced Photocatalysts Assisted by Plasmonic Structures; Sponsor: Duke Energy Research Initiative Fund (1Yr: \$40,000); PI: Hotz; Co-PI: Vo-Dinh

2012-2014 Plasmonics-Active Nanoplatfoms for SERS Detection: Study and Evaluation of Nanostars; Sponsor: BD Technologies Corp.; SPS #189498; (2yrs: \$224,000); PI: Vo-Dinh

2013-2014 Enhanced Photocatalytic Hydrogen Generation Assisted by Plasmonic Structures; Sponsor: Pratt Seed Fund, (1Yr: \$27,000); PI: Hotz,; Co-PI: Vo-Dinh

2013-2014 Design and Synthesis of Plasmonic Nanoshells for Advanced Obscurants; Sponsor: Luna Innovations, Inc. (SBIR PI; W911 SR-13cC-0071)(Duke PI: Vo-Dinh)

2012-2012 Europtrode XI Conference, Barcelona, Spain, 2012; Sponsor NSF # 3390077; (\$10,000); PI: Vo-Dinh

2009-2014 Photonic Studies of Emission, Communication, and Signal Processes in Cellular Systems; Sponsor: Immunolight, LLC, (5 years: \$1M); PI: Vo-Dinh

2009-2011 Dynamic Testing of Signal Transduction Dereglulation During Brest Cancer Initiation; Sponsor: US Army Research; W81XWH-09-1-0064 (2 Yrs: \$500K); PIs: Sewaldt and Vo-Dinh

2009-2010 Development of a Point-of-Care Diagnostic for Candidemia and Community-acquired Respiratory Tract Infection Nanoprobes Using Molecular Sentinel, Sponsor: Coulter Foundation (1 yr: \$320K); PI: Ginsburg; Co-PI: Vo-Dinh

2008-2011 Photo-X: Non-invasive Photonic Modalities for Disease Treatment, Sponsor: Immunolight, LLC, (3 years: \$8M); PI: Vo-Dinh

2007-2012 Nanobiosensors for Probing Chemical Exposure and Metabolism Pathways of Individual Cells. Sponsor: National Institutes of Health (NIH); R01 ES014774-01A1 (3 yrs: \$1.2M); PI: Vo-Dinh

2006-2011 Ultrahigh Throughput Screening (μ HTS) Based on Surface-enhanced Raman Scattering. Sponsor: National Institutes of Health (NIH); R01 EB006201(4 years: \$2M); PI: Vo-Dinh

2007-2009 Fiber Optic and III-Nitride Materials-based Chemical and Biological Sensing. Sponsor: Army Research Office (2 years; \$80K); PI: Vo-Dinh

2001-2008 Advanced Multi-spectral Imaging for Cancer Diagnostics: Sponsor: National Institutes of Health (NIH); Biomedical Research Partnership (BRP); R01 CA088787 (5 years: \$2M); PI: Vo-Dinh

2007-2009 Development Of Advanced Raman Spectroscopy Methods And Databases For The Evaluation Of Trace Evidence And The Examination Of Questioned Documents. Sponsor: Dept of Justice (2 yrs: \$1M); Co-PI: Vo-Dinh, PI: J. R. Lombardi

2007-2008 Fiber Optic and III-Nitride Materials-based Chemical and Biological Sensing. Sponsor: Army Research Office (1yr: \$40K); Co-PI: Vo-Dinh; PI: M. Gerhold)

2005-2007 Development of Nanoprobes for Imaging Single Cells Under Low-Dose Radiation (DOE) (3 years: \$300K); PI: Vo-Dinh

2004-2006 Advanced Biosensor Systems; Sponsor: Department of Energy (DOE) (5 years: \$1.5M); PI: Vo-Dinh

2004-2006 Advanced Plasmonic Sensors for Homeland Defense; Sponsor ORNL LDRD Program (3 years: \$500K); PI: T. Vo-Dinh

2003-2006 Biosensor for Reactive Oxygen Species; Sponsor: Philip Morris (3 years: \$1M); PI: Vo-Dinh

2004-2005 Advanced Algorithm for Hyperspectral Fluorescence Imaging for Skin Cancer Diagnostics; Sponsor ORNL SEED Funds (2 years: \$125K) PI: Vo-Dinh

2003-2005 NSOM and 3-D ORAM Radiation Dosimeter; Sponsor: DOE Office of Non-Proliferation (3 years: \$1.2M); PI: Bogard, Co-PI: Vo-Dinh

2001- 2005 Raman Monitoring System for BeO Exposure: Sponsor: National Security Administration and BWXT-Y12, LLC (4 yrs: \$1M); PI: Vo-Dinh.

1996 - 2004: Ultrasound Detection for Brain Injury. Sponsor: Department of the Army (5 yrs; \$650K) PI: Vo-Dinh

1999 – 2004 Advanced Multifunctional Biochip for Biochem Detection: Sponsor: DOE (5 yrs; \$2.5M); PI: Vo-Dinh

2000 – 2004 DNA Biochip for Environmental Monitoring; Sponsor-US Navy, New Mexico Tech. (3 yrs; \$1M); PI: Vo-Dinh

1999 – 2001 Advanced Synchronous Luminescence for Biomedical Diagnostics: Sponsor-US DOE (2 yrs; \$550K); PI: Vo-Dinh

2000 – 2002 Raman Monitor for Carbon Sequestration; Sponsor-ORNL (2 yrs; \$300K); Co-PI: Vo-Dinh; PI: S. Wullschleger.

1998 – 2001 Analytical Instrumentation: Sponsor-Federal Bureau of Investigation (4 yrs; \$900K); PI: Vo-Dinh

1998 – 2003 3D ORAM Dosimeter: Sponsor: US DOE and DTRA (6 years; \$1M) PI: Bogard, Co-PI: Vo-Dinh

1998 – 2003 Monitoring Systems for PAHs; Philip Morris, WFO No. ERD-99-1735 (5 yrs; \$2M); PI: Vo-Dinh

1997 - 2000: Advanced Nanosystems for Chemical Analysis and Medical Diagnostic. Sponsor: ORNL-LDRD (3 yrs; \$800K); PI: Vo-Dinh

1997 - 1999: SERS Gene for DNA Sequencing. Sponsor: US DOE (2 yrs; \$200K) PI: Vo-Dinh

1977 - 2000: Dosimetry for New Energy Systems Pollutants. Sponsor: U.S. Department of Energy (DOE): KP0102 (10 yrs; \$300K/yr); PI: Vo-Dinh

1993 - 1996: Advanced Biosensors. Sponsor: ORNL-LDRD Project (3 yrs; \$1M); PI: Vo-Dinh

1988 - 2000: Advanced In Situ Spectroscopic Analytical Methodologies and Instrumentation. Sponsor: U.S. Env. Protection Agency: DW-89-936227-01-1 (5 yrs; \$750K), PI: Vo-Dinh

1993 - 1998: Development of a SERODS Device. Sponsor: Office of Naval Research and AFOSR NOO14-41 F-0042 (3 yrs; \$1M), PI: Vo-Dinh

1994 - 1997: SERS Drug Detection. Sponsor: Gamma-Metrics, Inc. (\$50K), PI: Vo-Dinh

1988 - 1992: Surface-Enhanced Optical Data Storage. Sponsor: Office of Naval Research - NOO14-41-F-0042 (\$1M) 1866-E030-A1 (3 yrs; \$485K), PI: Vo-Dinh

1988 - 1989: Director's R&D Research Grants (Human Genome, SERS, UV-B Projects). Sponsor: Oak Ridge National Laboratory. (\$150K), Co-PI: Vo-Dinh

1991 - 1992 Luminescence Spot Test for PCBs. Sponsor: Office of Technology Development, US DOE (2 yrs; \$280K), PI: Vo-Dinh

1991 - 1994: SERS Dosimeter and Monitor. Sponsor: DOE Office of Arms Control No. ST766 (3 yrs; \$698K), PI: Vo-Dinh

1989 - 1991: Field Evaluation of Cost-Effective Screening Procedures in Indoor Air. Sponsor: U.S. Environmental Protection Agency; DW8930725 (2 yrs; \$160K), PI: Vo-Dinh

1986 - 1988: Integrated Study of Biomarker Formation and Mutagenic Profile in Mammalian Cells, Animals, and Human. Sponsor: U.S. EPA. (2 yrs; \$500K), Co-PI: Vo-Dinh (PI: E. Zeighami)

1982 - 1987: Practical Development and Fundamental Studies of Surface-Enhanced Raman Spectroscopy for Toxic Chemicals Detection. Sponsor: U.S. Dept of the Army; No. 3311-1450 (3 yrs; \$400K), PI: Vo-Dinh

1985 - 1988: Fiberoptics-Based Fluoroimmuno-Sensors. Sponsor: National Institutes of Health: (No. GM

- 34730-03) (3 yrs; \$171K); PI: Sepaniak, Co-PI: Vo-Dinh
- 1984 - 1985: Fluoroimmuno-Sensors. Sponsor: National Science Foundation: OIR-8413145 (2 yrs; \$107K), PI: Sepaniak; Co-PI: Vo-Dinh
- 1983 - 1985: Evaluation of Protective Clothing Materials. Sponsor: American Petroleum Inst. (2yrs; \$75K), Co-PI: Vo-Dinh; PI: Gammage
- 1983 - 1984: Evaluation of Screening Tools for Polynuclear Aromatic Pollutants in a Field Study. Sponsor: US EPA and PEDCO Environmental, Inc.; ERD-82-190 (1 yrs; \$75K), PI: Vo-Dinh

CHAIRMANSHIP, PROFESSIONAL COMMITTEE, AND RELATED ACTIVITIES:

Research Grant Review Committee:

Chaired the 2007 NIH study session panel on the Quantum Grants program; Member of various NIH Review Committees on numerous panels and study groups related to biomedical engineering, cancer research, biomedical instrumentation, molecular imaging, and nanobiotechnology (1998-present).

