

Teaching CV for

Mathias P. Clausen

Institut for Grøn Teknologi (IGT)

SDU Biotechnology

**Postadresse:**

Campusvej 55

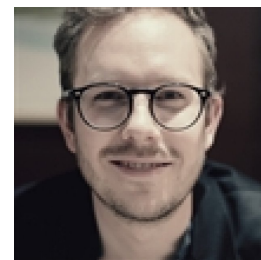
5230

Odense M

Danmark

**E-mail:** mpc@igt.sdu.dk

**Mobil:** 30254005



## Teaching Experience Summary

I have taught more than 10 different university level courses (bachelor, master and PhD level), covering a wide range of topics within physics, chemistry, food science, microscopy, and molecular biology. I am currently main responsible for two bachelor level courses, and co-responsible for one master level course. My teaching experience covers both problem solving, laboratory exercises, lecturing, and project supervision.

I am currently following a course on university level teaching with expected completion January 2020.

I have supervised and co-supervised a number of students at levels ranging from semester projects at bachelor level to research projects at PhD level.

I have arranged workshops and developed teaching material to use at different levels of the Danish educational system; secondary schools, technical colleges, high schools, university colleagues, and university.

## Pedagogical View – Educational Practise

I believe that it is my task as teacher to motivate the students and promote a curiosity driven approach in learning and problem solving. I actively engage the students in the teaching by asking questions, and by requiring answers. I further find, that giving the student responsibility for their own learning as well as for the rest of the class by actively contributing to the teaching, improve the commitment of the students and provides very good results. I find that a mixture of theoretical concepts followed by immediate examples of applications (both academic and non-academic) provide a very good way for the students to learn even very complicated topics. When possible, I like to include demonstrations and laboratory exercises to supplement textbook material. I always aim for the students to gain both knowledge and skills within a given topic to improve their overall competences. I try to meet the students where they are in order to help moving them the furthest. I place high ambitions for my students, but do so in a supporting and friendly setting, and my door is always open to students. In projects, I encourage the students to come with their own project ideas, not only following my own agenda. I believe this empowers the students and motivates them to apply their own innovative solutions.

## Teaching Experience

Courses with main course responsibility:

2018 - now

"Food Technology", as part of the course "Biotechnological Processes", 15 ECTS (responsible for 1/2 of total course workload), 3rd semester, mandatory course, 50 students pr. semester (Chemical Engineering and Biotechnology), SDU  
Main tasks: laboratory training, lectures/class room teaching, project supervision

2019 - now

"Applied Statistics", as part of the course "Analytical Instrumentation and Applied Statistics, 15 ECTS (responsible for 1/2 of total course workload), 4th semester, mandatory course, 60 students pr. semester (Chemical Engineering and Biotechnology and Chemistry), SDU

Main tasks: lectures/class room teaching, project supervision

Courses with co-course responsibility:

2018 - now

"Methods in Science", 5 ECTS (responsible for 1/3 of total course workload), 9th semester, mandatory course, 30 students pr. semester (Chemical Engineering and Biotechnology), SDU

Main tasks: lectures/ class room teaching, synopsis supervision and feedback

Courses with minor course responsibility:

2015 - 2017 Lecturer in the courses:

“Biology at the Interfaces”, master level course, SDU  
“Condensed Soft Matter Physics”, 6th semester, SDU  
“Biophotonics and Bioimaging”, PhD course, SDU  
“Cross-Institutional Molecular Biophysics Course”, PhD course, SDU  
“Cellular Bioimaging Course”, PhD course, iBG Izmir, Turkey

2013 - 2014 Lecturer and laboratory demonstration instructor in the course:  
“Basic and Advanced Microscopy”, PhD course, University of Oxford

2005 - 2012 Student teaching assistant (instructor) in the courses:  
“Introduction to Biophysics”, 1st semester, SDU  
“Science Statistics”, 2nd semester, SDU  
“Advanced molecular biology”, 5th semester, SDU  
“Physical Chemistry”, 3rd semester, SDU

## Supervision Experience

I have supervised a number of different student projects related to my courses and research activity:

3 PhD students (1 as main supervisor and 2 as co-supervisor), SDU and Oxford University

4 Master student projects, SDU

9 ISA (individual study activity) projects (master level), SDU

7 project groups, 3rd semester projects in “Food Technology”, SDU

## Pedagogical Training

I am currently following the formal training in university level teaching (Lecturer Training Programme) at SDU. As part of the training, I have completed training in “Students as Learners”, “Research Based Teaching” engaged in discussion group on best practise teaching. I have successfully completed the following courses:

Supervision – roles and relationships,  $\frac{3}{4}$  ETCS, 2019

Oral examination in higher education in Denmark,  $\frac{1}{2}$  ETCS, 2018

Interactive lecturing,  $\frac{1}{2}$  ETCS, 2018

## Other Relevant Teaching Related Activities

Discussion Meeting on a regular basis with peers to discuss teaching and student supervision practise.

Personal coaching on body language, voice control, and stage performance. This coaching was done as part of a research theatre show (“Forskeshow – alt du bør opleve om mad”) arranged by Folkeuniversitetet Aarhus, 2017 I meet on a regular basis with peers to discuss teaching and student supervision practise.

Organiser of a large number of workshops on “Food, Taste, and Science” within the project “Smag for Livet” (“Taste for Life”). The teaching material was aimed at high schools, secondary schools, secondary school teachers and teacher students, university colleges, technical colleges, and participants in food camps, 2015-2018

Author of teaching material in the project “Smag for Livet” (“Taste for Life”) in collaboration with professional educator with a teaching didactics background. Most of the teaching material can be found in the app “Smag med Fag”, 2015-2018

## Popular Science Papers

I have written a number of Danish-language articles/book chapters related to my research and scientific fields intended for use in the Danish educational system:

Schmidt. C.V. et al., Spise blæksprutter – er du mør?, *Aktuel Naturvidenskab* 3, 2018

Pedersen, M.T.; Clausen M.P., Sådan bliver vandmænd en knasende spise, *ForskerZonen*, videnskab.dk, 2017

Christensen M. & Clausen M.P., Smag og smagssansen, *Forening for Madkundskab*, 2016

Christensen M.; Clausen M.P.; Mouritsen, O.G., Se ind i maden, *Aktuel Naturvidenskab* 6, 2015

Dreier, J. & Clausen M.P., Nanoskopi, *Aktuel Naturvidenskab* 5, 2014  
Onslev L. & Clausen M.P., Jagten på en ny membranmodel, *Aktuel Naturvidenskab* 4, 2013