

SEDERE Evaporative Light-Scattering Detector Bibliography

Theory, Principles and Reviews

The Evaporative Analyser.

D.L. Ford, W. Kennard, *Journal of the Oil and Colour Chemists' Association*, **1966**, 49, 299-313.

Evaporative Analyzer as a Mass Detector for Liquid Chromatography.

J.M. Charlesworth, *Analytical Chemistry*, **1978**, 50 (11), 1414-1420.

The Mass Detector: A New Detection System for Carbohydrate and Lipid Analyses.

R. Macrae, L.C. Trugo, J. Dick, *Chromatographia*, **1982**, 15 (7), 476-478.

Use of Light-Scattering as a Detector Principle in Liquid Chromatography.

A. Stolyhwo, H. Colin, G. Guiochon, *Journal of Chromatography*, **1983**, 265, 1-18.

Principles of Operation of an Evaporative Light-Scattering Detector for Liquid Chromatography.

T.H. Mourey, L.E. Oppenheimer, *Analytical Chemistry*, **1984**, 56 (13), 2427-2434.

Study of the Qualitative and Quantitative Properties of the Light-Scattering Detector.

A. Stolyhwo, H. Colin, M. Martin, G. Guiochon, *Journal of Chromatography*, **1984**, 288, 253-275.

Examination of the Concentration Response of Evaporative Light-Scattering Mass Detectors.

L.E. Oppenheimer, T.H. Mourey, *Journal of Chromatography*, **1985**, 323, 297-304.

Some Applications of a Commercial Light-Scattering Detector for Liquid Chromatography.

M. Lafosse, M. Dreux, L. Morin-Allory, J.M. Colin, *Journal of High Resolution Chromatography and Chromatography Communications*, **1985**, 8, 39-41.

Effects of the Nature of the Solvent and Solutes on the Response of a Light-Scattering Detector.

M. Righezza, G. Guiochon, *Journal of Liquid Chromatography and Related Technologies*, **1988**, 11 (9-10), 1967-2004.

Influence of Various Parameters on the Response Factors of the Evaporative Light-Scattering Detector for a Number of Non-Volatile Compounds.

G. Guiochon, A. Moysan, C. Holley, *Journal of Liquid Chromatography and Related Technologies*, **1988**, 11 (12), 2547-2570.

Normal-Phase High-Performance Liquid Chromatography with Relay Gradient Elution - I. Description of the Method.

L.R. Treiber, *Journal of Chromatography A*, **1995**, 696, 193-199.



The Evaporative Light-Scattering Detector - A Universal Instrument for Non-Volatile Solutes in LC and SFC.

M. Dreux, M. Lafosse, L. Morin-Allory, *LCGC International*, **1996**, 9 (3), 148-153.

Comparison of the Responses of Triacylglycerols with an Evaporative Visible Light-Scattering Detector Used in Conventional, Micro and Capillary Liquid Chromatography.

S. Heron, A. Tchapla, *Journal of Chromatography A*, **1999**, 848, 95-104.

Proposed Performance Qualification and Calibration Method for Evaporative Light-Scattering Detectors.

L. Sims, *Chromatographia*, **2001**, 53 (7-8), 401-404.

Response Enhancement for the Evaporative Light-Scattering Detection for the Analysis of Lipid Classes and Molecular Species.

F.S. Deschamps, K. Gaudin, E. Lesellier, A. Tchapla, D. Ferrier, A. Baillet, P. Chaminade, *Chromatographia*, **2001**, 54 (9-10), 607-611.

Volatility Evaluation of Mobile Phase - Electrolyte Additives for Mass Spectrometry.

K. Petritis, H. Dessans, C. Elkafir, M. Dreux, *LCGC Europe*, **2002**, 15 (2), 98-102.

Evaporative Light-Scattering Detection for In-Line Monitoring of Stopped-Flow Liquid Chromatography - Nuclear Magnetic Resonance Analysis of Compounds with Weak or No Chromophore Groups.

K. Petritis, I. Gillaizeau, C. Elkafir, M. Dreux, A. Petit, N. Bongibault, W. Luijten, *Journal of Separation Science*, **2002**, 25, 593-600.

Success with Evaporative Light-Scattering Detection.

C.S. Young, J.W. Dolan, *LCGC Europe*, **2003**, 16 (3), 132-137.

Success with Evaporative Light-Scattering Detection, Part II: Tips and Techniques.

C.S. Young, J.W. Dolan, *LCGC Europe*, **2004**, 17 (4), 192-199.

Single-Point Calibration with a Non-Linear Detector: Carbohydrate Analysis of Conifer Needles by Hydrophobic Interaction Chromatography - Evaporative Light-Scattering Detection (HIC-ELSD).

B.A. Kimball, W.M. Arjo, J.J. Johnston, *Journal of Liquid Chromatography and Related Technologies*, **2004**, 27 (12), 1835-1848.

Post-Column Addition as a Method of Controlling Triacylglycerol Response Coefficient of an Evaporative Light-Scattering Detector in Liquid Chromatography - Evaporative Light-Scattering Detection.

S. Heron, M. Dreux, A. Tchapla, *Journal of Chromatography A*, **2004**, 1035, 221-225.

Improving Quantitative Measurements for the Evaporative Light-Scattering Detector.

B.T. Mathews, P.D. Higginson, R. Lyons, J.C. Mitchell, N.W. Sach, M.J. Snowden, M.R. Taylor, A.G. Wright, *Chromatographia*, **2004**, 60 (11-12), 625-633.

Detection Modes with High Temperature Liquid Chromatography - A Review.

D. Guilleme, S. Heinisch, *Separation and Purification Reviews*, **2005**, 34, 181-216.

Twenty Years of Evaporative Light-Scattering Detection.

N.C. Megoulas, M.A. Koupparis, *Critical Reviews in Analytical Chemistry*, **2005**, 35, 301-316.

Experimental Proofs of a Correlation between the Coefficients for the Slope of the Response Line and the Response Factor of an ELSD.

S. Heron, M.G. Maloumbi, M. Dreux, E. Verette, A. Tchapla, *LCGC Europe*, **2006**, 19 (12), 664-672.

Evaporative Light-Scattering Detection: Trends in its Analytical Uses.

