

ELECTRONIC SUPPLEMENTARY INFORMATION

Enhanced microalgal lipid extraction using bio-based solvents for sustainable biofuel production

Wan M. Asyraf Wan Mahmood,^{a,b} Constantinos Theodoropoulos,^{a,b} Maria Gonzalez-Miquel^{*a,b}

^a School of Chemical Engineering and Analytical Sciences, Faculty of Science and Engineering, The University of Manchester, Manchester M13 9PL, UK

^b Biochemical and Bioprocess Engineering Group, The University of Manchester, M13 9PL, UK

Table S1. GC-MS FAME spectrum

| FAME | Label | FAME | Label |
|-------|-------|-------|-------|
| C14:0 | A | C18:1 | H |
| C15:0 | B | C18:2 | I |
| C16:0 | C | C18:3 | J |
| C16:1 | D | C20:4 | K |
| C16:2 | E | C20:5 | L |
| C16:3 | F | C24:0 | M |
| C18:0 | G | | |

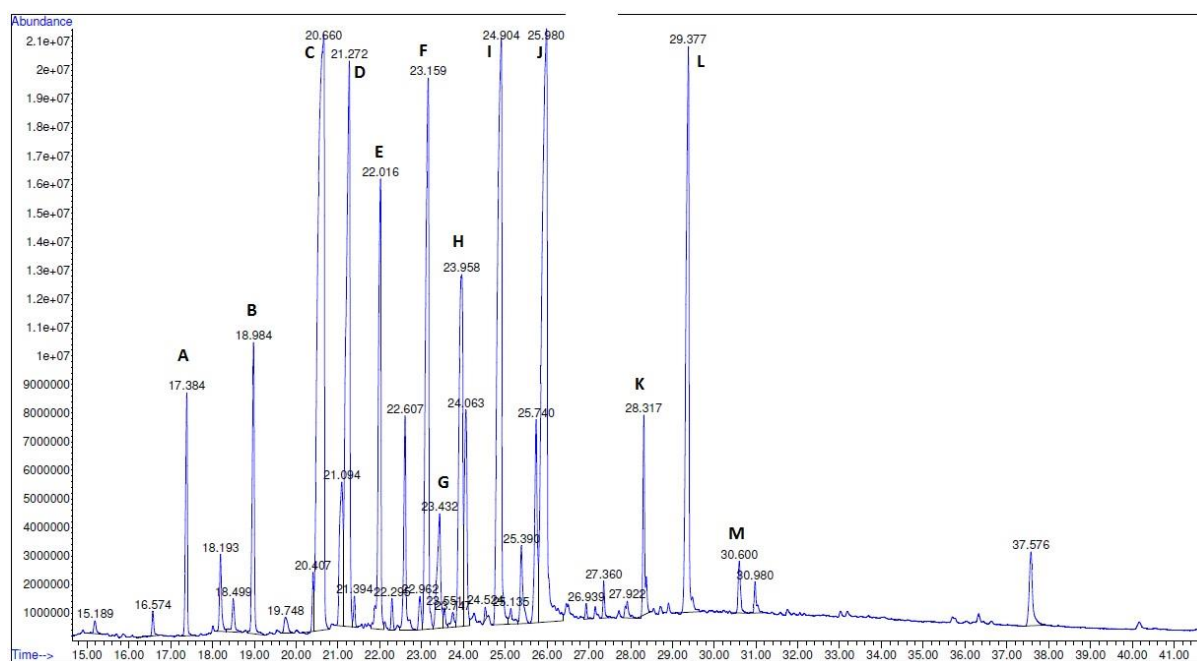


Figure S1. GC-MS chromatogram of FAME produced from *Chlorella vulgaris* (hexane extract)

