

MATSUS

F A L L

Materials for Sustainable
Development Conference

MATSUS Fall 2025 Program

nanoge
CONFERENCES

scito
fundació



AJUNTAMENT
DE VALÈNCIA



València
Innovation
Capital





ROOMS			MONDAY 20 TH	TUESDAY 21 ST	WEDNESDAY 22 ND	THURSDAY 23 RD	FRIDAY 24 TH
1 ST FLOOR	ROOM MALLORCA	Registration	Conference Registration · 08:00 - 08:30 h				
		Announcements	Opening MATSUS Fall 2025 · 08:30 - 08:45 h		Call for Symposia · 08:30 - 08:50 h		Closing & Awards Ceremony · 08:30 - 08:55 h
		S1 - Morning	A1 - PeroProp	A1 - PeroProp	A3 - PeroPrint	A2 - InterPero	A2 - InterPero
		S2 - Morning					
		S3 - Afternoon					
	ROOM MENORCA	S1 - Morning	A5 - PeroVac	A5 - PeroVac	A7 - SimChar	A4 - PeroFun	A4 - PeroFun
		S2 - Morning					
		S3 - Afternoon		A7 - SimChar			
	ROOM FORMENTERA	S1 - Morning	A6 - TransparentPV	B2 - IMBES	D2 - TMEM	B1 - EmergentNano	B1 - EmergentNano
		S2 - Morning					
		S3 - Afternoon					
	ROOM TABARCA	S1 - Morning	D3 - NeuroComp	D3 - NeuroComp	D1 - NeuroMorph	D4 - OectMap	
S2 - Morning		D1 - NeuroMorph					
S3 - Afternoon							
6 TH FLOOR	ROOM ALICANTE	S1 - Morning	E1 - ExSusMat	E1 - ExSusMat	E4 - SpEM	E4 - SpEM	E4 - SpEM
		S2 - Morning					
		S3 - Afternoon					
	ROOM CASTELLÓN	S1 - Morning	E2 - nPEC	E2 - nPEC	E6 - PhotoChem	C2 - SolBat	C1 - SusBat
		S2 - Morning					
		S3 - Afternoon					
	ROOM ALAMEDA	S1 - Morning	E3 - EcatReact	E9 - MXFrontiers	E5 - EOSF		
		S2 - Morning					
		S3 - Afternoon					
	ROOM JARDÍN	S1 - Morning	E8 - NanoDyn	E8 - NanoDyn	E7 - PecVal	E7 - PecVal	
		S2 - Morning					
		S3 - Afternoon					
				POSTER SESSION 17:30 H		POSTER SESSION 17:30 H	
				SOCIAL DINNER 20:00 H			

A - Perovskite Solar Cells and Optoelectronic

- A1** - Halide Perovskites - Properties, Synthesis and Advanced Characterization (**Mallorca Room**)
- A2** - Molecular Interfaces for Emerging Photovoltaics (**Mallorca Room**)
- A3** - Advancing Printed Electronics for Perovskite Optoelectronic and Electronic Devices (**Mallorca Room**)
- A4** - Fundamental Understanding of Halide Perovskite Materials and Devices (**Menorca Room**)
- A5** - Advances in Vacuum and Hybrid Deposition of Halide Perovskites (**Menorca Room**)
- A6** - Advanced Materials and Device Architectures for Transparent PV (**Formentera Room**)
- A7** - Simulation and Characterization of OptoElectrolonic Devices (**Menorca Room**)

B - Nanocrystals and Biomaterials

- B1** - Emergent Properties in Nanomaterials: Synthesis, Phenomena, and Applications (**Formentera Room**)
- B2** - Innovations in Microbial Bioelectronics for Sustainable Energy and Environmental Solutions (**Formentera Room**)

C - Energy Storage and Batteries

- C1** - Emerging sustainable battery technologies: advances in electrode, electrolyte and interf(ph)ase design (**Castellón Room**)
- C2** - Solid state batteries: hybrid solid electrolytes, manufacturing strategies and advanced characterization (**Castellón Room**)

