# Literature references for Cogent TYPE-C HPLC columns – Tech Information

The following is a list of Articles published in peer-reviewed Journals and books that discuss Cogent TYPE-C™ Silica based HPLC Columns and their Applications:

| Authors | Title | Publication | Date | Volume | Pages |
|---|---|---|---|---|---|
| Appia-Kusi, Volda and Lurie, Ira S., | Utility of 'Flip-Flop' Chromatography Employing Silica Hydride Stationary Phases with Simultaneous Photodiode Array Ultraviolet and Single Quadrupole Mass Detection for the Analysis of Seized Drugs | Journal of Chromatography | September 2023 | 1707 | |
| Jason G. Dumelie, Qiuying Chen, Dawson Miller, Nabeel Attarwala, Steven S. Gross & Samie R. Jaffrey | Biomolecular condensates create phospholipid-enriched microenvironments | Nature chemical biology | 2023 | | |
| Joseph J. Pesek, Maria T. Matyska, Tanya Hiltz, Gary Takeoka | Validation of an Aqueous Normal Phase Chromatography Method for the Analysis of Ergothioneine in Commercial Mushrooms | LCGC North America | 2023 | 41 | 341–344, 349 |
| Joseph J. Pesek, Maria T. Matyska, Tanya Hiltz, Jennifer McCall | Application of a Cholesterol-Based Stationary Phase for the Analysis of Brevetoxins | Journal of Separation Science | 2022 | 46 | 2200666 |
| Bugajev Viktor, Halova Ivana, Demkova Livia, Cernohouzova Sara, Vavrova Petra, Mrkacek Michal, Utekal | ORMDL2 Deficiency Potentiates the ORMDL3-Dependent Changes in Mast Cell Signaling | Frontiers in Immunology | 2021 | 11 | 591975 |
| Pesek JJ, Matyska MT, Tardiff E, Hiltz T. | Chromatographic characterization of a silica hydride-based amide stationary phase. | Journal of Separation Science | 2021 | 14 | 2728-2734 |
| Pesek JJ, Matyska MT. | Silica Hydride: A Separation Material Every Analyst Should Know About. | Molecules | 2021 | 26 | 7505 |
| Marisa C. May, David C. Pavone, Dr. Ira S. Lurie | The separation and identification of synthetic cathinones by portable low micro-flow liquid chromatography with dual capillary columns in series and dual wavelength ultraviolet detection | Journal of Separation Science | 2020 | 43 | 1-9 |



**MicroSolv Technology Corporation**
9158 Industrial Blvd. NE, Leland, NC 28451
tel. (732) 380-8900, fax (910) 769-9435
Email: customers@mtc-usa.com
Website: www.mtc-usa.com

| | | | | | |
|---|---|---|---|---|---|
| Carly Ploumen, Ioan Marginean, Ira S. Lurie | The utility of silica hydride-based stationary phases for dual-mode ultra high performance liquid chromatography separation of synthetic cathinone positional isomers | Journal of Separation Science | 2020 | 43 | 1–9 |
| P. Jandera, T. Hájek | Mobile phase effects on the retention on polar columns with special attention to the dual hydrophilic interaction–reversed-phase liquid chromatography mechanism, a review | Journal of Separation Science | 2018 | 41 | 145-162 |
| E. Bartó, A. Felinger, P. Jandera | Investigation of the temperature dependence of water adsorption on silica-based stationary phases in hydrophilic interaction liquid chromatography | Journal of Chromatography A | 2017 | 1489 | 143–148 |
| J.J. Pesek, M.T. Matyska | Silica Hydride-Based Packing Materials: HPLC Stationary Phases for a Global Approach to Complex Sample Analysis | Current Chromatography | 2017 | 4 | 1-10 |
| D.K. Appulage, K.A. Schug | Silica hydride based phases for small molecule separations using automated liquid chromatography–mass spectrometry method development | Journal of Chromatography A | 2017 | 1507 | 115-123 |
| J.E. Young, Z. Pan, H. Ean, V. Menon, B. Modereger, J.J. Pesek, M.T. Matyska, G. Takeoka | Phenolic Composition of Pomegranate Peel Extracts using an LC-MS Approach with Silica Hydride Columns | J. Sep. Sci. | 2017 | 40 | 1449-1456 |
| J.E. Young, J.J. Pesek, M.T. Matyska, B. Sanchez, B. White | Quantitative Analysis of Uric Acid Metabolites in Urine by High Performance Liquid Chromatography – Mass Spectrometry using Silica Hydride Columns | Current Chromatography | 2017 | 4 | 51-57 |
| R. Naffa, G. Holmes, M. Ahn, D. Harding, G. Norris | Liquid chromatography-electrospray ionization mass spectrometryfor the simultaneous quantitation of collagen and elastin crosslinks | Journal of Chromatography A | 2016 | 1478 | 60-67 |
| J.E. Young, T. Nguyen, C. Ly, S. Jarman, D. Diep, C. Pham, J.J. Pesek, M.T. Matyska, G.R. Takeoka | LC–MS Characterization of Mesquite Flour Constituents | LC-GC North America Special Issues | 2016 | 10 | 28-31 |


