BIOGRAPHICAL SKETCH

Abdul MALIK, Ph.D.

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- (b) The Wiley Handbook of Sample Preparation 2010.
- (c) **Popular Analytical Chemistry Textbook** by Daniel C. Harris, (Ref. *Quantitative Chemical Analysis*, 6th edition, Freeman, New York, USA, 2003);
- (d) *Analytical Chemistry* the premier journal in the field of our research (Ref. *Anal. Chem.* 1997, 69, 4556-

National and International Symposia-related Activities:

General Chair:

Abdul Malik, Ph.D.

12. **A. Malik**

-Gel Monolithic Column with Optical Window and United States Patent No. Abdul Malik, Ph.D.

Abdul Malik, Ph.D.

- 05. **A. Malik**, E. Seyyal, Dual Ligand Sol-gel Sorbent Combining Superthydrophobicity and Pi-Pi Interaction, US Patent Application No. **15/813,799** (Filed on November 15, **2017**)
- 04. **A. Malik**, M.-P. Tran, Tantala-based Sorbent for Online/Offline Extraction and Preconcentration of Catecholamine Neurotransmitters as well as Other Chemical Species Prior to Chromatographic Analysis, and Method for Chemical Synthesis of the Same. US Provisional Patent Application No. 62/524,937(Submitted June 26, **2017**).
- 03. **A. Malik**, A. Alhendal, S. Kesani, Niobia-based Sorbents and Methods for Phosphopeptide Enrichment, and Synthesis of the same. US Provisional Patent Application No. 62/524,928 (Submitted June 26, **2017**).
- 02. **A. Malik**, E. Seyyal, Dual Ligand Sol-gel Sorbent Combining Superhydrophobicity and Pi-Pi Interaction, US Provisional Patent Application No. 62/422,417 (Submitted November 15, **2016**, USF Ref. No. 16B181PR).
- 01. **A. Malik**, C.- -based Patent Application No. 14212673, Filed on Mar 14, **2014**.

PUBLICATIONS (Lead Author: **Bolded**)

- 155. S. Kesani, **A. Malik**, Sol-gel niobia sorbent with a positively charged octadecyl ligand providing enhanced enrichment of nucleotides and organophosphorus pesticides in capillary microextraction for online HPLC analysis, *J. Sep. Sci.* **2018**, 41(7), 1663-1673.
- 154. **A. Malik, A**. Alhendal. (Metal Oxide-based Biocompatible Hybrid Sorbent for the Extraction and Preconcentration of Catecholamine and Related Compounds, and Method of Synthesis, US Patent Publication No. 2018-0001298 A1), pp. 12 (2018).
- 153. M. Tran, E.B. Turner, S.S. Segro, E. Seyyal, **A. Malik** -based Sol-gel Coating for Capillary Microextraction on-line Coupled to High-Performance Liquid *J. Chromatogr. A* 2017, 1522, 38-47. (Online published on Sep 22, **2017**; https://doi.org/10.1016/j.chroma.2017.09.048).
- 152. E. Seyyal, **A. Malik** Silica- and germania-based dual-ligand sol-gel organic-role of inorganic substrate in sol2017, 964, 96-111.

- -gel United States Patent No. US 9,555,394 (January 31, 2017).
- 150. A. Malik
 Combination with High-performance Liqui
 Patent No. US 9,528,921 (December 27, 2016).

