

Publication List – Michael J Cooney

- 2015** Bandlamudi, S, Cooney, M. J., Martin, G., and K. M. Benjamin. Molecular modeling of ionic liquid based co-solvent extraction solvents. In Preparation.
- 2015** Lamichhane, K. M., Lewis, W. K., Wang, J. J., Rong, K. C., and Michael J. Cooney[✉]. Anaerobic treatment of high strength acidic wastewater without base addition. *Journal of Water Process Engineering*. **Submitted.**
- 2015** He X., Zhang, Q. Cooney, M. J. and Tao. Yan. Biodegradation of Fat, Oil and Grease (FOG) Deposits under Various Redox Conditions Relevant to Sewer Environment. *Applied Microbiology and Biotechnology*. **In Press.**
- 2015.** Cooney[✉], M. J., D. Harris, K. Lewis, and Tao Yan. Biochar as a packing material in anaerobic digestors for rapid start up at demonstration scale. **In Press.** *Journal of Water Process Engineering*.
- 2014** Severa, G., G. Kumar, and M. J. Cooney. Co-Recovery of lipids and fermentable sugars from *Rhodospiridium toruloides* using ionic liquid co-solvents: Application of recycle in batch fermentation. *Journal of Biotechnology Progress*. DOI: 10.1002/btpr.1952.
- 2014** Lopez, R., Higgins, S., Pagaling, E., Yan, T., and M. J. Cooney[✉]. *High rate anaerobic digestion of wastewater separated from grease trap*. *Journal of Renewable Energy*, 62:234-242.
- 2013** Higgins, S., Lopez, R., Pagaling, E., Yan, T., and M. J. Cooney[✉]. *Towards a hybrid anaerobic digester-microbial fuel cell integrated energy recovery system: An overview of the development of an electrogenic biofilm*. *Enzyme and Microbial Technology*. 52(6-7): 344-351.
- 2013** Godwin Severa, Kumar G., and Michael J. Cooney[✉]. *Co-recovery of bio-oil and fermentable sugars from oil-bearing biomass*. *International Journal of Chemical Engineering*. Article ID 617274 <http://dx.doi.org/10.1155/2013/617274>.
- 2013** Godwin Severa, Kumar G., Troung, M., Young, G., and Michael J. Cooney[✉], *Ionic liquid co-solvent assisted extraction of phorbol esters from jatropha biomass*. *Separation and Purification Technology*. 116:265-270.
- 2012** Maloy, S. F., Martin, G., Atannassov, P., and M. J. Cooney[✉]. Controlled deposition of structured polymer films: chemical and rheological factors in chitosan film formation. *Langmuir*. 28 (5), pp 2589–2595.
- 2011** Denery, J., Cooney, M. J., and Q. Li[✉]. *Diauxic and antimicrobial growth phases of Streptomyces tenjimariensis: Metabolite profiling and gene expression*. *Journal of Bioengineering & Biomedical Science*. 1:101. doi: 10.4172/2155-9538.1000101.
- 2011** Higgins, S. R., Lau C., Atannassov, P., Minter, S. D. and M. J. Cooney[✉]. *Hybrid Biofuel Cell: Microbial Fuel Cell with an Enzymatic Air-Breathing Cathode*. *ACS Catalysis*. 1 (9), pp 994–997
- 2011** Higgins, S. R., Lau, C., Atannassov, P., Minter, S. D. and M. J. Cooney[✉]. *Standardized Characterization of a Flow Through Microbial Fuel Cell*. *Electroanalysis*. 23(9): 2174 – 2181.
- 2011** Martin, G., Minter, S., and M. J. Cooney[✉]. *Fluorescence characterization of immobilization induced enzyme aggregation*. *Chemical Communications*. Feb 21;47(7):2083-5. **Cited 2**
- 2011** Higgins, S., Cooney[✉], M. J., Foerster, D., Minter, S., Lau, C., Atannassov, P., Cheung, A., Bretschger, O., and K. Neilson. *Fabrication of macroporous chitosan scaffolds doped with carbon nanotubes and characterized in a microbial fuel cell*. *Enzyme and Microbial Technology*. 48(6-7): 458-465. Cited 1.
- 2011** Young, G., Nippgen, F., Titterbrandt, S., and M. J. Cooney[✉]. *Direct Transesterification of Biomass Using Ionic Liquid co-Solvent System*. *Biofuels*, 2(3):261-266.
- 2011** Cooney[✉], M. J., Young, G., and R. Pate. *Bio-oil from Photosynthetic Microalgae: Case Study*. *Bioresource Technology*. 102(1):166-77. **Cited 4.**
- 2010** Lau, C., Martin, G., Minter, S. D., and M. J., Cooney[✉]. *Development of a chitosan scaffold electrode for fuel cell applications*. *Electroanalysis*. 22(7-8):793-798. **Cited: 12**
- 2010** Martin, G. L., Minter, S. D., and M. J. Cooney[✉]. *Fluorescence characterization of chemical microenvironments in immobilization matrices: Polarity*. *The Analyst*. 135 (5):1131-1137. **Cited: 4**
- 2010** Mojica, K. and M. J. Cooney[✉]. *The uronic acids assay: a method for the determination of chemical activity on biofilm EPS*. *Biofouling*. 6(3):301-12.
- 2010** Young, G., Nippgen, F., Titterbrandt, S., and M. J. Cooney[✉]. *Lipid extraction from biomass using co-solvent mixtures of ionic liquids and polar covalent molecules*. *Separation and Purification Technology*. 72(1): 118-121. **Cited 9**