**MicroSolv Technology Corporation**
9158 Industrial Blvd. NE, Leland, NC 28451
tel. (732) 380-8900, fax (910) 769-9435
Email: customers@mtc-usa.com
Website: www.mtc-usa.com

| | | | | | |
|---|---|---|---|---|---|
| J.C. Evans, C. Trujillo, Z. Wang, H. Eoh, S. Ehrt, D. Schnappinger, H.I.M. Boshoff, K.Y. Rhee, C.E. Barry III, V. Mizrahi | Validation of CoaBC as a bactericidal target in the coenzyme A pathway of Mycobacterium tuberculosis | ACS Infectious Diseases | 2016 | 2 | 958–968 |
| H. Grajek, Z. Witkiewicz, M. Purchała, W. Drzewiński | Liquid Crystals as Stationary Phases in Chromatography | Chromatographia | 2016 | | 1-29 |
| Y. Kannan1, J. Perez-Lloret, Y. Li1, L.J. Entwistle, H. Khoury, S. Papoutsopoulou, R. Mahmood, N.R. Mansour, S.C. Huang, E.J. Pearce, L.P.S. de Carvalho, S.C. Ley, M.S. Wilson | TPL-2 Regulates Macrophage Lipid Metabolism and M2 Differentiation to Control TH2-Mediated Immunopathology | PLOS Pathogens | 2016 | 12(8) | 1-26 |
| E. Cífková, R. Hájek, M. Lísa, M. Holčapek | HILIC/ESI-MS Separation of acidic and other lipid classes using hydride column | HPLC 2016 poster | 2016 | N/A | N/A |
| C. Kulsing, Y. Yang, R. Sepehrifar, M. Lim, J. Toppete, M.T. Matyska, J.J. Pesek, R.I. Boysen, M.T.W. Hearn | Investigations into the separation behaviour of perfluorinated C8 and Undecanoic acid modified silica hydride stationary phases | Analytica Chimica Acta | 2016 | 916 | 102-111 |
| J.E. Young | Advances in chromatographic analysis of foods and beverages: modern stationary phases for challenging compounds | Agro Food Industry Hi Tech | 2016 | 27 | 14-17 |
| J.J. Pesek, M.T. Matyska, M. Sieng, L. Doan | Analysis of Capsaicinoids in Hot Sauces Using a Silica Hydride-Based Stationary Phase | Current Chromatography | 2016 | 3 | 12-16 |
| J.E. Young, J.J. Pesek, M.T. Matyska | Robust HPLC-Refractive Index Analysis of Simple Sugars in Beverages using Silica Hydride Columns | Current Nutrition & Food Science | 2016 | 12 | 125-131 |



