

Publication & Presentations:

Marek A. Domin, Brian D. Steinberg, Jennifer M. Quimby, Natalie J. Smith, Allison K. Greene and Lawrence T. Scott. **Routine analysis and characterization of highly insoluble polycyclic aromatic compounds by direct analysis in real time mass spectrometry (DART)** *Analyst*, 2010
DOI: [10.1039/b923300h](https://doi.org/10.1039/b923300h)

Smith, Natalie J.; **Domin, Marek A.**; Scott, Lawrence T. **HRMS directly from TLC Slides. A powerful tool for rapid analysis of organic mixtures.** *Organic Letters* (2008), 10(16), 3493-3496

Lo, Wayne; **Domin, Marek**; Rybak-Akimova, Elena V.; Armstrong, William H. **Modeling photosystem II with schiff-base manganese complexes.** Abstracts of Papers, 234th ACS National Meeting, Boston, MA, United States, August 19-23, 2007 (2007)

Herod, A. A.; Lazaro, M.-J.; Suelves, I.; Dubau, C.; Richaud, R.; Shearman, J.; Card, J.; Jones, A. R.; **Domin, M.**; Kandiyoti, R. **Size exclusion chromatography of soot and coal-derived materials with 1-methyl-2-pyrrolidinone as eluent: Observations on high molecular mass material.** *Energy & Fuels* (2000), 14(5), 1009-1020

Brady, Fergal J.; Cardin, David J.; **Domin, Mark.** **New organometallic complexes of buckminsterfullerene having σ -bonded nickel, palladium, or platinum with triorganophosphite ligands, and their characterization.** *Journal of Organometallic Chemistry* (1995), 491(1-2), 169-72

Herod, Alan A.; Johnson, Barry R.; Bartle, Keith D.; Carter, David M.; Cocksedge, Mike J.; **Domin, Mark**; Kandiyoti, Rafael. **A reconciliation of mass ranges from matrix-assisted laser desorption/ionization mass spectrometry and size exclusion chromatography for coal-derived materials.** *Rapid Communications in Mass Spectrometry* (1995), 9(14), 1446-51.

Herod, A. A.; Zhang, S.-F.; Carter, D. M.; **Domin, M.**; Cocksedge, M. J.; Parker, J. E.; Johnson, C. A. F.; John, P.; Smith, G. P.; et al. **Matrix-assisted laser desorption/ionization mass spectrometry of pitch fractions separated by planar chromatography.** *Rapid Communications in Mass Spectrometry* (1996), 10(2), 171-7.

Zhang, Sheng-Fu; Shearman, Jim R.; **Domin, Mark**; Lazaro, Maria-Jesus; Herod, Alan A.; Kandiyoti, Rafael. **Catalytic activity of fullerenes for hydrocracking coal extracts.** *Fuel* (1997), 76(3), 207-214.

Domin, Mark; Moreea, Ruksana; Lazaro, Maria-Jesus; Herod, Alan A.; Kandiyoti, Rafael. **Choice of extraction voltage and matrix in the matrix-assisted laser desorption/ionization time-of-flight mass spectrometry of coal tar pitch-pyridine insolubles.** *Rapid Communications in Mass Spectrometry* (1997), 11(6), 638-645.

Domin, M.; Li, Shang; Lazaro, M. J.; Herod, A. A.; Larsen, J. W.; Kandiyoti, R. **Large molecular mass materials in coal-derived liquids by 252Cf-plasma and matrix assisted laser desorption mass spectrometry.** *DGMK Tagungsbericht* (1997), 9704(Proceedings ICCS '97, Volume 3), 1501-1504.

Domin, M.; Moreea, R.; Lazaro, M. J.; Herod, A. A.; Kandiyoti, R. **Suppression of high molecular mass signal in the MALDI-MS of coal-derived liquids. Evidence from spectra of polystyrene standard mixtures.** *DGMK Tagungsbericht* (1997), 9704(Proceedings ICCS '97, Volume 3), 1533-1536.

