

### MML PUBLICATIONS (\*undergraduate student)

94. "Characterization of silver halide fiber optics and hollow silica waveguides for use in the construction of a mid-infrared attenuated total reflection fourier transform infrared (ATR FT-IR) spectroscopy probe" C. A. Damin and A. J. Sommer, *Appl. Spectrosc.*, 67(11), 1252-1263 (2013).
93. "Fluorapatite from this remarkable occurrence of graphite and associated minerals, Karo Pit, Block D, Merelani Hills, Arusha Region, Tanzania", J. M. Long\*, J. Rakovan, J. Jaszczak, A. J. Sommer, A. , *Rocks & Minerals*. 88: 179-183 (2013).
92. "A test of the hypothesis that oxalate secretion produces proximal tubule crystallization in primary hyperoxaluria Type 1", Worcester, E.M., Evan, A.E., Coe, F.L., Lingeman, J.E., Krambeck, A., Sommer, A., Phillips, C.L. and Milliner, D.. *Am. J. Physiol.* 305:F1574-1584 (2013).
91. "A Comparison of Reflectance and Attenuated Total Internal Reflection Infrared Microspectroscopic Imaging Techniques for the Analysis of Kidney Stones", Chen Ling, Heather J. Gulley-Stahl, James C. Williams Jr, Andrew P. Evan and André J. Sommer, *Proceedings of the Microscopy and Microanalysis ("M&M") Society, Indianapolis, Indiana* (2013).
90. "Infrared Microspectroscopy using Prism Based Spectrographs and Focal Plane Array Detection", A. C. Lanzarotta, C. Marcott, G. M. Story, A. Dowrey, and A. J. Sommer, *Appl. Spectrosc.*, 66(3), 304-311 (2012).
89. "Analysis of Counterfeit Pharmaceutical Tablet Cores Utilizing Macroscopic Infrared Spectroscopy and Infrared Spectroscopic Imaging", A. Lanzarotta, \*K. Lakes, C. A. Marcott, M. R. Witkowski, and A. J. Sommer, *Anal. Chem.*, 83(15), 5972-5978 (2011).
88. "Renal Histopathology and Crystal Deposits in Patients with Small Bowel Resection and Calcium Oxalate Stone Disease", A. P. Evan, J. E. Lingeman, E. M. Worcester, S. B. Bledsoe, A. J. Sommer, J. C. Williams, Jr., A. E. Krambeck, C. L. Phillips, and F. L. Coe, *Kid. Internat.* 78(3), 310-317 (2010).
87. "The Advantages of an Attenuated Total Internal Reflectance Infrared Microspectroscopic Imaging Approach for Kidney Biopsy Analysis", H. J. Gulley-Stahl, S. B. Bledsoe, A. P. Evan, and A. J. Sommer, *Appl. Spectrosc.*, 64(1), 15-22, 2010.
86. "Intra-tubular Deposits, Urine and Stone Composition are Divergent in Patients with Ileostomy", A. P. Evan, J. E. Lingeman, F. L. Coe, S. B. Bledsoe, A. J. Sommer, J. C. Williams, Jr., A. E. Krambeck and E. M. Worcester, *Kidney International*, 76, 1081-1088, 2009.
85. "Rapid Molecular Imaging Using Attenuated Total Internal Reflections Planar Array Infrared Spectroscopy for the Analysis of Counterfeit Pharmaceutical Tablets", A. Lanzarotta, \*L. Baumann, G. M. Story, M. R. Witkowski, F. Khan, A. Sommers, and A. J. Sommer, *Appl. Spectrosc.*, 63(9), 979-991, 2009.