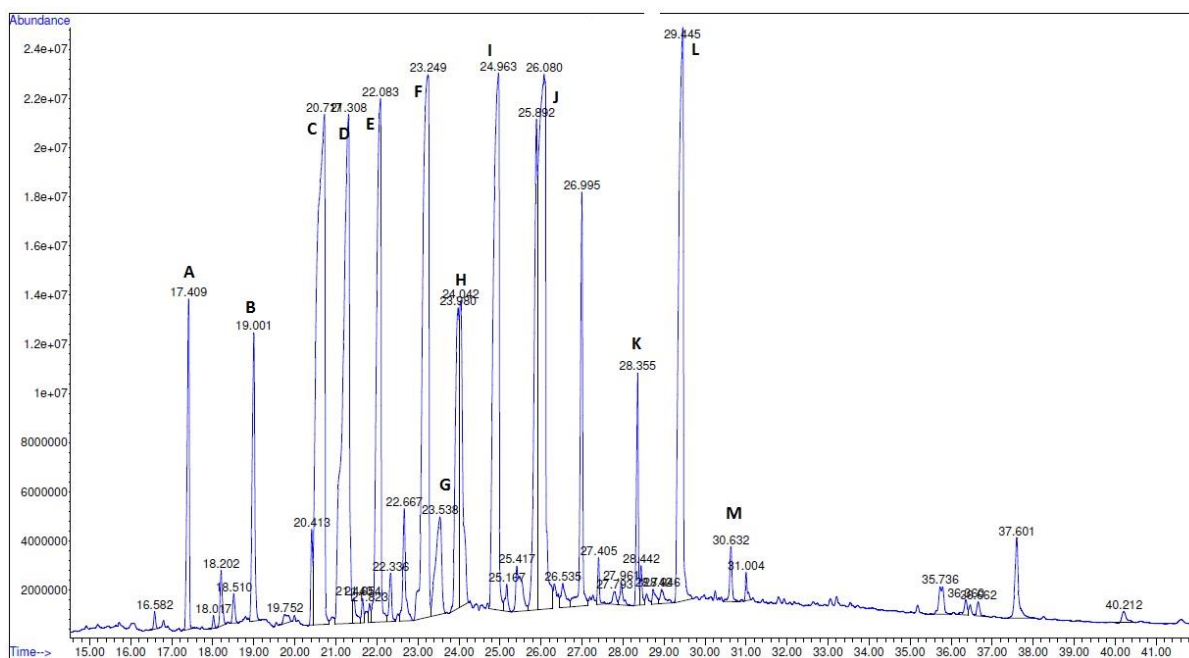


Figure S2. GC-MS chromatogram of FAME produced from *Chlorella vulgaris* (ethyl acetate extract)