R. Lucena, S. Cardenas, M. Valcarcel, *Analytical and Bioanalytical Chemistry*, **2007**, 388, 1663-1672.

Method Development for a Quantitative Analysis Performed without any Standard Using an Evaporative Light-Scattering Detector.

S. Heron, M.G. Maloumbi, M. Dreux, E. Verette, A. Tchapla, *Journal of Chromatography A*, **2007**, 1161, 152-156.

Micro Liquid Chromatography Coupled with Evaporative Light-Scattering Detector at Ambient and High Temperature: Optimization of the Nebulization Cell Geometry.

D. Guillarme, S. Rudaz, C. Schelling, M. Dreux, J.L. Veuthey, *Journal of Chromatography A*, **2008**, 1192, 103-112.

Evaluation of the Coupling between Ultra Performance Liquid Chromatography and Evaporative Light-Scattering Detector for Selected Phytochemical Applications.

R. Russo, D. Guillarme, S. Rudaz, C. Bicchi, J.L. Veuthey, *Journal of Separation Science*, **2008**, 31, 2377-2387.

Achieving Precision Analysis with ELSD.

S. Robinson, *Genetic Engineering and Biotechnology News*, **2008**, 28 (14).

Review and Optimization of Linearity and Precision in Quantitative HPLC-ELSD with Chemometrics.

I.S. Krull, S. Walfish, W.O. Aruda, *LCGC North America*, **2008**, 26 (10), 1032-1042.

On the Issue of Characteristic Evaporative Light-Scattering Detector Response.

K. Mojsiewicz-Pienkowska, *Critical Reviews in Analytical Chemistry*, **2009**, 39, 89-94.

Evaporative Light-Scattering Detection for LC.

S.S. Chen, *Encyclopedia of Chromatography, Third Edition*, **2009**, 1 (1), J. Cazes ed., CRC Press, 818-820.

Lipid Applications

Analysis of Triglycerides in Oils and Fats by Liquid Chromatography with the Laser Light-Scattering Detector.

A. Stolyhwo, H. Colin, G. Guiochon, *Analytical Chemistry*, **1985**, 57 (7), 1342-1354.

Rapid Separation and Quantification of Lipid Classes by High Performance Liquid Chromatography and Mass (Light-Scattering) Detection.

W.W. Christie, *Journal of Lipid Research*, **1985**, 26, 507-512.

Detectors for High-Performance Liquid Chromatography of Lipids with Special Reference to Evaporative Light-Scattering Detection.

W.W. Christie, in *Advances in Lipid Methodology - One*, **1992**, W.W. Christie, ed., Oily Press, Ayr, 239-271.

Separation and Analysis of Phospholipids in Different Foods with a Light-Scattering Detector.

M.F. Caboni, S. Menotta, G. Lercker, *Journal of the American Oil Chemists' Society*, **1996**, 73 (11), 1561-1566.

Analysis of Mixtures Containing Free Fatty Acids and Mono-, Di- and Triglycerides by High-Performance Liquid Chromatography Coupled with Evaporative Light-Scattering Detection.

B. Marcato, G. Cecchin, *Journal of Chromatography A*, **1996**, 730, 83-90.

Separation of Lipids Classes from Marine Particulate Material by HPLC on a Polyvinyl Alcohol-Bonded Stationary Phase Using Dual-Channel Evaporative Light-Scattering Detection.

J. Nordback, E. Lundberg, W.W. Christie, *Marine Chemistry*, **1998**, 60, 165-175.

Rapid Separation and Quantification of Combined Neutral and Polar Lipid Classes by High-Performance Liquid Chromatography and Evaporative Light-Scattering Mass Detection.

R. Homan, M.K. Anderson, *Journal of Chromatography B*, **1998**, 708, 21-26.

Separation and Determination of Glycolipids from Edible Plant Sources by High-Performance Liquid Chromatography and Evaporative Light-Scattering Detection.

T. Sugawara, T. Miyazawa, *Lipids*, **1999**, 34 (11), 1231-1237.

High Resolution Separation Non-Polar Lipid Classes by HPLC-ELSD Using Alumina as Stationary Phase.

J. Nordback, E. Lundberg, *Journal of High Resolution Chromatography*, **1999**, 22 (9), 483-486.

High-Performance Liquid Chromatography / Evaporative Light-Scattering Detector Techniques for Neutral, Polar and Acidic Lipid Classes: A Review of Methods and Detector Models.

T.J. McNabb, A.E. Cremesti, P.R. Brown, A.A. Fischl, *Seminars in Food Analysis*, **1999**, 4 (1), 53-70.

Quantification of Major Classes of Xenopus Phospholipids by High Performance Liquid Chromatography with Evaporative Light-Scattering Detection.

B.J. Stith, J. Hall, P. Ayres, L. Waggoner, J.D. Moore, W.A. Shaw, *Journal of Lipid Research*, **2000**, 41, 1448-1454.

Simultaneous Quantification of Components of Neoglycolipid-Coated Liposomes Using High-Performance Liquid Chromatography with Evaporative Light-Scattering Detection.

Y. Shimizu, M. Nakata, J. Matsunuma, T. Mizuochi, *Journal of Chromatography B*, **2001**, 754, 127-133.

Simultaneous Determination of Free Fatty Acids, Partial Acylglycerols and Tocols in Palm Oil Products Using High-Performance Liquid Chromatography.

M.H. Moh, T.S. Tang, G.H. Tan, *Journal of Food Lipids*, **2001**, 8, 179-190.

Quantitation of Yeast Ceramides Using High-Performance Liquid Chromatography - Evaporative Light-Scattering Detection.

Q. Zhou, L. Zhang, X.Q. Fu, G.Q. Chen, *Journal of Chromatography B*, **2002**, 780 (1), 161-169.

Migration of Lubricants from Food Packagings Screening for Lipid Classes and Quantitative Estimation Using Normal-Phase Liquid Chromatographic Separation with Evaporative Light-Scattering Detection.

A. Schaefer, T. Kuchler, T.J. Simat, H. Steinhart, *Journal of Chromatography A*, **2003**, 1017, 107-116.

Triacylglycerol Composition of Walnut (*Juglans regia* L.) Cultivars: Characterization by HPLC-ELSD and Chemometrics.

J.S. Amaral, S.C. Cuhna, M. R. Alves, J.A. Pereira, R.M. Seabra, B.P.P. Oliveira, *Journal of Agricultural and Food Chemistry*, **2004**, 52, 7964-7969.



