

GARY M. HIEFTJE

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PRESENT POSITION

Distinguished Professor and
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PERSONAL INFORMATION

Birth Date: October 1, 1942
Height: 5 ft. 8 in.
Weight: 145 lbs.
Marital Status: Married
Citizenship: U.S.

EDUCATIONAL RECORD

Zeeland High School, Zeeland, Michigan - 1956-60
Hope College, Holland, Michigan - A.B. - Chemistry - 1964
University of Illinois, Urbana, Illinois - Ph.D. - June, 1969

Advisor: Prof. H. V. Malmstadt
Thesis title: *A Unique System for Use in Studying Flame Spectrometric Processes*
Foreign Languages: Read French and German

RESEARCH INTERESTS

Investigation of basic mechanisms in atomic emission, absorption, fluorescence and mass-spectrometric analysis; development of atomic methods of analysis; chemical instrumentation, on-line computer-control of experimentation, laser applications in chemistry, elemental and molecular mass spectrometry, chemical applications of linear response theory; near-infrared correlation analysis; time-resolved luminescence; fiber-optic sensors.

PROFESSIONAL EXPERIENCE

Laboratory Assistant, Organic, Analytical and General Chemistry, Hope College, 1961-1964
Research Assistant in Physical Chemistry, Illinois State Geological Survey, Urbana, Illinois, 1964-65
Graduate Teaching Assistant in Analytical Chemistry, University of Illinois, Fall and Spring Semester, 1965-1969
Assistant in "Electronics for Scientists," NSF-sponsored Short Course, Summer, 1966, 1967, 1968, 1969
Assistant Professor of Chemistry, Indiana University, 1969-1973
Associate Professor of Chemistry, Indiana University, 1973-1977
Professor of Chemistry, Indiana University, 1977-1985
Distinguished Professor of Chemistry, Indiana University, 1985-present
Chairman, Department of Chemistry, Indiana University, 1997-1999
Interim Director, Linda and Jack Gill Center for Instrumentation and Measurement Science, Indiana University, 1997-1999
Director, Linda and Jack Gill Center for Instrumentation and Measurement Science, Indiana University, 1999-2000
Gill Chair, Linda and Jack Gill Center for Instrumentation and Measurement Science, Indiana University, 1999-2000
Adjunct Professor of Informatics – 2005-present
Robert and Marjorie Mann Chair, Indiana University, 2000-present

HONORS

Hope College Scholarship - 1960-1962
DuPont Scholarship in Chemistry, Hope College - 1962-1964
Phi Mu Alpha (National German Honor Fraternity)
NSF Traineeship in Chemistry, University of Illinois - 1965-1969
Sigma Xi - 1969 - present
Can Test Award (administered by the Chemical Institute of Canada) - 1979
Science & Engineering Research Council Senior Fellowship (England) - 1983
IR 100 Award (one of the 100 most-significant new technical products of the year) - 1983
Anachem Award - 1984
Meggers Award for year 1983, Society for Applied Spectroscopy - 1984
Lester W. Strock Medal, Society for Applied Spectroscopy - 1984
Chemical Instrumentation Award, American Chemical Society, Analytical Division - 1985
Distinguished Professorship, Indiana University, 1985 - Present
Pittsburgh Analytical Chemistry Award, Society for Analytical Chemists of Pittsburgh, - 1986
Theophilus Redwood Award, Royal Society of Chemistry, 1986
ACS Award in Analytical Chemistry Sponsored by Fisher Scientific Company, 1987

HONORS (CONT.)