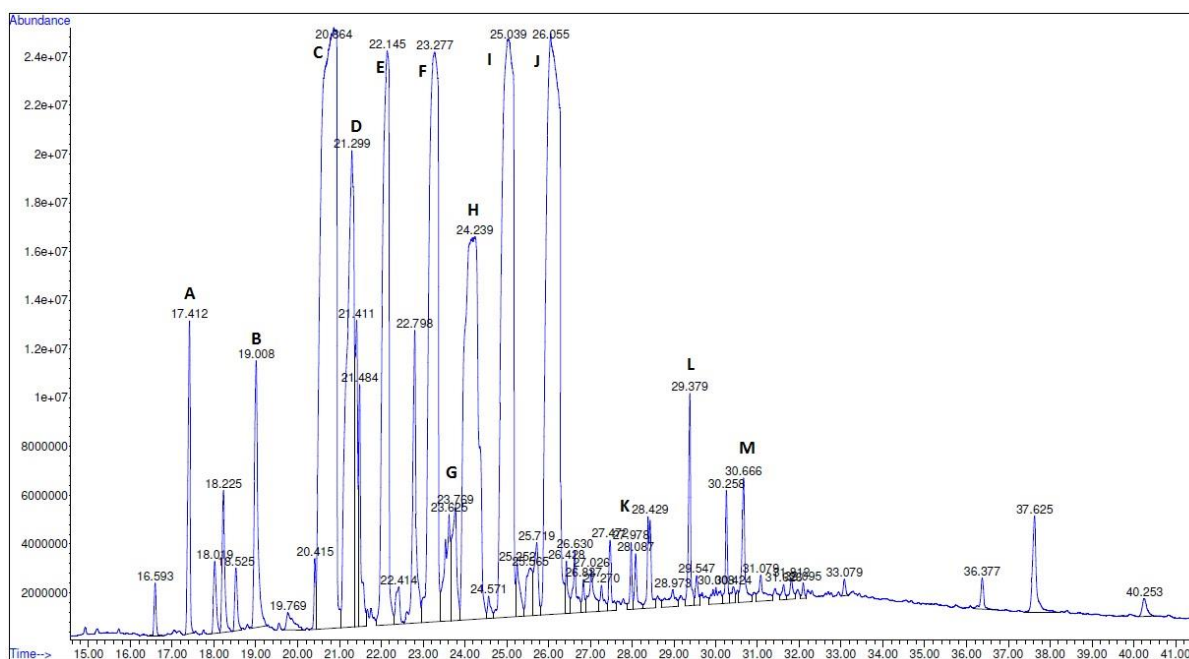


Figure S3. GC-MS chromatogram of FAME produced from *Chlorella vulgaris* (ethyl lactate extract)

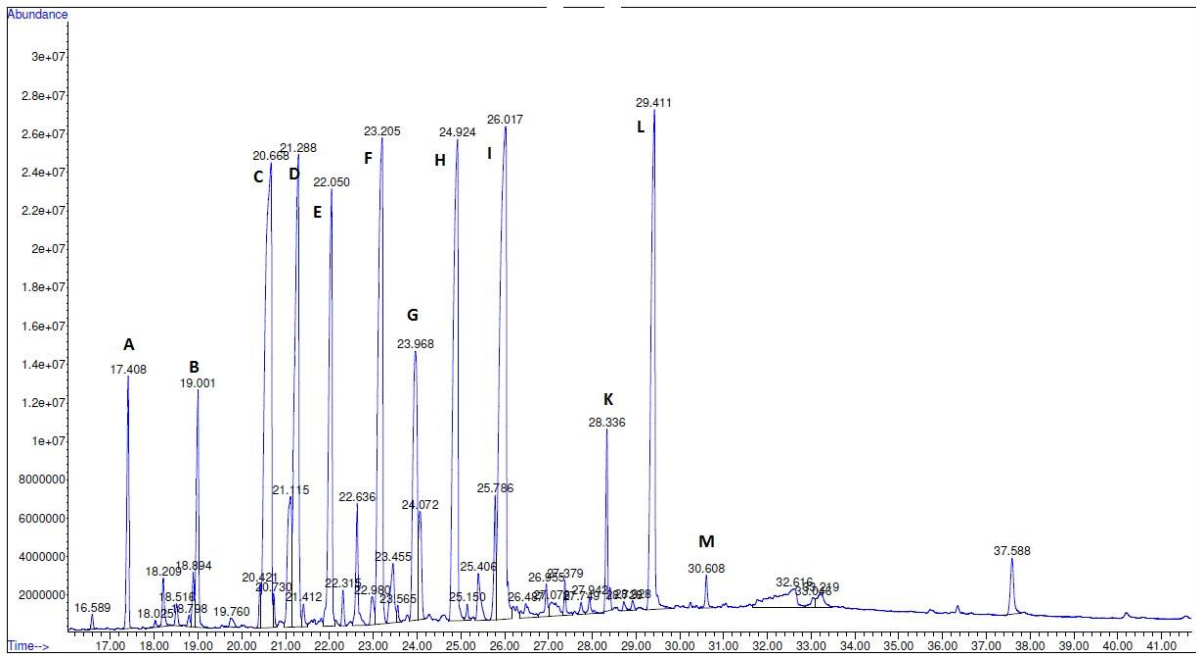


Figure S4. GC-MS chromatogram of FAME produced from *Chlorella vulgaris* (cyclopentyl methyl ether extract)