**MicroSolv Technology Corporation**

9158 Industrial Blvd. NE, Leland, NC 28451

tel. (732) 380-8900, fax (910) 769-9435

Email: customers@mtc-usa.com

Website: www.mtc-usa.com

MICROSOLV

| | | | | | |
|---|---|---|---|---|---|
| J.J. Pesek, M.T. Matyksa, B. Modereger, A. Hasbun, V.T. Phan, Z. Mehr, M. Guzman, S. Watanable | The separation and analysis of symmetric and asymmetric dimethylarginine and other hydrophilic isobaric compounds using Aqueous Normal Phase Chromatography | J. Chromatogr. A. | 2016 | 1441 | 52-59 |
| J.E. Young, M.V. Lim, J. Topete, H. Hang, M. Gahol, J.J. Pesek, M.T. Matyska | Improved Sensitivity and **Specificity** for trans-Resveratrol in Red Wine Analysis with HPLC-UV and LC-MS | LC GC N. Am. | 2016 | 34 | 206-213 |
| E. Cífková, R. Hájek, M. Lísa, M. Holčapek | Hydrophilic interaction liquid chromatography–mass spectrometry of (lyso)phosphatidic acids, (yso)phosphatidylserines and other lipid classes | J. Chromatogr. A. | 2016 | 1439 | 65-73 |
| J. Pesek, M. Matyska, A. Jimena, J. Juan, A. Jo, B. Berioso | Analysis of glucosamine using **aqueous normal phase** chromatography | Food Sci. Technol. | 2016 | 65 | 777-782 |
| J.J. Kamphorst, M. Nofal, C. Commisso, S.R. Hackett,W. Lu, E. Grabocka, M.G.Vander Heiden, G. Miller, J.A. Drebin, D. Bar-Sagi, C.B. Thompson, J.D. Rabinowitz | Human Pancreatic Cancer Tumors Are Nutrient Poor and Tumor Cells Actively Scavenge Extracellular Protein | Cancer Research | 2015 | 75 | 544-553 |
| Y. Dai, S.M. Fischer | Metabolomics Batch Data Analysis Workflow to Characterize Differential Metabolites in Bacteria | Agilent Application Note | 2015 | N/A | 1-8 |
| E.M. Borges | Silica, Hybrid Silica, Hydride Silica and Non-Silica Stationary Phases for Liquid Chromatography | J. Chromatogr. Sci. | 2015 | 53 | 580-597 |
| A. Dang, M. Sieng, J.J. Pesek, M.T. Matyska | Determination of Bisphenol A in Receipts and Carbon Paper by HPLC-UV | J. Liq. Chromatogr. & Rel Technol. | 2015 | 38 | 438-442 |
| J.J. Pesek, M.T. Matyska, M. Sieng, L. Doan | Analysis of Capsaicinoids in Hot Sauces using a Silica Hydride-based Stationary Phase | Curr. Chromatogr. | 2015 | 3 | |



**MicroSolv Technology Corporation**

9158 Industrial Blvd. NE, Leland, NC 28451

tel. (732) 380-8900, fax (910) 769-9435

Email: customers@mtc-usa.com

Website: www.mtc-usa.com

| | | | | | |
|---|---|---|---|---|---|
| Y. Nolvachai, C. Kulsing, R.I. Boysen, M.T. Matyska, J.J. Pesek, P.J. Marriott, M.T.W. Hearn | Comparison of the performance of different silica hydride particles for the solid-phase extraction of non-volatile analytes from dark chocolate with analysis by gas chromatography–quadrupole mass spectrometry | Food Chem. | 2015 | 174 | 434-439 |
| J. Pesek, M. Matyska, A. Dang | Analysis of ethyl glucuronide and ethyl sulfate using aqueous normal-phase chromatography with mass spectrometry | J. Sep. Sci. | 2015 | 38 | 1515-1520 |
| J. Pesek, M. Matyska, N. Salehi | Evaluation of Stationary Phases Made by Hydrosilation of Alkynes on Silica Hydride | Curr. Chromatogr. | 2015 | 2 | 41-47 |
| J. Pesek, M. Matyska | Ammonium fluoride as a mobile phase **additive** in **aqueous normal phase** chromatography | J. Chromatogr. A. | 2015 | 1401 | 69-74 |
| J.E. Young, M.T. Matyska, J.J. Pesek | LC-MS-Compatible Approaches for the Quantitation of Limonin in Citrus Juice | LCGC N. Am. | 2015 | 33 | 192-199 |
| S. Rocchi, A. Rocco, J.J. Pesek, M.T. Matyska, D. Capitani, S. Fanali | Enantiomers separation by nano-liquid chromatography: Use of a novel sub-2 µm vancomycin silica hydride stationary phase | J. Chromatogr. A. | 2015 | 1381 | 149-159 |
| C. Kulsing, Y. Nolvachai, P.J. Marriott, R.I. Boysen, M.T. Matyska, J.J. Pesek, M.T.W. Hearn | Insights into the Origin of the Separation Selectivity with Silica Hydride Adsorbents | J. Phys. Chem. B. | 2015 | 119 | 3063-3069 |
| C. Kulsing, Y. Yang, R.I. Boysen, M.T. Matyska, J.J. Pesek, M.T.W. Hearn | Role of electrostatic contributions in the separation of peptides with silica hydride stationary phases | Analytical Methods | 2015 | 7 | 1578-1585 |
| C. Kulsing, Y. Yang, R.I. Boysen, M.T. Matyska, J.J. Pesek, M.T.W. Hearn | Prediction of the zeta potentials and ionic descriptors of a silica hydride stationary phase with mobile phases of different pH and ionic strength | Anal. Chim. Acta | 2015 | 859 | 79-86 |



