



Supplement of

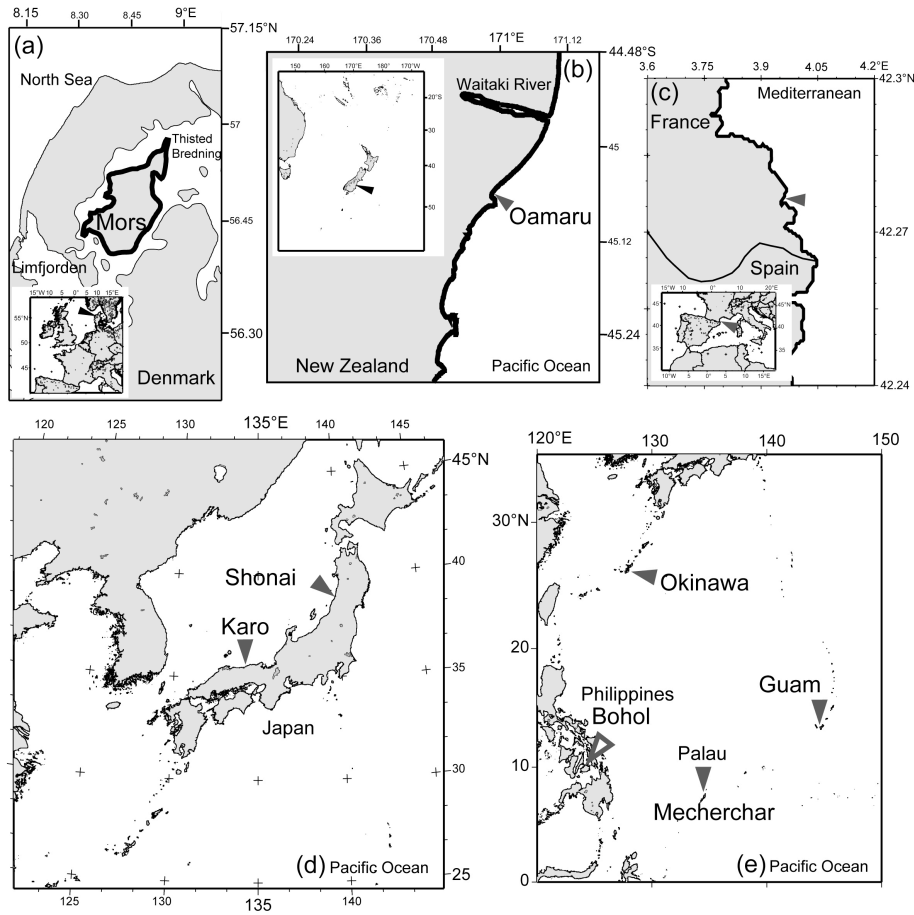
Modified cleaning method for biomineralized components

Hideto Tsutsui and Richard W. Jordan

Correspondence to: Hideto Tsutsui (blacksand@mail.goo.ne.jp)

The copyright of individual parts of the supplement might differ from the CC BY 4.0 License.

1



2

3 **Fig. S1.** Maps showing the locations of the diatom-bearing samples from (a) Mors Island in
 4 Denmark and (b) Oamaru in New Zealand; the holothurian sampling points in (c) France and (e)
 5 Okinawa, Bohol, and Guam; (d) the approximate locations where the sailfin sandfish were caught
 6 off the Shonai and Karo coasts in Japan; and (e) the fossil foraminifer sampling point in Mecherchar
 7 Jellyfish Lake, Mecherchar Island, Palau. All maps are based on Collaborative Research Center
 8 (SFB) 574, Volatiles and Fluids in Subduction Zones (<http://sfb574.geomar.de/gmt-maps.html>).

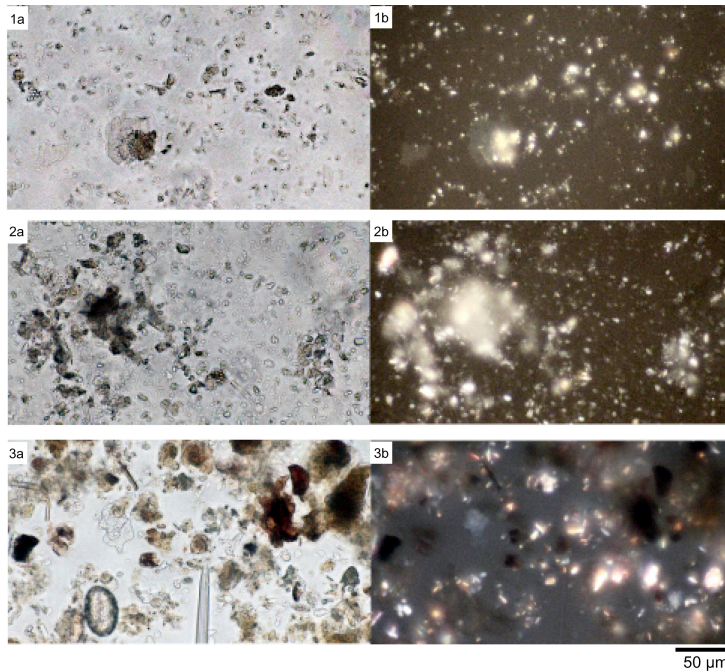


Plate S1. Photomicrographs of the water mounts of the untreated material. **fig. 1a-b.** Mors diatomite. Many coccoliths were observed in cross nicols. **fig. 2a-b.** Oamaru diatom-bearing sediment. **fig. 3a-b.** JFL sediments. figs 1a, 2a and 3a were taken in open nicols, while figs 1b, 2b, and 3b were taken in crossed nicols.