**SENSITIVITY
FLEXIBILITY
EXPERIENCE**

**For further information please contact :
applications@sedere.com**



Page : 4/15

14/09/2010 8:18

Determination of Phospholipids in Dairy Products by SPE / HPLC / ELSD.

A. Avalli, G. Contarini, *Journal of Chromatography A*, **2005**, 1071, 185-190.

Study of the Analysis of Alkoxyglycerols and Other Non-Polar Lipids by Liquid Chromatography Coupled with Evaporative Light-Scattering Detector.

C.F. Torres, L. Vazquez, F.J. Senorans, G. Reglero, *Journal of Chromatography A*, **2005**, 1078, 28-34.

Biodiesel Production from Triolein and Short Chain Alcohols through Biocatalysis.

A. Salis, M. Pinna, M. Monduzzi, V. Solinas, *Journal of Biotechnology*, **2005**, 119, 291-299.

Discrimination of Vegetable Oils by Triacylglycerols Evaluation of Profile Using HPLC / ELSD.

S.C. Cunha, M.B.P.P. Oliveira, *Food Chemistry*, **2006**, 95, 518-524.

A Comparative Study of the Fractionation of Regular Buttermilk and Whey Buttermilk by Microfiltration.

P. Morin, Y. Pouliot, R. Jimenez-Flores, *Journal of Food Engineering*, **2006**, 77 (3), 521-528.

Simultaneous Assessment of Lipid Classes and Bile Acids in Human Intestinal Fluid by Solid-Phase Extraction and HPLC Methods.

E. Persson, L. Lofgren, G. Hansson, B. Abrahamsson, H. Lennernas, R. Nilsson, *Journal of Lipid Research*, **2007**, 48, 242-251.

Analysis of Triacylglycerols on Porous Graphitic Carbon by High Temperature Liquid Chromatography.

B. Merelli, M. de Person, P. Favetta, M. Lafosse, *Journal of Chromatography A*, **2007**, 1157, 462-466.

The Identification and Quantification of Steryl Glucosides in Precipitates from Commercial Biodiesel.

R.A. Moreau, K.M. Scott, M.J. Haas, *Journal of the American Oil Chemists' Society*, **2008**, 85 (8), 761-770.

Improved Separation and Quantification of Neutral and Polar Lipid Classes by HPLC-ELSD Using a Monolithic Silica Phase: Application to Exceptional Marine Lipids.

M. Graeve, D. Janssen, *Journal of Chromatography B*, **2009**, 877, 1815-1819.

Triacylglycerol Analysis of Fats and Oils by Evaporative Light-Scattering Detection.

R. Rombaut, N. De Clercq, I. Foubert, K. Dewettinck, *Journal of the American Oil Chemists' Society*, **2009**, 86 (8), 19-25.

Simultaneous Quantification of Plant Glyceroglycolipids Including Sulfoquinovosyldiacylglycerol by HPLC-ELSD with Binary Gradient Elution.

K. Yunoki, M. Sato, K. Seki, T. Ohkubo, Y. Tanaka, M. Ohnishi, *Lipids*, **2009**, 44, 77-83.

Calibration of an Evaporative Light-Scattering Detector for the Universal Quantitative Analyses in Liquid Chromatography - Application to the Determination of Triacylglycerols in Cucurbitaceous Oils.

S. Heron, M.G. Maloumbi, T. Silou, E. Verette, M. Dreux, A. Tchaplal, *Food Analytical Methods*, **2010**, 3, 67-74.

Carbohydrate Applications

Simultaneous Identification of Sugars by HPLC Using Evaporative Light-Scattering Detection (ELSD) and Refractive Index Detection (RI). Application to Plant Tissues.

A. Clement, D. Yong, C. Brechet, *Journal of Liquid Chromatography and Related Technologies*, **1992**, 15 (5), 805-817.

Evaporative Light-Scattering Detection of Carbohydrates in HPLC.

M. Dreux, M. Lafosse, in **Carbohydrate Analysis: High Performance Liquid Chromatography and Capillary Electrophoresis**, *Journal of Chromatography Library*, **1995**, 58, Z. El Rassi, ed., Elsevier, Amsterdam, 515-540.

Analysis of Maltodextrins in Plant Extracts by LC Using Evaporative Light-Scattering Detection.

S. Guenu, J.M. Seigneuret, M. Dreux, *Journal of Liquid Chromatography and Related Technologies*, **2000**, 23 (18), 2883-2895.

Improved Separation of Sucrose Ester Isomers Using Gradient High Performance Liquid Chromatography with Evaporation Light-Scattering Detection.

M.H. Moh, T.S. Tang, G.H. Tan, *Food Chemistry*, **2000**, 69, 105-110.

Carbohydrate Analysis by LC and SFC Using Evaporative Light-Scattering Detection.

M. Lafosse, B. Herbreteau, in **Carbohydrate Analysis by Modern Chromatography and Electrophoresis**, *Journal of Chromatography Library*, **2002**, 66, Z. El Rassi, ed., Elsevier Science, Amsterdam, 1101-1134.

Comparison of Refractive Index Detection (RID) to Evaporative Light-Scattering Detection (ELSD) for Analysis of Sugars in Presweetened Cereals.

S.M. Steinike, *LCGC North America*, **2003**, 21 (6 suppl.), 9.

Improved Method of Analysis of Biomass Sugars Using High-Performance Liquid Chromatography.

F.A. Agblevor, A. Murden, B.R. Hames, *Biotechnology Letters*, **2004**, 26 (15), 1207-1210.

Comparative Analysis of Enzymatically Digested k-Carrageenans, Using Liquid Chromatography on Ion-Exchange and Porous Graphitic Carbon Columns Coupled to an Evaporative Light-Scattering Detector.

A. Antonopoulos, B. Herbreteau, M. Lafosse, W. Helbert, *Journal of Chromatography A*, **2004**, 1023, 231-238.

Characterisation of i-Carrageenans Oligosaccharides with High-Performance Liquid Chromatography Coupled with Evaporative Light-Scattering Detection.

A. Antonopoulos, P. Favetta, M. Lafosse, W. Helbert, *Journal of Chromatography A*, **2004**, 1059, 83-87.

Separation and Quantification of Beer Carbohydrates by High-Performance Liquid Chromatography with Evaporative Light-Scattering Detection.

