

Interactive comment on “Molecular insights into the microbial formation of marine dissolved organic matter: recalcitrant or labile?” by B. P. Koch et al.

Anonymous Referee #1

Received and published: 4 March 2014

General comments:

This is a nice paper with novel and useful findings. The work advances the prior reports and efforts of the authors, and so is a valuable contribution. The authors test various important hypotheses, and come to sometimes surprising conclusions.

Specific comments:

Abstract: the fact that priming was not observed should be noted in the abstract.

3068/9-23. The term “TEP” is used, but the description in part appears to be that for microgels; certainly the reference to Verdugo papers suggests gels while the mention

C202

of aggregation and vertical flux suggests TEP. Is “TEP” being used for both true gels and standard TEP particles? Please revise for clarity.

3069/6: the word “transformations” should be singular

3069/7-11: I do not understand “a better mechanistic understanding of kinetics”. Kinetics deal with rates, not mechanisms. The use of the word “kinetics” in this section is confusing. How are “kinetics..crucial for . . .conservation..”?

3069/14: only one goal is given yet “main goals” is written.

3078/25: “(Fig. 4)” should be Fig. 5, right?

Interactive comment on Biogeosciences Discuss., 11, 3065, 2014.

C203