**MicroSolv Technology Corporation**

9158 Industrial Blvd. NE, Leland, NC 28451

tel. (732) 380-8900, fax (910) 769-9435

Email: customers@mtc-usa.com

Website: www.mtc-usa.com

| | | | | | |
|---|---|---|---|---|---|
| C. Kulsing, Y. Yang, C. Munera, C. Tse, M.T. Matyska, J.J. Pesek, R.I. Boysen, M.T.W. Hearn | Correlations between the zeta potentials of silica hydride-based stationary phases, **analyte** retention behaviour and their ionic interaction descriptors | Anal. Chim. Acta | 2014 | 817 | 48-60 |
| J.J. Pesek, R.I. Boysen, M.T.W. Hearn, M.T. Matyska | Hydride-based HPLC stationary phases: A rapidly evolving technology for the development of new bio-analytical methods | Analytical Methods | 2014 | 6 | 4496-4503 |
| S. Bocian, G. Rychlicki, M.T. Matyska, J.J. Pesek, B. Buszewski | Study of hydration process on silica hydride surfaces by micro-calorimetry and water adsorption | J. Colloid Interface Sci. | 2014 | 416 | 161-166 |
| E.Y. Santali, D. Edwards, O.B. Sutcliffe, S. Bailes, M.R. Euerby, D.G. Watson | A Comparison of Silica C and Silica Gel in HILIC Mode:<br><br>The Effect of Stationary Phase Surface Area | Chromatographia | 2014 | 77 | 873-881 |
| J.J. Pesek, M.T. Matyska, J.E.Young | Analysis of thiopurines using **aqueous normal phase** chromatography | J. Pharm. Biomed. Anal. | 2014 | 95 | 102-106 |
| J.E. Young, M.T. Matyska, J.J. Pesek | Why development of new HPLC column technology is still alive | Chimica Oggi. | 2014 | 32 | 8-12 |
| N. Byrd | Quick, Easy and Reliable Detection of Histamine in Food Using the Agilent 6490 Triple Quadrupole LC/MS with Jet Stream Technology | Agilent Application Note | 2013 | N/A | 1-4 |
| S. Jenkins, S.M. Fischer, T.R. Sana | Compound Identification, Profiling and Pathway Analysis of the Yeast Metabolome in Mass Profiler Professional | Agilent Application Note | 2013 | N/A | 1-10 |
| A. Marcobal, P.C Kashyap, T.A. Nelson, P.A. Aronov, M.S. Donia, A. Spormann, M.A. Fischbach, J.L. Sonnenburg | A metabolomic view of how the human gut microbiota impacts the host metabolome using humanized and gnotobiotic mice | ISME J. | 2013 | 7 | 1933-1943 |
| Tong Zhang and David G. Watson | High Performance Liquid Chromatographic Approaches to Mass Spectrometry Based Metabolomics | Current Metabolomics | 2013 | 1 | 3-33 |



**MicroSolv Technology Corporation**
9158 Industrial Blvd. NE, Leland, NC 28451
tel. (732) 380-8900, fax (910) 769-9435
Email: customers@mtc-usa.com
Website: www.mtc-usa.com

| | | | | | |
|---|---|---|---|---|---|
| Y. Yang, R.I. Boysen, C. Kulsing, M.T. Matyska, J.J. Pesek, M.T. W. Hearn | Analysis of polar peptides using a silica hydride column and high aqueous content mobile phases | J. Sep. Sci. | 2013 | 36 | 3019-3025 |
| J.J. Pesek, MT. Matyska, A.M. Kim | Evaluation of stationary phases based on silica hydride for the analysis of drugs of abuse | J. Sep. Sci. | 2013 | 36 | 2760-2766 |
| R. Le, J.E. Young, J.J. Pesek, M.T. Matyska | Separation of 1,3-dimethylamylamine and other polar compounds in a dietary supplement formulation using **aqueous normal phase** chromatography with MS | J. Sep. Sci. | 2013 | 36 | 2578-2583 |
| Y. Yang, M.T. Matyska, R.I. Boysen, J.J. Pesek, M.T. W. Hearn | Simultaneous separation of hydrophobic and polar bases using a silica hydride stationary phase | J. Sep. Sci. | 2013 | 36 | 1209-1216 |
| H. Yeman, T. Nicholson, M.T. Matyska, J.J. Pesek, K. Albert | Simulation of the chromatographic separation process in HPLC employing suspended-state NMR spectroscopy – Comparison of interaction behavior for monomeric and hydride-modified C18 stationary phases | J. Sep. Sci. | 2013 | 36 | 173-181 |
| A. Dang, J.J. Pesek, M.T. Matyska | The use of **aqueous normal phase** chromatography as an analytical tool for food analysis: Determination of histamine as a model system | Food Chem. | 2013 | 141 | 4226-4230 |
| J.E. Young, H.N. Nguyen, M.T. Matyska, J.J. Pesek, | LC-MS-Compatible separation of polar compounds using silica hydride columns | LCGC N. Am. | 2013 | 31 | 144-157 |
| J. E. Young, M.T. Matyska, A.K. Azad, S.E. Yoc, J.J. Pesek | Separation Differences Among Phenyl Hydride, Undecanoyl Cholesterol, and Bidentate C8 Stationary Phases for Stability Indicating Methods of Tetracyclines | J. Liq. Chromatogr. & Rel Technol. | 2013 | 36 | 926-942 |
| J.J. Pesek, M.T. Matyska, R.I. Boysen, Y. Yang, M.T.W. Hearn | Aqueous normal-phase chromatography using silica-hydride-based stationary phases | Trends Anal. Chem. | 2013 | 42 | 64-73 |
| S. Jenkins, S.M. Fischer, T.R. Sana | Mass Profiler Professional and Personal Compound Database and Library Software Facilitate Compound Identification for Profiling of the Yeast Metabolome | Agilent Application Note | 2012 | N/A | 1-12 |