L.C. Nogueira, F. Silva, I. Ferreira, L.C. Trugo, *Journal of Chromatography A*, **2005**, 1065, 207-210.

Separation of Monosaccharides by Hydrophilic Interaction Chromatography with Evaporative Light-Scattering Detection.

G. Karlsson, S. Winge, H. Sandberg, *Journal of Chromatography A*, **2005**, 1092, 246-249.

Quantitative Analysis of the Polysaccharide and Glycoprotein Fractions in *Echinacea purpurea* and *Echinacea angustifolia* by HPLC-ELSD for Quality Control of Raw Material.

C. Bergeron, S. Gafner, *Pharmaceutical Biology*, **2007**, 45 (2), 98-105.

Uncertainty in the Determination of Glucose in Aqueous Solutions by High-Performance Liquid Chromatography with Evaporative Light-Scattering Detection.

B. Nogueiro Estevinho, A. Ferraz, F. Rocha, L. Santos, A. Alves, *Journal of Separation Science*, **2009**, 32, 3116-3125.

Miscellaneous Applications

Evaporative Light-Scattering Detection in the Quantitative Analysis of Semivolatile Polycyclic Aromatic Compounds by High-Performance Liquid Chromatography.

V.L. Cebolla, L. Membrado, J. Vela, A.C. Ferrando, *Journal of Chromatographic Science*, **1997**, 35 (4), 141-150.

Advantages of Evaporative Light-Scattering Detection for the Purity Control of Commercial Cyclodextrins.

I. Caron, C. Elfakir, M. Dreux, *Journal of Liquid Chromatography and Related Technologies*, **1997**, 20 (7), 1015-1035.

Liquid Chromatography of Polyethers Using Universal Detectors V. Quantitative Aspects in the Analysis of Low-Molecular-Mass Poly(Ethylene Glycol)s and their Derivatives by Reverse-Phase High Performance Liquid Chromatography with an Evaporative Light-Scattering Detector.

B. Trathnigg, M. Kollroser, *Journal of Chromatography A*, **1997**, 768, 223-238.

Partitioning of Ethoxylated Nonionic Surfactants into Nonaqueous-Phase Organic Liquids: Influence on Solubilization Behavior.

J.B. Zimmerman, T.C.G. Kibbey, M.A. Cowell, K.F. Hayes, *Environmental Science and Technology*, **1999**, 33 (1), 169-176.

Improved Separation of Polyethylene Glycols Widely Differing in Molecular Weight Range by Reverse-Phase High Performance Liquid Chromatography and Evaporative Light-Scattering Detection.

K. Rissler, *Chromatographia*, **1999**, 49 (11-12), 615-620.

Direct Analysis of Industrial Oligoglycerols by Liquid Chromatography with Evaporative Light-Scattering Detection and Mass Spectrometry.

P. Chaimbault, S. Cassel, S. Claude, C. Debaig, T. Benvegnu, D. Plusquellec, P. Rollin, M. Lafosse, *Chromatographia*, **1999**, 50 (3-4), 239-242.

Ion-Pair Reversed-Phase Liquid Chromatography for Determination of Polar Underivatized Amino Acids Using Perfluorinated Carboxylic Acids as Ion Pairing Agent.

K. Petritis, P. Chaimbault, C. Elfakir, M. Dreux, *Journal of Chromatography A*, **1999**, 833, 147-155.

Liquid Chromatography Analysis of Phosphonic Acids on Poursous Graphitic Carbon Stationary Phase with Evaporative Light-Scattering and Mass Spectrometry Detection.

J.P. Mercier, P. Morin, M. Dreux, A. Tambute, *Journal of Chromatography A*, **1999**, 849, 197-207.

Amino Acid Analysis of Peptides Using HPLC with Evaporative Light-Scattering Detection.

J.A. Peterson, L.J. Lorenz, D.S. Risley, B.J. Sandmann, *Journal of Liquid Chromatography and Related Technologies*, **1999**, 22 (7), 1009-1025.



**SENSITIVITY
FLEXIBILITY
EXPERIENCE**

**For further information please contact :
applications@sedere.com**



Page : 7/15

14/09/2010 8:18

Ion-Pair Chromatography on a Porous Graphitic Carbon Stationary Phase for the Analysis of Twenty Underivatized Protein Amino Acids.

P. Chaimbault, K. Petritis, C. Elfakir, M. Dreux, *Journal of Chromatography A*, **2000**, 870, 245-254.

RP-HPLC Peptide Mapping of Proteins with an Evaporative Light-Scattering Detector.

J. Bongers, T.K. Chen, *Journal of Liquid Chromatography and Related Technologies*, **2000**, 23 (6), 925-933.

Separation of Underivatized Small Peptides on a Porous Graphitic Carbon Column by Ion-Pair Chromatography and Evaporative Light-Scattering Detection.

A. Ait Adoubel, S. Guenu, C. Elfakir, M. Dreux, *Journal of Liquid Chromatography and Related Technologies*, **2000**, 23 (16), 2433-2446.

Quantitative Analysis of Hydrophobic Pulmonary Surfactant Proteins by High-Performance Liquid Chromatography with Light-Scattering Detection.

H. Bunger, L. Kaufner, U. Pison, *Journal of Chromatography A*, **2000**, 870, 363-369.

Analysis of Organosilicone Copolymers by Gradient Polymer Elution Chromatography with Evaporative Light-Scattering Detection.

V. Verhelst, P. Vandereecken, *Journal of Chromatography A*, **2000**, 871, 269-277.

Analysis of Aliphatic Alcohol Ethoxylates in Terms of Alkyl and Ethylene Oxide Chain Lengths by Reverse-Phase Liquid Chromatography with Evaporative Light-Scattering Detection.

G. Cretier, C. Podevin, J.L. Rocca, *Journal of Chromatography A*, **2000**, 874, 305-310.

Analysis of Surfactants in Industrial Cleaners to Support Membrane Ultrafiltration Treatment Evaluations.

T.M. Chow, B. Daniels, M. Piwoni, *American Laboratory*, **2000**, 32 (5), 96-97.

Influence of Secondary Interactions on High Performance Size Exclusion Chromatography. Application to the Fractionation of Landfill Leachates.