84. "Attenuated Total Internal Reflectance Infrared Spectroscopy (ATR-FTIR): A Quantitative Approach for Kidney Stone Analysis", H. J. Gulley-Stahl, \*J. Haas, A. P. Evan and A. J. Sommer, *Appl. Spectrosc.* 63(7), 759-766, 2009.
83. "Loss of Urinary Macromolecules in Mice Causes Interstitial and Intratubular Renal Calcification Dependent on the Underlying Conditions", X.-R. Wu, J. C. Lieske, A. P. Evan, A. J. Sommer, L. Liaw and L. Mo, 2008. In Renal Stone Disease: Proceedings of the Second International Urolithiasis Research Symposium. A. P. Evan, J. A. McAteer, J. E. Lingeman, and J. C. Williams, Eds., AIP Conference Proceedings, 2008 Nov. 25; 1049(22) 113-119.
82. "Histopathology and Surgical Anatomy of Patients with Primary Hyperparathyroidism and Calcium Phosphate Stones", A. P. Evan, J. E. Lingeman, F. L. Coe, N. L. Miller, S. B. Bledsoe, A. J. Sommer, J. C. Williams, Y. Shao and E. M. Worcester, *Kidney International* 74, 223-229, 2008.
81. "Renal Calcinosis and Stone Formation in Mice Lacking Osteopontin, Tamm-Horsfall Protein or Both", L. Mo, L. Liaw, A. P. Evan, A. Sommer, J. Lieske and X.-R. Wu, *AJP: Renal Physiology*, 293, F1935-F1943, 2007.
80. "Mechanism of Formation of Human Calcium Oxalate Renal Stones on Randall's Plaque", A. P. Evan, F. L. Coe, J. E. Lingeman, Y. Shao, A. J. Sommer, S. B. Bledsoe, J. C. Anderson and E. M. Worcester, *The Anatomical Record* 290: 1315-1323, 2007.
79. "Prism Based Infrared Spectrographs using Modern-Day Detectors", \*Z. Keltner, \*K. Kayima, A. Lanzarotta, L. Lavallo, M. Canepa, A. E. Dowrey, G. M. Story, C. Marcott and A. J. Sommer, *Appl. Spectrosc.*, 61(9), 909-915, 2007.
78. "Renal Histopathology of Stone-forming Patients with Distal Renal Tubular Acidosis", A. P. Evan, J. Lingeman, F. Coe, Y. Shao, N. Miller, B. Matlaga, C. Phillips, A. Sommer and E. Worcester, *Kidney International* 71, 795-801 (2007).
77. "Raman Analysis of Nitrogen Doped ZnO", L. L. Kerr, X. Li, M. Canepa, and A. Sommer, *Thin Solid Films*, 515 (13), 5282-5286 (2007).
76. "Microbial Effects in Promoting the Smectite to Illite Reaction: Role of Organic Matter Intercalated in the Interlayer", G. Zhang, J. W. Kim, H. Dong, and A. J. Sommer, *American Mineralogist* 92, 1401-1410, 2007.
75. "Analysis of Urinary Calculi Using an Infrared Microspectroscopic Surface Reflectance Imaging Technique", J. C. Anderson, J. C. Williams, Jr., A. P. Evan, K. W. Condon, and A. J. Sommer, *Urol. Res.* 35:41-48 (2007).
74. "Polymer Mediated Capillary Electrophoresis with Attenuated Total Reflectance Infrared Microspectroscopy Detection", B. M. Patterson, N. D. Danielson and A. J. Sommer, *Analytica Chimica Acta* 583, 231-238, 2007. Available online at [www.sciencedirect.com](http://www.sciencedirect.com).
73. "Flower-like Nano-structured ZnO for Dye-sensitized Solar Cells", R. Zhang, L. Kerr, R. E. Edelman, M. Canepa, and A. J. Sommer, *Proceedings of the 2006 IEEE 4<sup>th</sup> World Conference on Photovoltaic Energy Conversion*, pp. 267-270, 2006.