Member of NSF Review Committee on various panels related to sensors and biomedical engineering (1999- present).

Invited reviewer of the European Union (EU) research program on nanobiotechnology, Vienna (Austria) October 22-23, 2006)

Invited reviewer of grants and contracts for the American Chemical Society, Department of Energy, National Institutes of Health, National Science Foundation, and the Petroleum Research Fund (1995 - present).

Member of U.S. Environmental Protection Agency ASRL Peer Review Committee (1985 - present).

Member of NIEHS Site Review Committee - NIEHS Center Grant - University of Cincinnati (1990).

Member of NIH Review Committee on NIH Shared Instrumentation Grant Program (1988).

Co-chair, EPA Peer Review Committee, Environmental Chemistry and Physics on Air Toxics Program, Raleigh, NC (1994 -1995).

Chairmanship for National and International Conferences and Symposia:

Chairman of *Scientific Panel on Monitoring Instrumentation for Occupational Health Research Program*, Office of Health and Environmental Research, U.S. Department of Energy (1984).

Organizer and Co-Chairman, *Scientific Work Group on Review and Establishment of Database for Polycyclic Aromatic Hydrocarbons*, U.S. Department of Energy and Environment Canada (1985).

International Program Committee Member: *International Symposium on Polyaromatic Hydrocarbons* (1987-present).

Scientific Organizing Committee Member, SPIE's *Symposium on Laser Spectroscopy*, Los Angeles, CA (1988).

Co-Chairman, *Second Meeting on Polycyclic Aromatic Compounds Database*, Gaithersburg, MD (1986).

Co-Chairman, SPIE's *Symposium on Laser Spectroscopy*, Fluorescence Detection II Conference, Los Angeles, CA, January 10, 1988.

Chairman, *ASTM Workshop on Luminescence Spectroscopy*, Oak Ridge National Laboratory, Oak Ridge, TN, June 3, 1988.

Chairman, *Symposium on Laser-Based Approaches in Luminescence Spectroscopy*, FACSS Meeting, Boston, MA, Oct 30-Nov 4, 1988.

Co-Chairman, *Conference on Fluorescence Detection II*, SPIE Meeting, Los Angeles, CA, Jan. 15-19, 1989.

Chairman, *Symposium on Laser-Based Molecular Spectroscopy*, FACSS Meeting, Chicago, IL, October 1-5, 1989.

Co-Chairman, *ASTM Symposium on Spectroscopy and Fiberoptics*, Las Vegas, Nevada, April 30-31, 1990.

Co-Chairman, *Symposium on Laser-Based Molecular Spectroscopy*, FACSS Meeting, Cleveland, Ohio, October 7-12, 1990.

Program Committee Member: *IVth International Symposium on Quantitative Luminescence Spectrometry*, Ghent (Belgium), May 27-31, 1991.

Chairman, *Conference on Methods and Technologies for Environmental and Process Monitoring*, Los Angeles, California, Jan. 19-21, 1992.

Chairman, *Symposium on Optical Fiberoptics Sensors*, 1992 Pittsburgh Conference, March 17, 1992.

Chairman, *International Conference on Monitoring Toxic Chemicals and Biomarkers*, Berlin (Germany), June 22-25, 1992.

Honorary President, *International Symposium on Analytical Sciences*, Deauville (France), May 5-7, 1993.

Program Committee Member, *International Symposium on Polycyclic Aromatic Compounds*, Tan-Tara, Missouri, September 8-10, 1993.

Honorary President, *Second International Symposium of Analytical Sciences*, Montreux (Switzerland), May 16-19, 1994

Organizing Committee and Session Chairman, *Workshop on Biomedical Technology Opportunities*, Atlanta, Georgia, April 3-4, 1995.

Honorary President, *Third International Symposium of Analytical Sciences*, Paris (France) March 12-16, 1995.

Chairman, *International Conference of Environmental Monitors and Hazardous Waste Sites*, Munich (Germany), June 19-23, 1995.

Chairman, *Symposium on Chemical Sensors and Biosensors*, FACSS Meeting, Cincinnati, Ohio, October 15-18, 1995.

Co-Chairman, *Conference on Biomedical Sensing Imaging and Tracking*, San Jose, CA, January 30-31, 1996, 1997.

Chairman, *Conference on Advanced Environmental Monitoring Technologies*, Denver, CO, August 6-8, 1996.

Chairman, *Conference on Biomedical Diagnostic and Surgical Assist Systems*, San Jose, California, January 1998.

International Steering Committee Member, *EUROPTRODE IV*, International Conference on Optical Chemical Sensors and Biosensors, Munster (Germany), April 1998

Chairman, *International Conference on Environmental and Remediation Technologies*, Boston, MA, November 1998.

General Chair of the *SPIE's International Symposium on Environmental and Industrial Sensing* at Photonics East, Boston, MA, November 1998.

General Chair of the *SPIE's International Symposium on Environmental and Industrial Sensing* at Photonics East, Boston, MA, November 1999.

Chairman, *Conference on Biomedical Diagnostic and Surgical Assist Systems II*, San Jose, California, January 1999.

General Chairman of the *SPIE's International Symposium on Environmental and Industrial Sensing* at Photonics East, Boston, MA, November 2000.

Chairman, *Conference on Biomedical Diagnostic and Surgical Assist Systems III*, San Jose, California, January 2000.

International Steering Committee Member, *EUROPTRODE V*, International Conference on Optical Chemical Sensors and Biosensors, Lyon (France), April 2000

General Chairman of the *SPIE's International Symposium on Environmental and Industrial Sensing* at Photonics East, Boston, MA, November 2000.

Chairman, *Conference on Biomedical Diagnostic and Surgical Assist Systems IV*, San Jose, California, January 2001.

Scientific Advisory Board, *Biochips 2001 Conference*, Brooklyn, NY, March, 2001.

General Chairman of the *International Symposium on Environmental and Industrial Sensing* at Photonics East 2002, Boston, MA, November 2001.

Chairman, *Conference on Biomedical Diagnostic and Surgical Assist Systems V*, San Jose, California, January 2002

International Steering Committee Member, *EUROPTRODE VI*, International Conference on Optical Chemical Sensors and Biosensors, Manchester (United Kingdom), April 2002

Steering Committee Member and Session Chair, National Institute of Health, Bioengineering Consortium, *NIH BECON Symposium on Sensors for Biology and Medicine*, Bethesda, MD, June 24-26, 2002

Chairman, *Conference on Biomedical Diagnostic and Surgical Assist Systems VI*, San Jose, California, January 25-27, 2003

International Program Committee Member, *ASIASENSE 2003*, Asian Conference on Sensors, Kuala Lumpur (Malaysia), July 14-18, 2003.

International Program Committee Member, *Colloquium Spectroscopicum Internationale XXXIII*, Granada (Spain), September 7-12, 2003

General Chairman, *Photonics East 2003*, Providence, RI, October 27-30, 2003.

Chairman, *Conference on Advanced Biomedical Diagnostic and Clinical System sIII*, San Jose, California, January 24-28, 2004

General Chairman, *Optics East 2004*, Philadelphia, PA, October 24-29, 2004.

Chairman, *Conference on Advanced Biomedical Diagnostic and Clinical Systems II*, San Jose, California, January 22-24, 2005

Chairman, *Conference on Plasmonics in Biology and Medicine*, San Jose, California, January 22-24, 2005

Organization Committee Member, *CLEO/Europe 2005*, Biophotonics Topics, Munich (Germany), June 12-17, 2005

Organization Committee Member, *Conference on Advances on Optics for Biotechnology, Medicine and Surgery*, Copper Mountain, CO, July 24-28, 2005

Chairman, *Conference on Advanced Biomedical Diagnostic and Clinical Systems IV*, San Jose, California, January 21-24, 2006

Chairman, *Conference on Plasmonics in Biology and Medicine*, San Jose, California, January 22-24, 2006

International Steering Committee Member, *EUROPTRODE VII*, International Conference on Optical Chemical Sensors and Biosensors, Tubingen (Germany) April 2006

General Symposium Co-Chairman, *SPIE Optics East 2006 Symposium*, Boston, MA, October 1-4, 2006.

Chairman, *2006 Symposium on Frontiers in Photonics Science and Technology*, Fitzpatrick Institute of Photonics, Duke University, Durham, North Carolina, September 28-29, 2006

Member of Board of Visitors, Army Research Organization (ARO), Electrooptics Division Program Review Meeting, Research Triangle Park, North Carolina, November 17, 2006.