**MicroSolv Technology Corporation**
9158 Industrial Blvd. NE, Leland, NC 28451
tel. (732) 380-8900, fax (910) 769-9435
Email: customers@mtc-usa.com
Website: www.mtc-usa.com

| | | | | | |
|---|---|---|---|---|---|
| J.J. Pesek, M.T. Matyska | A New Approach to Bioanalysis: **Aqueous Normal Phase** Chromatography with Silica Hydride Stationary Phases | Bioanalysis | 2012 | 4 | 845-853 |
| J.J. Pesek, M.T. Matyska, A. Dang | Analysis of cycloserine and related compounds using A**queous Normal Phase C**hromatography/Mass Spectrometry | J. Pharm. Biomed. Anal. | 2012 | 64 | 72-76 |
| R. MacNeill, R. Stromeyer, B. Urbanowicz, V. Acharya, M. Moussallie, J.J. Pesek | Silica hydride-based chromatography of LC–MS response-altering compounds native to human plasma | Bioanalysis | 2012 | 4 | 2877-2886 |
| H. Yeman, T. Nicholson, V. Friebolin, L. Steinhauser, M.T. Matyska, J.J. Pesek, K. Albert | Time-dependent column performance of cholesterol-based stationary phases for HPLC by LC characterization and solid-state NMR spectroscopy | J. Sep. Sci. | 2012 | 35 | 1582-1588 |
| S. Bocian, J. Soukup, M. Matyska, J. Pesek, P. Jandera, B. Buszewski | The influence of the organic modifier in hydro-organic mobile phase on separation selectivity of steroid hormones separation using cholesterol-bonded stationary phases | J. Chromatogr. A. | 2012 | 1245 | 90-97 |
| B. Buszewski, S. Bocian, G. Rychlicki, M. Matyska, J. Pesek | Determination of accessible silanols groups on silica gel surfaces using micro calorimetric measurements | J. Chromatogr. A. | 2012 | 1232 | 43-46 |
| A.D. Panopoulos, O. Yanes, S. Ruiz, Y. Kida, D. Diep, R. Tautenhahn, A. Herrerías, E.M. Batchelder, N. Plongthongkum, M. Lutz, W.T. Berggren, K. Zhang, R.M. Evans, G. Siuzdak, J.C.I. Belmonte | The metabolome of induced pluripotent stem cells reveals metabolic changes occurring in somatic cell reprogramming | Cell Res. | 2012 | 22 | 168-177 |
| D. Ryan, K. Robards, P.D. Prenzler, M. Kendall | Recent and potential developments in the analysis of urine: A review | Analytica Chimica Acta | 2011 | 684 | 17-29 |