72. "Continuous Infusion of Oxalate by Minipumps Induces Calcium Oxalate Nephrocalcinosis", S. R. Marengo, D. H.-C. Chen, A. P. Evan, A. J. Sommer, N. T. Stowe, D. G. Ferguson, M. I. Resnick, and G. T. MacLennan, *Urological Research* 34(3), 200-210 (2006).
71. "Renal Crystal Deposits and Histopathology in Patients with Cystine Stones", A. P. Evan, F. L. Coe, J. E. Lingeman, Y. Shao, B. R. Matlaga, S. C. Kim, S. B. Bledsoe, A. J. Sommer, M. Grynepas, C. L. Phillips, and E. M. Worcester, *Kidney International* 69(12), 2227-2235 (2006).
70. "Calcium Oxalate Calculi Found Attached to the Renal Papilla: Preliminary Evidence for Early Mechanisms in Stone Formation", J. C. Williams, Jr., B. R. Matlaga, S. C. Kim, M. E. Jackson, A. J. Sommer, J. A. McAteer, J. E. Lingeman and A. P. Evan, *J. of Endourology*, 20 (11), 885-890, 2006.
69. "Quantitative Analysis of Oxalate Salts in Renal Biopsies via ATR Infrared Microspectroscopy and its Relevance to Kidney Disease", J. Anderson, \*J. Haas, \*R. Arays, A. Sommer and A. Evan, *Micros. Microanal.* 12 (Supp 2), 312CD-313CD, 2006.
68. "The Development of a Spatial Resolution Standard for IR Microspectroscopy: A Preliminary Investigations", L. Lavallo, \*D. Oertel and A. J. Sommer, *Micros. Microanal.* 12 (Supp 2), 1764CD-1765CD, 2006.
67. "Rapid Infrared Microspectroscopy using an Infrared Spectrograph Based on a Prism Dispersing Element and an MCT Array Detector", \*Z. Keltner, \*K. Kayima, L. Lavallo, M. Canepa, A. E. Dowrey, G. M. Story, C. Marcott and A. J. Sommer, *Micros. Microanal.* 12 (Supp 2), 1766CD-1767CD, 2006.
66. "Nephrolithiasis and Nephrocalcinosis in Rats with Small Bowel Resection", R. C. O'Connor, A. P. Evan, S. Meehan, E. Worcester, D. Kuznetsov, B. Laven, A. J. Sommer, S. B. Bledsoe, J. H. Parks, F. L. Coe and G. S. Gerber, *Urological Research*: 33, 105-115 (2005).
65. "A Concerted Protocol for the Analysis of Mineral Deposits in Biopsied Tissue Using Infrared Microanalysis", J. Anderson, \*J. Dellomo, A. J. Sommer, A. P. Evan and S. Bledsoe, *Urological Research* 33: 213-219 (2005).
64. "Crystal Associated Nephropathy in Patients with Brushite Nephrolithiasis", A. P. Evan, J. E. Lingeman, F. L. Coe, Y. Shao, J. H. Parks, S. B. Bledsoe, A. J. Sommer, R. F. Paterson, R. L. Kuo, S. Kim and M. Grynepas, *Kidney International* 67, 576-591 (2005).
63. "Helical Computed Tomography Accurately Reports Urinary Stone Composition Using Attenuation Values: In Vitro Verification Using High-Resolution Micro-Computed Tomography Calibrated to Fourier Transform Infrared Microspectroscopy", C. A. Zarse, J. A. McAteer, M. Tann, A. J. Sommer, S. C. Kim, R. F. Paterson, E. K. Hatt, J. E. Lingeman, A. P. Evan and J. C. Williams, Jr., *Urology* 63(5), 828-833 (2004).

62. "Nondestructive Analysis of Urinary Calculi Using Micro Computed Tomography", C. A. Zarse, J. A. McAteer, A. J. Sommer, S. C. Kim, E. K. Hatt, J. E. Lingeman, A. P. Evan and J. C. Williams Jr., *BMC Urology*, 4:15, 2004.

61. "A Comparison of Immersion Infrared Microspectroscopy to Attenuated Total Internal Reflection Microspectroscopy", L. Lavallo-Castellanos, A. J. Sommer, G. M. Story, E. A. Dowrey and C. Marcott, *Microscopy and Microanalysis* 10 (Suppl. 2), 1298-1299, August 2004.