 United States
- 149. A. Alhendal, S. Mengis, J. Matthews, **A. Malik**, Nonhydrolytic Sol-gel Approach to Facile Creation of Surface-bonded Zirconia Organic-Inorganic Hybrid Coatings for Sample Preparation. I. Capillary Microextraction of Catecholamine Neurotransmitters, *J Chromatogr. A* **2016**, 1468, 23-32.
- 148. **A. Malik** -Gel Gas Chromatography United States Patent No. US 8,685,240 (April 1, 2014).
- 147. **A. Malik** -gel 27, **2014**).
- 146. **A. Malik**, A.M. Shearrow, Ionic Liquid Mediated Sol-gel Sorbents **United States Patent** No. **US 8,623,279** (January 7, **2014**).
- 145. A. Kabir, K.G. Furton, **A. Malik** -gel Microextraction Phases for Solvent- *Trends Anal. Chem.*, **2013**, 45, 197-218.
- 144. **A. Malik** -silica-based Sol-gel Monolithic **United States Patent** No. **US 8,603,833** (December 10, **2013**).
- 143. **A. Malik** -Gel Monolithic Column with Optical Window and **United States Patent** No. **US 8,597,508** (December 3, **2013**).
- 142. **A. Malik**, S.S. Segro, Materials and Methods for Capillary Microextraction in Combination with High-performance Liquid Chromatography, United States Patent Publication No. US 2013/0071945 A1, March 21, **2013**.
- 141. **A. Malik** -Gel Coatings for On-line Preconcentration in **United States Patent** No. **US 8,241,476** (August 14, **2012**).
- 140. &Đ€6 @A)J′

139. **A. Malik**

- 127. S. S. Segro, **A. Malik** -Gel Coatings and Monoliths in Analytical Sample *Handbook of Sample Preparation* (ISBN: 978-0-470-09934-6, Edited by J. Pawliszyn and H. Lord), Chapter 22, pp. 419-443 (**2010**).
- 126. S.S. Segro, J.C. Triplett, **A. Malik** -Gel Germania Tri-Block Polymer
 Coatings of Exceptional pH Stability in Capillary Microextraction On-Line Coupled to HighAnal. Chem. **2010**, 82 (10), 4107-4113.
- 125. A. Malik, T.- United States Patent Publication No. US 2010/0112208 A1, May 6, **2010**.
- 124. **A. Malik,** T.- **United States Patent** No. US 7,622,191 B2 (November 24, **2009**).
- 123. D.X. Wang, **A. Malik** Extended research on the role of the attaching arms in separation of a chiral lactone on sol-gel gas chromatographic columns with chirasil-cyclodextrin as stationary phase, Nanjing Shida Xuebao, Ziran Kexueban **2009**, 32(3), 61-65.
- 122. **A. Malik**

- 116. S. Segro, **A. Malik** -resistant Sol-gel Polydimethyldiphenylsiloxane Coating for on-line Hyphenation of Capillary Microextraction with High-*J. Chromatogr. A* **2008**, 1205 (1-2), 26-35.
- 115. A. Malik -Gel Coatings for On-line
 US Patent No.

7,407,568 B1 (August 5, **2008**).

114. S. S. Segro, **A. Malik** Sol-gel methyl coating in capillary microextraction hyphenated on-line with high-performance liquid chromatography. Counterintuitive extraction behavior for polar analytes

- 80. D.X. Wang, **A. Malik** -gel-coated poly(dimethylsiloxane) capillary column and a conventional column, *Chin. J. Chromatogr.* **2002**, 20 (6), 534-536.
- 79. **A. Malik** -gel Surface Coatings and/or **US Patent Publication** No. US2002150923 (October 17, **2002**).
- 78. **A. Malik** -Gel Based Columns for Capillary Electro-Chromatography: Sol-3973-3992.
- 77. **A. Malik**, *Multidimensional Chromatography*, (Edited by L. Mondello, A. C. Lewis, and K.D. Bartle: Wiley, New York, 2002), *J. Am. Chem. Soc.* **2002**, 124, 13959-13960 (JACS Book Review).
- 76. **A. Malik**, J.D. Hayes, "Sol-Gel Open Tubular ODS Columns with Charged Inner Surface for Capillary Electrochroma International Patent Publication No. WO 02/059591, **2002**.
- 75. D.X. Wang, **A. Malik** Study of the Sample Capacity of Sol-Gel-Coated Capillary *J. Nanjing Normal U (Nat. Sci. Ed.)*, **2002**, 25 (4), 67-70.
- 74. **A. Malik** Sampling and Sample Preparation (Comprehensive Analytical Chemistry, Vol. XXXVII), ISBN: 9780444505101, edited by J. Pawliszyn, Elsevier, Amsterdam, **2002**, Ch. 32, pp. 1023-1080.
- 73. **A. Malik,** A. Kabir, G.R. -Gel Dendron Separation and International Patent Publication No. WO 02/094410 A1 (November 28, **2002**).
- 72. D.X. Wang, **A. Malik,** for Separation of Polar Organic Compounds by Sol-*Chromatogr.* **2002**, 20 (3), 279-282.
- 71. S. Bigham, J. Medlar, A. Kabir, C. Shende, A. Alli, **A. Malik,** -gel Capillary Microext *Anal. Chem.* **2002**, 74 (4), 752-761.
- 70. **A. Malik** -efficiency Sol-gel Gas Chromatography **International Patent Publication No**. WO 02/072225 A1 (September 19, **2002**).