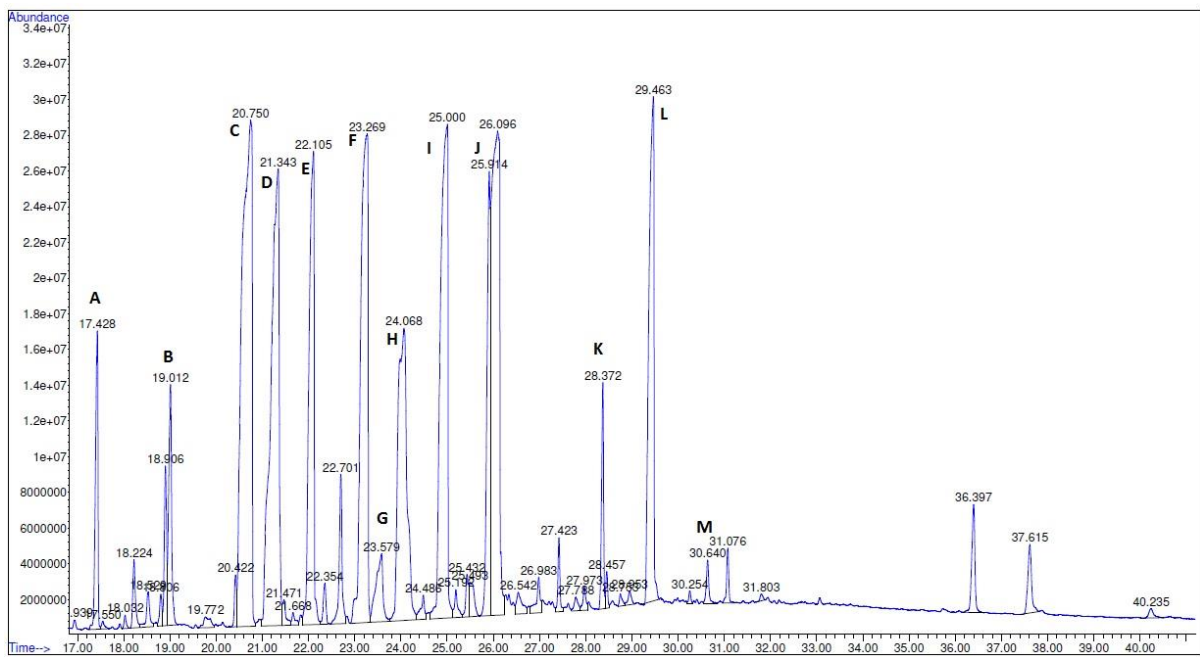


Figure S5. GC-MS chromatogram of FAME produced from *Chlorella vulgaris* (2-methyltetrahydrofuran extract)