60. "Combined ATR Infrared Microspectroscopy and SIL Microspectroscopy", \*A. F. Sohn, L. G. Tisinger and A. J. Sommer, *Microscopy and Microanalysis* 10 (Suppl. 2), 1316-1317, August 2004.

59. "Attenuated Total Internal Reflection (ATR) Raman Microspectroscopy, L. Tisinger and A. J. Sommer, *Microscopy and Microanalysis* 10 (Suppl. 2), 1318-1319, August 2004.

58. "Attenuated Total Internal Reflectance Infrared Microspectroscopy as a Detection Technique for Capillary Electrophoresis", B. M. Patterson, N. D. Danielson and A. J. Sommer, *Anal. Chem.*, 76(13), 3826-3832 (2004).

57. "Analytical Spectroscopy Using Modular Systems", B. M. Patterson, N. D. Danielson, G. A. Lorigan and A. J. Sommer, *J. Chem. Ed.*, 80(12), 1460-1463 (2003).

56. "Attenuated Total Internal Reflectance Infrared Microspectroscopy as a Detection Technique for High Performance Liquid Chromatography", B. M. Patterson, N. D. Danielson and A. J. Sommer, *Anal. Chem.*, 75(6), 1418-1424 (2003).

55. "Randall's Plaque of Patients with Nephrolithiasis Begins in Basement Membranes of Thin Loops of Henle", A. P. Evan, J. E. Lingeman, F. L. Coe, J. H. Parks, S. B. Bledsoe, Y. Shao, A. J. Sommer, R. F. Paterson, R. L. Kuo and M. Grynopas, *The Journal of Clinical Investigation*, 111(5), 607-616 (2003).

54. "Cost-Effective Spectroscopic Instrumentation for the Physical Chemistry Laboratory", G. A. Lorigan, B. M. Patterson, A. J. Sommer and N. D. Danielson, *J. Chem. Ed.* 79(10), 1264-1266 (2002).

53. "Microchannel Thin Layer Chromatography with In Situ Plate Scanning :DRIFTS Detection Using Plain and Polybutadine Modified Zirconia Stationary Phases", B. A. Musial, A. J. Sommer and N. D. Danielson, *Appl. Spectrosc.* 56(8), 1059-1066 (2002).

52. "Extinction Coefficient Determination of Polymeric Materials for Use in Quantitative Infrared Microspectroscopy", L. G. Tisinger and A. J. Sommer, *Appl. Spectrosc.* 56(11), 1397-1402 (2002).

