VLAG-EPS Course
Microscopy and Spectroscopy in Food and Plant Sciences
7-9 May, 2019

Wageningen, The Netherlands

The Wageningen Light Microscopy Centre and the MicroSpectroscopy Research Facility will organize a three-day course on Microscopy and Spectroscopy in Food and Plant Sciences. In this course you will learn the theory behind different state-of-the-art microscopy techniques and get hands-on experience in the form of group assignments under the guidance of experts in the field.

Tuesday 7 May, Forum building (nr. 102), PC room 0707

09:00 Intro and lecture "microscope construction" (Janson)
09:45 break
10:00 lecture "creating contrast" (Janson)
10:45 break
11:00 Start computer practical "digital image analysis" (Bader/deRuijter/Borst)
12:00 lunch
13:30 lecture "Fluorescent probes" (Borst)
14:15 break
14:30 Continuation computer practical "digital image analysis" (Bader/deRuijter/Borst)
18:00 Dinner

Wednesday 8 May, Forum building (nr. 102), PC room 0707

09:00 lecture "fluorescence microscopy and optical sectioning" (Janson)
10:00 break
10:15 lecture "Förster resonance energy transfer" (Borst)
10:45 break
11:00 lecture "Single Molecule Techniques" (Hohlbein)
12:00 lunch
13:30 Practical 1,2,3 and 4 (depending on group assignment)
15:30 Change practical: Practical 1,2,3 and 4 (depending on group assignment)
17:30 End of day 2

Thursday 9 May, Radix building (nr. 107), room PC0089

09:00 lecture "FRET imaging applications" (Borst)
09:45 break
10:00 Practical 1,2,3 and 4 (depending on group assignment)
12:00 lunch
13:00 Practical 1,2,3 and 4 (depending on group assignment)
15:00 Data analysis
17:30 Evaluation and drinks

Practical 1: Microscope construction
Practical 2: Confocal (3D) imaging
Practical 3: FRET-FLIM
Practical 4: Super-resolution imaging