



Hands-On Proteomics Workshop

(2D Gel Electrophoresis in combination with Mass Spectrometry)

Efficiency and Reliability through Innovative Technology

NH DyeAGNOSTICS

Strategies for Effective Sample Preparation – Exciting Proteins are Low Abundant Proteins

NH DyeAGNOSTICS shows strategies for efficient sample preparation and demonstrates a High Performance Technology for multiplexed 2D gel analysis (experimental design, labeling, performance, imaging).

SERVA Electrophoresis

Dr. Reiner Westermeier: High Performance Electrophoresis (HPE) - A New Dimension of 2D Gel Electrophoresis

Learn to handle a complex workflow using the 2D High Performance Electrophoresis System. The combined use of the HPE Tower and HPE 2D gels allows a separation quality not experienced before. After SERVA IPG BlueStrips samples are separated on HPE 2D horizontal gels using the Tower system.

DECODON

Image Analysis with Delta2D – expression profiles from 2D gel images

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.

Did you experience problems you want to discuss?
Do you want to have your own samples analysed?
Please inform us when you register.

Registration: martina.marchetti-deschmann@tuwien.ac.at

Please register – course is limited to 10 participants (except lectures on Wednesday afternoon)

When: 02.04. – 05.04.2013 (details see page 2)

Where: Vienna University of Technology, Getreidemarkt 9, 1060 Vienna

Costs: Industry € 450,00 (AuPA member € 400,00)
students, PhD, PostDoc,.. € 300,00 (AuPA member € 250,00)

Lunch, Coffee break, scripts, consumables are included

Program

Tuesday, 02. April 2013

8:30	to	8:45	L	Registration and Welcome
8:45	to	9:00	L	Introduction of participants (e.g. name, work place, type of research, goal)
9:00	to	9:15	L	Theory: Sample Preparation + Labeling (Refraction-2D™, Saturn-2D™)
9:15	to	9:30	L	2D gel electrophoresis - state of the art
9:30	to	9:45	L	Image Analysis of 2D electrophoresis gel - state of the art
9:45	to	10:00	L	Introduction to Modern Protein Mass Spectrometry
10:00	to	10:15		Coffee break
10:15	to	11:15	P	Praxis: Sample Preparation (Refraction-2D™, Saturn-2D™)
11:15	to	12:45	P	IPG rehydration and sample preparation
12:45	to	13:45		Lunch
13:45	to	16:15	P	Sample Preparation + Labeling, Scan of a Demo gel
16:15	to	16:30		Coffee break
16:30	to	17:00	L	Aspects of Sample Preparation
17:00	to	17:30	L	HPE Tower, HPE 2 D Gels
17:30	to	18:30	P	Start of 1st dimension: Cup-Loading, start IEF (6h)

Wednesday 03. April 2013

8:00	to	9:00	P	Handling of the HPE Tower, Start of 2nd dimension (runs 6h)
9:00	to	10:00	P	Image analysis of 2D Gel images with Delta2D
10:00	to	10:15		Coffee break
10:15	to	12:15	P	Gel analysis under supervision with demo gels (1)
12:15	to	13:15		Lunch

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13:15	to	13:45	L	Strategies of efficient sample preparation and labeling
13:45	to	14:15	L	guest speaker <u>"Differential Proteomics Quantification using iTRAQ and TMT labeling"</u> Christian Huber
14:15	to	14:30		break
14:30	to	15:00	L	<u>"Study design in biomarker research"</u> Rudolf Oehler
15:00	to	15:30	L	Innovative analysis of 2D gel images
15:30	to	15:45		break
15:45	to	16:15	L	guest speaker <u>"Trichoderma atroviridae – identifying regulators of mycoparasitism in a biocontrol fungus"</u> Martina Marchetti-Deschmann
16:15	to	16:45	L	Latest developments in 2D electrophoresis for Proteome Analysis
16:45	to	17:15	L	Modern Mass Spectrometry for Proteomics

Thursday, 04. April 2013

8:00	to	10:00	P	Gel analysis under supervision with demo gels (2)
10:00	to	10:15		coffee break
10:15	to	11:15	L	Mass spectrometry sample preparation
11:15	to	12:45	L	Mass spectrometry and analysis of mass spectra
12:45	to	13:45		lunch
13:45	to	14:30	L	Trouble shooting
14:30	to	16:00	P	Scanning of own gels
16:00	to	16:15		coffee break
16:15	to	17:15	P	MS results import in Delta2D, database research (Uniprot), presentation of results

Friday, 05. April 2013

8:00	to	10:00	P	Gel analysis under supervision with own gels
10:00	to	10:15		break
10:15	to	11:45	P	Spot picking

L: lecture, P: Hands-On

Slight changes of time plan may occur during the course.