International Advisory Committee Member, *Ninth International Conference on Optics Within Life Sciences*, National Yang-Ming University, Taipei (Taiwan), November 26-29, 2006

Chairman, *Conference on Advanced Biomedical Diagnostic and Clinical Systems V*, San Jose, California, January 21-24, 2007

Chairman, *Conference on Plasmonics in Biology and Medicine*, San Jose, California, January 22-24, 2006

General Symposium Co-Chairman, *SPIE Optics East 2007 Symposium*, Boston, MA, September 9-12, 2007.

Chairman, *Conference on Advanced Biomedical Diagnostic and Clinical Systems V*, San Jose, California, January 19-21, 2007

Chairman, *2007 Symposium on Frontiers in Photonics Science and Technology*, Fitzpatrick Institute of Photonics, Duke University, Durham, North Carolina, October 11-12, 2007

Chairman, *Conference on Advanced Biomedical Diagnostic and Clinical Systems VI*, San Jose, California, January 20-21, 2008

Chairman, *Conference on Plasmonics in Biology and Medicine V*, San Jose, California, January 22-23, 2008

International Steering Committee Member, *EUROPTRODE VIII, International Conference on Optical Chemical Sensors and Biosensors*, Dublin (Ireland), March 30-April 4, 2008

Co-Chair, *Symposium on Nanophotonics*, IEEE/LEOS Summer Topical Meetings, Acapulco (Mexico), July 21-23, 2008.

Chairman, *2008 Symposium on Frontiers in Photonics Science and Technology*, Fitzpatrick Institute of Photonics, Duke University, Durham, North Carolina, October 13-14, 2008

Co-Chair, *Symposium on Bio-Inspired Materials: Principles and Applications*, Annual Meeting of the Materials Research Society, Boston, MA, December 1-4, 2008

Chairman, *Conference on Advanced Biomedical Diagnostic and Clinical Systems VII*, San Jose, California, January 25-26, 2009

Chairman, *Conference on Plasmonics in Biology and Medicine VI*, San Jose, California, January 26-27, 2009

Chairman, *Conference on Advanced Environmental, Chemical, and Biological Sensing Technologies VI*, Orlando, Florida, April 13-14, 2009

International Program Committee Member, *Second Symposium on Topical Problems of Biophotonics*, Novgorod–Samara (Russia), July 19-24, 2009.

Chairman, *2009 Symposium on Frontiers in Photonics Science and Technology*, Fitzpatrick Institute of Photonics, Duke University, Durham, North Carolina, October 6, 2009

International Steering Committee Member, *EUROPTRODE X, International Conference on Optical Chemical Sensors and Biosensors*, Prague (Tcheque Republic), March 28-31, 2010.

International Advisory Committee Member, *10th International Conference on Fiber Optics and Photonics, PHOTONICS 2010*, Guwahati (India), December 11-15, 2010

Chairman, *Conference on Advanced Biomedical Diagnostic and Clinical Systems VIII*, San Jose, California, January 24-26, 2010

Chairman, *Conference on Plasmonics in Biology and Medicine VI*, San Jose, California, January 26-27, 2010

Chairman, *Conference on Advanced Environmental, Chemical, and Biological Sensing Technologies VI*, Orlando, Florida, April 2-3, 2010

Chairman, *2010 Symposium on Frontiers in Photonics Science and Technology*, Fitzpatrick Institute of Photonics, Duke University, Durham, North Carolina, October 27-28, 2010

Chairman, *Conference on Advanced Biomedical Diagnostic and Clinical Systems IX*, San Jose, California, January 22-24, 2011

Chairman, *Conference on Plasmonics in Biology and Medicine VIII*, San Jose, California, January 23-24, 2011

International Program Committee Member, SPIE Eco-Photonics Symposium, Strasbourg (France), March 28-31, 2011.

International Steering Committee Member, *EUROPTRODE XI, International Conference on Optical Chemical Sensors and Biosensors*, Barcelona (Spain), April 1-4, 2012.

Chairman, *Conference on Advanced Environmental, Chemical, and Biological Sensing Technologies VIII*, Baltimore, MD, April 25-26, 2011

Chairman, *2011 Symposium on Frontiers in Photonics Science and Technology*, Fitzpatrick Institute of Photonics, Duke University, Durham, North Carolina, October 10-11, 2011

Chairman, *Conference on Advanced Biomedical Diagnostic and Clinical Systems X*, San Jose, California, January 23-24, 2012

Chairman, *Conference on Plasmonics in Biology and Medicine IX*, San Jose, California, January 24-25, 2012

Chair, Session on Biomedical Applications of Plasmonics, *International Conference META 12*, Paris (France), April 18-22, 2012

Chairman, *Conference on Advanced Environmental, Chemical, and Biological Sensing Technologies IX*, Baltimore, MD, April 26-27, 2012

Member of the Scientific Advisory Board, *Biomedical Sciences and Engineering Center*, Oak Ridge National Laboratory (2012-present)

Chairman, *Conference on Advanced Biomedical Diagnostic and Clinical Systems XI*, San Francisco, California, - February 2-5, 2013

Chairman, *Conference on Plasmonics in Biology and Medicine X*, San Francisco, California, February 2-5, 2013

Chairman, *2013 Symposium on Frontiers in Photonics Science and Technology*, Fitzpatrick Institute of Photonics, Duke University, Durham, North Carolina, March 11-12, 2013

Member of the *US National Academies Panel on Sensors and Electron Devices*, US National Academies, (2011-present)

Chairman, *Conference on Advanced Biomedical Diagnostic and Clinical Systems XII*, San Jose, California, February 1-2, 2014

Chairman, *Conference on Plasmonics in Biology and Medicine XI*, San Jose, California, February 2-3, 2014

Chairman, *2014 Symposium on Frontiers in Photonics Science and Technology*, Fitzpatrick Institute of Photonics, Duke University, Durham, North Carolina, March 11-12, 2014

Chairman, *Conference on Advanced Environmental, Chemical, and Biological Sensing Technologies X*, Baltimore, MD, May 6-4, 2014

International Steering Committee Member, *EUROPTRODE XII, International Conference on Optical Chemical Sensors and Biosensors*, Athens (Greece), April 13-16, 2014.

Member of the Advisory Board of the *United Nations (UN) Committee on the 2015 International Year of Light (IYL2015)*, proclaimed by the UN General Assembly 68th Session, 2015.

Chairman, *Conference on Advanced Biomedical Diagnostic and Clinical Systems XII*, San Jose, California, February 7-8, 2015

Chairman, *Conference on Plasmonics in Biology and Medicine XI*, San Jose, California, February 8-9, 2015

Chairman, *2015 Symposium on Frontiers in Photonics Science and Technology*, Fitzpatrick Institute of Photonics, Duke University, Durham, North Carolina, March 9-10, 2015

Chairman, *Conference on Advanced Environmental, Chemical, and Biological Sensing Technologies X*, Baltimore, MD, April 20-12, 2015

International Scientific Committee Member, *Fiat Lux International Conference*, June 3-5, 2015, Rome (Italy)

Member Committee on Biophotonics, *European Photonics Industry Consortium (EPIC)*, (2105 to present)

Chairman, *2016 Symposium on Frontiers in Photonics Science and Technology*, Fitzpatrick Institute of Photonics, Duke University, Durham, North Carolina, March 14-15, 2016

International Steering Committee Member, *EUROPTRODE XIII, International Conference on Optical Chemical Sensors and Biosensors*, Graz (Austria), March 20-26, 2016.

Scientific Committee Member, 14th Annual World Congress of Society for Brain Mapping and Therapeutics, Silicon Valley, California, March 30- April 1, 2017.

Chairman, Conference on Advanced Biomedical Diagnostic and Clinical Systems XV, San Francisco, California, - February 13-18, 2017

Chairman, *Conference on Plasmonics in Biology and Medicine XIII*, San Francisco, California, February 13-18, 2017

Chairman, *2017 Symposium on Frontiers in Photonics Science and Technology*, Fitzpatrick Institute of Photonics, Duke University, Durham, North Carolina, March 13-14, 2017

Chairman, *Conference on Advanced Environmental, Chemical, and Biological Sensing Technologies XIV*, Anaheim, CA, April 21-22, 2017

Chairman, Conference on Advanced Biomedical Diagnostic and Clinical Systems XVI, San Francisco, California, - January 29-30, 2018

Chairman, Conference on *Plasmonics in Biology and Medicine XV*, San Francisco, California, January 29, 2018

Chairman, *2018 Symposium on Frontiers in Photonics Science and Technology*, Fitzpatrick Institute of Photonics, Duke University, Durham, North Carolina, March 11-12, 2018

International Steering Committee Member, *EUROPTRODE XVI, International Conference on Optical Chemical Sensors and Biosensors*, Naples (Italy), March 25-28, 2018.