51. "Electrochemistry of Prussian Blue in Sol-Gel Electrolytes Doped with Polyamidoamine Dendrimers", S. Zamponi, A. M. Kijak, A. J. Sommer, R. Marassi, P. J. Kulesza and J. A. Cox, *J. Solid-State Electrochem.*, 6, 528-533 (2002).
50. "Mid-Infrared Transmission Microspectroscopy", A. J. Sommer, in *Handbook on Vibrational Spectroscopy*, J. M. Chalmers and P. R. BGriffiths, Eds., John Wiley & Sons, Ltd., England, December 2001.
49. "Attenuated Total Internal Reflection Infrared Mapping Microspectroscopy Using an Imaging Microscope", A. J. Sommer, L. G. Tisinger, C. M. Marcott and G. Story, *Appl. Spectrosc.*, 55(3), 252-256 (2001).
48. "Fourier Transform-IR Determination of Protein Contamination in Thioglycolic Acid Lignin from Radish Seedlings, and Improved Methods for Extractive-free Cell Wall Preparation", M. Chen, A. J. Sommer and J. W. McClure, *Phytochem. Anal. II*, 153-159, 2000.
47. "Attenuated Total Internal Reflection Infrared Mapping Microspectroscopy of Soft Materials", L. L. Lewis and A. J. Sommer, *Appl. Spectrosc.*, 54(2), 324-330, 2000.
46. "Attenuated Total Internal Reflection (ATR) Infrared Microspectroscopy for the Analysis of Trace Solutes in Aqueous Solutions", A. J. Sommer and Mark Hardgrove, *Prominent Young Vibrational Spectroscopists, Vib. Spectrosc.* 24(1), 93-100 (2000).
45. "Sampling Considerations for FT-Raman Spectroscopy of Polymers and Solutions", \*B. A. Barrera and A. J. Sommer, *Appl. Spectrosc.* 52(11), 1483, (1998).
44. "Raman Microspectroscopy with a Card-Based Spectrograph", A. J. Sommer and \*S. A. Stewart, *Appl. Spectrosc.*, 53(4), 483, 1999.
43. "Attenuated Total Internal Reflection Microspectroscopy of Isolated particles, An Alternative Approach to Current Methods", L. Lewis and A. J. Sommer, *Appl. Spectrosc.* 53(4), 375, 1999.
42. "Variable Path Length Cells for Discovery-Based Investigations of Beer's Law", \*S. A. Stewart and A. J. Sommer, *J. Chem. Ed.*, 76(3), 399-400, 1999.
41. "Esperanzaite,  $\text{NaCa}_2\text{Al}_2(\text{As}^{5+}\text{O}_4)_2\text{F}_4(\text{OH}) \cdot (\text{H}_2\text{O})$ , A New Mineral Species Form the La Esperanza Mine, Mexico: Descriptive Mineralogy and Atomic Arrangement", E. E. Foord, J. M. Hughes, F. Cureton, C. H. Maxwell, A. U. Falster, A. J. Sommer, and P. F. Hlava, *The Canadian Mineralogist* 37, 67-72, 1999.
40. "Attenuated Total Internal Reflection Infrared Microspectroscopy for the Analysis of Trace Contaminants in Aqueous Solutions", A. J. Sommer and M. Hardgrove, *Microscopy and*

Microanalysis Vol. 5, Supplement 2, 66-67, 1999, Proceedings: Microscopy and Microanalysis '99, Springer.

39. "Substitution of Poly(chlorotrifluoroethylene) with Sulfur Dioxide Under Reductive Conditions", R. T. Taylor, A. J. Sommer, J. W. Green, K. Ripparger, M. B. Nejad and J. A. Shah, *Heteroatom Chemistry*, 9(2), 265 (1998).

38. "Raman Microspectroscopy", A. J. Sommer, in *Modern Techniques in Applied Molecular Spectroscopy*, Francis M. Mirabella, Ed., John Wiley & Sons, Inc., New York, pp. 291-322 (1998).

37. "Reaction of Poly(chlorotrifluoroethylene) with Metal Carbonyl Complexes", R. T. Taylor, J. W. Green, J. A. Shah, A. Warren and A. J. Sommer, *Electronic Conference on Organometallic Chemistry*, hosted by Imperial College, United Kingdom 1997.

36. "Optical Non-Linearities in Infrared Microspectroscopy: A Preliminary Study into the Effects of Sample Size and Shape on Photometric Accuracy", \*S. A. Stewart and A. J. Sommer, *Microscopy and Microanalysis Vol. 3, Supplement 2, 1997-Proceedings*, 837-838.

35. "Immersion Raman Microspectroscopy", A. J. Sommer, *Microbeam Analysis*, 111, 1995.

34. "Sample Preparation In Raman Microspectroscopy", A. J. Sommer, *Microbeam Analysis*, 147, 1995.

33. "Microspectroscopy Uncovers Fibers' Secrets", A. J. Sommer, *Photonics Spectra*, 91, 1995.

32. "Development of Micro-Channel Thin-Layer Chromatography with Infrared Microspectroscopic Detection", S. P. Bouffard, J. E. Katon, A. J. Sommer and N. D. Danielson, *Anal. Chem.* 66, 1937 (1994).

31. "Applications of Vibrational Microspectroscopy to Chemistry", J. E. Katon, *Vibrational Spectroscopy* 7, 201-229 (1994).