American Association for the Advancement of Science, Fellow - 1987
Tracy M. Sonneborn Award, Indiana University - 1987
Pergamon/Spectrochimica Acta Atomic Spectroscopy Award - 1988
R&D 100 Award, Research & Development Magazine - 1988
Society for Analytical Chemists of Pittsburgh, Honorary Membership – 1988
ACS Award in Spectrochemical Analysis - 1989
Indiana Academy of Science, Fellow - 1989
Pergamon/Spectrochimica Acta Atomic Spectroscopy Award - 1991
Eastern Analytical Symposium Award for Outstanding Achievement in the Field of Analytical Chemistry - 1992
Lester W. Strock Medal, Society for Applied Spectroscopy - 1992
Golden Key National Honor Society, Honorary Member - 1993
Distinguished Faculty Award, Indiana University Arts and Sciences Alumni Association - 1993
Honorary Professor of Jilin University, Jilin, China - 1995
Humboldt Research Award for Senior U.S. Scientists, Alexander Von Humboldt - Stiftung, Germany - 1996
Meggers Award for year 1995, Society for Applied Spectroscopy - 1996
Excellence in Teaching Award, American Chemical Society, Analytical Division - 1998
Gill Chair, College of Arts & Sciences, Indiana University - 1999
Society for Applied Spectroscopy, Honorary Membership - 1999
Pittsburgh Spectroscopy Award - 2001
Indiana Academy of Science Speaker of the Year - 2000-2001
Trustees Teaching Award, Indiana University – 2002
New York Section of the Society for Applied Spectroscopy Gold Medal Award – 2004
Distinguished Faculty Research Lecturer, Indiana University – 2004-2005
Monie A. Ferst Award (Sigma Xi) – 2004
Society for Applied Spectroscopy, Fellow of the Society – 2004
Royal Society of Chemistry, Fellow of the Society – 2005
CSI XXXV Award, sponsored by Wiley – 2007

NAME LECTURESHIPS

W. Heinlen Hall Lecture Series, Bowling Green State University, 1975.
Barnett Lectureship, Northeastern University, May 7-8, 1986.
Edward Herbert Boomer Lectureship, University of Alberta, May 26-29, 1986.
Neckers Lecture, Southern Illinois University, April 24, 1987.
Mobay Lecture Series, University of New Hampshire, May 5-6, 1987.
W. Allan Powell Chemistry Lectureship, University of Richmond, March 18, 1988.
Distinguished Visiting Professorship, New Mexico State University, March 14-16, 1988.

NAME LECTURESHIPS (CONT.)

Hobart H. Willard Lectures, University of Michigan, April 27-28, 1988.
Henry Werner Lecture, University of Kansas, October 24, 1988.
Randolph T. Majors Lecture, University of Connecticut, April 5-7, 1989.
Symposium at the Pontifical Academy of Sciences, The Vatican, June 27-28, 1989.
Visiting Professorship, Texas A&M University, March 26-30, 1990
Merck Frosst Lectureship, University of British Columbia, March 11-15, 1991.
L. B. Rogers Lectureship, University of Georgia, May 16-18, 1991.
J. and J. Neckers Lectureship in Chemistry, Hope College, October 11, 1991.
Samuel M. McElvain Seminar Series, University of Wisconsin, April 22-24, 1992.
Francis Clifford Phillips Lecture Series, University of Pittsburgh, May 13-14, 1992.
Visiting Professorship, University of Iowa, April 21-23, 1997.
Conover Lecturer, Vanderbilt University, March 16, 1998.
Clifford C. Hach Lecturer, University of Wyoming, October 26, 2001.
Wolfgang-Paul-Lecture, German Mass Spectrometry Society, University of Mainz, March 5, 2006.
Amy-Mellon Lecture, Purdue University, West Lafayette, IN, September 18, 2007.
Lyle Dawson Lecture, University of Kentucky, October 17, 2008

