# **BIOGRAPHICAL SKETCH**

## Abdul MALIK, Ph.D.

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(b)

The Wiley Handbook of

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- (c) Popular Analytical Chemistry Textbook by Daniel C. Harris, (Ref. Quantitative Chemical Analysis, 6<sup>th</sup> edition, Freeman, New York, USA, 2003);
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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.

- 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**).
- 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**.

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- 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-

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- 120. A. Malik, K. Alhooshani, T.-

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113. W. Li, K. Alhooshani, T.-Y. Kim, C. Shende, A. Kabir, <u>A. Malik</u> -Gel Invited Lecture

- 104. <u>A. Malik</u>, 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).
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- 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. <u>T.-Y. Kim</u> -Inorganic Sol-Gel Titania Coatings for Sample Extraction and Preconcentration for Gas- and Liquid- **International 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**.

- J. Medlar, A. Kabir and A. Malik Microextraction with a Sol-International Symposium on Advances in Extraction Technologies (ExTech 2003), St. Pete Beach, Florida, USA, March 5-7, 2003.
- 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> Microextraction *via*

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- D.X. Wang, 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.
- S.L. Chong, 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. J.W. Cramer, A. Malik

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- 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.
- <u>V.S. Gavrichev</u>, 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.
- 05. A. Malik, V.S. Gavrichev, V.G. Berezkin

Symposium (Budapest, Hungary, June 11-14, 1985).

- 04. <u>V.G. Berezkin</u>, A. Malik micro-packed colum Symposium (Budapest, Hungary, June 11-14, **1985**).
- 03. A. Malik, V.G. Berezkin, V.S. Gavrichev

**Soviet Conference** on Analytical Chemistry (Moscow, **USSR**, December 11-14, **1984**), Abstracts, p. 166.

- 02. <u>A. Malik</u>, **V.G. Berezkin** -packed columns in **15<sup>th</sup> International Symposium** on Chromatography, Nurnberg, **Germany**, October 1-5, **1984**, p. 68.
- 01. <u>A. Malik</u>, V.G. Berezkin

4<sup>th</sup> Danube Symposium on Chromatography and 7<sup>th</sup> 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 5<sup>th</sup> 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).