Part 1:

General information for analyses at the

NanoSIMS lab of the Leibniz-Institute for Baltic Sea research Warnemünde

The NanoSIMS lab is open to all users. The first step to get analysis time on the instrument is to submit a short proposal which will be reviewed by the IOW within 4 weeks. If your project is selected for analysis, the lab manager will contact you to schedule your measurement.

The sample needs to be conductible, withstanding a vacuum of 1‑10 mbar and is not allowed to contain particles which ablate from the sample in the high voltage field. The sample height differences need to be below 10 micrometre to receive good results. Samples which do not meet these specifications or contain toxic, corrosive reactive, flammable, explosive, radioactive or otherwise hazardous substances will not be analysed.

NanoSIMS results depend on sample matrix and topography and no absolute concentrations are received. To receive results like content in % or isotope ratio in permil vs. an official standard, a standard substance with comparable and known composition needs to be provided. Please discus with the lab manager which standards are available.

The samples need to be provided at least two days in advance (depending on sample composition) and the samples have to be accompanied by a sample description sheet with detailed information. The analyses will be performed by the operators of the NanoSIMS. The users need to give detailed information about the sample spots that should be analysed and/or accompany the operator during his/her work.

The results are given to the user in digital form. At the IOW a working place with appropriate software for data analysis is available. Please contact the lab manager if you want to use this computer. After the analysis the client must return the post analysis survey to the lab manager within 4 weeks.

For further details and any questions please have a look at the website (<http://www.io-warnemuende.de/nanosims-en.html>) and the links there. For detailes questions contact the lab manager Angela Vogts (angela.vogts@io-warnemuende.de, +49 (0) 381 5197 353).