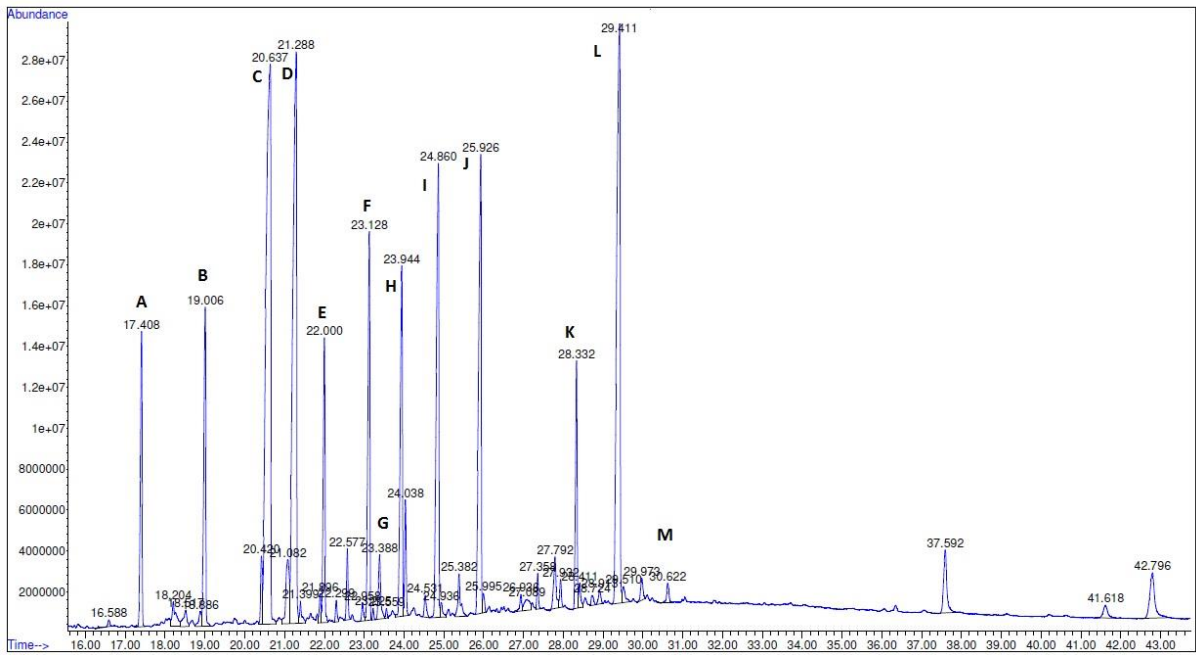


Figure S6. GC-MS chromatogram of FAME produced from *Nannochloropsis sp.* (hexane extract)

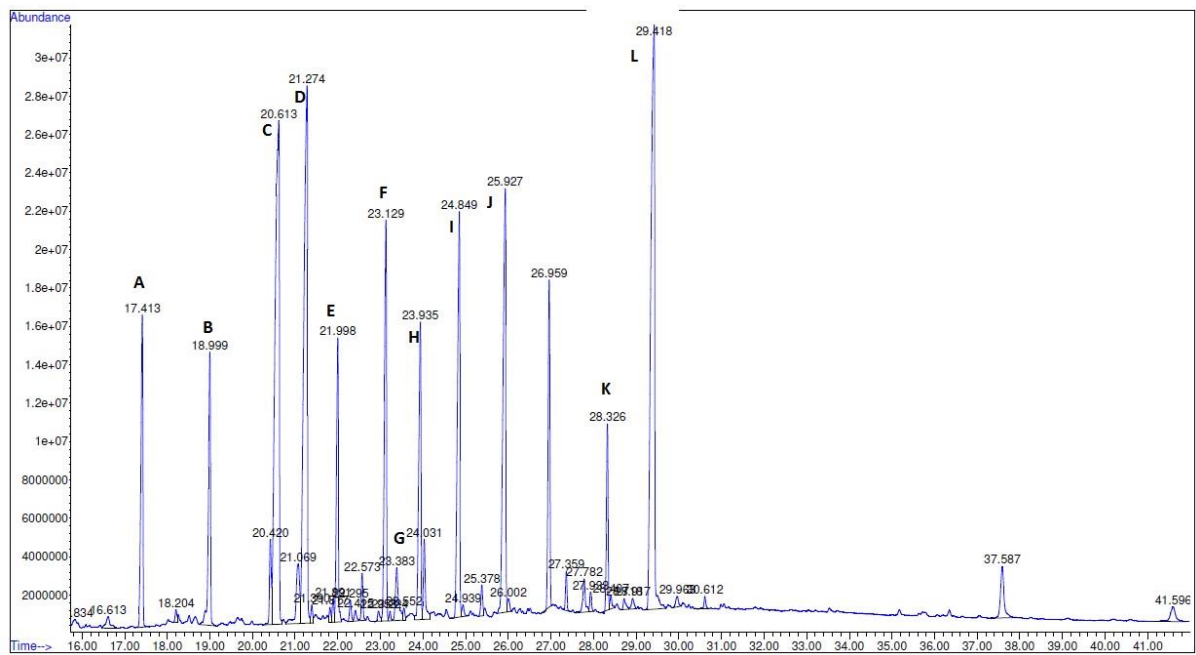


Figure S7. GC-MS chromatogram of FAME produced from *Nannochloropsis sp.* (ethyl acetate extract)