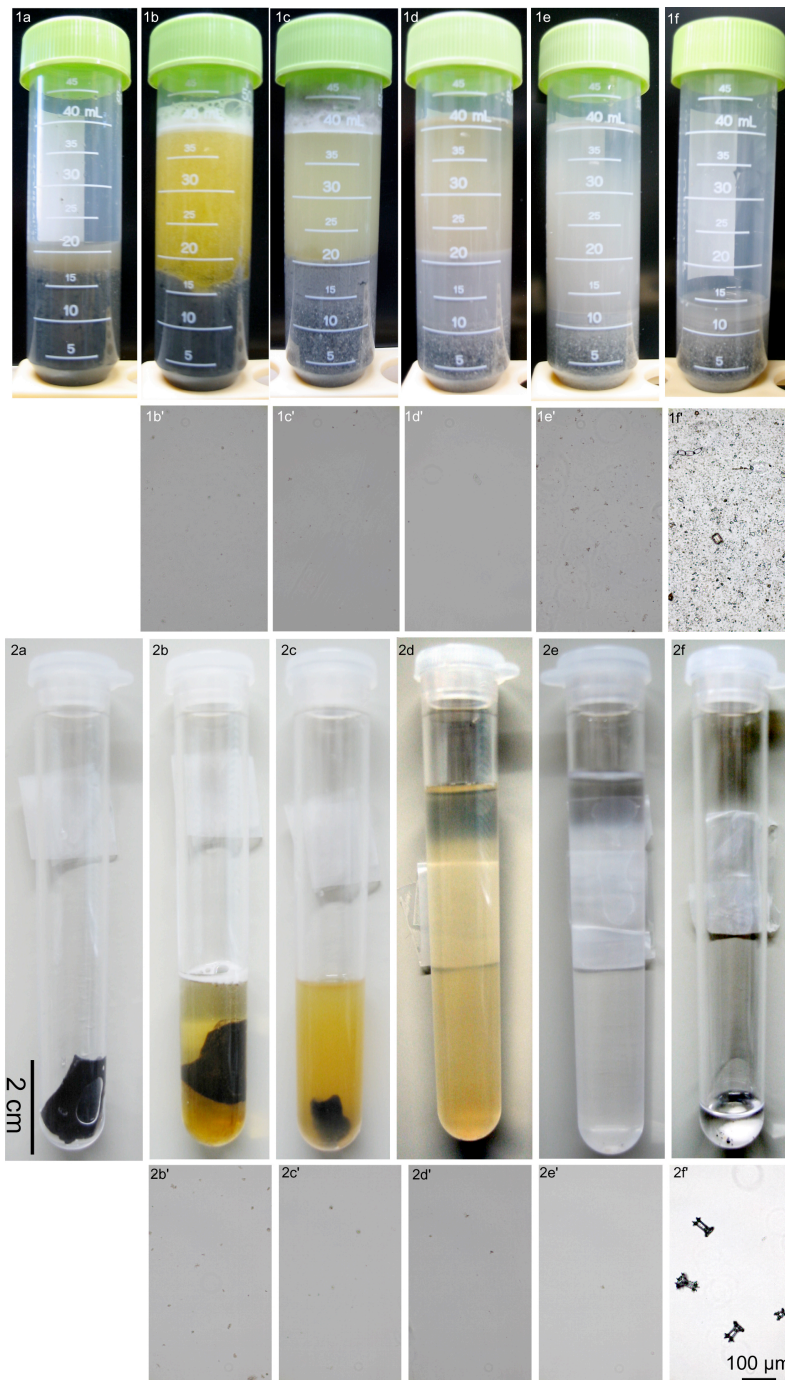


Plate S2. Step-by step process, showing the supernatant in the centrifuge tubes of the East China Sea sediment (figs. 1a-1f), sampled on 2nd August 2016 during the NS16-442 cruise of the T/S Nagasaki Maru, and of a specimen of *Holothuria leucospilota* (holothuria, sea cucumber), collected from Taketomi Island, Okinawa, Japan on 20th June 2015 (figs. 2a-2f). Photomicrographs of the discarded supernatant are shown for the sediment (figs. 1b'-1e') and for the holothurian (figs. 2b'-2e'). Also shown are photomicrographs of final pellet containing fossil diatoms in the sediment (fig. 1f) and ossicles of the holothurian (fig. 2f).