F. Le Coupanec, D. Morin, O. Sire, J.J. Peron, *Analisis*, **2000**, 28, 543-549.

Determination of Inorganic Cations and Anions by Ion-Exchange Chromatography with Evaporative Light-Scattering Detection.

F. Mouchere, M. El Haddad, C. Elfakir, M. Dreux, *Journal of Chromatography A*, **2001**, 914, 167-173.

Liquid Chromatography of Polyglycerol Fatty Esters and Fatty Ethers on Porous Graphitic Carbon and Octadecyl Silica by Using Evaporative Light-Scattering Detection and Mass Spectrometry.

S. Cassel, P. Chaimbault, C. Debaig, T. Benvegna, S. Claude, D. Plusquellec, P. Rollin, M. Lafosse, *Journal of Chromatography A*, **2001**, 919, 95-106.

Conditions for Rapid Determination of Inorganic Cations in Water by Ion-Exchange Chromatography and Evaporative Light-Scattering Detection.

M. El Haddad, F. Mouchere, C. Elfakir, M. Dreux, *Journal of Separation Science*, **2001**, 24, 669-673.

Validation of an Ion-Interaction Chromatography Analysis of Underivatized Amino Acids in Commercial Preparation Using Evaporative Light-Scattering Detection.

K. Petritis, M. de Person, C. Elfakir, M. Dreux, *Chromatographia*, **2004**, 60 (5-6), 293-298.

Analysis of Fructose, Glycine and Triglycine Using HPLC UV / Vis Detection and Evaporative Light-Scattering Detection.

H.A.J.M. Bevers, R. Wijntje, A.B. de Haan, *LCGC Europe*, **2005**, 18 (2), 103-108.

Comprehensive Two-Dimensional Liquid Chromatography for the Characterization of Functional Acrylate Polymers.

X. Jiang, A. van der Horst, V. Lima, P.J. Schoenmakers, *Journal of Chromatography A*, **2005**, 1076, 51-61.

Characterization of a New Methylated b-Cyclodextrin with a Low Degree of Substitution by Matrix-Assisted Laser Desorption / Ionization Mass Spectrometry and Liquid Chromatography Using Evaporative Light-Scattering Detection.

R. Jacquet, P. Favetta, C. Elfakir, M. Lafosse, *Journal of Chromatography A*, **2005**, 1083, 106-112.

Quantitation of Surfactant Protein B by HPLC in Bronchoalveolar Lavage Fluid.

C. Paschen, M. Griesse, *Journal of Chromatography B*, **2005**, 814, 325-330.

New Polar-Embedded Stationary Phase for Surfactant Analysis.

X. Liu, C.A. Pohl, J. Weiss, *Journal of Chromatography A*, **2006**, 1118, 29-34.

Comparison of Liquid Chromatography and Capillary Electrophoresis Methods for Quantification of Sodium Residuals.

W. Brione, C. Herbots, C. Kottgen, S. Loix, M. Gibella, M. Bertrand, A. Ceccato, *Journal of Pharmaceutical and Biomedical Analysis*, **2007**, 44 (3), 615-622.

Validation of an Analytical Method for the Simultaneous Determination of Nine Intense Sweeteners by HPLC-ELSD - Report on the Final Collaborative Trial.

M. Buchgraber, A. Wasik, *European Commission - Scientific and Technical Research Series*, **2007**, 128pp.

Normal Phase High Performance Liquid Chromatography for Fractionation of Organic Acid Mixtures Extracted from Crude Oils.

A.E. Borgund, K. Erstad, T. Barth, *Journal of Chromatography A*, **2007**, 1149, 189-196.

New Hydrophilic Interaction / Reversed-Phase Mixed-Mode Stationary Phase and its Application for Analysis of Non-Ionic Ethoxylated Surfactants.

X. Liu, C. Pohl, *Journal of Chromatography A*, **2008**, 1118, 83-89.

Pharmaceutical Applications

The Advantages of Evaporative Light-Scattering Detection in Pharmaceutical Analysis by High Performance Liquid Chromatography and Supercritical Fluid Chromatography.

M. Lafosse, C. Elfakir, L. Morin-Allory, M. Dreux, *Journal of High Resolution Chromatography*, **1992**, 15, 312-317.

High-Performance Liquid Chromatographic Analysis of Mupirocin in PolyEthylene Glycols 400 and 3350 Using Dual Ultraviolet and Evaporative Light-Scattering Detection.

R.S. Porter, T.K. Chen, *Journal of Chromatography A*, **1996**, 732, 399-402.

The Evaporative Light-Scattering Detector: Some Applications in Pharmaceutical Analysis,

M. Kohler, W. Haerdi, P. Christen, J.L. Veuthey, *Trends in Analytical Chemistry*, **1997**, 16, 475-484.

Simultaneous Resolution and Detection of a Drug Substance, Impurities, and Counter Ion Using a Mixed-Mode HPLC Column with Evaporative Light-Scattering Detection.

M.D. Lantz, D.S. Risley, J.A. Peterson, *Journal of Liquid Chromatography and Related Technologies*, **1997**, 20 (9), 1409-1422.



**SENSITIVITY
FLEXIBILITY
EXPERIENCE**

**For further information please contact :
applications@sedere.com**



Page : 9/15

14/09/2010 8:18

Assay of Ursodeoxycholic Acid and Related Impurities in Pharmaceutical Preparations by HPLC with Evaporative Light-Scattering Detector.

M. Rajevic, P. Betto, *Journal of Liquid Chromatography and Related Technologies*, **1998**, 21 (18), 2821-2830.

Comparison of LC Detection Methods in the Investigation of Non-UV Detectable Organic Impurities in a Drug Substance.

S.D. McCrossen, D.K. Bryant, B.R. Cook, J.J. Richards, *Journal of Pharmaceutical and Biomedical Analysis*, **1998**, 17 (3), 455-471.

Application of Evaporative Light-Scattering Detection to the Characterization of Combinatorial and Parallel Synthesis Libraries for Pharmaceutical Drug Discovery.

B.H. Hsu, E. Orton, S.Y. Tang, R.A. Carlton, *Journal of Chromatography B*, **1999**, 725, 103-112.

Rapid Determination of Artemisinin and Related Analogues Using High Performance Liquid Chromatography and an Evaporative Light-Scattering Detector.