**MicroSolv Technology Corporation**

9158 Industrial Blvd. NE, Leland, NC 28451

tel. (732) 380-8900, fax (910) 769-9435

Email: customers@mtc-usa.com

Website: www.mtc-usa.com

| | | | | | |
|---|---|---|---|---|---|
| J.E. Young, M.T. Matyska, J.J. Pesek | Liquid Chromatography/Mass Spectrometry Compatible Approaches for the Quantitation of Folic Acid in Fortified Juices and Cereals using **Aqueous Normal Phase** Conditions | J. Chromatogr. A | 2011 | 1218 | 2121-2126 |
| J.J. Pesek, M.T. Matyska, P. Lee | Synthesis of a Preparative C30 Stationary Phase on a Silica Hydride Surface and its Application to Carotenoid Separation | J. Liq. Chromatogr. & Rel Technol. | 2011 | 34 | 231-240 |
| J.J. Pesek and M.T. Matyska | **Aqueous Normal Phase** Chromatography. The Bridge between Reversed-Phase and HILIC | Hydrophilic Interaction Chromatography (HILIC) and Advanced Applications, P.G. Wang, W. He, eds. | 2011 | N/A | 26-Jan |
| S. Bocian, M. Matyska, J. Pesek, B. Buszewski | Study of solvation processes on cholesterol bonded phases | J. Chromatogr. A | 2011 | 1218 | 441-448 |
| R.I. Boysen, Y. Yang, J. Chowdhury, M.T. Matyska, J.J. Pesek, M.T.W. Hearn | Simultaneous separation of hydrophobic and hydrophilic peptides with a silica hydride stationary phase using **aqueous normal phase** conditions | J. Chromatogr. A | 2011 | 1218 | 8021-8026 |
| J.J. Pesek, M.T. Matyska, S.M. Fischer | Improvement of Peak Shape in **Aqueous Normal Phase** Analysis of Anionic Metabolites | J. Sep. Sci. | 2011 | 34 | 3509-3516 |
| J.J. Pesek, M.T. Matyska, M. Nshanian | Open-tubular capillary electro-chromatography of small polar molecules using etched, chemically modified capillaries | Electrophoresis | 2011 | 32 | 1728-1734 |
| J.E. Young, M.T. Matyska, J.J. Pesek | Liquid chromatography/mass spectrometry compatible approaches for the quantitation of folic acid in fortified juices and cereals using **aqueous normal phase** conditions | J. Chromatogg.A. | 2011 | 1218 | 2121-2126 |
| J.J. Pesek, M.T. Matyska, J. Duley, M. Zamzami, S.M. Fischer | **Aqueous Normal Phase** (ANP) Retention of Nucleotides on Silica Hydride-Based Columns. Method Development Strategies for Analytes Relevant in Clinical Analysis | J. Sep. Sci. | 2010 | 33 | 930-938 |
| J.J, Pesek, M.T. Matyska, K. Prajapati | Synthesis and Evaluation of Silica Hydride-Based Fluorinated Stationary Phases | J. Sep. Sci. | 2010 | 33 | 2908-2916 |



**MicroSolv Technology Corporation**

9158 Industrial Blvd. NE, Leland, NC 28451

tel. (732) 380-8900, fax (910) 769-9435

Email: customers@mtc-usa.com

Website: www.mtc-usa.com

| | | | | | |
|---|---|---|---|---|---|
| S. Bocian, M. Matyska, J. Pesek, B. Buszewski | Study of the Retention and Selectivity of Cholesterol Bonded Phases with Different Linkage Spacers | J. Sep. Sci. | 2010 | 1217 | 6891-6897 |
| J.J. Pesek, M.T. Matyska | Recent Developments in Type C Stationary Phases: Exploiting the Versatility of Silica Hydride Materials | Chromatography Today | 2010 | 3 | 24-26 |
| J.J. Pesek, M.T. Matyska | Silica Hydride: Chemistry and Applications | Advances in Chromatography, Grushka, E., Grinberg, N., eds | 2010 | N/A | 255-288 |
| J.J. Pesek, M.T. Matyska, J. Duley, M. Zamzami, S.M. Fischer | **Aqueous normal phase** (ANP) retention of nucleotides on silica hydride-based columns. Method development strategies for analytes relevant in clinical analysis | J. Sep. Sci. | 2010 | 33 | 930-938 |
| D.L. Callahan, D. De Souza, A. Bacic, U. Roessner | Profiling of polar metabolites in biological extracts using diamond hydride-based **aqueous normal phase** chromatography. | J. Sep. Sci. | 2009 | 32 | 2273-2280 |
| J.J. Pesek, M.T. Matyska, M.T.W. Hearn, R.I. Boysen | **Aqueous Normal Phase** retention of nucleotides on Silica Hydride columns | J. Chromatogr. A | 2009 | 1216 | 1140-1146 |
| V. Freibolin, M.P. Bayer, M.T. Matyska, J.J. Pesek, K. Albert | 1H HR/MAS NMR in the suspended state: Molecular recognition processes in liquid chromatography between steroids and a silica hydride-based cholesterol phase | J. Sep. Sci. | 2009 | 32 | 1722-1728 |
| J.J. Pesek, M.T. Matyska, J.A. Loo, S.M. Fischer, T.R. Sana | Analysis of Hydrophilic Metabolites in Physiological Fluids by HPLC-MS using a Silica Hydride-Based Stationary Phase | J. Sep. Sci. | 2009 | 32 | 2200-2208 |
| J.J..Pesek, M.T. Matyska | Our Favorite Materials: Silica Hydride Stationary Phases | J. Sep. Sci. | 2009 | 32 | 3999-4011 |
| M.T. Matyska, J.J. Pesek, G. Shetty | Type C Amino Columns for Affinity and **Aqueous Normal Phase** Chromatography: Synthesis and HPLC Evaluation | J. Liq. Chromatogr. & Rel Technol. | 2009 | 33 | 1-26 |
| J.J. Pesek, M.T. Matyska, A. Sharma | Use of Hydride-Based Separation Materials for Organic Normal Phase Chromatography | J. Liq. Chromatogr. & Rel Technol. | 2008 | 31 | 134-147 |