PROFESSIONAL ACTIVITIES

Advances in Inorganic Mass Spectrometry (AIMS), Advisory Editor, 1989-Current
American Chemical Society, Analytical Division Chairman, 1985-86
American Chemical Society, Analytical Division, Education Committee, 1988-1992
American Chemical Society, Analytical Division, Distinguished Service Award Jury, 1999-02
analysis europa, Advisory Board, 1994-Current
Analytica Chimica Acta, Advisory Board, 1977-1999
Analytical Chemistry, Advisory Board, 1985-87
Analytical Chemistry Bench Top Series, Springer-Verlag, Editorial Board, Current
Analytical Chemistry, Instrumentation Advisory Panel, 1978-1980
Analytical Sciences, Japan Society for Analytical Chemistry, Advisory Board 1999-Current
Annual Reports on Analytical Atomic Spectroscopy, Advisory Board, 1980-1984
Applied Spectroscopy, Editorial Board, 1997-2003
Applied Spectroscopy, Focal Point Series Editor, 1994-1996
Arizona State University, Chemistry Department External Review Committee, 1990
Commission V-4, Int. Union of Pure and Applied Chemistry, Member
Comprehensive Analytical Chemistry, Book Series, Editorial Advisory Board 1998-present
Council for Chemical Research, Governing Board, 1999-2001
Encyclopedia of Analytical Science, Advisory Board, Current

PROFESSIONAL ACTIVITIES (CONT.)

Encyclopedia of Scientific Instrumentation, International Advisory Board Member, Current
Fresenius' Journal of Analytical Chemistry, Editorial Board, 1993-1998

Heinrich Emanuel Merck Award Selection Jury, 1988-Current
Hewlett Packard Labs Research Board, 1991-93
Humana Press, Series Editor for "Contemporary Instrumentation and Analysis",
1991

Indiana Corporation for Science and Technology, Optical Technology Committee, Current
Indiana University, Department of Chemistry, Chair 1997-1999

Journal of Analytical Atomic Spectrometry, International Advisory Board, 1986-2002
Journal of Analytical Atomic Spectrometry, Editorial Board, 2002-2004
Journal of Analytical Atomic Spectrometry, Editorial Board Chair, 2004-2006
Journal of Biomedical Optics, Editorial Board, 1998-2002
Journal of Mass Spectrometry, Advisory Board, 1995-1998
Laboratory Microcomputer, Advisory Board, Current

Los Alamos National Laboratory, Review Committee - INC Division, Chairman, 1992-93
Los Alamos National Laboratory, Review Committee - CST Division, Current (Chairman, 1994-96)
Los Alamos National Laboratory, Review Committee - NMT Division, 1998-2000
Los Alamos National Laboratory, Review Committee - C Division, Chairman, 2004-2006

Mass Spectrometry Reviews, Editorial Board, 1994-2003

Pacific Northwest National Laboratory, External Review Committee - NNSA Office of Research and
Engineering, 2004

Progress in Analytical Spectroscopy, Advisory Board, 1982-1990 (Editor 1985-87)

Purdue University, Chemistry Department External Review Committee, 1995

Química Analítica, Editorial Board, 2001-Current

Research Trends, Editorial Advisory Board-Current

Society for Analytical Chemists of Pittsburgh, Short Course, Oct. 7, 1986

Society for Applied Spectroscopy - President, 1991, Honorary Member 1999

Society for Applied Spectroscopy - Fellows Award Committee of the SAS National Committee, Chairman
(2005-2006)

Society for Applied Spectroscopy - Lester W. Strock Award Committee, Chair-Elect (2007-2010)

Spectrochimica Acta, Part B/Spectrochimica Acta Electronica, Advisory Board, Current

Spectrochimica Acta, Part B: Atomic Spectroscopy, Guest Editor, Special Honor Issue, Dedicated to
the Memory of Prof. Howard V. Malmstadt, **61**, 6, 2006.

Spectrochimica Acta Reviews, Advisory Board, 1991-1993

Spectroscopy and Spectral Analysis, Editorial Board, Current

Spectroscopy Letters, Editorial Board, Current

Talanta, Advisory Board, 1981-1986

University of Cincinnati, Chemistry Department External Review Committee, 1995

PROFESSIONAL ACTIVITIES (CONT.)