Chairman, *Conference on Plasmonics in Biology and Medicine XVI*, San Francisco, California, February 1-2, 2019

Chairman, *2019 Symposium on Frontiers in Photonics Science and Technology*, Fitzpatrick Institute of Photonics, Duke University, Durham, North Carolina, March 11-12, 2019

Chairman, *Conference on Advanced Environmental, Chemical, and Biological Sensing Technologies XV*, Baltimore, Maryland, April 14-16, 2019

Chairman, *2020 Symposium on Frontiers in Photonics Science and Technology*, Fitzpatrick Institute of Photonics, Duke University, Durham, North Carolina, March 9-10, 2020

International Steering Committee Member, *EUROPTRODE XV International Conference on Optical Chemical Sensors and Biosensors*, November 28-December 1, 2021, Warsaw (Poland)

Chairman, *Conference on Plasmonics in Biology and Medicine XVII*, San Francisco, California, February 2-3, 2020

Chairman, *2021 Symposium on Frontiers in Photonics Science and Technology*, Fitzpatrick Institute of Photonics, Duke University, Durham, North Carolina, March 16-18, 2021

Chairman, *Conference on Plasmonics in Biology and Medicine XVIII*, San Francisco, California, March 6-11, 2021

Chairman, *2022 Symposium on Frontiers in Photonics Science and Technology*, Fitzpatrick Institute of Photonics, Duke University, Durham, North Carolina, May 7-8, 2022

Chairman, *Conference on Plasmonics in Biology and Medicine XIX*, San Francisco, California, January 23-24, 2022

Chairman, *Conference on Plasmonics in Biology and Medicine XX*, San Francisco, California, January 29-30, 2023

International Steering Committee Member, *EUROPTRODE XVI, International Conference on Optical Chemical Sensors and Biosensors*, March 24-March 27, 2024, Birmingham (United Kingdom)

TEACHING AND ACADEMIC-RELATED ACTIVITIES:

R. Eugene and Susie E. Goodson Distinguished Professor of Biomedical Engineering and Professor of Chemistry, Duke University, Durham, North Carolina

Direct graduate research programs, develop and teach courses at the Department of Biomedical Engineering and Department of Chemistry, Duke University. The courses involve topics on “Advances in Photonics”, “Biosensors”, and “Analytical Chemistry” (2006-present).

Awarded the *Certificate of Excellence in Teaching*, Duke University, Pratt School of Engineering (2015).

Distinguished Visiting Professor, University of Florida, Gainesville, Florida

Invited Distinguished Visiting Professor at the Chemistry Department, University of Florida, Gainesville, FL, for the 2004 Spring Semester. Taught a series of lectures on “Advanced Biophotonics: A New Generation of Tools for Environmental and Biomedical Applications” and “Nanosensor Technologies”; conducted mentoring sessions with graduate students.

Professor (Adjunct Position) University of California – San Francisco (UCSF) Medical School

Co-direct research on in-vivo monitoring brain injury at the UCSF Department of Neurosurgery. The research deals with the development of a non-invasive diagnostic approach based on low-frequency ultra-sound and photoacoustic techniques (2000 - present).

Professor (Adjunct Position), University of Tennessee/Postdoctoral and Graduate Research Supervisor

Supervised, directed and co-directed M.S. and Ph.D. research projects for students and postdoctoral fellows at Oak Ridge National Laboratory and The University of Tennessee. Research topics deal with the development of novel analytical techniques for environmental studies, and biochemical research. (1980 - present).

Visiting Professor, University of Rome, Italy

Invited Visiting Professor at the University of Rome “La Sapienza,” Rome, Italy in the 1999 Spring Semester; Taught a series of lectures on “Advanced Spectroscopic Techniques and Sensors for Environmental and Biomedical Applications.

Undergraduate Teaching:

Taught a General Physics Laboratory course for undergraduate students majoring in chemistry and physics at the Ecole Polytechnique Federale, Lausanne (EPFL). Topics included theory and experiments in general mechanics, optics, and thermodynamics (1968 - 1970).

Taught a General Physical Chemistry Laboratory course for undergraduate students majoring in chemistry and physics at the Swiss Federal Institute of Technology, Zurich (Switzerland). Topics included theory and experiments in general spectroscopy, thermodynamics, separation techniques, optics, and thermodynamics (1971- 1975).

Directed Summer Student Research Projects for the Oak Ridge Associated University and the Great Lakes Colleges Association. Research topics involved the development of new analytical methods for environmental and biomedical analysis (1980 - 2006).

Taught undergraduate and graduate courses on Biosensors and Advances in Photonics, Duke University (2007 to present)

Graduate Teaching:

Currently teaching a course on Biosensors and a course on Advances in Photonics for graduate students and senior undergraduate students at Duke University (2006-present)

Taught a course on Biophysical Chemistry for students pursuing Ph.D. degrees in biochemistry and biology at the Graduate School of Biomedical Sciences, University of Tennessee, Knoxville. Subjects included biophysical analytical and spectrochemical techniques for macromolecules: diffusion, sedimentation, electrophoresis, chromatography, molecular spectroscopies, X-ray, and microscopy (1994 - 1999).

Taught an Introduction Course to Analytical Methods for students pursuing a postgraduate degree in analytical chemistry at the University of Florida, Off-campus Program in Jacksonville, Florida. Subjects included theory and practice for fluorescence, phosphorescence, ultraviolet, infrared, and mass spectrometries (1975 - 1976).

Taught a General Physical Chemistry laboratory course for graduate students in natural life sciences at ETH, the Swiss Federal Institute of Technology in Zurich, Switzerland. Subjects included electrochemistry, infrared, luminescence spectrometries, and general thermodynamics (1971 - 1975).

Served on committees for developing teaching curricula for the Graduate School of Biomedical Sciences and the Graduate School of Genomic Science and Technology at the University of Tennessee.

Taught undergraduate and graduate courses on Biosensors and Advances in Photonics, Duke University (2007 to present)

American Chemical Society (ACS) Short Course

Developer and instructor of the ACS short course on "Spectroscopy for Chemical Analysis: Rapid Screening and Advanced Techniques." (1989 - 1991).

Special Field Program for High School Science and Mathematics and Biotechnology:

Directed special Summer Field Programs sponsored by Oak Ridge National Laboratory, aimed to improve the academic levels in high schools and to promote excellence in science and mathematics teaching in Tennessee (1987 - present).

Served on the Educational Committee, American Institute of Chemists, Tennessee Section, and initiated a Traveling Educational Videotape Showing Program ("The World of Chemists") for high school teachers to increase interest in science education (1989 - present).

Served on the Tennessee Department of Education Task Force to establish a new curriculum in Biotechnology for High School Education (1990).

Thesis Research Director of Graduate Students

Directed Ph.D. Research Projects for students in the Department of Biomedical Engineering and Department of Chemistry, Duke University (2006 - present).

Directed Ph.D. Research Projects for students in the Chemistry Department, the Graduate School of Biomedical Sciences, and the Graduate School of Genomic Science and Technology at the University of Tennessee Knoxville (1980 - present).

Number of Ph.D. dissertations supervised: 12 (Duke University), 5 (ORNL/University of Tennessee, before joining Duke)

Postdoctoral Associates Supervised

D. W. Abbott, A. Alak, S. Atta, L.R. Allain, J. Bello, S. Burrows, A. D. Campiglia, K. Chen, Y. F. Cheng, Z. Chi, M. Culha, B. M. Cullum, A. Dhawan, P. D. Enlow, A. Fales, N. Gandra, A. M. Helmenstine, D. M. Hueber, A. S. D. S. Indrasekara, N. Isola, R. Jagannathan, R. W. Johnson, D. A. Landis, B. Lauly, A. Leonardo, Q. Liu, Y. liu, J. Mobley, M. Morena-Bondi, V. A. Narayanan, A. Pal, T. Pal, G. Reddy, J. K. Register, J. Scaffidi, J.M. Song, C. L. Stevenson, D. Stratis-Cullum, P. Strobbia, W. S. Sutherland, N. Taranenko, M. Wabuye, F. Yan, H. Yuan, Y. Zhang

PROFESSIONAL ASSOCIATION ACTIVITIES

- President, *International Society on Polycyclic Aromatic Compounds* (ISPAC) (1991-1993)

- Chairman of *IUPAC Commission on V-4 on Spectrochemical and Other Optical Procedures for Analysis*, (1991-2000)
- Chairman, *ASTM Subcommittee on Fiberoptics*, E13.09 (1988 - 2003).
- Member of Task Forces and Field Evaluation Teams for various synfuel industrial sites: H-coal pilot plant, Catlettsburg, Kentucky; gasifier at the University of Minnesota, Duluth, Minnesota; coal liquefaction plant; Morgantown, West Virginia (1979 - 1983).
- Member of Committee on Biotechnology Program, Oak Ridge National Laboratory (1993).
- Secretary of Technical Committee TT-6 in Energy-Environmental Interactions, Member of Technical Committees TP-6 on Ambient Measurements, TT-7 on Indoor Air, and TT-9 on Air Toxics, Air Pollution Control Association (1984-89).
- Member of Technical Committee on Indoor Air Quality, American Industrial Hygiene Association (1985-1990).
- Member of the Board of Directors, Air Pollution Control Association, East Tennessee Chapter (1985-1988).
- Secretary/Treasurer, *American Institute of Chemists*, East Tennessee Section (1988-1992)

TECHNOLOGY TRANSFER AND INDUSTRY-RELATED ACTIVITIES

Member of the Board of Directors: Biochem Tech, Inc.

