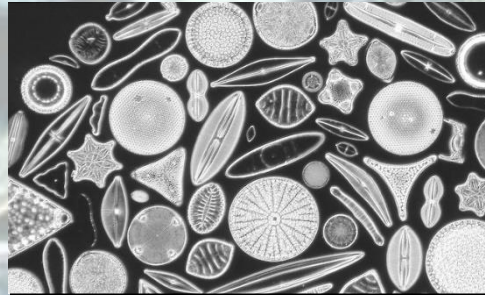


## Introduction

Diatoms are a big group of microalgae, with different taxa living in different conditions (for example, salinity conditions). They can be used to reconstruct environmental history. The same applies to the rest of microalgae.



Picture 1-Diatoms.

Source: <https://www.illinoisscience.org/2017/11/diatoms-the-cheat-sheet-for-studying-our-waterways/>



Picture 2- Island of Lygra.

Source: <https://www.lygragjestegard.no/>

## Aim

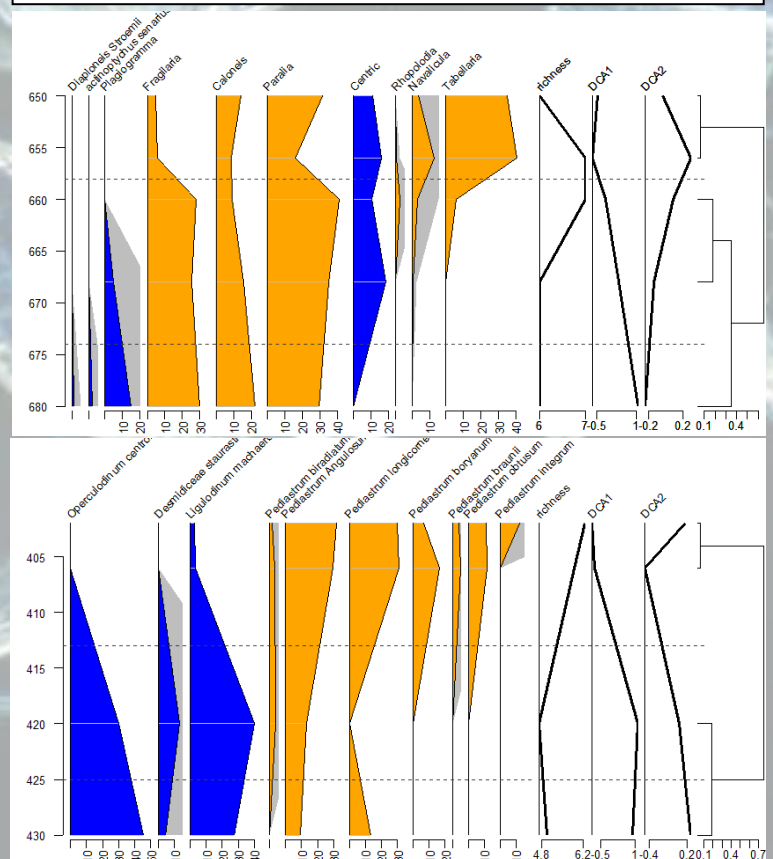
Use diatom and microalgae assemblages to study the sea-level variations in the Island of Lygra, Norway.

## Materials and methods:

- Use of samples of microalgae and diatoms gathered in the Island of Lygra;
- Analysis in a microscope;
- Use of RStudio to build the graphs and interpretation.

## Results and Discussion

There was definitely a marine regression, observed by the disappearance of the marine species and the increase in fresh-water species, observed in both graphs. There was a transition from salt-water to fresh-water.



Graphs 1 and 2- stratigraphic plots of diatoms assemblages (Graph 1) and microalgae assemblages (Graph 2), both in the Island of Lygra, during the Holocene. Marine species are represented by the blue colour and fresh-water species are represented by the orange.