- 69. **A. Malik**, Sample Preconcentration Tubes with Sol-Gel Surface Coatings and Monolithic Beds, **US Patent Publication** No. US 2002/0150923 A1, October 17, **2002**.
- 68. **A. Malik**, J.D. Hayes, "Sol-Gel Open Tubular ODS Columns," **International Patent Publication** No. WO 02/059591 A1 (August 1, **2002**).
- 67. J.D. Hayes, A. Malik -Gel Open Tubular ODS Columns with Reversed

Abdul Malik, Ph.D.

- polysiloxane stationary phases and their influence on chiral selectivity and resolution in capillary gas chromatography," *J. Microcol. Sep.* **7**, 91-105 (**1995**).
- 43. Y. Shen, A. Malik, W. Li, and **M.L. Lee**, "Packed capillary column supercritical fluid chromatography using SE-54 polymer encapsulated silica," *J. Chromatogr. A* **707** (2), 303-310 (**1995**).
- 42. W. Li, A. Malik, **M.L. Lee**, B.A. Jones, N.L. Porter, and B.E. Richter, "Group-type separation of diesel fuels using packed capillary column supercritical fluid chromatography," *Anal. Chem.* **67** (3), 647-654 (**1995**).
- 41. Y. Shen, W. Li, A. Malik, S.L. Reese, B.E. Rossiter, and **M.L. Lee**, -substituted polymethylsiloxane encapsulated particles for

- 33. W. Li, A. Malik, and **M.L. Lee**, "Fused silica packed capillary columns in supercritical fluid chromatography," *J. Microcol. Sep.* **6** (6), 557-563 (**1994**).
- 32. P.Z. Liu, A. Malik, and **M.L. Lee**, "Polyacrylamide-modified polypropylene hollow fibers for capillary electrophoresis," *J. Microcol. Sep.* **6** (6), 581-589 (**1994**).
- 31. G. Yi, J.S. Bradshaw, B.E. Rossiter, A. Malik, W. Li, H. Yun, and **M.L. Lee**, "Large-rim-tethered permethyl-substituted -cyclodextrin polysiloxanes for use as chiral stationary phases in open tubular column chromatography", *J. Chromatogr.* **A**, **673** (2), 219-230 (**1994**).
- 30. Z. Zhao, A. Malik, **M.L. Lee**, and G.D. Watt, "A Capillary electrophoresis method for studying *apo*, *holo*, recombinant, and subunit-dissociated ferritins", *Anal. Biochem.* **218** (1), 47-54 (**1994**).
- 29. X. Shao, K. O'Neill, Z. Zhao, S. Anderson, A. Malik, and **M.L. Lee**, "Analysis of nucleotide pools in human lymphoma cells by capillary electrophoresis," *J. Chromatogr.* A **680** (2), 463-468 (**1994**).
- 28. K. O'Neill, X. Shao, Z. Zhao, A. Malik, and **M.L. Lee**, "Capillary electrophoresis of nucleotides on Ucon-coated fused silica columns", *Anal. Biochem.* **222** (1), 185-189 (**1994**).
- 27. A. Malik, Z. Zhao, and **M.L. Lee**, "Simple method for the preparation of highly efficient polymer-coated capillary electrophoresis columns," *J. Microcol. Sep.* **5**, 119-125 (**1993**).
- 26. B.E. Rossiter, J.S. Bradshaw, S.L. Reese, A. Malik, and **M.L. Lee**, "Polysiloxanes containing pendant cyano-substituted biphenyls as stationary phases for chromatographic columns," **US Patent** No. **US5262052** (Nov. 16, **1993**).
- 25. Z. Zhao, A. Malik, and **M.L. Lee**, "Study of Adsorption on Polymer-coated Fused Silica Capillary Electrophoresis Columns Using Selected Peptide and Protein Standards," *Anal. Chem.* **65** (16), 2747-2752 (**1993**).
- 24. G.-L. Yi, J.S. Bradshaw, B.E. Rossiter, A. Malik, W. Li, and **M.L. Lee**, "New Permethyl- -Cyclodextrin Polysiloxanes for Use as Chiral Stationary Phases in Open Tubular Column Chromatography," *J. Org. Chem.* **58**, 4844-4850 (**1993**).
- 23. P.Z. Liu, A. Malik, M.C.J. Kuchar, W.P. Vorkink, and **M.L. Lee**, "Polymeric Hollow Fibers for Capillary Electrophoresis," *J. Microcol. Sep.* **5** (3), 245-253 (**1993**).
- 22. A. Malik, W. Li, and **M.L. Lee**, "Preparation of long packed capillary columns using carbon dioxide slurries," *J. Microcol. Sep.* **5**, 361-369 (**1993**).

