



WSC-2022 Program

4th Winter School of Chemometrics

6-9 February 2022

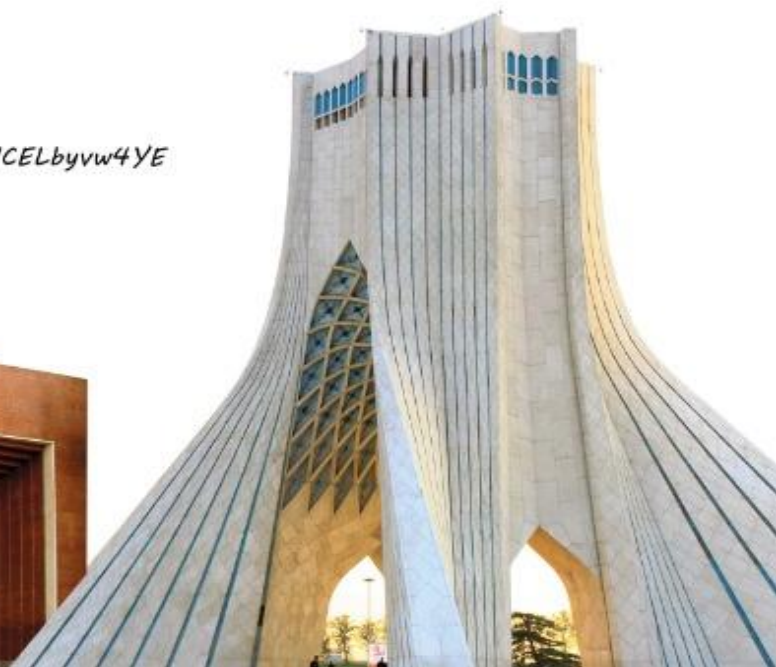
Department of Chemistry, Sharif University
of Technology, Tehran, Iran

Virtual class link:

<https://vc.sharif.edu/ch/wsc-2022>

More information:

-  [sut.wsc](#)
-  [@sut_wsc](#)
-  021-66165329
-  wsc.ch.sharif.edu
-  sut.chemometrics@gmail.com
-  <https://chat.whatsapp.com/B5mwiUT9AvglCELbyvw4YE>



Sunday 06 February (Theory)

Time	Title	Presenter
8:30-9:00	Welcome	
9:00-9:45	Introduction to multivariate analysis	H. Abdollahi
9:45-10:45	Principal component analysis (PCA)	A. Mani
10:45-11:00	Break ☕	---
11:00-12:00	Exploratory data analysis (EDA)	B. Hemmateenejad
12:00-12:45	Univariate linear regression	A. Naseri
12:45-14:00	Lunch 🍱	---
14:00-14:45	Multiple linear regression (MLR)	A. Naseri
14:45-15:45	Principal component regression (PCR)	H. Abdollahi
15:45-16:00	Break ☕	---
16:00-17:00	ANOVA/ASCA	F. Marini
17:00-18:30	Multivariate calibration and partial least squares regression (PLSR)	P. Weller

Monday 07 February (Theory)

Time	Title	Presenter
8:30-9:30	Linear/quadratic discriminant analysis (L/QDA)	B. Hemmateenejad
9:30-10:30	Preprocessing methods	M. Khoshkam
10:30-10:45	Break ☕	---
10:45-11:45	Soft independent modeling of class analogy (SIMCA)	A. Pomerantsev
11:45-12:45	Partial least squares-discriminant analysis (PLS-DA)	A. Pomerantsev
12:45-13:30	Lunch 🍽️	---
13:30-14:30	Model validation (classification and regression)	F. Marini
14:30-15:30	Design of experiment (DOE)- Factorial designs	A. Mani
15:30-16:00	Break ☕	---
16:00-17:00	DOE- Response surface methodology	H. Parastar
17:00-18:00	Hard modelling (1)	H. Abdollahi

Tuesday 08 February (Theory/Practice)

Time	Title	Presenter
8:30-9:30	Hard modelling (2)	M. Khoshkam
9:30-10:30	DOE-second-order designs/optimization	H. Parastar
10:30-10:45	Break ☕	---
10:45-11:30	Multivariate curve resolution (MCR)	H. Abdollahi
11:30-12:30	MCR-alternating least squares (MCR-ALS)	A. de Juan
12:30-13:30	Lunch 🍱	---
13:30-14:30	MCR multi-set analysis	A. de Juan
14:30-16:30	W1: Design of experiment (1)	A. Mani
16:30-16:45	Break ☕	---
16:45-18:30	W2: Design of experiment (2)	H. Parastar

Wednesday 09 February (Practice)

Time	Title	Presenter
8:30-10:30	W3: Multivariate classification (1)	H. Parastar
10:30-10:45	Break ☕	---
10:45-13:00	W4: Multivariate classification (2)	A. Pomerantsev/Y. Zontov
13:00-14:00	Lunch 🍱	---
14:00-16:00	W5: Multivariate calibration (1)	A. Naseri/S. Sajedi
16:00-16:30	Break ☕	---
16:30-18:30	W6: Mltivariate calibration (2)	P. Weller