Several technologies developed at ORNL by Dr. Vo-Dinh have been licensed and commercialized by private companies and technology start-ups:

- Environmental Systems Corporation: the fiberoptic luminoscope
- Gamma-Metrics, Inc.: the SERS Toxic Chemical Analyzer (TCA™)
- Serotech, Inc.: the SERODS Optical Data Storage System
- Gargantuan Storage Devices, Inc: SERODS
- Pioneer Surgical Inc.: Cancer diagnosis (gastrointestinal tracts)
- Optical Biopsy, LLC: Cancer diagnosis (cervical tracts)
- Spectra Diagnostics Inc.: Cancer diagnostics (gastrointestinal tracts)
- IdentiChem. LLC: SERS for medical diagnostics
- HealthSpex, Inc.: Biochip for medical diagnostics
- ID Systems, LLC: Ramits technology for chemical, biological and medical sensing
- Nano Detection Technology (biochip technology for diagnostics)
- Immunolight, LLC (cancer nanotherapy)
- Minutia Company (stem cell therapy)

Served as consultant and subcontracting services for: ARCO Products Company, Biochem Tech, Inc.; Eli Lilly; Environmental Systems Corporation; Jetalon Solutions, Inc.; Monsanto; Optical Biopsy; PEDCo Environmental, Inc.; Radian Corporation; Rockwell International, Rohm and Haas Company, Shell Company, Thompson Cancer Survival Center.

MEDIA/PRESS COVERAGE

Dr. Vo-Dinh's research activities have been highlighted in a large number of reports and news articles from many national and international publications (*Science, Nature, New York Times, Wall Street Journal*), and radio and television shows. Television media coverage includes:

- PBS Television: *Frontiers in Medicine* (biochip technology)
- CNN: *Technology Week* (rapid field spot test for PCBs and environmental pollutants)
- CNN: News laser optical biopsy for cancer diagnostics
- CNBC Television: *Profiles of America* (laser optical biopsy for cancer diagnostics)
- National Public Radio (NPR): SERODS optical data storage

CIVIC AND COMMUNITY ACTIVITIES:

- Member of United Way Leadership Giving Program (2004-present)
- Tennessee Department of Education, Committee on Biotechnology Curriculum, 1990 - 1992
- Stage Committee, "Fantasy of Trees," Children's Hospital, Fund Raising Organization, 1989
- President, Vietnamese Association and Friends in East Tennessee, 1978-1979
- United Way Campaign Committee, ORNL, 1979
- Editor, Student Newsletter, "Culture and Technology," Zurich, Switzerland, 1970-1972.

LANGUAGES: Vietnamese
English
French
German
Spanish

INVITED LECTURES, PLENARY LECTURES, AND KEYNOTES

- 1976 First ORNL Workshop on Exposure to Polynuclear Aromatic Compounds, Oak Ridge National Laboratory
- 1977 Second ORNL Workshop on Exposure to Polynuclear Aromatic Compounds, Oak Ridge National Laboratory
- 1978 Ninth Material Research Symposium, Gaithersburg, Maryland, National Bureau of Standards
American Chemical Society Instrumentation Award Symposium, Anaheim, California
Symposium on the Industrial Hygiene Needs for the Coal and Oil Shale Industries, Brookhaven National Laboratory, Upton, New York
- 1979 Pacific Chemical Congress, Honolulu, Hawaii
Symposium on Recent Developments and Future Trends in Fluorescence Spectroscopy, Pittsburgh Conference, Cleveland, Ohio
Wake-Forest University, Winston-Salem, North Carolina
- 1980 Second EPA Symposium on Process Measurements for Environmental Assessment, Atlanta, Georgia
Symposium on Instrumentation and Controls for Fossil Energy Processes, Virginia Beach, Virginia
Workshop on Portable Instrumentation for Health and Safety, Fallen Leaf Lake, California
Symposium on Luminescence Spectroscopy, Joint SE-SW American Chemical Society Meeting, New Orleans, Louisiana
- 1981 Annual Meeting of Instrument Society of America, St. Louis, Missouri
EPA National Symposium on Monitoring Hazardous Organic Pollutants in Air, Raleigh, North Carolina
Chemical Systems Laboratory, Aberdeen Proving Ground, Maryland
National Institutes of Occupational Safety and Health, Cincinnati, Ohio
- 1982 ASTM Symposium on New Directions in Molecular Luminescence, Atlantic City, New Jersey
Annual Technical Meeting of the Institute of Environmental Sciences, Atlanta, Georgia
EPA National Symposium on Recent Advances in Pollutants Monitoring of Ambient Air and Stationary Sources, Raleigh, North Carolina
Symposium on Identification and Analysis of Organic Pollutants in Air, Kansas City, Missouri
Honeywell, Inc., Clearwater, Florida
The University of Tennessee, Knoxville, Tennessee
Symposium on Advances in Fluorescence and Phosphorescence, New York, New York
- 1983 National Institutes of Occupational Safety and Health, Cincinnati, Ohio
U.S. Environmental Protection Agency, Environmental Systems Laboratory, Research Triangle Park, North Carolina
Harvard Workshop on Evaluation of Monitoring Equipment for Personal Exposure Assessment, Harvard University
Specialty Conference on Measurement and Monitoring of Non-Criteria Toxic Contaminants in Air, Chicago, Illinois
- 1984 Symposium on Recent Advances in Instrumentation and Analytical Methods for Ambient Gaseous Toxic Substances, San Francisco, California
Workshop on Occupational Health Research, Knoxville, Tennessee
International Chemical Congress, Honolulu, Hawaii

- DOE Workshop on Portable Instrumentation and Dosimeter, Knoxville, Tennessee
 University of Dijon, Dijon (France)
 Laboratory of Physical Chemistry, ETH, Zurich (Switzerland)
 Joint European Communities Research Center, Ispra, (Italy)
 World Health Organization, Geneva, (Switzerland)
 University of Stockholm, Stockholm, (Sweden)
- 1985 Symposium on Analytical Chemistry of Nitrated Polynuclear Aromatic Compounds, Miami, Florida
 Chemical Research and Development Center, Aberdeen Proving Ground, Maryland
 Symposium on Indoor/Outdoor Air Pollution Relationships, West Long Branch, New Jersey
 U.S. Environmental Protection Agency, EMSL, Las Vegas, Nevada
 Workshop on Polycyclic Aromatic Database, Oak Ridge, Tennessee
 Air Pollution Control Association Annual Meeting, Detroit, Michigan
 Scientific Conference on Chemical Defense Research, Edgewood, Maryland
- 1986 National Cancer Institute, Bethesda, Maryland
 Symposium on Chemical Basis for Toxicological Response to Synthetic Fuels, ACS Meeting, New York
 Symposium on Measurements of Toxic Air Pollutants, Research Triangle Park, North Carolina
 Air Pollution Control Association Annual Meeting, Minneapolis, Minnesota
 Eli Lilly Research Center, Indianapolis, Indiana
 Workshop on Recent Advances in Monitoring Techniques for DNA-Adducts, Washington, DC
 Symposium on Advances in Raman Spectroscopy, FACS Meeting, St. Louis, Missouri
 National Bureau of Standards, Gaithersburg, Maryland
- 1987 Vanderbilt University, Nashville, Tennessee - February, 1987
 Marquette University, Milwaukee, Wisconsin - March 6, 1987
 American Industrial Hygiene Meeting, Montreal (Canada) - May 31-June 6, 1987
 Colloquium Spectroscopicum Internationale, Toronto (Canada) - June 21-26, 1987
 American Chemical Society Annual Meeting, New Orleans, Louisiana, Aug 31-Sept. 4, 1987
 Symposium on Microphase Luminescence Spectroscopy, FACS Meeting, Detroit, Michigan,
 Oct. 5-8, 1987
 National Institute of Occupational Safety and Health, Cincinnati, Ohio - July 16, 1987
 International Symposium on Polyaromatic Hydrocarbons, Gaithersburg, Maryland, Sept. 23-25, 1987
- 1988 Symposium on Laser Spectroscopy, SPIE's OE/LASE 88, Los Angeles, California, Jan. 10-15, 1988
 Emory University, Atlanta, Georgia - Feb. 2, 1988
 Association for the Advancement on Medical Instrumentation Annual Meeting, Washington, D.C.,
 May 15-18, 1988
 International Laser Science Conference, Atlanta, Georgia - Oct. 2-4, 1988
 Eastern Analytical Symposium, New York - Oct. 3-6, 1988
 FACS Meeting, Boston, Massachusetts - Oct. 30 - Nov. 4, 1988
 International Symposium on Screening Techniques, Las Vegas, Nevada - Oct. 9-13, 1988
 NRC Workshop on Advances in Assessing Human Exposure to Airborne Pollutants, Yale
 University - Oct. 19-20, 1988
- 1989 Conference on Fluorescence Detection III, SPIE Meeting, Los Angeles, CA, Jan. 15-19, 1989
 ASTM Subcommittee on Fiberoptics Meeting, Atlanta, GA, March 7, 1989
 State University of New York, Buffalo, NY, March 21, 1989.
 International Course on Laser Spectroscopy, Malaga (Spain) May 22, 1989
 University of Perpignan, Perpignan (France) May 29, 1989.
 OE/SPIE Fiber's '89 Conference, Boston, MA, Sept. 5-8, 1989
 International Symposium Polyaromatic Hydrocarbon, Gaithersburg, MD, Sept. 18-21, 1989
 IUPAC International Conference, Lund (Sweden) August 11, 1989
 German Environmental and Radiation Protection Agency (GSF), Munich (Germany), Aug. 16, 1989
 Symposium on Laser-Based Molecular Spectroscopy, FACSS Meeting, Chicago, IL, Oct. 1-5, 1989
 Rutgers University, Dec. 12, 1989.
 Pacific Conference, Honolulu, Hawaii, December 18-21, 1989.
- 1990 Department of Defense, Washington, DC, February 8, 1990
 AAAS Press Conference, New Orleans, Louisiana, February 16, 1990
 ASTM Symposium on Spectroscopy and Fiberoptics, Las Vegas, Nevada, March 30, 1990