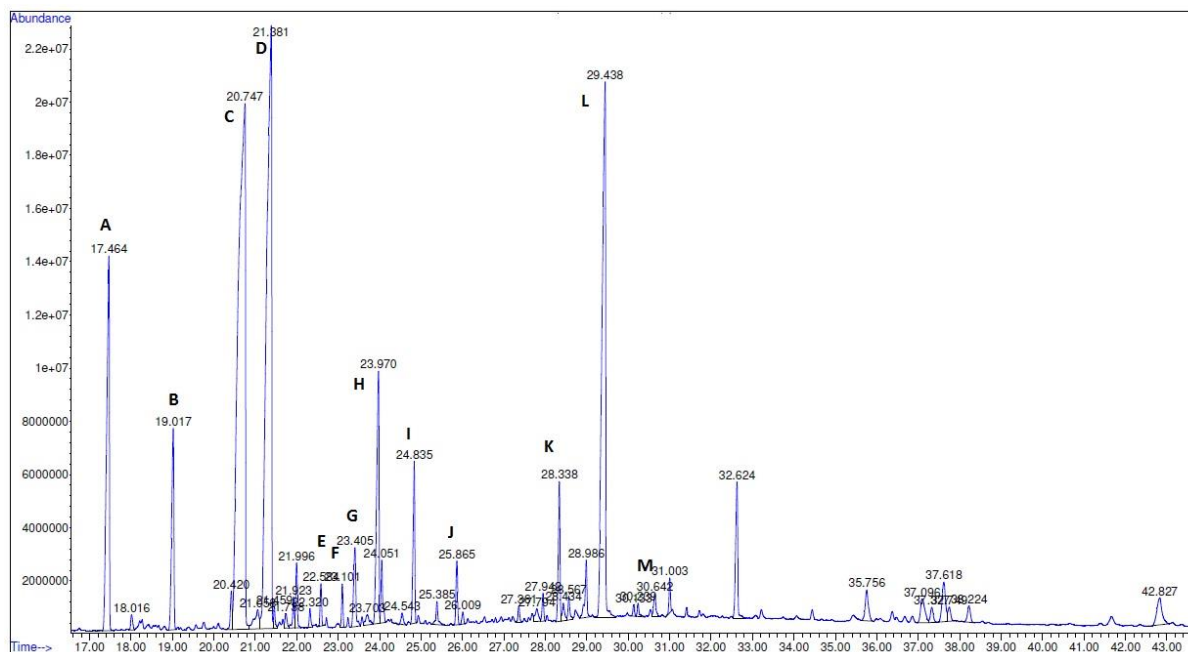


Figure S8. GC-MS chromatogram of FAME produced from *Nannochloropsis sp.* (ethyl lactate extract)