11. A. Malik, **V.G. Berezkin**, V.S. Gavrichev, "Investigation of capillary micro-packed columns composed of two segme

01. **T.P. Popova, V.E.** Shiryaeva, A. Malik, "Gazovaya khromatografiya na modifitsirovannykh steklyannykh kolonkakh (Gas chromatography on modified glass capillary columns)," In *Vysoko-effektivnaya Gazovaya High Resolution Chromatography*), T.N. Tyurina Ed. (Nauka Publishers, USSR Academy of Sciences, Moscow, **1982**), pp. 37-58 (in Russian).

Presentations: (Lead Author: **Bolded**; Presenting Author: <u>Underlined</u>)

176. **A. Malik**, C. Jiang, S. Kesani, E. Seyyal, M.-P. Tran, A. Alhendal, New Generation of Exceptionally Stable Surface-bonded Sol-gel Sorbent Media for

Technologies (ExTech 2016) and 22nd International Symposium on Separation Science (ISSS 2016), Torun, **Poland**, July 3-6, **2016**.

Symposium on Capillary Chromatography, Palm Springs, CA, **USA**, May 12-16, **2013**.

162. A. Malik, C. Jiang, M. McLean, A. Alhendal, M. Tran, S. Kesani, E. Seyyal, Y.
- and Tungsten oxide-based Sol-gel Organic-inorganic
Hybrid Materials in Gas and LiquidLecture, 36th International Symposium on Capillary Chromatography, Riva del

146. A. Malik, S.S. Segro, E.B. Turner, M. Tran, A. Alhendal, C.Germania Coatings Invited
Plenary Lecture, 11th International Symposium on the Development in

137. A. Malik, A. Shearrow, S. Kulkarni, L. Fa -Gel Immobilized Polyglycol Sorbents for Capillary Microextraction of Polar Trace Invited Lecture, 10th International Symposium

Meeting and Exposition of the American Chemical Society (**FAME 2006**), Orlando, Florida, **USA**, May

- 121. A. Malik -Gel Approach to Column Technology for Analytical Separations Invited Lecture at Restek Corporation, PA, USA, October 1, 2004.
- 120. A. Malik, K. Alhooshani, T.-