- University of Perpignan, Perpignan (France) June 15, 1990
 SPIE Conference on Raman and Luminescence, San Diego, California, July 8-12, 1990
 Shell Research Laboratories, Houston, Texas, September 11, 1990
 OE/SPIE Fibers 90 Conference, San Jose, California, September 16-21, 1990
 Symposium on Molecular Spectroscopy, FACSS Meeting, Cleveland, Ohio, October 7-12
- 1991 OE/LASE SPIE Conference in Laser Trace Detection Technique, Los Angeles, California, Jan 19-25, 1991
 GammaMetrics, Inc., San Diego, California, Jan 24, 1991
 US Environmental Pollution Agency, Las Vegas, Nevada, February 25-27, 1991
 Pittsburgh Conference, Chicago, Illinois, March 3-7, 1991
 ACS Annual Meeting, Atlanta, Georgia, April 14-18, 1991.
 IUPAC General Assembly Meeting, Hamburg (Germany), August 5-8, 1991
 International Symposium on Polyaromatic Hydrocarbons, Bordeaux (France), October 1-4, 1991
 Iowa State University, DeMoines, Iowa, October 24, 1991
 Florida State University, Tallahassee, Florida, October 1, 1991
 Eastern Analytical Symposium, Somerset, New Jersey, November 12, 1991
- 1992 SPIE Conference on Environmental and Process Control Monitoring Technologies, Technologies, Los Angeles, California, January 20-23, 1992
 Symposium on Optical Fiber-Optic Sensors, Pittsburgh Conference, New Orleans, Louisiana, March 11, 1992
 International Conference on Monitoring Toxic Chemicals and Biomarkers, Berlin (Germany), June 22-25, 1992
 Technical University of Munich, Munich (Germany), June 21, 1992
 EC Research Center, Ispra (Italy), June 29, 1992
 General Electric Research Center, Schenectady, New York, August 31, 1992
 Spectroscopic Methods of Analysis Symposium, San Antonio, Texas, November 15, 1992
 First International Congress of Medicine in the Oil Industry, Mexico City (Mexico), December 3-5, 1992
- 1993 Rohm and Hass Company, Philadelphia, Pennsylvania, April 14, 1993
 Symposium of Analytical Sciences, Deauville (France), May 5, 1993
 Harvard University, June 29, 1993
 Massachusetts Institute of Technology, June 30, 1993
 IUPAC General Assembly Meeting, Lisbon (Portugal), August 3-9, 1993
 Annual FACSS Meeting, Detroit, Michigan, October 19, 1993
 International Symposium on Polycyclic Aromatic Compounds, Tan-Tar, Missouri, September 9, 1993
 Mire Corporation, JASON Meeting, La Hoya, California, July 9, 1993
- 1994 Symposium on Advances in Luminescence Spectroscopy, 1994, Pittsburgh Conference, Chicago, Illinois, March 3, 1994
 Second European Symposium on Optical Chemical and Biosensors, Florence (Italy), April 20, 1994
 University of Rome – La Sapienza, Department of Chemistry, Rome, Italy, April 25, 1994
 Center for Chemical Sensors, University of Rome – Tor Vergata, Rome (Italy), April 26, 1994
 Conference on Solid-State Memory Technologies, Pasadena, California, May 24, 1994
 FACSS Analytical Symposium, Detroit, Michigan, October 4, 1994
 Eastern Analytical Symposium, Somerset, New Jersey, November 11, 1994
- 1995 Conference on Laser Techniques for Diagnosis of Cancer and Other Diseases, San Jose, California, February 7-9, 1995.
 WATTEC Conference on Energy, Knoxville, Tennessee, February 21, 1995
 Biomedical Technology Opportunities: A Workshop, Atlanta, Georgia, April 3-4, 1995
 Conference on Analytical Instrumentation, Madrid (Spain), April 5-7, 1995
 Meeting on Photonics Technology Transfer Program, Orlando, Florida, April 24, 1995
 International Conference on Environmental Monitors and Hazardous Waste, Munich

- (Germany), June 19-21, 1995
 IUPAC General Assembly, Guilford (United Kingdom), August 4-11, 1995
 Conference of the Optical Society of America, Portland, Oregon, September 10-14, 1995
 Annual FACSS Meeting, Cincinnati, Ohio, October 15-18, 1995
- 1996 Conference on Biomedical Sensing, Imaging and Tracking Technologies, San Jose, January 30-31, 1996
 Conference of the Optical Society of America, Orlando, FL, March 20-22, 1996
 Europtrode Conference, Zurich (Switzerland), April 2-4, 1996
 Conference on Aerosol Obscuration, Edgewood, MD, June 25-27, 1996
 Conference on Advanced Environmental Monitoring Technologies, Denver, CO, August 6-8, 1996
 International Conference on Raman Spectroscopy, Pittsburgh, PA, August 12-15, 1996
 First Workshop on AOTF, University of Maryland, College Park, MD, September 24-25, 1996
 Annual FACSS Meeting, Chicago, October 1-3, 1996
- 1997 Conference in Biomedical Sensing, Imaging and Tracking Technologies, San Jose, CA, February 10-12, 1997.
 New York Academy of Sciences Conference on Optical Biopsy, New York, April 23-25, 1997.
 NCI Conference on Breast Cancer, Washington, DC, May 1-2, 1997.
 Advanced Technology for Trauma Care Conference, Ft. Walton Beach, FL, May 19-20, 1997.
 EPA International symposium on analytical chemistry, Jekyll Island, GA, June 15-18, 1997.
 American Society for Photobiology, St. Louis, MO, July 7-10, 1997.
 Swiss Federal Institute of Technology, Zurich (Switzerland), September 1, 1997.
 Symposium on Optical Sensors, Optical Society of America, Oct. 12-17, 1997, Long Beach, CA
 Lester Wolfe Workshop in Laser and Medicine, MIT, Cambridge, MA, Oct. 31, 1997
 Federal Multi-Agency Consortium on Imaging Technologies to Improve Women's Health, Washington, DC, Oct. 24, 1997
 Annual FACSS Meeting, Providence, Rhode Island, October 29, 1997
 Workshop on Measurement Issues for Nanometer Particles, Minneapolis, MN, Dec. 5-7, 1997
- 1998 Conference on Biomedical Sensing, Imaging and Tracking Technologies, San Jose, CA, Jan. 26-19, 1998
 University of Tubingen, Tubingen (Germany), March 24, 1998, International Symposium on Analytical Chemistry, Dusseldorf (Germany), March 26, 1998
 University of Hannover, Hannover (Germany), March 27, 1998
 Europtrode Conference, Münster (Germany), April 1, 1998
 HCI Conference, RNA/DNA Diagnostics, Washington, DC, May 19-21, 1998
 National Institute of Occupational Health, Morgantown, West Virginia, July 22, 1998
 Philip Morris, Richmond, Virginia, August 20, 1998.
 Indiana University, Bloomington, Indiana, September 3, 1998
- 1999 Vanderbilt University, Nashville, Tennessee, March 1, 1999
 Pittsburgh Conference, Orlando, Florida, March 8, 1999
 GOMAC/HEART Conference, Monterey, California, March 9, 1999
 University of Rome "La Sapienza," Rome (Italy), March 29-April 2, 1999
 Virginia Commonwealth University, Richmond, Virginia, Annual Meeting of SPIE, Denver, Colorado, July 22, 1999
 Colloquium Spectroscopicum Internationale, Ankara (Turkey), September 5-10, 1999
 FACSS Meeting, Vancouver (Canada), October 26, 1999
- 2000 US Department of Agriculture, Athens, GA, March 21, 2000
 University of South Carolina, March 31, 2000 (Weissman Lecture in Analytical Chemistry)
 Europtrode Conference, Lyon, (France), April 17, 2000 (Plenary Lecture)
 National Institute of Agronomy, University of Paris, Paris (France), April 21, 2000
 Workshop on Advances in Optical Imaging for Biomedical Applications, Berlin, Germany, June 16, 2000
 NIH Conference of Nanotechnology, Washington, DC, June 25-26, 2001