D - Computation Theory and Devices

- D1** - Materials and Methods for Neuromorphic Devices (**Tabarca Room**)
- D2** - Theory and Modelling for Next-Generation Energy Materials (**Formentera Room**)
- D3** - Brain-Inspired Computation: Memristors, Oscillators, and Networks (**Tabarca Room**)
- D4** - Organic Electrochemical Transistors – Materials and Device Properties (**Tabarca Room**)

E - Energy Conversion, Catalysis and Photocatalysis

- E1** - Exsolution for Sustainable Energy Materials (**Alicante Room**)
- E2** - Experimental and Theoretical Advances in (Photo)Electrochemical Conversion of CO₂ and N₂ (**Castellón Room**)
- E3** - ElectroCATalyst in action: REAL-time Characterization Techniques (**Alameda Room**)
- E4** - (Ultrafast) Spectroscopy for Energy Materials (**Alicante Room**)
- E5** - Emerging Organic-based Materials for Solar-driven Fuel Production (**Alicante Room**)
- E6** - Photo-assisted Chemical Reactions: Materials, Characterization and Mechanisms (**Castellón Room**)
- E7** - Photoelectrochemical Approaches for Added-value Chemicals and Waste Valorization (**Jardín Room**)
- E8** - Materials in motion: Imaging nanoscale dynamics with photons and electrons (**Jardín Room**)
- E9** - Frontiers in MXene Research: From Fundamentals to Applications (**Alameda Room**)

Monday 20th

ROOM MALLORCA	OPENING MATSUS FALL 2025 · 08:30 - 08:45 H	
	A1	PeroProp Halide Perovskites - Properties, Synthesis and Advanced Characterization
	08:50 - 10:30	Maksym Kovalenko, Paulina Plochocka, Hendrik Bolink
	11:15 - 12:45	Michael Toney
	15:00 - 16:15	Annamaria Petrozza, Sarah Wiegold
ROOM MENORCA	A5	PeroVac Advances in Vacuum and Hybrid Deposition of Halide Perovskite
	08:50 - 10:30	Hendrik Bolink, Yana Vaynzof, Beom-Soo Kim
	11:15 - 12:45	Marcel Roß, Juliane Borchert
	15:00 - 16:00	Christian Wolff
ROOM FORMENTERA	A6	TransparentPV Advanced materials and device architectures for Transparent PV
	08:50 - 10:30	Sascha Sadewasser, Alex López García, Nicolae Spalatu
	11:15 - 13:00	Chen Qian, Marcel Placidi, Claudia Barolo
	15:00 - 16:10	Michael Wagner
ROOM TABARCA	D3	NeuroComp Brain-Inspired Computation: Memristors, Oscillators, and Networks
	08:50 - 10:30	Siegfried Karg, Si En Timothy Ng Ng, Francesca Borghi
	11:15 - 13:00	Laura Bégon-Lours, Catherine Dubourdieu, Luca Fehlings
	15:00 - 17:00	Wooseok Choi, Wooyoung Shim, So-Yeon Kim
ROOM ALICANTE	E1	ExSusMat Exsolution for sustainable energy materials
	08:50 - 10:30	Francesco Ciucci, Catalina Elena Jiménez
	11:15 - 13:00	Simone Mascotto, Athanasios Chatzitakis
	15:00 - 16:15	Eleonora Cali
ROOM CASTELLÓN	E2	nPEC Experimental and Theoretical Advances in (Photo)Electrochemical Conversion of CO ₂ and N ₂
	08:50 - 10:30	Matthew Mayer, Sara García Ballesteros
	11:15 - 12:15	Max Garcia-Melchor
	15:00 - 16:30	Adriano Sacco, Guillermo Díaz-Sainz
ROOM ALAMEDA	E3	EcatReact ElectroCATalyst in action: REAI-time Characterization Techniques
	08:50 - 10:30	Frédéric Maillard, Raphaël Chattot
	11:15 - 13:00	Ana Guilherme Buzanich, Evan Wenbo Zhao, Serhiy Cherevko
	15:00 - 16:10	Elena Baranova, Ya-Wei Zhou
ROOM JARDÍN	E8	NanoDyn Materials in motion: Imaging nanoscale dynamics with photons and electrons
	08:50 - 10:30	Ferry Prins, Milan Delor
	11:15 - 12:30	Thomas LaGrange, Sara Bals
	15:00 - 16:30	Naomi Ginsberg, Matthias Hensen