Herod, A. A.; Lazaro, M.-J.; Rahman, M.; **Domin, M.**; Cocksedge, M. J.; Kandiyoti, R. **Matrix-assisted laser desorption/ionization time-of-flight mass spectrometry of kerogen extracts: effect of interactions between sample structure and matrix.** Rapid Communications in Mass Spectrometry (1997), 11(15), 1627-1634.

Domin, Mark; Moreea, R.; Lazaro, M.-J.; Herod, Alan A.; Kandiyoti, Rafael. **Effect of polydispersity on the characterization of coal-derived liquids by matrix-assisted laser desorption/ionization time-of-flight mass spectrometry: inferences from results for mixtures of polystyrene molecular mass standards.** Rapid Communications in Mass Spectrometry (1997), 11(17), 1845-1852.

Lazaro, Maria-Jesus; Herod, Alan A.; Cocksedge, Mike; **Domin, Mark**; Kandiyoti, Rafael. **Molecular mass determinations in coal-derived liquids by MALDI mass spectrometry and size-exclusion chromatography.** Fuel (1997), 76(13), 1225-1233.

Welham, Kevin J.; **Domin, Mark A.**; Scannell, D. Eoin; Cohen, E.; Ashton, David S. **The characterization of micro-organisms by matrix-assisted laser desorption/ionization time-of-flight mass spectrometry.** Rapid Communications in Mass Spectrometry (1998), 12(4), 176-180.

Welham, Kevin J.; **Domin, Mark A.**; Scannell, D. Eoin; Cohen, E.; Ashton, David S. **The rapid identification of intact microorganisms by matrix-assisted laser desorption/ionization-time of flight mass spectrometry.** Pharmacy and Pharmacology Communications (1998), 4(2), 81-87.

Domin, M.; Li, Shang; Lazaro, M.-J.; Herod, A. A.; Larsen, J. W.; Kandiyoti, R. **Large Molecular Mass Materials in Coal-Derived Liquids by 252Cf-Plasma and Matrix-Assisted Laser Desorption Mass Spectrometry.** Energy & Fuels (1998), 12(3), 485-492.

Johnson, Barry R.; Bartle, Keith D.; **Domin, Mark**; Herod, Alan A.; Kandiyoti, Rafael. **Absolute calibration of size exclusion chromatography for coal derivatives through MALDI-m.s.** Fuel (1998), 77(9/10), 933-945.

Domin, Mark; Welham, Kevin; Ashton, David. **Mass spectrometry as a tool for bacterial identification.** Journal of Pharmacy and Pharmacology (1998), 50(Suppl., British Pharmaceutical Conference 1998), 90.

Welham, Kevin J.; **Domin, Mark A.**; Scannell, D. Eoin; Cohen, E.; Ashton, David S. **The characterization of micro-organisms by matrix assisted laser desorption/ionisation-time of flight mass spectrometry.** Advances in Mass Spectrometry (1998),

Domin, Mark A.; Welham, Kevin J.; Ashton, David S. **The effect of solvent and matrix combinations on the analysis of bacteria by matrix-assisted laser desorption/ionization time-of-flight mass spectrometry.** Rapid Communications in Mass Spectrometry (1999), 13(4), 222-226.

Welham, Kevin J.; **Domin, Mark A.**; Ashton, David S. **Solvent and matrix combinations in the quality of matrix-assisted laser desorption/ionization-time of flight mass spectra obtained from microorganisms.** Pharmacy and Pharmacology Communications (1999), 5(2), 73-78.

Domin, M.; Herod, Alan; Kandiyoti, Rafael; Larsen, John W.; Lazaro, M-J.; Li, Shang; Rahimi, Parviz. **A comparative study of bitumen molecular weight distributions.** *Energy & Fuels* (1999), 13(3), 552-557.