University of Georgia, Chemistry Department Visiting Committee, 1984-86

University of Iowa, Chemistry Department External Review Committee, 1994

University of Manchester Institute of Science and Technology, Visiting Professor, 1983

University of Pittsburgh, Chemistry Department External Review Committee,
1988 and 1993

University of Buenos Aires, Buenos Aires, Argentina, Chemistry Department External Review Committee,
2002

University of Maryland, Chemistry Department External Review Committee, 2002

ORGANIZATIONS

Member, American Chemical Society - 1963-present

Member, American Society for Mass Spectrometry - 1987-present

Fellow, American Association for the Advancement of Science - 1983-present

Honorary Member, Golden Key Honor Society - 1993-present

Member, Indiana Academy of Science - 1987-1988, Fellow 1989-present

Member, Society for Applied Spectroscopy - 1967-1998, Honorary Member 1999-present

Scientific Board Member, Society for the Advancement of Analytical Sciences e.V. 2004-2009

Fellows Award Committee of the SAS National Committee, Chairman, 2005-2006

Steering Committee, NSF Workshop for evaluating future of Thermal Ionization Mass Spectrometry – 2005-2006

Member, USP General Chapters Expert Committee – 2005-2010

BOOKS

1. "Chemical Separations and Measurements--The Theory and Practice of Analytical Chemistry" W. B. Saunders, NY, 1974 (with D. G. Peters and J. M. Hayes).
2. "A Brief Introduction to Modern Chemical Analysis", W. B. Saunders, NY, 1976 (with D. G. Peters and J. M. Hayes).
3. "Contemporary Topics in Analytical and Clinical Chemistry", Vol. 1, Plenum Press, NY, 1977 (with D. M. Hercules, L. R. Snyder, and M. A. Evenson).
4. "Contemporary Topics in Analytical and Clinical Chemistry", Vol. 2, Plenum Press, NY, 1978 (with D. M. Hercules, L. R. Snyder, and M. A. Evenson).
5. "New Applications of Lasers to Chemistry", ACS Symposium Series no. 85, American Chemical Society, Washington, D. C., 1978.
6. "Contemporary Topics in Analytical and Clinical Chemistry", Vol. 3, Plenum Press, NY, 1978 (with D. M. Hercules, L. R. Snyder, and M. A. Evenson).
7. "Introduction to Bioinstrumentation", Clifford D. Ferris, The Humana Press, Clifton, NJ, 1978, G. M. Hieftje, ed.
8. "Lasers in Chemical Analysis", The Humana Press, Clifton, NJ, 1981 (with J. C. Travis and F. E. Lytle).

BOOKS (CONT.)

9. "Contemporary Topics in Analytical and Clinical Chemistry", Vol. 4, Plenum Press, NY, 1982 (with D. M. Hercules, L. R. Snyder, and M. A. Evenson).
10. "Liquid Chromatography in Environmental Analysis", James F. Lawrence, The Humana Press, Clifton, NJ, 1984, G. M. Hieftje, series editor.
11. "A New Fiber-Optic-Based Phase-Resolved Phosphorescence Spectrometer", ed: Isiah M. Warner and Linda B. McGown, JAI Press Inc., Greenwich, CT and London, England 1991 (with F.B. Bright and C.A. Monnig)
12. "Microwave Plasmas in Analytical Atomic Spectrometry", Jilin University Press, Changchun, Jilin, P.R. China, 1993.
13. "Focus on Analytical Spectrometry: A Compendium of Applied Spectroscopy Focal Point Articles (1994-1997)", Society for Applied Spectroscopy, Frederick, MD, 1998. (with J.A. Holcombe and V. Majidi)