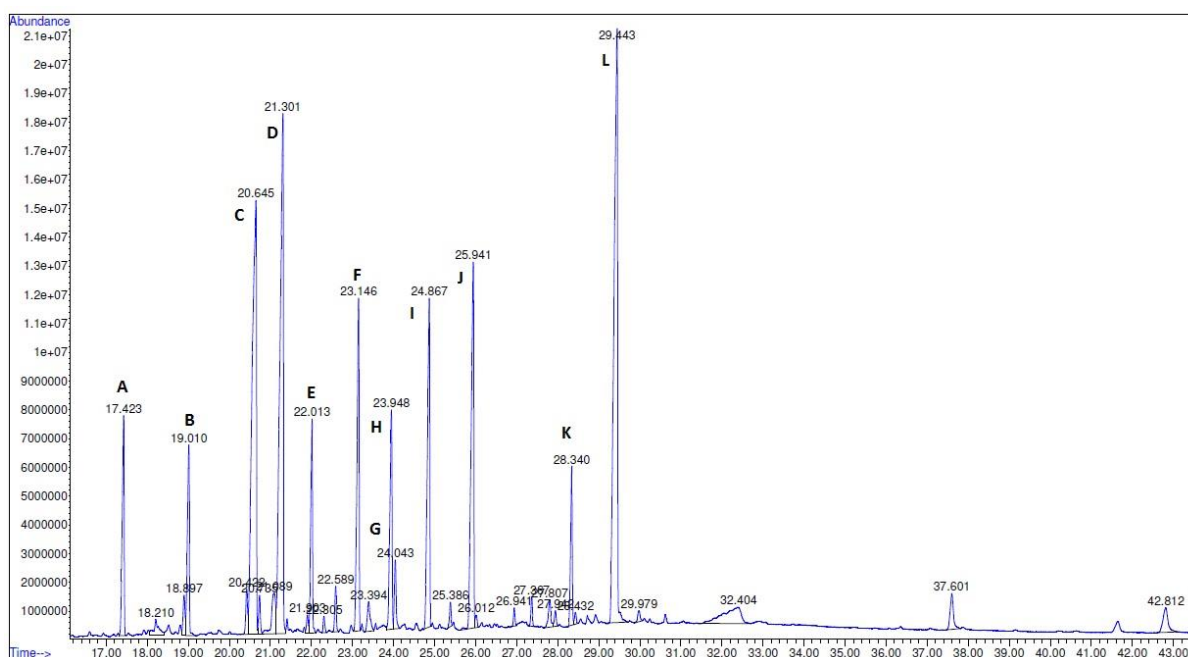


Figure S9. GC-MS chromatogram of FAME produced from *Nannochloropsis sp.* (cyclopentyl methyl ether extract)

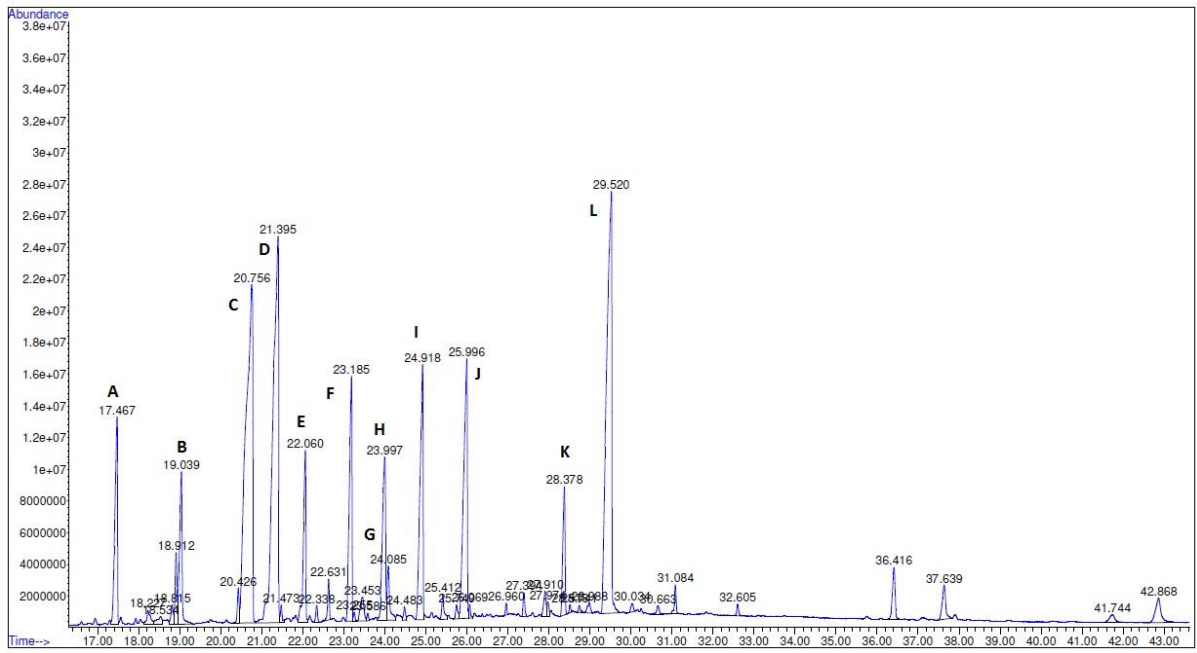


Figure S10. GC-MS chromatogram of FAME produced from *Nannochloropsis sp.* (2-methyltetrahydrofuran extract)