30. "Use of Molecular Microspectroscopy to Characterize Pigment-Loaded Polypropylene Single Fibers", S. P. Bouffard, A. J. Sommer, J. E. Katon and S. Godber, *Appl. Spectrosc.* 48(11), 1387 (1994).

29. "Textile Analytical Techniques: A Methodological Update for the Historic, Archaeological and Textile Science Research Areas", K. A. Jakes, J. E. Katon, J. C. Mitchell and M. E. Swinker, in *ITAA Proceedings* (Proceedings of the Annual Meeting of the International Textile and Apparel Association, Inc.), Christine M. Ladisch, Ed., International Textile and Apparel Association, Inc., Monument, CO, 1993.

28. "Performance Enhancement of a Fourier Transform Raman Microprobe", A. J. Sommer and J. E. Katon, *Spectrochim. Acta.* 49A(5/6), 611 (1993).
27. "The Vibrational Assignment of Tetronic Acid", P. A. Martoglio and J. E. Katon, *J. Mol. Struct.* 296, 35 (1993).
26. "Quantitative Analysis of Colorants in Single Polypropylene Fibers Using Molecular Microspectroscopy", S. P. Bouffard, A. J. Sommer, J. E. Katon and S. Godber, *Microbeam Anal.* 2 (Supp.), S63 (1993).
25. "Infrared Microspectroscopy: A High Information Content Microanalytical Technique for the Analysis of Contaminants in the Pulp and Paper Making Industry", A. J. Sommer and J. E. Katon, *TAPPI Proceedings, 1993 Pulping Conference*, 543 (1993).
24. "Zirconium Oxide Stationary Phase for Thin-Layer Chromatography with Diffuse Reflectance Fourier Transform Infrared Detection", Neil D. Danielson, J. E. Katon, Steven P. Bouffard and Zhaohai Zhu, *Anal. Chem.* 64, 2183 (1992).
23. "The Use of Infrared Microspectroscopy in the Analysis of Etowah Textiles: Evidence of Dye Use and Pseudomorph Formation", Pamela A. Martoglio, K. A. Jakes and J. E. Katon, *Microbeam Anal.* 1992, 1534 (1992).
22. "IR Microspectroscopy: Routine IR Sampling Methods Extended to the Microscopic Domain", J. E. Katon and A. J. Sommer, *Anal. Chem.* 64, 931A (1992).
21. "Phase Behavior in Aqueous Surfactant Systems: Infrared Studies", Curtis Marcott, Robert G. Laughlin, Andre' J. Sommer and J. E. Katon, " in Fourier Transform Infrared Spectroscopy in Colloid and Interface Science, David R. Scheuing, Ed., American Chemical Society, Washington, D. C., 1991.
20. "A Comparison Between a Micro and an Ultramicro CIRCLE Cell for On-Line FT-IR Detection in a Reverse Phase HPLC System", P. T. McKittrick, N. D. Danielson and J. E. Katon, *J. of Liquid Chromatography*, 14 (2), 377 (1991).
19. "The Development of a Fourier Transform Raman Microprobe", A. J. Sommer and J. E. Katon, *Appl. Spectrosc.* 45, 527 (1991).
18. "Characterization of an Ultramicro CIRCLE Cell and its Use in Aqueous Flow Injection Analysis with Infrared Detection", P. T. McKittrick, Neil D. Danielson and J. E. Katon, *Microchem. J.* 44, 105 (1991).
17. "Diffraction Induced Stray Light in Infrared Microspectroscopy and Its Effect on Spatial Resolution", A. J. Sommer and J. E. Katon, *Appl. Spectrosc.* 45, 1633 (1991).