CHAPTERS

1. "Correlation Methods in Chemical Data Measurement" in *Contemporary Topics in Analytical and Clinical Chemistry*, Vol. 3, D. M. Hercules, G. M. Hieftje, L. R. Snyder, and M. A. Evenson, eds., Plenum Press, NY, 1978, Ch. 4, pp. 153-216 (with G. Horlick).
2. "New Laser-Based Methods for the Measurement of Transient Chemical Events" in *New Applications of Lasers to Chemistry*, ACS Symposium Series no. 85, American Chemical Society, Washington, D. C., 1978, Ch.8, pp. 118-25 (with G. R. Haugen and J. M. Ramsey).
3. "A Linear Response Theory Approach to Time-Resolved Fluorometry" in *Modern Fluorescence Spectroscopy*, Vol. 4, E. Wehry, ed., Plenum Press, NY, 1981, Ch. 2, pp. 25-50 (with E. E. Vogelstein).
4. "Operational Characteristics of a Helium Microwave Induced Plasma at Atmospheric Pressure" in *Development in Atomic Plasma Spectrochemistry*, R. M. Barnes, ed., Hayden and Sons, Rochelle Park, NJ, 1982, pp. 209-16 (with A. T. Zander).
5. "Signal-to-Noise Considerations in Fluctuation Analysis Spectroscopic Techniques", in *New Directions in Molecular Luminescence*, D. Eastwood, ed., ASTM Publication 822, Philadelphia, 1983, pp. 82-100 (with J. M. Ramsey).
6. "Energy Transport and Analyte Excitation in the ICP", in *Analytical Chemistry in the Exploration, Mining and Processing of Materials*, L.R.P. Butler, ed., Blackwell Scientific Publications, 1986, pp. 15-24 (with J. W. Mills, J. W. Carr, G. D. Rayson, H. Huang, and K. A. Marshall).
7. "Torches for Inductively Coupled Plasmas" in *Inductively Coupled Plasma Emission Spectrometry--Part I: Methodology, Instrumentation and Performance*, P.W.J.M. Boumans, ed., Wiley, 1987, pp. 258-295 (with P.W.J.M. Boumans).
8. "A New Fiber-Optic-Based Phase-Resolved Phosphorescence Spectrometer" in *Advances in Multidimensional Luminescence*, Volume I, I. M. Warner, ed., JAI Press, Inc., 131, 1991 (with F. V. Bright and C. A. Monnig).
9. "Induction-Coupled Plasmas" in *Analytical Atomic Spectroscopy*, J. A. Holcombe, ed., John Wiley & Sons, Inc. Publishers (submitted--1987).
10. "Characterization and Comparison of Three Fiber-Optic Sensors for Iodine Determination Based on Dynamic Fluorescence Quenching of Rhodamine 6G," in *45 Years of the Greatest Science on Earth* (with W. A. Wyatt and F. V. Bright).
11. *Foreword* in "Inductively Coupled Plasmas in Analytical Atomic Spectrometry", ed: A. Montaser and D.W. Golightly, VCH Publishers, Inc.: New York (1997)

CHAPTERS (CONT.)

12. *Foreword: "Alternatives in Plasma-Source Mass Spectrometry: Evolution or Revolution?"*, J. Anal. Atom. Spectrom., **14**, 51N-52N (1999).
13. *Encyclopedia of Analytical Chemistry: Instrumentation Applications - Introduction to Atomic Spectroscopy*, in Encyclopedia of Analytical Chemistry, R.A. Meyers, ed., John Wiley & Sons, Ltd.: Sussex, United Kingdom, (2000), 9357-9361.
14. *Inorganic Time-of-Flight Mass Spectrometry*, in Inorganic Mass Spectrometry: Fundamentals and Applications, C.M. Barshick, D.C. Duckworth, and D.H. Smith, eds., Marcel Dekker: New York, NY, (2000), **23**, pp. 447-505 (with D.P. Myers and S.J. Ray).
15. *Time-of-Flight Mass Spectrometry with Atomic Ion Sources* in Advances in Mass Spectrometry, E. Gelpi, ed., John Wiley & Sons, Ltd: New York (2001), **15**, pp. 61-85 (with S.J. Ray, D.P. Myers, A.M. Leach, and J.P. Guzowski Jr.).
16. *All the Ions All the Time: Dream or Reality?* in Plasma Source Mass Spectrometry: The New Millennium, J.G. Holland and S.D. Tanner, eds., The Royal Society of Chemistry: Durham, England (2001), pp. 73-89 (with Ray, S.J., Guzowski Jr., J.P., Leach, A.M., McClenathan, D.M., Solyom, D.A., Wetzal, W.C., and Grøn, O.A.).
17. *Multidimensional Ionization Sources for Plasma-source Mass Spectrometry*, in Glow Discharge Plasmas in Analytical Spectroscopy, R. Kenneth Marcus and José A.C. Broekaert, eds., John Wiley & Sons, Ltd: New York (2003), **17**, pp. 435-468 (with J.P. Guzowski, Jr.).
18. *Plasma Source Time-of-Flight Mass Spectrometry: A Powerful Tool for Elemental Speciation*, in the Handbook of Elemental Speciation, R. Cornelis, J. Caruso, H. Crews, and K. Heumann, eds., John Wiley & Sons Ltd. (2003), pp. 313-333 (with A.M. Leach and D.M. McClenathan)
19. *Introduction – A Forward-Looking Perspective*, in Inductively Coupled Plasma Spectrometry and its Applications, 2nd ed., S. Hill, ed., Blackwell Publishing Ltd. (2007), pp. 1-26.