-gel

113. W. Li, K. Alhooshani, T.-Y. Kim, C. Shende, A. Kabir, A. Malik Invited Lecture

- 104. A. Malik, Sol-Gel Monolithic Columns with *in situ* Created Wallbonded Organic-Inorganic Hybrid Separation Beds for Capillary

 Plenary Lecture, 23rd International Symposium on Capillary Chromatography, Riva del Garda, Italy (June 5-10, 2000).
- 103. A. Malik, J.D. Hayes, D.-X. Wang Developments in Sol-Graduiertenkolleg, Invited Lecture for University of Tubingen, Germany, June 13, 2000.
- 102. A. Malik, J.D. Hayes, D.-X. Wang, -bonded Organic-inorganic Sol-gel Coatings and Monolithic Separation Beds: Their in situ Creation, Invited Lecture, 32nd
 Central Regional Meeting of the American Chemical Society: The Ohio Valley Chromatography Symposium, Covington, Kentucky, USA, May 16-19, 2000, Abstract # 154, p.114.
- 101. A. Malik, S. Bigham, J. Medlar, C. Ashford,

Abdul Malik, Ph.D.

- 85. S.L. Chong, D. Wang, J.D. Hayes, <u>A. Malik</u>, -Gel Coating Technology in Analytical Separations and Sample Preparations, <u>Lecture</u>, <u>Department of Chemistry</u>, <u>University of Miami</u>, Miami, Florida, <u>USA</u>, December 12, 1997.
- 84. J.D. Hayes, J.W. Cramer, A. Malik
 Supercritically Dried SolInvited Lecture, 1997 Eastern
 Analytical Symposium, Somerset, NJ, USA, November 17-21, 1997, Abstract #146, p.76.
- 83. Wang, D.-X.; S.-L. Chong, J.D. Hayes, <u>A. Malik</u>, "New Developments in the Invited Lecture,
 Department of Chemistry, University of Washington, Seattle, Washington, USA. October 13. 1997.
- 82. <u>A. Malik,</u> J.D. Hayes, D. Wang, S.L. Chong, G.S. Corbett, Jeff W. Cramer, "Advanced Sol-gel Column Technology for Condensed-phase Microseparations," Invited Lecture, 19th International Symposium on Capillary Chromatography and Electrophoresis, Wintergreen, VA, USA, May 18-22, 1997, pp. 54-55.
- 81. J. D. Hayes, <u>A. Malik</u>, "Sol-gel Chemistry Based Universal Approach to Column Technology for Electromigration Separation Techniques," Invited Lecture, First Asia-pacific International Symposium on Capillary Electrophoresis and Other Nano- and Micro-scale Analytical Techniques," Singapore, December 17-20, 1996, Abstract p. 56.
- 80. J. D. Hayes, D.-X. Wang, S.-L. Chong, <u>A. Malik</u> for Analytical Invited Lecture, Department of Chemistry, Valdosta State University, Valdosta, GA, USA, November 4, 1996.
- 79. A. Malik, W. Li, <u>M.L. Lee</u>, "Application of Low-aspect Ratio Packed Capillary Columns in Supercritical Fluid Chromatography," **Invited Lecture**, **16th International Symposium**

- 76. A. Malik, A. Kabir, W. Li, T.Hybrid Materials for Selective Enhancement and Ultra-Trace Analysis of Organic
 Oral presentation at the 56th Pittsburgh
 conference (Pittcon 2005), Orlando, Florida, USA, February 26- March 4, 2005.
- 75. J. D. Hayes, <u>A. Malik</u> -gel Column Technology for High Resolution Electromigration Microseparations Using *in situ* Generated Supercritical Fluids Eleventh International Symposium on High Performance Capillary Electrophoresis and Related Microscale Techniques, Orlando, Florida, USA, February 1-5, 1998; Abstracts, pp. 83-84.
- 74. A. Malik, S.- -gel Fibers Technology for Solid-phase Microextraction: State of the Art and International Conference on Sample Preparation, Orlando, Florida, USA, January 14-17, 1998; Abstract S-004.
- 73. S.-L. Chong, D.-X. Wang, J.D. Hayes, <u>A. Malik</u> -gel Coating Technology for Analytical separations and solventless sa , University of South Florida, Tampa, Florida, **USA**, October 2-4, **1997**.
- 72. J.D. Hayes, <u>A. Malik</u>, "Monolithic Column Technology for High Performance Capillary Electrochromatography *via* Non-shrinking Gels and Supercritical Drying," **9th International Symposium** on High Performance Capillary Electrophoresis and Related Microscale Techniques," Anaheim, CA, **USA**, January 26-30, **1997**, Abstract pp. 80-81.
- 71. <u>A. Malik</u>, G.S. Corbett, "Recent Developments in Column Technology for Condensed Phase Microseparations." Florida, Tampa, Florida,