16. "Unlocking the Secrets of the Past. The Analysis of Archaeological Textiles and Dyes", P. A. Martoglio, S. P. Bouffard, A. J. Sommer, J. E. Katon, and K. A. Jakes, *Anal. Chem.* 62, 1123A (1990).
15. "Visible Absorbance Microspectroscopy with a Raman Microprobe", A. J. Sommer, P. A. Martoglio and J. E. Katon, *Appl. Spectrosc.* 44, 1471, (1990).
14. "Identification of Dyes and Characterization of Fibers by Infrared and Visible Microspectroscopy: Application to Paracas Textiles", K. A. Jakes, J. E. Katon and P. A. Martoglio, in *Archaeometry 90, Proceedings of the 27th International Archaeometry Symposium*, E. Pernicka and G. Wagner, Eds., Birkhauser Verlag AG, Basel, (1990).
13. "Applications of Infrared Microspectroscopy to Art Historical Questions about Medieval Manuscripts" Mary Virginia Orna, Patricia L. Lang, J. E. Katon, Thomas F. Mathews and Robert S. Nelson, in *Archaeological Chemistry IV*, Ralph O. Allen, Ed., Advances in Chemistry Series 220, American Chemical Society, Washington, D. C., 1989.
12. "Infrared and Raman Microspectroscopy: An Overview of Their Use in the Identification of Microscopic Particulates", Patricia L. Lang, A. J. Sommer and J. E. Katon, in *Particles on Surfaces 2: Detection, Adhesion and Removal*, K. L. Mittal, Ed., Plenum Publishing Corp., New York, 1989.
11. "Infrared Microspectroscopy", J. E. Katon, A. J. Sommer and Patricia L. Lang, *Appl. Spectrosc. Revs.* 25, 173 (1989).
10. "Aqueous Infrared Pharmaceutical Analysis of Two Choline Compounds by Flow Injection Analysis Using the CIRCLE Cell", B. E. Miller, N. D. Danielson, and J. E. Katon, *Appl. Spectrosc.* 42(3), 401 (1988).
9. "Identification of Dust Particles by Molecular Microspectroscopy", Patricia L. Lang, J. E. Katon and Anthony S. Bonanno, *Appl. Spectrosc.* 42, 313 (1988).
8. "The Identification and Characterization of Polymer Contaminants by Infrared Microspectroscopy", Patricia L. Lang, J. E. Katon, \*Anthony S. Bonanno and G. E. Pacey, in *Infrared Microspectroscopy*, Robert G. Messerschmidt and Matthew A. Harthcock, Eds., Marcel Dekker, Inc., New York, 1988.
7. "Applications of Molecular Microspectroscopy to Paper Chemistry", A. J. Sommer, Patricia L. Lang, \*Brian S. Miller and J. E. Katon, in *Infrared Microspectroscopy*, Robert G. Messerschmidt and Matthew A. Harthcock, Eds., Marcel Dekker, Inc., New York, 1988.
6. "Infrared and Raman Microspectroscopy: Critical Factors in Sample Purity, Preparation and Size", A. J. Sommer and J. E. Katon, *Microbeam Anal.* 1988, 207 (1988).



5. "Instrumental and Sampling Factors in Infrared Microspectroscopy", J. E. Katon, P. L. Lang, D. W. Schiering and J. F. O'Keefe, in The Design, Sample Handling, and Applications of Infrared Microscopes, ASTM STP 949, P. B. Roush, Ed., American Society for Testing and Materials, Philadelphia, 1987.
4. "Vibrational Molecular Microspectroscopy", J. E. Katon, G. E. Pacey and J. F. O'Keefe, *Anal. Chem.* 58, 465A (1986).
3. "Application of Infrared and Raman Microspectroscopy to Polymer Characterization", Patricia L. Lang, J. E. Katon, D. W. Schiering and J. F. O'Keefe, *Polym. Mater. Sci. Eng.* 54, 381 (1986).
2. "The Use of Infrared and Raman Microspectroscopy for the Analysis of Failed Circuit Boards", Patricia L. Lang and J. E. Katon, *Microbeam Anal.* 1986, 47 (1986).
1. "The Identification of Fibers by Infrared and Raman Microspectroscopy", Patricia L. Lang, J. E. Katon, J. F. O'Keefe and David W. Schiering, *Microchem. J.* 34, 319 (1986).