PATENTS AWARDED

1. "Spectroanalytical System", U. S. Patent Number: 4,462,685 (with Stanley B. Smith, Jr.) 1984.
2. "Spectroanalytical System", United Kingdom Patent Number: 2,093,990 (with Stanley B. Smith, Jr.) 1985.
3. "Spectroanalytical System", Canadian Patent Number: 1,187,628 (with Stanley B. Smith, Jr.) 1985.
4. "Novel Device for the Accurate Dispensing of Small Volumes of Liquid Samples", U. S. Patent Number: 4,492,322 (with John G. Shabushnig) 1985.
5. "Spectroanalytical System", Australian Patent Number: 546,278 (with Stanley B. Smith, Jr.) 1986.
6. "Spectroanalytical System", French Patent Number: 2,501,373 (with Stanley B. Smith, Jr.) 1986.
7. "Method and Device for Spectral Reconstruction", U. S. Patent Number: 4,642,778 (with David E. Honigs) 1987.
8. "Methods and Devices for Near-Infrared Evaluation of Physical Properties of Samples", U. S. Patent Number: 4,800,279 (with David E. Honigs and Tomas B. Hirschfeld) 1988.
9. "Sample Holders or Reflectors for Intact Capsules and Tablets and for Liquid Microcells for Use in Near-Infrared Reflectance Spectrophotometers", U. S. Patent Number: 4,882,493 (with Robert A. Lodder) 1989.
10. "Method for Analyzing Intact Capsules and Tablets by Near-Infrared Reflectance Spectrometry", U.S. Patent Number: 4,893,253 (with Robert A. Lodder) 1990.
11. "Rotary Spray Chamber Device for Conditioning Aerosols," U.S. Patent Number: 5,335,860 (with Min Wu) 1994.

PATENTS AWARDED (CONT.)

12. "Rotary Spray Chamber Device for Conditioning Aerosols," European Patent Number 94300153.7 (with Min Wu) 1994.
13. "On-Axis Time-of-Flight Mass Spectrometer," U.S. Patent Number 5,614,711 (with Gangqiang Li) 1997.
14. "Simultaneous Acquisition of Chemical Information," U.S. Patent Number 7,294,830 (with Steven J. Ray) 2007.
15. "Spatially Resolved Glow Discharge Optical Emission Spectrometry," PCT/US2005/046466 (with Steven J. Ray, Gerardo Gamez, Francisco J. Andrade, and Michael R. Webb) 2006.
16. "Method and Apparatus for Simultaneous Detection and Measurement of Charged Particles at One or More Levels of Particle Flux for Analysis of Same", Application No. 20080073548 (with M. Bonner Denton, Roger Sperline, David W. Koppelaar, Charles J. Barinaga, James H. Barnes, IV, and Eugene Atlas) 2008.