**MicroSolv Technology Corporation**

9158 Industrial Blvd. NE, Leland, NC 28451

tel. (732) 380-8900, fax (910) 769-9435

Email: customers@mtc-usa.com

Website: www.mtc-usa.com

| | | | | | |
|---|---|---|---|---|---|
| J.J. Pesek, M.T. Matyska, D. Sukul | Capillary Liquid Chromatography and Capillary Electrochromatography using Silica Hydride Stationary Phases | J. Chromatogr. A | 2008 | 1191 | 136-140 |
| J.J. Pesek, M.T. Matyska, S.M. Fischer, T.R. Sana | Analysis of hydrophilic metabolites by high-performance liquid chromatography – mass spectrometry using a silica hydride-based stationary phase | J. Chromatogr. A | 2008 | 1204 | 48-55 |
| J.J. Pesek, M.T. Matyska, S. Larrabee | HPLC Retention Behavior on Hydride-Based Stationary Phases | J. Sep. Sci. | 2007 | 30 | 637-647 |
| J.J. Pesek, M.T. Matyska, M.T.W. Hearn, R.I. Boysen | Temperature effects on solute retention for hydride-based stationary phases | J. Sep. Sci. | 2007 | 30 | 1150-1157 |
| J.J. Pesek, M.T. Matyska | A Comparison of Two Separation Modes: HILIC and **Aqueous Normal Phase** Chromatography | LCGC | 2007 | 25 | 480-490 |
| J.J. Pesek, M.T. Matyska | How to Retain Polar and Nonpolar Compounds on the same HPLC Column with an Isocratic Mobile Phase | LCGC | 2006 | 24 | 296-303 |
| J.J. Pesek, M.T. Matyska | Silica Hydride Surfaces: Versatile Separation Media for Chromatographic and Electrophoretic Analyses | J. Liq. Chromatogr. & Rel Technol. | 2006 | 29 | 1105-1124 |
| J.J. Pesek, M.T. Matyska | One Stationary Phase, Three Modes of Separation: Reversed Phase and Normal Phase Separations on the Same Column | International Labmate | 2006 | 31 | 2-3 |
| J.J. Pesek, M.T. Matyska | Hydride-based Silica Stationary Phases for HPLC: Fundamental Properties and Applications | J. Sep. Sci. | 2005 | 28 | 1845-1854 |
| .J. Pesek, M. Matyska, L. Dalal | Evaluation of Hydride-Based Stationary Phases for LC/MS | Chromatographia | 2005 | 62 | 595-601 |
| J.J. Pesek, M.T. Matyska | Hydride-Based Separation Materials for High Performance Liquid Chromatography and Open Tubular Capillary Electrochromatography | Chinese J. Chromatogr. | 2005 | 23 | 599-603 |



**MicroSolv Technology Corporation**
9158 Industrial Blvd. NE, Leland, NC 28451
tel. (732) 380-8900, fax (910) 769-9435
Email: customers@mtc-usa.com
Website: www.mtc-usa.com