Tuesday 21st

A1	PeroProp	Halide Perovskites - Properties, Synthesis and Advanced Characterization	ROOM MALLORCA
09:00 - 10:30		Monica Morales Masis, Marianna Kemell	
11:15 - 12:45		Antoine Kahn, Sascha Feldmann	
15:00 - 16:25		Shuxia Tao	
A5	PeroVac	Advances in Vacuum and Hybrid Deposition of Halide Perovskites	ROOM MENORCA
09:00 - 10:30		Ulrich Paetzold, Selina Olthof	
11:15 - 12:25		Solenn Berson, Annamaria Petrozza	
A7	SimChar	Simulation and Characterization of OptoElectrolonic Devices	
14:50 - 17:00		Konstantinos Rogdakis, Thomas Kirchartz, L. Jan Anton Koster	
B2	IMBES	Innovations in Microbial Bioelectronics for Sustainable Energy and Environmental Solutions	ROOM FORMENTERA
08:50 - 10:30		Arpita Bose, Gabor Mehes, Paulo Rocha	
11:15 - 12:40		Mary Wood, Bin Lai	
D3	NeuroComp	Brain-Inspired Computation: Memristors, Oscillators, and Networks	ROOM TABARCA
09:00 - 10:40		Seung Ju Kim, Antonio Guerrero	
D1	NeuroMorph	Materials and Methods for Neuromorphic Devices	
11:15 - 12:55		Yoei van de Burgt, Bruno Ehrler	
15:00 - 16:15		Wolfgang Tress, Markus Hellenbrand	
E1	ExSusMat	Exsolution for Sustainable Energy Materials	ROOM ALICANTE
09:00 - 10:30		Roger De Souza, William Bowman, Moritz L. Weber	
11:15 - 12:40		William Skinner	
E2	nPEC	Experimental and Theoretical Advances in (Photo)Electrochemical Conversion of CO2 and N2	ROOM CASTELLÓN
09:00 - 10:30		Francesca Toma	
11:15 - 13:10		Arno Bergmann, Marco Fontana, See Wee Chee	
E6	PhotoChem	Photo-assisted Chemical Reactions	
14:50 - 17:00		Hermenegildo Garcia Gomez, Carla Casadevall Serrano, Paolo Giusto	
E9	MXFrontiers	Frontiers in MXene Research: From Fundamentals to Applications	ROOM ALAMEDA
08:50 - 10:30		José Gomes, David Portehault, Lorena Manzanares	
11:15 - 12:45		Hermenegildo Garcia Gomez, Bahareh Khezri, Feiyan Xu	
15:00 - 16:40		Aicha Anouar, Hermenegildo García Baldoví, Alberto Baldoví	
E8	NanoDyn	Materials in motion: Imaging nanoscale dynamics with photons and electrons	ROOM JARDÍN
09:00 - 10:40		Sascha Schäfer, Armin Feist	
POSTER SESSION · 17:30 H			