REPORTS

1. "Atomic Spectroscopy, 5th International Conference, Monash University", Appl. Opt. **14**, 2779 (1975).
2. "Signal Processing in Analytical Chemistry", contribution to "A History of Analytical Chemistry", H. A. Laitinen and G. W. Ewing, eds., American Chemical Society, York, PA, 1977.
3. "Fifth Australian Symposium on Analytical Chemistry", Anal. Chem. **51**, 1422A (1979).
4. "Analytical Atomic Absorption Spectroscopy", John C. VanLoon, book review in J. Am. Chem. Soc. **102**, 7996 (1980).
5. "Atomic Spectrometry Viewpoint", J. Anal. Atomic Spectrosc. **1**, 3 (1986).
6. "Instrumentune-Up", S. N. Deming and S. L. Morgan, Elsevier, 1984, Software review in TrAC **4**, XXII-XXIII (1985).
7. "Preface" to Spectrochimica Acta, **41B**(7), pp. 625-637, 1986, honoring Gordon F. Kirkbright.
8. "Cleopatra--Chemometrics Library: An Extendable Set of Programs as an Aid in Teaching, Research and Application", G. Kateman, P.F.A. van der Wiel, T.A.H.M. Janse, and B.G.M. Vandeginste, Elsevier Scientific Software, 1985. Software review in the Analyst **111**, 997 (1986) (with R. Lodder).
9. "38th Pittsburgh Conference and Exposition on Analytical Chemistry and Applied Spectroscopy, February 22-26, 1988" (1988, JAAS) (with C. A. Monnig and K. R. Brushwyler).
10. "Glow Discharge Spectroscopies. Modern Analytical Chemistry". Edited by R. K. Marcus (Clemson University). Plenum Publishing Corp.: New York. 1993. 514 pp. Book review in J. Am. Chem. Soc. (1994) (with M.J. Heintz).
11. "Electrospray for More than Just Organics", Anal. Chem., **70**(1), 19A, (1998).
12. "Session Report: Laser Assisted Plasma Spectrochemistry", ICP Info. Newsl., **24**(5), 360-361, (1998).
13. "Symposium Report: Laser Assisted Plasma Spectrochemistry", ICP Info. Newsl., **26**(1), 31-33, (2000).
14. "Symposium Report: Laser Assisted Plasma Spectrochemistry", ICP Info. Newsl., **27**(10), 706-707, (2002).

REPORTS (CONT.)

15. "Report on Meeting of European Glow-Discharge Network", EC Thematic Network on Glow Discharge Spectroscopy for Spectrochemical Analysis, EC Standards, Measurement and Testing Programme (DG12), Final General Meeting, March 3-6, 2002, Wiener Neustadt, Austria.
16. "Handbook of Spectroscopy". Edited by G. Gauglitz (University of Tübingen) and T. Vo-Dinh (Oak Ridge National Laboratory). Wiley-VCH Verlag GmbH & Co. KGaA: Weinheim, Germany. 2003. Vol. I, 599 pp. Book review in The Analyst and JAAS. (2004) (with F.J. Andrade and S.J. Ray).
17. "Handbook of Spectroscopy". Edited by G. Gauglitz (University of Tübingen) and T. Vo-Dinh (Oak Ridge National Laboratory). Wiley-VCH Verlag GmbH & Co. KGaA: Weinheim, Germany. 2003. Vol. II, 538 pp. Book review in The Analyst and JAAS. (2004) (with F.J. Andrade and S.J. Ray).
18. "Symposium Report: Laser Assisted Plasma Spectrochemistry ", ICP Information Newsletter, **29**(8), 752-754, (2004).
19. "Symposium Report: Laser Assisted Plasma Spectrochemistry", ICP Info. Newsl., **31**(8), 815-816, (2006).
20. "Symposium Report: Laser Assisted Plasma Spectrochemistry", ICP Info. Newsl., **32**(9), 928-929, (2007).

PRESENTATIONS

The Hieftje research group has presented nearly 1000 papers at major universities and both national and international conferences throughout the world. Of these presentations roughly 600 were either invited or plenary presentations.