B.A. Avery, K.K. Venkatesh, M.A. Avery, *Journal of Chromatography B*, **1999**, 730, 71-80.

Partial Solubility Parameters of Lactose, Mannitol and Saccharose Using the Modified Extended Hansen Method and Evaporative Light-Scattering Detection.

M.A. Pena, Y. Daali, J. Barra, P. Bustamante, *Chemical and Pharmaceutical Bulletin*, **2000**, 48 (2), 179-183.

Evaluation of Evaporative Light-Scattering Detector for Combinatorial Library Quantitation by Reverse Phase HPLC.

L. Fang, M. Wan, M. Pennacchio, J. Pan, *Journal of Combinatorial Chemistry*, **2000**, 2 (3), 254-257.

Mixed-Mode Anion-Cation Exchange / Hydrophilic Interaction Liquid Chromatography - Electrospray Mass Spectrometry as an Alternative to Reverse Phase for Small Molecule Drug Discovery. (ACE - HILIC - ESI - MS - ELSD)

M.A. Strege, S. Stevenson, S.M. Lawrence, *Analytical Chemistry*, **2000**, 72 (19), 4629-4633.

High-Throughput Determination of Identity, Purity, and Quantity of Combinatorial Library Members Using LC / MS / UV / ELSD: Analytical Methods for the Combinatorial Sciences.

L. Fang, J. Pan, B. Yan, *Biotechnology and Bioengineering*, **2001**, 71 (2), 162-171.

Analytical Techniques Applied in the Combinatorial Synthesis of Large Drug Discovery Libraries.

B. Yan, L. Fang, J. Zhao, M.M. Irving, *Analytical Sciences*, **2001**, 17 (suppl.), 487-490.

Chromatographic Analysis of Compounds of Pharmaceutical Interest.

M.-S. Kuo, F. Barclay Shilliday, D.A. Yurek, *Journal of Chromatographic Science*, **2001**, 39, 513-520.

Determination of Isepamicin Sulfate and Related Compounds by High Performance Liquid Chromatography Using Evaporative Light-Scattering Detection.

R. Vogel, K. DeFillipo, V. Reif, *Journal of Pharmaceutical and Biomedical Analysis*, **2001**, 24 (3), 405-412.

Analytical Methods for Optimization and Quality Control of Combinatorial Synthesis.

B. Yan, L. Fang, M.M. Irving, J. Zhao, D. Liu, G.M. Figliozzi, F. Woolard, A. Krueger, in **Methods in Molecular Biology**, *Combinatorial Library Methods and Protocols*, **2002**, L.B. English, ed., Humana Press Inc., Totowa, NJ, USA, 189-200.

Quality Control in Combinatorial Chemistry: Determination of the Quantity, Purity, and Quantitative Purity of Compounds in Combinatorial Libraries.

B. Yan, L. Fang, M. Irving, S. Zhang, A.M. Boldi, F. Woolard, C.R. Johnson, T. Kshirsagar, G.M. Figliozzi, C.A. Krueger, N. Collins, *Journal of Combinatorial Chemistry*, **2003**, 5 (5), 547-559.

One-Minute Full-Gradient HPLC / UV / ELSD / MS Analysis to Support High-Throughput Parallel Synthesis.

J.N. Kyranos, H. Lee, W.K. Goetzinger, L.Y.T. Li, *Journal of Combinatorial Chemistry*, **2004**, 6 (5), 796-804.

ELSD in Preclinical Research.

W.J. Hurst, E. Conrad, *Preclinica*, **2004**, 2 (3), 183-186.

Streamlined System for Purifying and Quantifying a Diverse Library of Compounds and the Effect of Compound Concentration Measurements on the Accurate Interpretation of Biological Assay Results.

I.G. Popa-Burke, O. Issakova, J.D. Arroway, P. Bernasconi, M. Chen, L. Coudurier, S. Galasinski, A.P. Jadhav, W.P. Janzen, D. Lagasca, D. Liu, R.S. Lewis, R.P. Mohny, N. Sepetov, D.A. Sparkman, C.N. Hodge, *Analytical Chemistry*, **2004**, 76 (24), 7278-7287.

Simultaneous Separation and Quantitation of Four Antiepileptic Drugs - A Study with Potential for Use in Patient Drug Level Monitoring.

M.K. Manoj Babu, *Journal of Pharmaceutical and Biomedical Analysis*, **2004**, 34 (2), 315-324.

Development and Validation of a Novel LC / ELSD Method for the Quantitation of Gentamicin Sulfate Components in Pharmaceuticals.

N.C. Megoulas, M.A. Koupparis, *Journal of Pharmaceutical and Biomedical Analysis*, **2004**, 36 (1), 73-79.

Determination of Gentamicin Sulfate and Related Compounds by High-Performance Liquid Chromatography with Evaporative Light-Scattering Detection.

I. Clarot, P. Chaimbault, F. Hasdenteufel, P. Netter, A. Nicolas, *Journal of Chromatography A*, **2004**, 1031, 281-287.

Enhancement of Evaporative Light-Scattering Detection in High Performance Liquid Chromatographic Determination of Neomycin Based on Highly Volatile Mobile Phase, High-Molecular-Mass Ion-Pairing Reagents and Controlled Peak Shape.

N.C. Megoulas, M.A. Koupparis, *Journal of Chromatography A*, **2004**, 1057, 125-131.

Direct Determination of Kanamycin in Raw Material, Veterinary Formulation and Culture Media Using a Novel Liquid Chromatography - Evaporative Light-Scattering Method.

N.C. Megoulas, M.A. Koupparis, *Analytica Chimica Acta*, **2005**, 547, 64-72.

Analysis of Neomycin Sulfate and Framycetin Sulfate by High Performance Liquid Chromatography Using Evaporative Light-Scattering Detection.

I. Clarot, A. Regazzeti, N. Auzeil, F. Laadani, M. Citton, P. Netter, A. Nicolas, *Journal of Chromatography A*, **2005**, 1087, 236-244.

Development and Validation of a Novel HPLC / ELSD Method for the Direct Determination of Tobramycin in Pharmaceuticals, Plasma, and Urine.

N.C. Megoulas, M.A. Koupparis, *Analytical Bioanalytical Chemistry*, **2005**, 382, 290-296.