- 2001 Annual Meeting of Electrochemical Society, Washington, DC, March 23-25, 2001
 Biochip 2001 Conference, New York, March 12, 2001
 NCI Workshop on Probing Individual Cells, Washington, DC, March 13-14, 2001
 BioInnova Conference, Montreal (Canada), March 14-15, 2001
 Annual Meeting of American Chemical Society, April 3, 2001
 HCI Conference on Microarrays, Macroresults, Boston, April 23, 2001
 Harvard University, CIMIT Lecture, April 24, 2001
 HCI Conference on Arrays and Molecular Labels, Washington, DC, May 17, 2001
 SPIE Environmental and Industrial Sensing Symposium, Boston, MA, October 28-31, 2001
- 2002 Conference Biomedical Diagnostic, Guidance and Surgical Assist Systems, Conference Chair, San Jose, Jan. 2002
 Conference on BeO Monitoring, Santa Fe, NM, February 12-14, 2002
 Biochips Conference, Washington DC, MARCH 18-20, 2002
 Eurotrode VI Conference, Manchester (United Kingdom) April 7-10, 2001
 Institute of Agronomy, Paris (France), April 12, 2002
 BECON Symposium on Sensors for Medical Applications, Washington DC, June 24-26, 2002
 Gordon Conference on Lasers in Biology and Medicine, July 14-17, 2002
 HCI Conference on Biomems and Nanotechnology, Columbus, September 6-7, 2002
 Nanotechnology Symposium 2002, Nakazawa (Japan), Sep 12-15, 2002
 University of Kyoto, Kyoto, September 17, 2002
 Japan Advanced Institute of Science and Technology, Tokyo (Japan) September 20, 2002
 FACCs Annual Conference on Analytical Chemistry, Providence, RI, October 14, 2002
 SPIE Conference on Homeland Defense, Washington DC, Dec 10-12, 2002
- 2003 Conference on Biomedical and Clinical Diagnostic, Distinguished Visiting Professor Lectures San Jose, CA, January 27-28, 2003
 University of Tennessee, Memphis, Tennessee, June 10, 2003
 BIOCHIPS 2003, Boston, MA, June 12, 2003 (Plenary Lecture)
 Stanford Photonics Workshop, Stanford University, CA, July 7-8, 2003
 DARPA Workshop on Biosensors, California Institute of Technology, July 23, 2003
 IGERT Photonics Research Center, SUNY Buffalo, July 25, 2003
 World Congress on Biomedical Physics and Bioengineering, Sydney (Australia), August 24-29, 2003.
 University of New South Wales, Sydney (Australia), September 2, 2003.
 International Symposium on NanoBiotechnology: a Systems Approach, Okinawa (Japan), Oct. 12-17, 2003
 SPIE Photonics East 2003, Providence, RI, Oct 26-29, 2003.
 Cedars-Sinai Medical Center, Los Angeles, CA, November 11-12, 2003.
 International Semiconductor Devices Research Symposium, Washington DC, Dec 10-12, 2003.
- 2004 University of Florida, University of Florida, Department of Chemistry, Spring Semester 2004, January 14-16, 2004 (Distinguished Visiting Professor Lectures)
 Conference on Advanced Biomedical Diagnostic and Clinical Systems II, Conference Chair, San Jose, Jan. 25-29, 2004.
 Conference on Plasmonics in Biology and Medicine I, Conference Chair, San Jose, January 25-29, 2004
 First International Symposium on Micro & Nano Technology, March 14-17, Honolulu, HI (Keynote Lecture)
 Eurotrode Conference, Madrid, Spain, April 5-8, Session Chair
 Experimental Biology 2004, Washington DC, April 17-21, 2004
 Stanford University, Palo Alto, CA, April 28, 2004
 NATO-ASCOS 2004 International School of Quantum Electronics, Erice, Italy, July 30-Aug. 7, 2004
 NATO Advanced Study Meeting, Ottawa, Canada, September 30, 2004
 Optics East 2004, Philadelphia, PA, Oct. 24-27, 2004
 Nanomaterials 2004 Conference, Stamford, CT, October 27, 2004
 Wake Forest University, November 17, 2004
 2nd Asian & Pacific Rim Symposium on Biophotonics, December 15-17, Taipei (Taiwan), (Plenary Keynote)

- 2005 Conference on Advanced Biomedical Diagnostic and Clinical Systems III, Conference Chair, San Jose, January 22-24, 2005
 Conference on Plasmonics in Biology and Medicine II, Conference Chair, San Jose, January 22-24, 2005
 Penn State University, College Station, PA, April 14, 2005
 University of Virginia, Blacksburg, VA, April 15, 2005
 International Conference on Coherent and Nonlinear Optics/International Conference on Lasers, Applications, and Technologies (ICONO/LAT), St. Petersburg (Russia), May 11-15, 2005 (Keynote Lecture)
 Third International Conference on Materials for Advanced Technologies (ICMAT 2005), Singapore, July 3-8, 2005
 DARPA Workshop on SERS and Nanoparticles, San Francisco, CA, July 29, 2005
 Targeted Nanodelivery for Therapeutics and Molecular Imaging, Washington DC, August 22-23, 2005
- 2006 US-Indo Conference on Spectroscopy for National Security Application, Benares (India), Jan. 9-11, 2006 (Invited Lecture)
 Conference on Advanced Biomedical Diagnostic and Clinical Systems IV, Conference Chair, San Jose, January 21-23, 2006
 Conference on Plasmonics in Biology and Medicine III, Conference Chair, San Jose, January 22-23, 2006
 DARPA Workshop on SERS Chem/Bio Sensors for Defense, Colorado Springs, CO, April 11-12, 2006
 Nanotechnology Applications in Environmental Health Workshop, Raleigh, NC, April 20, 2006 (Keynote Lecture)
 NIOSH Exposure Biology Workshop, Greensboro, NC, May 16-17, 2006
 Annual Meeting of the American Chemical Society, San Francisco, CA, September 10-14, 2006
 SPIE Optics East Symposium, Boston, MA, October 1-3, 2006
- 2007 Conference on Advanced Biomedical Diagnostic and Clinical Systems V, Conference Chair, San Jose, CA, Jan.21-22, 2007
 Conference on Plasmonics in Biology and Medicine IV, Conference Chair, San Jose, CA, January 22-23, 2007
 Pittsburgh Conference, Chicago, IL, February 25-27, 2007
 Conference on Nanoscale Physics and Technology: the Interface with Medical and Biological Sciences, Univ. of Southampton, March 26-27, Southampton, United Kingdom-(Plenary Lecture)
 Metropolitan Museum of Art, New York, NY, May 18, 2007
 Engineering Conference International, Naples, FL, June 12-14, 2007
 Hunter Chair Distinguished Lecture, Clemson University, November 30, 2007
 Distinguished Lecture, Purdue University, December 5, 2007
 Conference on Nanotechnology in Biology and Medicine, (Paris France), December 14, 2007
- 2008 Conference on Advanced Biomedical Diagnostic and Clinical Systems VI, Conference Chair, San Jose, January 20-21, 2008
 Conference on Plasmonics in Biology and Medicine V, Conference Chair, San Jose, January 21-22, 2008
 Pittsburgh Conference, New Orleans, LA, March 6-7, 2008
 Spring Meeting of the Material Research Society, San Francisco, CA, March 24-28, 2008
 Founders Lecture, Vanderbilt University, Nashville, TN, April 25, 2008
 Meeting of the IEEE Laser Electro-Optics Society, Acapulco, (Mexico), July 20-24, 2008
 Annual Meeting of the European Optical Society, Paris (France), Sep. 28-Oct. 3, 2008
 Meeting of the IEEE Laser Electro-Optics Society, Newport Beach, CA, Sep 9-12, 2008
 Fall Meeting of the Material Research Society, Boston, MA, Dec. 2-5, 2008
- 2009 Conference on Advanced Biomedical Diagnostic and Clinical Systems VII, Conference Chair, San Jose, Jan. 25-29, 2009
 Conference on Plasmonics in Biology and Medicine VI, Conference Chair, San Jose, January 26-27, 2009
 ORNL Conference on Biomedical Technology, Oak Ridge, TN, March 19-20, 2010
 DARPA Microsystems Technology Office (MTO) Nano workshop, Sunriver, OR, July 7, 2010
 Columbia University, Department of Radiology, July 15, 2010
 Elcan Optical Technologies, Toronto, Canada, July 21-22, 2010
 2009 SouthEastern Optical Conference, Durham, North Carolina, December 15, 2010-(Plenary Lecture)