Wednesday 22nd

CALL FOR SYMPOSIA · 08:30 - 08:50 H		
ROOM MALLORCA	A3 PeroPrint	Advancing Printed Electronics for Perovskite Optoelectronic and Electronic Devices
	08:50 - 10:30	Hiroaki Jinno, Senol Öz
	11:15 – 12:45	Blas Garrido, Aldo Di Carlo
	15:00 - 16:10	Giovanni Vescio, Uli Lemmer
ROOM MENORCA	A7 SimChar	Simulation and Characterization of OptoElectrolonic Devices
	09:00 - 10:30	Iris Visoly-Fisher, Sandra Jenatsch, Vincent M. Le Corre
	11:15 - 12:45	Angela Sastre, Sofiia Kosar
	15:00 - 16:40	Simon Ternes, Beatriz Romero, Juan Bisquert
ROOM FORMENTERA	D2 TMEM	Theory and Modelling for Next-Generation Energy Materials
	08:50 - 10:30	Linn Leppert, Luyi Yang, Adriana Pietropaolo
	11:15 - 13:00	Benjamin Morgan, Waldemar Kaiser, Michele Reticioli
	15:00 - 17:25	Gian-Marco Rignanese, Mike Pols, Yang Li
ROOM TABARCA	D1 NeuroMorph	Materials and Methods for Neuromorphic Devices
	09:00 - 10:30	Juan Bisquert, Beatriz Noheda, Sungjun Kim
	11:15 - 12:40	Konstantinos Rogdakis, Ignacio Moltó
	D4 OectMap	Organic Electrochemical Transistors – Materials and Device Properties
	14:50 - 16:15	Shunsuke Yamamoto, Demetra Tsokkou
ROOM ALICANTE	E4 SpEM	(Ultrafast) Spectroscopy for Energy Materials
	14:50 - 16:45	Naomi Ginsberg, Niek F. van Hulst
ROOM CASTELLÓN	E6 PhotoChem	Photo-assisted Chemical Reactions
	09:00 - 10:30	Idan Hod
	11:15 - 13:00	Sixto Gimenez Julià, Salvador Eslava, Oleksandr Savatieiev
	15:00 - 16:25	Laia Francàs Forcada, Roberto Gonzalez-Gomez
ROOM ALAMEDA	E5 EOSF	Emerging Organic-based Materials for Solar-driven Fuel Production
	08:50 - 10:30	James Durrant, Catherine Aitchison, Kevin Sivula
	11:15 - 12:15	Julia Perez-Prieto, Víctor A. de la Peña O'Shea
	15:00 - 16:10	Amparo Ruiz Carretero, Jenny Nelson
ROOM JARDÍN	E7 PecVal	Photoelectrochemical Approaches for Added-value Chemicals and Waste Valorization
	08:50 - 10:30	Francesca Toma, Sudhanshu Shukla
	11:15 - 12:30	Anna Hankin, Teresa Gatti
	15:00 - 16:45	Roland Marschall, Menny Shalom

SOCIAL DINNER · 20:00 H

Thursday 23rd

A2	InterPero	Molecular Interfaces for Emerging Photovoltaics	ROOM MALLORCA	
		08:50 - 10:30		Ulrich Paetzold, Monica Morales Masis
		11:15 - 13:00		Artiom Magomedov, Eike Köhnen
		15:00 - 17:00		Patricia Schulze, Christian Wolff
A4	PeroFun	Fundamental Understanding of Halide Perovskite Materials and Devices	ROOM MENORCA	
		08:50 - 10:30		Rene Janssen, Jacky Even
		11:15 - 13:00		Wouter Van Gompel, Qing Shen
		15:00 - 17:00		Efrat Lifshitz, Thomas Kirchartz
B1	EmergentNano	Emergent Properties in Nanomaterials	ROOM FORMENTERA	
		08:50 - 10:30		Maryna Bodnarchuk, Yehonadav Bekenstein, Marcus Scheele
		11:15 - 12:45		Cherie Kagan, Agustín Mihi
		15:00 - 16:00		Christopher B. Murray
D4	OectMap	Organic Electrochemical Transistors – Materials and Device Properties	ROOM TABARCA	
		09:00 - 10:30		Renee Kroon, Ji-Seon Kim
		11:15 - 13:00		Gitti Frey, Jenny Nelson, Esma Ismailova
		15:00 - 16:40		Daniel Frisbie, Olivier Bardagot, Rajiv Giridharagopal
E4	SpEM	(Ultrafast) Spectroscopy for Energy Materials	ROOM ALICANTE	
		09:00 - 10:30		Sebastian F. Maehrein, Lukasz Klopotoski
		11:15 - 13:00		Ron Tenne, Sander Vonk, Katherine Shulenberger
		15:00 - 16:00		Oral Contributions
C2	SolBat	Solid state batteries: hybrid solid electrolytes, manufacturing strategies and advanced characterization	ROOM CASTELLÓN	
		08:50 - 10:30		Alex Morata, Alejandro Varez, Andrés Mormeneo Segarra
		11:15 - 13:10		Sergio Ferrer-Nicomedes, Laurence Hardwick, Dominic Bresser
		C1		SusBat
14:50 - 16:45	Guinevere Giffin, Andy Naylor, Phoebe Allan			
E7	PecVal	Photoelectrochemical Approaches for Added-value Chemicals and Waste Valorization	ROOM JARDÍN	
		09:00 - 10:40		Chiara Maccato, Marco Favaro, Virgil Andrei
POSTER SESSION · 17:30 H				

