



Course: Chemometrics in Excel 3-5 ECTS cr

February 14, 2010, St. Petersburg, Russia, WSC-7 preconference course



The aim of the course is to provide the participants with simple and powerful tool for basic multivariate analysis. The core functions for projection methods are presented as worksheet functions in Excel, a most widely-spread data handling environment. All calculations are carried out in Excel books, and all regular Excel capacities can be applied for additional calculations: charts, data export and import, templates, etc. During the course attendees will have a wide opportunity for the hands-on data analysis.

Audience: (postgraduate) students, specialists, scientists with a basic knowledge in chemometrics and Excel

Language: English

Instructors: DSc. Alexey Pomerantsev (ICP RAS, Moscow)
DSc. Satu-Pia Reinikainen (LUT, Lappeenranta)
DSc. Oxana Rodionova (ICP RAS, Moscow)

Course materials:

- Projection methods in Excel (web tutorial)
- Matrix calculations in Excel (web tutorial)
- Supplementary xls-files
- Chemometrics Add-In software

will be provided for the participants on January 15, 2010. To refresh the Excel skills it is highly recommended to read the tutorials and to carry out exercises.

Course Outline

Introduction (Brief reminders)

Basic projection methods PCA, PLS

Matrix calculations in Excel

Main features of *Chemometrics.Add-In*

Computer exercises

Explorative (one-block) data analysis: PCA and classification

Multivariate calibration

3 ECTS cr. are appointed by LUT to participants who carry out a final assignment provided at the end of the course and attend WSC-7 with a presentation. Two additional consultations will be given during WSC-7.

+ 2 ECTS cr. are appointed for the participants whose manuscripts will be accepted for the special WSC-7 issue of the Journal of Chemometrics.

	A	B	C	D	E	F	G
1	Window Factor Analysis						
2	Component A						
3	Rows omitted from top						15
4			P_a		t_z		
5	220					<code>=LoadingsPCA(OFFSET(Xdata,\$F\$3,0,-\$F\$3))</code>	
6	225	0.223	2	0.091			
7	230	0.170	3	0.522			
8	235	0.149	4	1.000			
9	240	0.182	5	1.131			
10	245	0.213	6	1.018			

Participants are encouraged to use their **own laptops** with Excel 2007 and Chemometrics Add-In installed.

Fee include full individual license for *Chemometrics Add-In* software

Early registration, till December 15, 2009 - 200 EUR

Registration after December 15, 2009 - 250 EUR

Deadline - January 30, 2010

Registration via web site: <http://wsc.chemometrics.ru/wsc7/program/excelcourse>

Additional information by email: rcs@chph.ras.ru Oxana Rodionova.

Upon cancellation until twenty days before the start of the course, half of the course fee is due. Cancellations made less than twenty days before the start date of the course will not be refunded. In case you cannot attend, you can let someone else take your place without additional cost. Course organizers have the right to cancel a course until twenty days before the start of the course, in which case a complete refund will be provided. Course organizers also have the right to reject the application of course candidates without further motivation.