| | | | | | |
|---|---|---|---|---|---|
| .J. Pesek, M.T. Matyska, G.B. Dawson, A. Wilsdorf, P. Marc, M. Padki | The Cholesterol Bonded Phase as a Separation Medium in High Performance Liquid Chromatography. Evaluation of Properties and Applications | J. Chromatogr A | 2003 | 986 | 253-262 |
| M.T. Matyska, J.J. Pesek, S. Tong, J.E. Sandoval | Adamantyl-Modified Silica va Olefin Hydrosilation on a Hydride Intermediate | J. Liq. Chromatogr. & Rel Technol. | 2003 | 26 | 1169-1195 |
| L. Brown, B. Ciccone, J.J. Pesek, M.T. Matyska | An Evolution in Separation Media for HPLC | American Lab. | 2003 | 24 | 23-29 |
| M.T. Matyska, J.J. Pesek, V. Grandhi | Charge Transfer-Like Stationary Phase for HPLC Prepared via Hydrosilation on Silica Hydride | J. Sep. Sci. | 2002 | 25 | 741-748 |
| J.J. Pesek, M.T. Matyska, S. James | Variable-Temperature Solid-State NMR Studies of Bonded Liquid Crystal Stationary Phases for HPLC | J. Liq. Chromatogr. & Rel Technol. | 2002 | 25 | 2749-2765 |
| J.J. Pesek, M.T. Matyska | Developments in Surface Chemistry for the Improvement of Chromatographic Methods | A Century of Separation Science, H. Issaq, ed. | 2001 | N/A | 349-364 |
| K. Jinno, H. Sawada, A.P. Catabay, H. Watanabe, N.B.H. Sabli, J.J. Pesek, M.T. Matyska | Comparison of the Separation Behavior of Benzodiazepines in Packed Capillary Electrochromatography and Open-Tubular Capillary Electrochromatography | J. Chromatogr. A | 2000 | 887 | 479-487 |
| A.P. Catabay, J.J. Pesek, M.T. Matyska, K. Jinno | Pharmaceutical Applications using Cholesterol-10-undecenoate Bonded Phase in Micro column Liquid Chromatography | J. Liq. Chromatogr. Relat. Technol. | 1999 | 22 | 953-967 |
| J.J. Pesek, M.T. Matyska | Surface Modifications to Support Materials for HPLC, HPCE and Electrochromatography | Fundamental and Applied Aspects of Chemically Modified Surfaces, J. Blitz and C.B. Little, eds. | 1999 | N/A | 97-110 |
| A. Catabay, C. Okumura, K. Jinno, J.J. Pesek, E. Williamsen, J.C. Fetzer, W.R. Biggs | Retention Behavior of Large Polycyclic Aromatic Hydrocarbons on Cholesteryl 10-Undecenoate Bonded Phase in Microcolumn Liquid Chromatography | Chromatographia | 1998 | 47 | 13-20 |



**MicroSolv Technology Corporation**

9158 Industrial Blvd. NE, Leland, NC 28451

tel. (732) 380-8900, fax (910) 769-9435

Email: customers@mtc-usa.com

Website: www.mtc-usa.com

| | | | | | |
|---|---|---|---|---|---|
| A. Catabay, M. Taniguichi, K. Jinno, J.J. Pesek, E. Williamsen | Separation of 1,4-Benzodiazepines and Analogs Using Cholesteryl 10-Undecenoate Bonded Phase in Micro-column Liquid Chromatography | J. Chromatogr. Sci. | 1998 | 36 | 111-118 |
| A. Catabay, Y. Saito, C. Okumura, K. Jinno, J.J. Pesek, E. Williamsen | Retention Behavior of Small Polycyclic Aromatic Hydrocarbons with Cholesteryl-10-Undecenoate Bonded Phase in Micro-column Liquid Chromatography | J. Microcol Sep. | 1997 | 9 | 81-85 |
| J.J. Pesek, M.T. Matyska, J.E. Sandoval, E. Williamsen | Synthesis, Characterization and Applications of Hydride-Based Surface Materials for HPLC, HPCE and Electrochromatography | J. Liq. Chromatogr. | 1996 | 19 | 2843-2865 |
| J.J. Pesek, M.T. Matyska, H. Hemphala | HPLC Evaluation of Mono-ol, Butylphenyl, and Perfluorinated Columns Prepared Via Olefin Hydrosilation on a Silica Hydride Intermediate | Chromatographia | 1996 | 43 | 10-16 |
| J.J. Pesek, M.T. Matyska, H. Hemphala, P. Christensen | High Performance Liquid Chromatographic Characterization of Diol Bonded Phases Synthesized via a Hydride Intermediate | J. Liq. Chromatogr. | 1995 | 18 | 2507-2525 |
| M.T. Matyska, J.J. Pesek, A.M. Siouffi | Evaluation of Mono-ol and Diol Columns Prepared via Olefin Hydrosilation on a Silica Hydride Intermediate for the Separation of Tetracylines | Chem. Anal. | 1995 | 40 | 517-530 |
| J.J. Pesek, M.T. Matyska, E.J. Williamsen, R. Tam | Variable-Temperature Solid-State NMR Studies of Bonded Liquid Crystal Stationary Phases for HPLC | Chromatographia | 1995 | 41 | 301-310 |
| M.C. Montes, C. van Amen, J.J. Pesek, J.E. Sandoval | Chromatographic Evaluation of Alkyl-Bonded Phases Prepared Through Olefin Hydrosilation on a Hydride-Silica Intermediate | J. Chromatogr. | 1994 | 688 | 31-45 |

*Click HERE for more information about – TYPE-C Silica™*



**MicroSolv Technology Corporation**

9158 Industrial Blvd. NE, Leland, NC 28451

tel. (732) 380-8900, fax (910) 769-9435

Email: customers@mtc-usa.com

Website: www.mtc-usa.com