Lazaro, M. J.; **Domin, M.**; Herod, A. A.; Kandiyoti, R. **Fractionation of a wood tar pitch by planar chromatography for the characterization of large molecular mass materials.** *Journal of Chromatography, A* (1999), 840(1), 107-115.

Lazaro, M. J.; Herod, A. A.; **Domin, M.**; Zhuo, Y.; Islas, C. A.; Kandiyoti, R. **Determining a "safe" high-mass limit in matrix-assisted laser desorption/ionization time-of-flight mass spectra of coal derived materials with reference to instrument noise.** *Rapid Communications in Mass Spectrometry* (1999), 13(14), 1401-1412.

Herod, A. A.; Lazaro, M.-J.; **Domin, M.**; Islas, C. A.; Kandiyoti, R. **Molecular mass distributions and structural characterisation of coal derived liquids.** *Fuel* (2000), 79(3-4), 323-337.

Welham, K. J.; **Domin, M. A.**; Johnson, K.; Jones, L.; Ashton, D. S. **Characterization of fungal spores by laser desorption/ionization time-of-flight mass spectrometry.** *Rapid Communications in Mass Spectrometry* (2000), 14(5), 307-310.

Welham, K. J.; **Domin, M. A.**; Johnson, K.; Jones, L.; Ashton, D. S. **Matrix-assisted laser-desorption/ionization time-of-flight mass spectrometry and its application to the analysis of fungal spores.** *Pharmacy and Pharmacology Communications* (2000), 6(3), 107-111.

Dimitrijevic, D.; Whitton, P. S.; **Domin, M.**; Welham, K.; Florence, A. T. **Increased vigabatrin entry into the brain by polysorbate 80 and sodium caprate.** *Journal of Pharmacy and Pharmacology* (2001), 53(2), 149-154.

Domin, M. & Herod, A. Presented at the 22nd British Mass Spectrometry Society Annual Conference at the University of Wales, Swansea 1996. MALDI-TOF Mass Spectrometry of polystyrene mixtures.

Domin, M., Lazaro, M. J., Herod, A. & Kandiyoti, R. Presented at the 22nd British Mass Spectrometry Society Annual Conference at the University of Wales, Swansea 1996. Mass Spectrometry of high mass insoluble pitch fraction.

Domin, M., Peachell, J. & Welham, K. Presented at the 22nd British Mass Spectrometry Society Annual Conference at the University of Wales, Swansea 1996. The use of crown ethers and cryptanes as desalting agents in MALDI-TOF mass spectrometry.

Domin, M., Danks, T., Cummingham, I & Wan, N. Presented at the 22nd British Mass Spectrometry Society Annual Conference at the University of Wales, Swansea 1996. Analysis of N-cyanoguanidines by matrix assisted laser desorption.

Bartle, K., **Domin, M.**, Herod, A., Johnson, B. & Kandiyoti, R. Presented at the 8th International Conference of Coal Science in Oviedo, Spain 1995. Molecular mass distribution of coal products relevant to pyrolysis, liquefaction and combustion.

Domin, M., Moreea, M., Lazaro, M. J., Herod, A. & Kandiyoti, R. Presented at the International Conference of Coal Science in Essen, Germany 1997. Suppression of high molecular mass signals in the MALDI-MS of coal derived liquids: Evidence from spectra of polystyrene standard mixtures.

Domin, M. Li, S., Lazaro, M. J., Herod, A., Larsen, J. & Kandiyoti, R. Presented at the International Conference of Coal Science in Essen, Germany 1997. Large molecular mass materials in coal derived liquids by ^{252}Cf -plasma and matrix assisted-laser desorption mass spectrometry.

Domin, M., Welham, K. & Ashton, D. Presented at the Royal Pharmaceutical Society Analysis Group Meeting in London, 1997. Analysis of whole micro-organisms by matrix-assisted laser desorption mass spectrometry.