Friday 24th

CLOSING & AWARDS CEREMONY · 08:30 - 08:55 H		
ROOM MALLORCA	A2 InterPero	Molecular Interfaces for Emerging Photovoltaics
	09:00 - 10:30	Bin Chen, Randi Azmi
	11:15 - 12:40	Philip Schulz, Stefan Weber
ROOM MENORCA	A4 PeroFun	Fundamental Understanding of Halide Perovskite Materials and Devices
	09:00 - 10:30	Hernán Míguez
	11:15 - 13:25	Nripan Mathews, Petra Cameron
ROOM FORMENTERA	B1 EmergentNano	Emergent Properties in Nanomaterials
	09:00 - 10:30	Carlos Bassani, Florian Schulz
	11:15 - 12:55	Maria Ibáñez, Emanuele Marino
ROOM ALICANTE	E4 SpEM	(Ultrafast) Spectroscopy for Energy Materials
	09:00 - 10:30	Andries Meijerink, Nicoletta Liguori
	11:15 - 12:25	James Utterback
ROOM CASTELLÓN	C1 SusBat	Emerging sustainable battery technologies: advances in electrode, electrolyte and interf(ph)ase design
	09:00 - 10:30	Miguel Ángel Muñoz Márquez, Darren Ould, Laure Monconduit
	11:15 - 13:10	Patrik Johansson, Tjaša Pavčnik, Sonia Dsoke