Development and Validation of an RP-IPC Method with ELSD for the Assay of Ions and an Excipient in a Self-Emulsifying Drug Delivery System Formulation.

S.A. Rodriguez, M. Mulcey, T. Tamblyn, *American Laboratory*, **2005**, 37 (20), 9-14.



SENSITIVITY
FLEXIBILITY
EXPERIENCE

For further information please contact :
applications@sedere.com



Page : 11/15

14/09/2010 8:18

Method Transfer from R and D to Quality Control of an RP-IPC Method with ELSD for the Analysis of an Excipient in a Pharmaceutical Drug Product.

S.A. Rodriguez, R. Kubiak, M. Mulcey, T. Tamblyn, T. Tougas, *American Laboratory*, **2005**, 37 (24), 9-14.

Development of a Novel Liquid Chromatography - Evaporative Light-Scattering Detection Method for Bacitracins and Applications to Quality Control of Pharmaceuticals.

A.K. Sarri, N.C. Megoulas, M.A. Koupparis, *Analytica Chimica Acta*, **2006**, 573-574, 250-257.

Development and Validation of a Novel LC Non-Derivatized Method for the Determination of Amikacin in Pharmaceuticals Based on Evaporative Light-Scattering Detection.

E.G. Galanakis, N.C. Megoulas, P. Solich, M.A. Koupparis, *Journal of Pharmaceutical and Biomedical Analysis*, **2006**, 40 (5), 1114-1120.

Excipient Quantitation and Drug Distribution during Formulation Optimization.

R. Forget, S. Spagnoli, *Journal of Pharmaceutical and Biomedical Analysis*, 41 (3), **2006**, 1051-1055.

Evaporative Light-Scattering Detection (ELSD): A Tool for Improved Quality Control of Drug Substances.

V. Douville, A. Lodi, J. Miller, A. Nicolas, I. Clarot, B. Prilleux, N. Megoulas, M. Koupparis, *Pharmeuropa Scientific Notes*, **2006**, 1, 9-15.

Chemical Fingerprinting of *Shexiang Baoxin* Pill and Simultaneous Determination of its Major Constituents by HPLC with Evaporative Light-Scattering Detection and Electrospray Mass Spectrometric Detection.

S.K. Yan, W.D. Zhang, R.H. Liu, Y.C. Zhan, *Chemical and Pharmaceutical Bulletin*, **2006**, 54 (7) 1058-1062.

Simultaneous Liquid Chromatographic Determination of Metals and Organic Compounds in Pharmaceutical and Food-Supplement Formulations Using Evaporative Light-Scattering Detection.

Z. Spacil, J. Folbrova, N. Megoulas, P. Solich, M. Koupparis, *Analytica Chimica Acta*, **2007**, 583, 239-245.

Chemical Fingerprinting of *Liuwei dihuang* Pill and Simultaneous Determination of its Major Bioactive Constituents by HPLC Coupled with Multiple Detections of DAD, ELSD and ESI-MS.

J. Ye, X. Zhang, W. Dai, S. Yan, H. Huang, X. Liang, Y. Li, W. Zhang, *Journal of Pharmaceutical and Biomedical Analysis*, **2009**, 49 (3), 164-170.

Simultaneous Quantification of Neomycin and Bacitracin by LC-ELSD.

C.O.R. Scheidl, F. Menzinger, E.J. Maier, E. Capek, O. Scheidl, C.W. Huck Christian, *Chromatographia*, **2009**, 69 (11-12), 1181-1188.

Determination of Arbekacin Sulfate Injection and its Related Substances by HPLC using Evaporative Light-Scattering Detection.

J. Wang, X. Hu, *Journal of Liquid Chromatography and Related Technologies*, **2010**, 33 (1-4), 441-451.

Natural Product Applications

Determination of Phenolic Diterpene Antioxidants in Rosemary (*Rosmarinus officinalis* L.) with Different Methods of Extraction and Analysis.

C. Bicchi, A. Binello, P. Rubiolo, *Phytochemical Analysis*, **2000**, 11, 236-242.

Liquid Chromatographic Determination of Less Polar Ginsenosides in Processed Ginseng.

S.W. Kwon, S.B. Han, I.H. Park, J.M. Kim, M.K. Park, J.H. Park, *Journal of Chromatography*, **2001**, 921, 335-339.

Determination of 24(R) - Pseudoginsenoside F11 in North American Ginseng Using High Performance Liquid Chromatography with Evaporative Light-Scattering Detection.

W. Li, J.F. Fitzloff, *Journal of Pharmaceutical and Biomedical Analysis*, **2001**, 25 (2), 257-265.

Analysis of Terpenelactones in *Ginkgo biloba* by High Performance Liquid Chromatography and Evaporative Light-Scattering Detection.

M. Ganzera, J. Zhao, I.A. Khan, *Chemical and Pharmaceutical Bulletin*, **2001**, 49 (9), 1170-1173.

Concept of Sequential Analysis of Free and Conjugated Phytosterols in Different Plant Matrices.

P. Breinholder, L. Mosca, W. Lindner, *Journal of Chromatography B*, **2002**, 777, 67-82.

High-Performance Liquid Chromatographic Analysis of Black Cohosh (*Cimicifuga racemosa*) Constituents with In-Line Evaporative Light-Scattering and Photodiode Array Detection.

W. Li, S. Chen, D. Fabricant, C.K. Angerhofer, H.H.S. Fong, N.R. Farnsworth, J.F. Fitzloff, *Analytica Chimica Acta*, **2002**, 471, 61-75.

Simultaneous Determination of Saponins and Isoflavones in Soybean (*Glycine max* L.) by Reversed-Phase Liquid Chromatography with Evaporative Light-Scattering and Ultraviolet Detection.

M. Ganzera, H. Stuppner, *Journal of AOAC International*, **2004**, 87 (5), 1189-1194.

Evaporative Light-Scattering Detection (ELSD) for the Analysis of Natural Products.

M. Ganzera, H. Stuppner, *Current Pharmaceutical Analysis*, **2005**, 1, 135-144.

Qualitative and Quantitative Determination of Ten Major Saponins in *Platycodi radix* by High Performance Liquid Chromatography with Evaporative Light-Scattering Detection and Mass Spectrometry.

Y.W. Ha, Y.C. Na, J.J. Seo, S.N. Kim, R.J. Linhardt, Y.S. Kim, *Journal of Chromatography A*, **2006**, 1135, 27-35.