- 67. <u>A. Malik</u>, Z. Zhao, and M.L. Lee, "Polymer Coating Column Technology for High Performance Capillary The 44th Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy, Atlanta, GA, USA, March 8-12, 1993, Abstract #855.
- 66. A. Malik, S.L. Reese, B.A. Johnson, Y. Zhang, B. Haydock, B.E. Rossiter, J. Curtis, J.S. Bradshaw, and M.L. Lee, "New Cyanobiphenyl Stationary Phases for GC and SFC", **The 44th Pittsburgh Conference** on Analytical Chemistry and Applied Spectroscopy, Atlanta, GA, **USA**, March 8-12, **1993**.
- 65. **J.D. Hayes**, -high Efficiency Capillary Electrochromatography on Sol-Sections American Chemical Society, Orlando, FL, **USA**, May 2-3, **1997**, Abstract #76, p. 44.
- Z. Chen, G. Yi, J.S. Bradshaw, B.E. Rossiter, A. Malik, H. Yun, D.R. Black, S.S. Zimmerman, M.L. Lee, W. Tong, -cyclodextrin-hexasiloxane Copolymers Prepared from 6^a 6^b--cyclodextrin Derivatives: Formation of -cyclodextrin-containing Rotoxane Monomers and Copolymers, 209th American Chemical Society National Meeting, Anaheim, CA, USA, April 2-6, 1995, Abstract #: Orgn 324.
- W. Li, A. Malik, **M.L. Lee**, "Application of Packed Capillary Columns in supercritical Fluid Chromatography," **5th International Symposium** on Supercritical Fluid Chromatography and Extraction, Baltimore, **USA**, Jan. 10-14, **1994** Abstracts, P. 4.
- P. Petersson, S.L. Reese, G. Yi, H. Yun, A. Malik, J.S. Bradshaw, B.E. Rossiter, A. Malik, M.L. Lee, K.E. Markides, "Evaluation of 'Beta'-cyclodextrin Based Chiral Stationary Phases for Capillary Column Supercritical Fluid Chromatography," Proceedings of The 16th International Symposium on Capillary Chromatography, Riva del Garda, Italy, September 27-30, 1994 (P. Sandra Ed., Huthig, 1994, pp. 798-803).
- 61. **J.S. Bradshaw**, M.L. Lee, A. Malik, G.-L. Yi, W.-B. Li, K.E. Markides, "Rational Synthesis of High Performance Substituted Polysiloxane Stationary Phases for Capillary Chromatography," Proceedings of the **16th International Symposium** on Capillary Chromatography, Riva del Garda, **Italy**, September 27-30, **1994** (P. Sandra Ed., Huthig, **1994**, pp. 288-299).
- 60. S.L. Reese, B.A. Johnson, A. Malik, J.S. Bradshaw, M.L. Lee, B.E. Rossiter, "Synthesis and Evaluation of Substituted Biphenylpolysiloxanes as Stationary Phases for Gas Chromatography," 207th American Chemical Society National Meeting, San Diego, CA, USA, March 13-17, 1994. Abstracts of Papers, Part 2, Abstract # Orgn 413.

