

Interactive comment on “Effect of salinity induced pH changes on benthic foraminifera: a laboratory culture experiment” by R. Saraswat et al.

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I share the concern of referee 1 that these experiments do not enable to distinguish the effect of salinity and pH. I would also like to highlight problems with units.

Salinity

Salinity is a major variable in this paper. However, the method used to measure salinity is not described and values are reported with unit ‰. A new salinity definition was introduced in 1978, the Practical Salinity Scale 1978 (Unesco, 1981). It is defined as the ratio of two conductivities and therefore has no unit. Interested readers can refer to the short statement of Ridout (1997). An even more recent definition is available (IOC, SCOR IAPSO, 2010) but is not widely used yet.

pH

The method used to measure pH is also not described, nor is the scale. See the recommendations of the "Guide to best practices for ocean acidification research and data reporting" (Riebesell et al., 2010).

References cited

IOC, SCOR IAPSO: 2010. The international thermodynamic equation of seawater–2010: calculation and use of thermodynamic properties. Intergovernmental Oceanographic Commission, Manuals and Guides 56:1-196.

Ridout, P.: Salinity units, *Ocean Challenge*, 7(1), 4, 1997.

Riebesell, U., Fabry, V. J., Hansson, L., and Gattuso, J.-P. (Eds.): 2010. Guide to best practices for ocean acidification research and data reporting, 260 p. Luxembourg: Publications Office of the European Union.

Unesco: Background papers and supporting data on the Practical Salinity Scale 1978, *Unesco Technical Papers in Marine Science*, 37, 1-144, 1981.

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