- 2009** Cooney[✉], M. J., Young, G. L., and N. Nagle. *Extraction of Bio-oils from Microalgae: A Review*. Separation and Purification Reviews. **38**(4):291-325. **Cited: 24**
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- 2009** Martin, G., Minteer, S. D., and M. J. Cooney[✉]. *Spatial distribution of malate dehydrogenase in chitosan scaffolds*. Applied Materials & Interfaces. **1**(2):367–372. **Cited 3**.
- 2009** Cooney[✉], M. J., Petermann, J., Lau, C., and S. D. Minteer[✉]. *Characterization and evaluation of hydrophobically modified chitosan scaffolds: Towards design of enzyme immobilized flow-through electrodes*. Carbohydrate Polymers, **75**(3):428-435.
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- 2007** Mojica, K., Eley, D., and M. J., Cooney[✉], *Quantitative analysis of biofilm EPS uronic acid content*. Journal of Microbial Methods. **71**(1):61-65.
- 2007** Minteer[✉], S., Liaw, B. Y., and M. J. Cooney. *Enzyme-Based Biofuel Cells*. Current Opinions in Biotechnology. **18**: 228 - 234.
- 2007** Svoboda, V., Rippolz, C., Cooney[✉], M. J., and Bor Yann Liaw[✉] *In situ characterization of electrochemical polymerization of methylene green on platinum electrodes*. The Journal of Electrochemical Society. **154**(3): D113 – D116.
- 2007** Eley, D., Jameson, D., Raleigh[✉], B., and M. J. Cooney[✉]. *Fluorescent measurement of microalgal neutral lipids*. The Journal of Microbiological Methods. **68**(3), 639 – 642.
- 2007** Cooney[✉], M. J., Maynard, N., Benemann J., and C. Cannizzaro. *Two-phase anaerobic digestion for production of hydrogen-methane mixtures*. Bioresource Technology. **98** (14), p.2641-2651.
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- 2006** Cooney[✉], M. J., Maynard, N., Cannizzaro, C., and David Harris. *On-line measurement of gas production rates*. Biotechnology Progress, **22**:1456 – 1460.
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Book Chapters

- 2015.** Cooney[✉], M. J., and K. Benjamin. *Ionic Liquids in Lipid Extraction and Recovery.* In (Zu, X., Guo, Z., and L.-Z. Cheon, Editors) Ionic Lipids for Lipid Processing and Analysis. AOCS Press, Urbana, IL. **In Press.**
- 2013** Cooney[✉], M. J. *Case Studies of Separation in Biorefineries – Extraction of Algae Oil from Microalgae.* In (Ramaswamy, S. Huang, H.-J., Ramarao, B. V., Editors) Separation and Purification Technologies in Biorefineries. John Wiley & Sons. ISBN: 9780470977965.
- 2013** Cooney[✉], M. J., Luckarift, H. *Methods for interrogating biocatalysts on hierarchical architectures.* In (Atannassov, P., Johnson, G., Luckarift, H., Eds) Enzymatic fuel cells: From fundamentals to applications. John Wiley & Sons. ISBN 1118369238.
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