- M.L. Lee, G. Yi, A. Malik, H. Yun, J.S. Bradshaw, S.S. Zimmerman, B.E. Rossiter, P. Petersson, K.E. Markides, "Structural Characteristics and Performance of New Immobilized Cyclodextrin Stationary Phases in Capillary Column Gas Chromatography," 45th Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy, Chicago, II, USA, February 27- March 4, 1994, Abstract #578.
- 58. **M.L. Lee**, W. Li, Y. Shen, A. Malik, "Capillary Columns, Both Packed and Open Tubular, in Supercritical Fluid Chromatography," **45th Pittsburgh Conference** on Analytical Chemistry and Applied Spectroscopy, Chicago, II, **USA**, February 27- March 4, 1994, Abstract #1009c.
- 57. G.-L. Yi, **J.S. Bradshaw**, P. Huszthy, C.-Y. Zhu, B.E. Rossiter, A. Malik, M.L. Lee, R.M. Izatt, K.E. Markides, P. Petersson, "Enantiomer Recognition by Chiral Host Molecules Including Oligosiloxane Co-polymers or Chiral Hosts Attached to Polysiloxane or Silica Gel" **International Symposium on Chiral Recognition**, Tokyo, **Japan**, April, **1993**.
- Z. Zhao, A. Malik, M.L. Lee, "Monitoring Adsorption in Open Tubular Columns for Capillary Electrophoresis with Proteins and Peptide Standards", 44th Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy, Atlanta, GA, USA, March 8-12, 1993, Abstract #856
- 55. M. Huang, Z. Zhao, Z. Liu, A. Malik, M.L. Lee, "Inert Surface Coatings for Capillary Zone Electrophoresis," 205th American Chemical Society National Meeting (Division of Analytical Chemistry), Denver, CO,

Poster Presentations

51.

- 42. T.-Y. Kim
 Gel Titania Coatings for Sample Extraction and Preconcentration for Gas- and LiquidInternational Symposium on Advances in Extraction Technologies (ExTech 2003), St. Pete Beach, Florida, USA, March 5-7, 2003.
- 41. <u>K. Alhooshani</u>, and **A. Malik**, Sol-Gel Zirconia-based Hybrid Organic-Inorganic Stationary Phase For Capillary Microextraction and Chromatographic Analysis, Fifth **International Symposium** on Advances in Extraction Technologies (ExTech 2003), St. Pete Beach, Florida, **USA**, March 5-7, **2003**.
- 40. <u>A. Kabir</u>, C. Hamlet, C. Tolar and **A. Malik**, -Gel Polytetrahydrofuran Coatings for Trace Analysis of Polar and Non-polar Analytes from Aqueous

International Symposium on Advances in Extraction Technologies (ExTech 2003), St. Pete Beach, Florida, **USA**, March 5-7, **2003**.

- 39. <u>J. Medlar</u>, A. Kabir and **A. Malik**Microextraction with a SolInternational Symposium on Advances in Extraction Technologies (ExTech 2003), St. Pete Beach, Florida, USA, March 5-7, 2003.
- 38. D.-X. Wang, W. H. Chang, <u>A. Malik</u>, Highly Acidic, Basic, and Polar Analytes, on Open Tubular Sol-gel Columns, Twenty-first International Symposium on Capillary Chromatography and Electrophoresis, Park City, UT, USA, June 20-24, 1999, Abstracts p.126.
- 37. S.-L. Chong, F. Brignol, <u>A. Malik</u> -phase Microextraction *via*

- 33. <u>D.X. Wang</u>, **Abdul Malik**, "Sol-gel Technology for Coating and Deactivation of GC Columns with High Thermal Stability," Proceedings, **19th International Symposium** on Capillary Chromatography and Electrophoresis, Wintergreen, VA, **USA**, May 18-22, **1997**, pp. 268-269.
- 32. <u>S.L. Chong</u>, D. Wang, J.D. Hayes, and **A. Malik** -gel Chemistry-based Poly (Dimethylsiloxane) Coated Fiber for Solid-Meeting of the **Florida Sections American Chemical Society**, Orlando, FL, **USA**, May 2-3, **1997**. Abstract # P7, p. 57.
- 31. <u>J.W. Cramer</u>, **A. Malik** sed Sol-gel Column **Florida**

