Hakai
Science on the Coastal Margin

Particulate Organic Matter (POM) for fatty acids

Collecting Samples

1. Collect POM samples from the desired depth with a niskin bottle.
2. Once the niskin is back on deck collect the POM sample into a 10 + liter plastic carboy.
3. 2 L of sample water from each depth (0,5,10,20,30)
4. Rinse the collection bottle three times prior to collection using a small amount of water (50-100mll)
5. Collect ~ 10 liters of water.
6. Store the collection bottle in a cooler / fridge until the time of filtration.
7. Samples should be filtered as close to the time of collection as possible.

Filtering the samples

1. Load a 47mm filter funnels with pre-combusted filter.
2. Invert sample bottle to mix water and rinse measuring jugs with filtered seawater/ sample water prior to filtering.
3. Filter as much water as possible onto these two filters. Do not let the pressure exceed -0.2 bar (-5 Hg).
4. Take care not to let the filter run dry. This will cause phytoplankton cells to rupture.
5. If the filters become blocked then stop the filtration and start a new filter. If the funnel still has water in it at this point, close the funnel stopper and pour the unfiltered water into a jug. Replace the filter and pour the saved water back into the funnel. In this way no water is lost.
6. Once all water has been filtered close the filter funnel stopper and turn off the pump.
7. Carefully remove the filter using flat filter forceps. Fold filter in half (inwards) using two pairs of forceps and place into numbered cryotubes / squares of aluminum foil.
8. If using foil, fold square along the edges to seal the package.
9. For each filter used record the filter number, the station depth and date, and the volume filtered on the station sheet.

Sample Storage

1. Place cryotubes / Al foil squares in a labelled ziplock bag (POM FA) and store in a **-80 freezer** until processing.