



## PHYTOPLANKTON PIGMENT ANALYSIS COURSE

How to obtain state-of-the-art pigment analyses by HPLC

This two-day course gives you an introduction to phytoplankton pigment analyses by HPLC. The aim of the course is to improve your knowledge and broaden your skills within HPLC pigment analysis.

You will obtain all the information needed to perform state-of-the-art phytoplankton pigment analyses. The course will guide you all the way from filtering of samples to obtaining validated results of pigment concentrations, including interpretation of the results.

The course features numerous opportunities to exchange and discuss ideas and experience with fellow pigment analysts in an informal forum.

### COURSE TOPICS

- Filtrating and extracting samples
- Choice of HPLC method
- HPLC/UHPLC systems and what is important for the analyses
- Defining the analysis protocol needed and getting the HPLC method running
- Calibration procedures
- Quality control and quality assurance
- Distribution of different pigments in phytoplankton groups
- Applications: calculation phytoplankton biomasses using CHEMTAX
- Demonstrations
- Course participants' own examples, challenges and problems

### TARGET GROUP AND PREREQUISITES

Professionals who are interested in obtaining a general understanding of what is important for obtaining precise and accurate results of pigment analyses.



### DATES

25 and 26 October 2018.

### LOCATION AND VENUE

DHI, Agern Allé 5, DK-2970 Hørsholm, Denmark.

### FEES

Price: € 750

The price is exclusive of VAT and taxes.

### THIS IS INCLUDED

- Training material
- Lunch and refreshments
- Training certificate

### LANGUAGE

Lectures and training material are in English.

### REGISTRATION AND CONTACT

Deadline for registration is 31 August 2018

A minimum of participants is required for the course to proceed. DHI reserves the right to reschedule the training course up to 8 weeks prior to the course.

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Programme 25 October 2018 (day 1)	
10:00	Welcome to DHI (tea and coffee) / General information
10:15	HPLC/UHPLC systems and what is important for the analyses
10:45	Defining the analysis protocol needed and getting the method running
11:15	Things to adjust if the HPLC does not separate the expected peaks
11:45	Lunch
12:30	Quality assurance
13:30	Example of an accreditation at DHI
14:00	Calibration procedures
14:30	Tea & coffee break
15:00	Things to consider when analysing samples
16:00	Demonstrations
17:00	End of day 1

Programme 26 October 2018 (day 2)	
08:45	Tea & coffee
09:00	Things to consider when analysing samples (cont.)
10:00	Exercise
11:00	Transfer methods from HPLC to UHPLC
11:30	Reporting results
12:00	Lunch
12:45	Calculating phytoplankton biomasses using CHEMTAX
13:15	Distribution of different pigments in different phytoplankton groups
13:45	Workshop: discussion of participants' own examples, challenges and problems
15:00	Evaluation
15:30	End of workshop

## INSTRUCTORS

### LOUISE SCHLÜTER

Louise Schlüter is a Lead Biologist at DHI. She is responsible for the DHI LAB Products. Louise has extensive experience in determining phytoplankton group composition and biomass by pigment analysis.

MSc, PhD (Biology), University of Copenhagen, Denmark



### MERETE ALLERUP

Merete Allerup is a Laboratory Technician at DHI. She is responsible for the production of phytoplankton pigment standards and for analyzing pigment samples by HPLC. Merete has extensive experience in HPLC and UHPLC methods.

Laboratory School, Copenhagen, Denmark



## THE ACADEMY BY DHI

THE ACADEMY offers a palette of courses and capacity building packages designed to fit your needs and challenges. We offer standard and/or tailored training.

**MIKE Powered by DHI courses** focus on practical skills, hands-on exercises and teaching you how to get the most out of your software. These courses also enable you to understand the power of the MIKE tools for building decision support systems.

**Thematic courses** allow you to apply concepts, applications and decision support principles to the entire business process within current areas: aquaculture and agriculture, energy, climate change, flooding, coast and marine, surface and groundwater, urban water, industry, environment and ecosystems, product safety and environmental risk, etc.

**Our trainers** are experienced professionals, many of whom are recognised international experts in their fields. The use of highly skilled trainers guarantees the quality of THE ACADEMY courses.

Learn more about THE ACADEMY on [www.theacademybydhi.com](http://www.theacademybydhi.com)

## DHI

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