- 07. <u>A. Malik</u>, **K. Jinno**, "Microcolumn Liquid Chromatography of Polycyclic Aromatic Hydrocarbons and Some Isomeric Compounds on Cyclodextrin Stationary Phases", Proceedings of the **12th International Symposium** on Capillary Chromatography, Kobe, **Japan**, September 12-16, **1990**, pp. 778-791.
- 06. V.S. Gavrichev, A.R. Jumaev, A. Malik, Yu. M. Borisov, I.A. Lvov, Yu. M. Lyubitov, V.I. Mikhailov, V.D. Sokovikh, V.N. Khokhlov, V.G. Berezkin, capillary micro-packed columns in gas chromatography-mass spectrometry, Danube Symposium on Chromatography (Yalta, USSR, November 11-16, 1985), Abstracts, pp. 258-259.
- O5. A. Malik, V.S. Gavrichev, <u>V.G. Berezkin</u>Symposium (Budapest, Hungary, June 11-14, 1985).
- 04. <u>V.G. Berezkin</u>, A. Malik micro-packed colum Budapest Chromatography Symposium (Budapest, Hungary, June 11-14, 1985).
- 03. A. Malik, V.G. Berezkin, V.S. Gavrichev

 Fifth AllSoviet Conference on Analytical Chemistry (Moscow, USSR, December 11-14, 1984), Abstracts, p. 166.
- 02. <u>A. Malik, V.G. Berezkin</u> -packed columns in 15th International Symposium on Chromatography, Nurnberg, Germany, October 1-5, 1984, p. 68.
- 01. <u>A. Malik, V.G. Berezkin</u>

 4th Danube Symposium on Chromatography and 7th

 International Symposium Advances and Applications of Chromatography in Industry, Bratislava, Czechoslovakia, August 29- September 2, 1983, Abstracts, Vol. I, p. A34.

TEACHING ACCOMPLISHMENTS

Recognized for excellence in teaching and mentorship at the doctoral level as major professor of Scott S. Segro, winner of USF outstanding dissertation Award, **2010**.

Served as the **Major Professor for sixteen Ph.D. students** (including eleven who have already received their doctoral degrees and eight others who are currently working in the lab), **Ten M.S. /M.A. students**, and **five** undergraduate Honors students.

- (d) Undergraduate Council
- (e) Instrument Committee
- (f) Liaison Committee
- (g) Graduate recruitment committee
- (h) Search Committee

Service to My Profession:

Member, Editorial Advisory Board for Journal Sample Preparation, 2012-

Since 2004 I have been serving on the **scientific review panel for NIH** (Chemistry and Biophysics SBIR/STTR panel, Study section ZRG1BCMBL10). Also, serve as a grant proposal reviewer for NSF, and DOE.

Charter member, National Academy of Inventors, 2010.

Co-chair Emerging Materials in Separation Science at Pittsburgh Conference, Orlando, Florida, February 28 March 5, **2010**.

General Chair for 5th International Symposium of the Advances in Extraction Technology (ExTech) organized here in Tampa Bay Area (2003).

Editorial Advisory Board Member of an International Journal *Journal of Microcolumn Separations* (2001).

External examiner/official opponent for Ph.D. dissertations carried out in Australia, Canada, Singapore, Sweden, and USA.

Referee for eleven leading international journals on analytical chemistry and chromatographic separations.

Member, Scientific Committee for the International Symposium on Extraction Technologies (ExTech).

Member of the international panel of judges for Leslie S. Ettre Award in Chromatography, since 2008.

Service to My Community:

Served on the Advisory Board of Tampa Palm Elementary school, Tampa, FL

Served as a judge for Science Fair at Clerk Elementary School, Tampa, FL

Served as a juror at Hillsborough County Circuit Court on two different occasions (July 23, 2007; February 16 and 17, 2009).