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Ocean Science
Discussions

Interactive comment on "A protocol for quantifying mono- and polysaccharides in seawater and related saline matrices by electro-dialysis (ED) – combined to HPAEC-PAD" *by* Sebastian Zeppenfeld et al.

Anonymous Referee #2

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This is a detailed and thorough analytical development paper applied to a number of matrices and tested using marine samples. The authors have managed to achieve sensitive detection limits for a challenging analysis and the paper is suitable for publication with minor revision. I have detailed the changes needed below:

DFCHO and CCHO are not obvious abbreviations; are these accepted forms? L13. 'dissolved free'; should also be DCCHO in that case. L20. Delete 'real'. L45. 'with' not 'to'. L50. 'recent' not 'latest'. L57. Analogous to DFCC and DCAA? L68. 'oceanic environments' is more appropriate. L74. kinds L75. gas chromatography L76. How is

it labour intensive; give brief details? L81. The 'high ionic strength/content of seawater samples' is better. L107. Related saline samples; what are they? L116. Resistivity, not conductivity. L117. How long were items soaked in 10 % HCl? L123. 'from' not 'to' L129. Delete 'real' L131. Add 'sampling campaigns; delete'of our department' and add any details to acknowledgements. L132. Delete 'kept'. L143. mL ; change throughout. L149. I presume this is 60 mL.min-1 ; space before 'Two' L150. 'compartment' or 'section' 'containing' the electrodes. L152. 'made of' stainless steel. L153. (e.g. to end of sentence) L155-156. Explain more clearly how homogenisation was achieved. L156. Renewed how often (based on number of samples?)? L163. 'filled with' or simiar L171. Did the guard and analytical columns have the same packing (different codes given)? L172. What was maintained at 30 oC, and how? L173. Adaptation of Meyer et al. (2008) L174. 'were eluted in 4 nM NaOH solution'. L175. Were they contaminants? L176. 'the remaining . . . . Equilibrated with 4 mM NaOH solution. L179. 'in' not 'as a' L180. 'ranged from 2-12 nM L181. with reported data (refs) L183. resistivity < 18.2. . . . L193. Do you know how the pH changed with each change in the gradient profile? L198. 4 oC; insert space between numbers and units through the paper. L199. 'at the end'. L202. 'of expected DFCHO concentrations in seawater'. L204. Weighed; change throughout. L205. Delete 'remaining'. L208. 'in' duplicate L223. solutions L224. 'repeated in triplicate for four. . . ..'; delete 'and as triplicate for each time'. L234. Replace 'as well with' by 'and'; rmove comma after membrances. L248. The samples can't be neutralised by evaporation; clarify this text. L259-260. 'requires prior removal of sea salt'. L283. 'Large pH increase' L301. What is hydrated water; is it the hydronium ion? L330. 'of 87 %' L339. 'a constant rate' L342. 'at the end' L366. '89 % recovered at pH 1.5' L381. 'it does not leave' L383. Replace 'worse' with 'lower'. L387. Replace 'gadget' with 'system' or 'apparatus'. L392. 'to filtered samples' L396. 'were performed' L398. 'method presented here' L416. 'been reported'; delete 'given only' L479. 'of' not 'with' L484. research

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