

International School on Biological Crystallization

Granada (SPAIN), October 4th – 9th, 2026

LABORATORIO DE ESTUDIOS CRISTALOGRAFICOS, IACT-CSIC

Sunday, October 4th WELCOME

18:00 – 20:00 Registration

20:00 – 21:00 Welcome *Spanish-Wine at Hotel Luna de Granada*

Monday, October 5th FROM SOLUTION TO CRYSTALS: THEORY AND PRACTICES

08:30– 09:00 Registration

09:00 – 09:15 Overview of the School

J.A.G. & F. C

09:15 – 10:00 Protein purification strategies intended for crystallization

S. Martínez-R

10:00 – 10:30 Coffee Break

10:30 – 11:15 Nucleation of Macromolecular Crystals

A. Van Driessche

11:15 – 12:00 A Mechanistic Journey Through Protein Nucleation

Isaac Rodriguez

12:00 – 12:45 Protein crystal growth

Fermin Otálora

12:45 – 13:30 The effect of impurities on crystal growth: beyond the CM

Jim Lutsko

13:30 – 15:00 Lunch

15:00 – 15:45 The use of microfluidics to study crystallization fundamental

Nadine Candoni

15:45 – 16:30 Nucleation induction methods

Simon Kuhn

16:30 – 17:15 Surface-inducing heterogenous nucleation

Daniela Tesekova

17:15 – 18:00 Crystallization road maps

Jeroen Mesters

18:00 – 18:30 Coffee break

18:30 – 19:30 Poster Session

Tuesday, October 6th CRYSTALLIZATION TECHNIQUES AND TECHNIQUES TO STUDY CRYSTALLIZATION

09:00 – 09:30 Preparation of protein samples for crystallization experiments

P. Řezáčová

09:30 – 10:00 Solubility Model to Guide Solvent Selection

Michael Lovette

10:00 – 10:30 Protein Crystallization by capillary Counter-diffusion technique

J.A. Gavira

10:30 – 11:00 Coffee Break

11:00 – 11:45 Crystallization of Membrane Proteins in Lipid Mesophases

M. Caffrey

11:45 – 12:15 Peptide Crystallization in the Pharmaceutical Industry

Clara Anduix

12:15 – 13:00 Maximising Antimicrobial Peptide Power through Particle Engineering and Formulation

Sarah Hudson

13:00 – 13:30 Using microseeding and phase diagrams to prepare crystal samples for routine and advanced data collection

Patrick Stewart

13:30 – 15:00 Lunch

15:00 – 15:45 Mechanistic model-based approaches in crystallization process engineering

Botond Szilágyi

15:45 – 16:30 Approaches to manipulate molecules/particles in μ fluidic devices

Wim De Malsche

16:30 – 17:00 Coffee break

17:00 – 17:30 *Ancestral proteins as scaffolds for enzyme engineering and evolution*

J.M. Sánchez-Ruiz

17:45 – 18:30 Poster Session

19:30

Geometry and Crystals in the Cuarto Real

Álvaro Martínez Sevilla

A Scientific, Artistic, and Heritage Visit in Granada.

20:00

NIGHT GUIDE WALK OF ALBAICÍN & SACROMONTE

Wednesday, October 7th TOWARDS LARGE SCALE CRYSTALLIZATION APPROACHES

09:00 – 09:30	Best practices to prepare and deliver samples in serial femtosecond crystallography experiments at XFELs	J.M. Martín-G.
09:30 – 10:00	Crystallization prediction: AI+ ML Algorithms to	C. Xiouras
10:00 – 10:30	Protein crystallization in micro- and meso-scale devices	F. Castro
10:30 – 11:00	Coffee Break	
11:00 – 11:45	The role of impurities on crystallization	Isha Bade
11:45 – 12:30	Crystalline formulations in drug delivery	V. Bhatia
12:30 – 13:30	Using living machinery	L. Redecke
13:30 – 15:00	Lunch	
15:00 – 15:45	The effect of ohmic heating on protein crystallization	Ricardo Pereira
15:45 – 16:30	Protein crystallization in microgravity conditions	A. Rech
16:30 – 17:30	Round Table: Revival of microgravity protein crystallization. <i>Introduced by JuanMa Garcia-Ruiz</i>	
17:30 – 18:00	Coffee break	
18:00 – 19:00	Poster Session	

Thursday, October 8th DEMONSTRATION FAIR

09:00 – 10:30	Practical Demonstration “a la carte”
10:30 – 11:00	Coffee Break
11:00 – 13:30	Practical Demonstration “a la carte”
13:30 – 15:00	Lunch
15:00 – 17:15	Practical Demonstration “a la carte”

20:00 GALA DINNER (CARMEN DE LA VICTORIA)

Friday, October 9th CLOSING LECTURES & STUDENTS PRESENTATIONS

09:30 – 10:15	<i>The role of silica in the dawn of life on our planet</i>	J.M. García-Ruiz
10:15 – 11:00	Round Table: Contribution of crystallisation to efficient and sustainable biomanufacturing.	
11:00 – 11:30	Coffee Break	
11:30 – 12:30	Oral Presentation of finalist posters	
12:30 – 13:00	Poster Prizes and Closing of the School	
13:00 – 14:00	Lunch	

**Come to Granada and enjoy learning about
Protein Crystallization towards crystallography and pharma &
industrial applications.**

***More than 15 live practical demonstrations on crystal growth techniques!
Get the most out of it within a friendly atmosphere by interacting with other
students and 30 outstanding lecturers.***

***Take the opportunity to present and discuss your work and if selected to
present it during last day with your new friends!!!***