



# Hands-On Proteomics Workshop

## (2D Gel Electrophoresis in combination with Mass Spectrometry)

### Efficiency and Reliability through Innovative Technology

#### NH DyeAGNOSTICS

##### Multiplex 2D Gel and 2D Western Blot Analysis

2D electrophoresis is the most powerful way for the separation and analysis of intact proteins. Learn how to prepare, run and image 2D samples using the latest developments in protein labeling, horizontal gel electrophoresis, precast gels for 2D Western Blotting, multiplex fluorescence imaging, and redox proteomics.

#### DECODON

##### Image Analysis with Delta2D – expression profiles from 2D images (2DE, 2D Western Blot)

DECODON shows you how to use Delta2D, how to analyze images in an innovative way and how to use statistical approaches to get robust data including visualization for presentation and easy understanding. Learn to analyze 2D western blot, redox proteomics, coverages, and many more approaches with Delta2D.

#### BRUKER

##### Strategies for Protein Identification - from in-gel digestion to protein identification

Learn how to prepare good samples for MALDI-TOF/TOF-MS. Tips and tricks for sample preparation to achieve highly valuable protein identification by an highly automated workflow. Learn how to "read" MS and MS/MS data to check your database output with respect to reliability and accuracy.

Do you have certain questions you want to discuss?  
Do you want to have your own samples analyzed?  
Please ask for further information when you register.

#### Registration:

Details see

[http://www.cta.tuwien.ac.at/division\\_instrumental\\_analytical\\_chemistry/omics\\_technologies/events/annual\\_hands\\_on\\_proteomics\\_workshop/](http://www.cta.tuwien.ac.at/division_instrumental_analytical_chemistry/omics_technologies/events/annual_hands_on_proteomics_workshop/)

Registration via website or email to [martina.marchetti-deschmann@tuwien.ac.at](mailto:martina.marchetti-deschmann@tuwien.ac.at)

Please register – course is limited to 10 participants.

**When:** 29.03. – 01.04.2016 (details see page 2)

**Where:** Vienna University of Technology, Getreidemarkt 9; Building BB , 1060 Vienna

**Costs:**

	Industry	Students, PhD, PostDoc...
early bird (Feb 15, 2016)	500,00€	400,00€
after Feb 15	600,00€	450,00€

AuPA Members have a discount of 50€.

Lunch, Coffee break, scripts, consumables are included

# Program

## Tuesday, 29. March 2016

08:30	to	08:45	L	Registration and Welcome
08:45	to	09:00	L	Introduction of participants (e.g. name, work place, type of research, goal)
09:00	to	09:30	L	Theory: Fluorescence 2D gel electrophoresis and 2D Western Blotting (Sample Preparation, Refraction-2D™ Labeling, 2D gel electrophoresis)
09:30	to	09:45	L	Image Analysis of 2D electrophoresis gel - state of the art
09:45	to	10:00	L	Introduction to Modern Protein Mass Spectrometry
10:00	to	10:15		Coffee break
10:15	to	11:30	L	Sample Preparation (Refraction-2D™, Saturn-2D™), IEF and Experimental setup of the workshop
11:30	to	13:00		Lunch
13:00	to	15:45	P	Sample Preparation, IPG strip rehydration & Start 1 <sup>st</sup> dimension
15:45	to	16:00		Coffee break
16:00	to	17:00	L	Image analysis of 2D Gel images with Delta2D
17:00	to	18:00	L/P	Introduction Octoplus Fluorescence Imager & Scan of demo gels

## Wednesday, 30. March 2016

08:00	to	09:30	P	ORCA Horizontal Gel Electrophoresis & start 2 <sup>nd</sup> dimension (1)
09:30	to	10:00	P	Coffee break
10:00	to	12:15	P	Gel analysis with demo gels under supervision (1)
12:15	to	13:00		Lunch
13:00	to	14:00		Start 2 <sup>nd</sup> dimension (2) & BEO Blotting
14:00	to	17:15	L	Mass spectrometry (sample preparation & analysis of mass spectra)
17:15	to	18:00	L	Modern Mass Spectrometry for Proteomics

## Thursday, 31. March 2016

08:00	to	10:00	P	Scanning own gels & Trouble shooting 2D guide
10:00	to	12:00	L	MS
12:00	to	13:00		Lunch
13:00	to	14:30	L	Trouble shooting
14:30	to	14:45	P	Coffee break
14:45	to	17:00	P	Gel analysis with demo gels under supervision (2)

## Friday, 01. April 2016

08:00	to	10:00	L/P	Latest Developments in 2D electrophoresis & 2D Western Blots (target detection and analysis using Delta2D)
10:00	to	10:15		Break
10:15	to	11:45	L/P	Q &A

L: lecture, P: Hands-On

Slight changes of time plan may occur during the course.