

Table S3: Summary of ONEWAY ANOVA post-hoc tests of reactors according to fuel additions.

R7, R8: no-fuel. R1, R2: petro F76. R3, R4: FT-F76. R5, R6: fuel mix. Dependent variables: relative abundance of the 100 genera in highest relative abundance. Avg: mean value. STDEV: standard deviation. Post-hoc tests: significance level < 0.05%, Tukey HSD and Dunnett t (2-sided) where no-fuel is the control group. Homogeneous groups are designated by the same letters (A, B, C). *: significant for Dunnett but not for Tukey HSD.

Reactors	no fuel Avg (STDEV)	petro-F76 Avg (STDEV)	FT-F76 Avg (STDEV)	fuel mix Avg (STDEV)
Class: genus				
Bacteroidia: <i>Bacteroidetes</i> BD-2 Homogeneous groups	5.4 (0.877) A	0.27 (0.382) B	0.36 (0.515) B	0.09 (0.133) B
Campylobacteria: <i>Sulfurovum</i> Homogeneous groups	0.02 (0.022) A	0.29 (0.090) BC	0.05 (0.066) C	0.11 (0.066) C
Chloroflexia: JG30-KF-CM45 (Family) Homogeneous groups	0.06 (0.000) A	0.3 (0.022) B	0.03 (0.000) A	0.05 (0.067) A
Desulfobacteria: <i>Desulfospira</i> Homogeneous groups	2.07 (0.492) A	0.00 (0.000) B	0.45 (0.640) B	0.00 (0.000) B
Desulfobacteria: <i>Desulfonatronobacter</i> Homogeneous groups	0.00 (0.000) A	0.84 (0.246) B	0.11 (0.068) AB	0.22 (0.310) AB
Desulfobacteria: Desulfosarcinaceae (Family) Homogeneous groups	0.31 (0.174) A	1.29 (0.293) B	0.33 (0.070) A	0.53 (0.089) A
Desulfobulbia: MSBL7 (Family) Desulfurivibrionaceae) Homogeneous groups	0.00 (0.000) A	0.19 (0.045) B	0.00 (0.000) A	0.03 (0.044) A
Clostridia: <i>Dethiosulfatibacter</i> Homogeneous groups	0.00 (0.000) A	0.11 (0.023) B	0.00 (0.000) A	0.03 (0.044) A
Firmicutes: unclassified Homogeneous groups	0.00 (0.000) A	0.3 (0.023) B	0.03 (0.045) A	0.09 (0.044) B

Alphaproteobacteria: <i>Hyphomonas</i> Homogeneous groups	0.44 (0.488) A	0.14 (0.112) A	2.11 (0.069) B	0.41 (0.266) A
Alphaproteobacteria: <i>Paracoccus</i> Homogeneous groups	0.17 (0.241) A*	1.72 (0.091) A	0.21 (0.157) A	0.72 (0.754) A
Alphaproteobacteria: <i>Magnetovibrio</i> Homogeneous groups	47.8 (2.473) A	2.49 (0.694) B	12.48 (13.539) B	1.62 (0.509) B
Alphaproteobacteria: <i>Erythrobacter</i> Homogeneous groups	2.7 (1.144) A	0.51 (0.044) AB*	0.13 (0.088) B	0.24 (0.111) B