- 2010 Conference on Advanced Biomedical Diagnostic and Clinical Systems VIII, Conference Chair, San Jose, Jan. 24-25, 2010
 Conference on Plasmonics in Biology and Medicine VII, Conference Chair, San Jose, January 25-26, 2010
 Metropolitan Biophotonics Symposium 2010. Washington DC, March 22, 2010, (Keynote Lecture)
 Ophthalmology Technology Day, GlaxoSmithKline, September 21, 2010
 International Conference on Biophotonics 2, Quebec City (Canada), Sep 25-25, 2010
 FACCS Annual Meeting, Raleigh, Oct 17-21, 2010
 Pacificchem 2010 Congress, Honolulu, HI, December 14-21, 2010
- 2011 Conference on Advanced Biomedical Diagnostic and Clinical Systems IX, Conference Chair, San Francisco, CA, Jan. 23-25, 2011
 Conference on Plasmonics in Biology and Medicine VIII, Conference Chair, San Francisco, CA, January 24-26, 2011
 AAAS Annual Meeting, Symposium on Lasers in Surgery, Regenerative Medicine and Medical Device Fabrication, Washington DC, February 19, 2011
 NC Nanotechnology Commercialization Conference, Charlotte, NC, March 29-30, 2011
 SPIE Conference on Optics & Electronics, Prague (Czech Republic), April 18-20, 2011
 International Topical Meeting on Information Photonics, Ottawa (Canada), May 18-20, 2011
 ACS Award Symposium, ACS Analytical Chemistry Division, Denver, CO, August 28-29, 2011
 Seoul National University. Seoul (South Korea), November 7, 2011
 5th IEEE International Conference on Nano/Molecular Medicine and Engineering (IEEE-NANOMED 2011), Jeju Island, December 9-12, 2011 (Plenary Lecture)
- 2012 Conference on Advanced Biomedical Diagnostic and Clinical Systems X, Conference Chair, San Francisco, California, January 23-24, 2012
 Conference on Plasmonics in Biology and Medicine IX, Conference Chair, San Francisco, California, January 24-25, 2012
 The Pennsylvania State University, Penn State Distinguished Lecture Series in the Life Science, March 2, 2012 (Distinguished Lecture)
 University of Pennsylvania, Advanced in Biomedical Optics Distinguished Lecture Series, April 2, 2012 (Distinguished Lecture)
 Biosensors & Bioelectronics- 2012 International Conference, Las Vegas, NV, May 14-16, 2012 (Keynote Lecture)
 International Conference META 12, Paris (France), April 18-22, 2012
 22nd International Conference on Optical Fiber Sensors-OFS-22, Beijing, China, October 15-19, 2012 (Plenary Lecture)
 Shanghai Jiao Tong University, Shanghai (China) October 19, 2012
- 2013 Conference on Advanced Biomedical Diagnostic and Clinical Systems XI, Conference Chair, San Francisco, California, February 2-5, 2013
 Conference on Plasmonics in Biology and Medicine X, Conference Chair, San Francisco, California, February 2-5, 2013
 Florida International University, Miami, Florida, June 3, 2013 (Distinguished Lecture)
 2013 Material Research Society Fall Meeting, Boston, MA, December 1-3, 2013
- 2014 Conference on Advanced Biomedical Diagnostic and Clinical Systems XII, Conference Chair, San Francisco, California, - February 1-2, 2014
 Conference on Plasmonics in Biology and Medicine XI, San Francisco, Conference Chair, California, February 2-3, 2014
 5th International Conference on Biomedical Engineering in Vietnam, Ho Chi Minh City, Vietnam, June 16-18, 2014 (Plenary Speaker)
 University of Montreal, Montreal, Canada, Sep. 12, 2014
- 2015 Conference on Advanced Biomedical Diagnostic and Clinical Systems XIII, Conference Chair, San Francisco, California, - February 7-8, 2015
 Conference on Plasmonics in Biology and Medicine XII, Conference Chair, San Francisco, California, February 8-9, 2015

- 2015 Pittcon Conference, March 8 – 12, New Orleans, LA
 IPA 2015 / SPIE Biophotonics South America, Rio de Janeiro, Brazil, May 22 - May 26, 2015 (Plenary Speaker)
 2015 SCix 2015 Conference, Rhode Island, September 27- October 5, 2015.
 Institut Langevin, ESCPI ParisTech, Paris, France, October 26, 2015
- 2016 Conference on Advanced Biomedical Diagnostic and Clinical Systems XIV, Conference Chair, San Francisco, California, - February 13-18, 2016
 Conference on Plasmonics in Biology and Medicine XIII, Conference Chair, San Francisco, California, February 13-18, 2016
 DOE Genomic Science Program (GSP)-PI meeting, Washington DC, March 6-8, 2016 (invited Lecture)
 University of Washington, Seattle, WA, April 25-26, 2016 (Invited Lecture)
 Annual Symposium Personalized Nanomedicine, Miami, May-19-20, 2016 (Invited Lecture)
 DOE Bioimaging Science Program Annual PI Meeting, Washington DC, August 2-3, 2016, Gaithersburg, MD (Plenary Lecture)
 Biological Systems Science Division (BSSD) Integration Workshop, Rockville, MD, September 21-23, 2016 (Plenary Lecture)
 Euro-Global Summit on Toxicology and Applied Pharmacology, Rome (Italy), October 24-26, 2016 (Keynote Lecture)
 2nd Global Nanotechnology Congress (Nanotechnology-2016) Las Vegas, USA, December 01-03, 2016 (Keynote Lecture)
- 2017 Conference on Advanced Biomedical Diagnostic and Clinical Systems XIV, Conference Chair, San Francisco, California, - January 28-30, 2017
 Conference on Plasmonics in Biology and Medicine XIV, Conference Chair, San Francisco, California, January 29-30, 2017
 DOE Genomic Science Program (GSP)-PI meeting, Washington DC, February 5-8, 2017 (invited Lecture)
 14th Annual World Brain Mapping of SBMT, Los Angeles, April 18-20, 2017 (Invited Lecture)
 2nd International Conference on Bioscience, June 19-20, 2017, London, UK (Keynote Lecture)
 Conference on Cancer Pharmacology Research, December 13-16, 2017 in New York, NY (Plenary Lecture)
- 2018 Conference on Advanced Biomedical Diagnostic and Clinical Systems XV, Conference Chair, San Francisco, California, - January 29-30, 2018
 Conference on Plasmonics in Biology and Medicine XV, Conference Chair San Francisco, California, January 29, 2018
 DOE Genomic Science Program (GSP)-PI meeting, Washington DC, February 28, 2018 (Plenary Lecture)
 Europt(r)ode XIV, International Conference on Optical Chemical Sensors and Biosensors, Naples (Italy) March 25-28, 2018, Naples
 United Nations *International of Day* Inaugural Ceremony, UNESCO Headquarters, Paris (France), May 16, 2018 (Invited Address)
 Fourth International Conference on Bioinspired and Bio-based Chemistry and Materials, Nice (France), October 14-17, 2018 (Keynote Lecture)
- 2019 SPIE-BIOS Symposium, Track Chair on Clinical Technologies and Systems, San Francisco, California, 2–6 February 2019
 Conference on Plasmonics in Biology and Medicine XVI, Conference Chair, San Francisco, California, 3–5 February 2019
 EuroCMR 2019 Congress, European Assoc. of Cardiovascular Imaging, Venice (Italy), May 1-4, 2019
 Congress OSA Sensors and Sensing Congress, San Jose, California, 25-27 June 2019 (Invited Tutorial Lecture)
 5th World Congress on Cancer Research & Therapy”, London (United Kingdom), September 09-11, 2019 (Keynote Lecture)
Sir George Stokes Award Lecture, King’s College, London (United Kingdom), October 14, 2019
- 2020 SPIE-BIOS Symposium, Track Chair on Clinical Technologies and Systems, San Francisco, California, February 2-6, 2022

Conference on Plasmonics in Biology and Medicine XVII, Conference Chair San Francisco, California, February 2-3, 2019

- 2021 SPIE-BIOS Symposium, Track Chair on Clinical Technologies and Systems, San Francisco, California, 2–6 February 2021
Conference on Plasmonics in Biology and Medicine XVIII, Conference Chair San Francisco, California, February 3-4, 2021
- 2022 SPIE-BIOS Symposium, Track Chair on Clinical Technologies and Systems, San Francisco, California, January 24-26, 2022
Conference on Plasmonics in Biology and Medicine XIX, Conference Chair, San Francisco, California, January 24-26, 2022
- 2023 SPIE-BIOS Symposium, Track Chair on Clinical Technologies and Systems, San Francisco, California, January 29- February 3, 2023
Conference on Plasmonics in Biology and Medicine XX, San Francisco, California, Conference Chair, January 28-29, 2023
LOPS 2023, Conference on Lasers, Optics, Photonics and Sensors, June 2-4, Fort Lauderdale, Florida, USA (Keynote Lecture)
Global Congress on Cancer Research & Therapy CANCER CARE 2023, September 18 & 19, 2023, Rome, Italy (Keynote Lecture)
- 2024 SPIE-BIOS Symposium, Track Chair on Clinical Technologies and Systems, San Francisco, California, January 28- February 2, 2024
Conference on Plasmonics in Biology and Medicine XX, San Francisco, California, Conference Chair, January 28-29, 2024
BASF Distinguished Lecture Series, BASF Corporation, Research Triangle Park, North Carolina, April 8, 2024
Nanotech France 2024 Conference, June 05 - 07 2024, Paris, France (Plenary Lecture)
2nd International Summit on Sensors and Sensing Technology, Edinburgh, UK, October 14-15, 2024 (Plenary Lecture)

In addition to the above-invited talks, keynotes, and plenary lectures, Dr. Vo-Dinh's research group has presented over 200 additional contributed papers at national and international conferences.

TUAN VO-DINH

PUBLICATIONS LIST:

A. Peer-Reviewed Journals and Invited Book Chapters:

1. T. Vo-Dinh, R. Paetzold, and U. P. Wild,
"Phosphorescence Spectra and Lifetimes of 1, 4-Naphthoquinones, Vitamin K3 and K1," Z. Phys. Chemie, 251: 395 (1972).
2. T. Vo-Dinh and U. P. Wild,
"High-Resolution Luminescence Spectrometer: 1. Simultaneous Recording of Total Luminescence and Phosphorescence," Applied Optics 12: 1286 (1973).
3. T. Vo-Dinh and U. P. Wild,
"Laser-Excited Luminescence of Coronene in a Shpolskii Matrix," Journal of Luminescence 6: 296 (1973).
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Dr. Vo-Dinh holds 64 US and international patents and has 5 patents pending.

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