Simultaneous Quantification of 14 Ginsenosides in *Panax ginseng* C.A. Meyer (Korean Red Ginseng) by HPLC-ELSD and its Application to Quality Control.

S.N. Kim, Y.W. Ha, H. Shin, S.H. Son, S.J. Wu, Y.S. Kim, *Journal of Pharmaceutical and Biomedical Analysis*, **2007**, 45 (1), 164-170.

Alkaloids and Saponins in Dietary Supplements of Blue Cohosh (*Caulophyllum thalictroides*).

S. Satchithanandam, E. Grundel, J. Roach, K.D. White, E. Mazzola, M. Ganzera, J.I. Rader, *Journal of AOAC International*, **2008**, 91 (1), 21-32.

Simultaneous Determination of Six Steroidal Alkaloids of *Veratrum dahuricum* by HPLC-ELSD and HPLC-MSⁿ.

J. Tang, H.L. Li, Y.H. Shen, H.Z. Jin, S.K. Yan, R.H. Liu, W.D. Zhang, *Chromatographia*, **2008**, 67 (1-2), 15-21.

SFC, CCC and Other Applications

Supercritical Fluid Chromatography with Light-Scattering Detection - I. Preliminary Results of the Analysis of Polar Compounds with Packed Columns.

M. Lafosse, P. Rollin, C. Elfakir, L. Morin-Allory, M. Martens, M. Dreux, *Journal of Chromatography*, **1990**, 505, 191-197.

Improvement of On-Line Detection in High-Speed Counter-Current Chromatography: UV Absorptiometry and Evaporative Light-Scattering Detection.

S. Drogue, M.-C. Rolet, D. Thiebaut, R. Rosset, *Journal of Chromatography*, **1991**, 538, 91-97.

Abnormal Composition of Commercial Waxes Revealed by Supercritical Fluid Chromatography.

S. Brossard, M. Lafosse, M. Dreux, J. Becart, *Chromatographia*, **1993**, 36 (1), 268-274.

Single Run Analysis of Underivatized Glycolipids, Phospholipids and Carbohydrates in a Plant Extract Using Subcritical Fluid Chromatography.

B. Herbreteau, M. Lafosse, M. Dreux, V. Krzych, P. Andre, *International Journal of Biological Chemistry*, **1996**, 1, 301-307.

Free Bile Acid Analysis by Supercritical Fluid Chromatography and Evaporative Light-Scattering Detection.

V. Villette, B. Herbreteau, M. Lafosse, M. Dreux, *Journal of Liquid Chromatography and Related Technologies*, **1996**, 19 (11), 1805-1818.

Supercritical Fluid Chromatography of Carbohydrates.

M. Lafosse, B. Herbreteau, L. Morin-Allory, *Journal of Chromatography A*, **1996**, 720, 61-73.

Analysis of Partially Methylated Cyclodextrins by Subcritical Fluid and Liquid Chromatography.

I. Caron, A. Salvador, C. Elfakir, B. Herbreteau, M. Dreux, *Journal of Chromatography A*, **1996**, 746, 103-108.

Review of Evaporative Light-Scattering Detection for Packed-Column SFC.

M. Dreux, M. Lafosse, *LGC International*, **1997**, 10 (6), 382-386.

Pressure-Regulating Fluid Interface and Phase Behavior Considerations in the Coupling of Packed-Column Supercritical Fluid Chromatography with Low-Pressure Detectors.

T.L. Chester, J.D. Pinkston, *Journal of Chromatography A*, **1998**, 807, 265-273.

SFC with Evaporative Light-Scattering Detection and Atmospheric-Pressure Chemical-Ionisation Mass Spectrometry for Methylated Glucoses and Cyclodextrins Analysis.

B. Herbreteau, A. Salvador, M. Lafosse, M. Dreux, *Analysis*, **1999**, 27 (8), 706-712.

Determination of Artemisinin in *Artemisia annua* L. by Off-Line Supercritical Fluid Extraction and Supercritical Chromatography Coupled to an Evaporative Light-Scattering Detector.

M. Kohler, W. Haerdi, P. Christen, J.L. Veuthey, in *Methods in Biotechnology, Supercritical Fluid Methods and Protocols*, **2000**, 13, J.R. Williams, A.A. Clifford, ed., Humana Press Inc., Totowa, NJ, USA, 135-143.

Preparative Isolation of Four Ginsenosides from Korean Red Ginseng (Steam-Treated *Panax Ginseng* C.A. Meyer), by High-Speed Counter-Current Chromatography Coupled with Evaporative Light-Scattering Detection.

Y.W. Ha, S.S. Lim, I.J. Ha, Y.C. Na, J.J. Seo, H. Shin, S.H. Son, Ye Shik Kim, *Journal of Chromatography A*, **2007**, 1151, 37-44.

Supercritical Fluid Extraction of Grape Seed Oil and Subsequent Separation of Free Fatty Acids by High-Speed Counter-Current Chromatography.

X. Cao, Y. Ito, *Journal of Chromatography A*, **2003**, 1021, 117-124.

SFC / MS / UV / ELSD: Integrated Hyphenation Technique for Drug Discovery.

Z. Wang, *International Labmate*, **2007**, 32, 12-13.

A Comparison of Methanol and Isopropanol in Alcohol / Water / CO₂ Mobile Phases for Packed Column Supercritical Fluid Chromatography.

J.J. Li, K.B. Thurbide, *Canadian Journal of Analytical Sciences and Spectroscopy*, **2008**, 53 (2), 59-65.

Purification of High-Throughput Organic Synthesis Libraries by Counter-Current Chromatography.

F.L. Wagenaar, J.E. Hochlowski, J.Y. Pan, N.P. Tu, P.A. Searle, *Journal of Chromatography A*, **2009**, 1216, 4154-4160.

Application of Centrifugal Partition Chromatography Coupled with Evaporative Light-Scattering Detection for the Isolation of Saikosaponins-a and -c from *Bupleurum falcatum* Roots.

K.D. Yoon, J. Kim, *Journal of Separation Science*, **2009**, 32, 3116-3125.



SENSITIVITY
FLEXIBILITY
EXPERIENCE

For further information please contact :
applications@sedere.com



Page : 15/15

14/09/2010 8:18