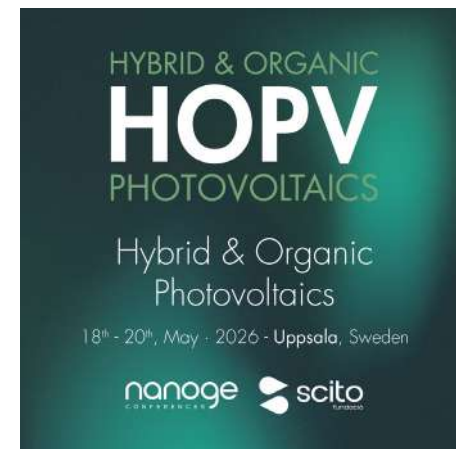


Program

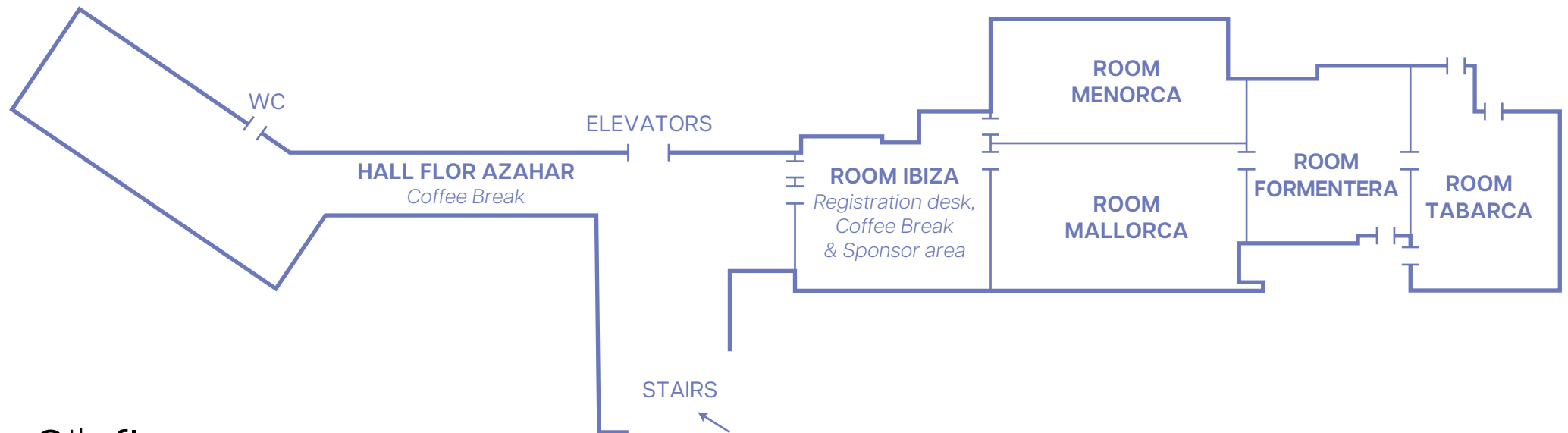


Talk Scheduler

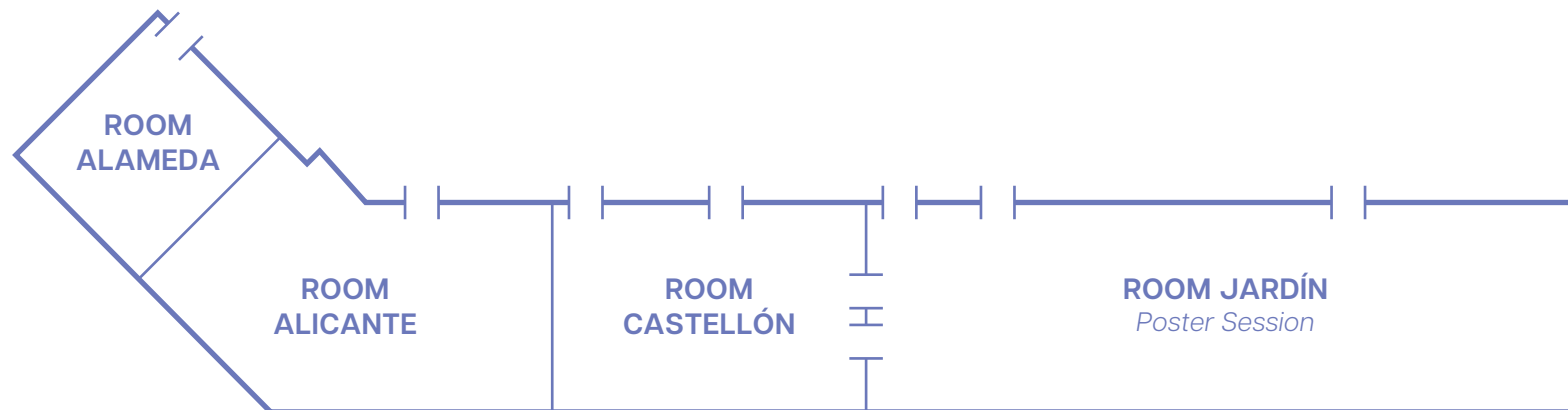
Upcoming conferences



1st floor



6th floor



Coffee break will take place on the ground floor and on the 1st floor in the Ibiza Room and the Flor Azahar Hall.

Announcements in Room Mallorca

- **Monday 20th at 08:30h. Opening MATSUS Fall 2025.**
Welcome from Nanoge team & general scientific organizers.
- **Wednesday 22nd at 08:30h. Call for Symposia – MATSUS Fall 2026**
We are now accepting proposals for the upcoming MATSUS Fall 2026 taking place in Mallorca from 26th to 30th October, 2026.

Send your proposals via the event website: nanoge.org/matsusfall26
Don't miss the opportunity to join us!

- **Friday 24th at 08:30h. Closing and Awards Ceremony.**

Several poster prizes will be awarded courtesy of the MATSUS Fall 2025 conference sponsors.

Poster Session in Room Jardín

- **Tuesday October 21st at 17:30h.**
Set up at 13:00h. Pick up your poster at the end of the session.
- **Thursday October 23rd at 17:30h.**
Set up at 13:00h. Pick up your poster at the end of the session.

Cocktail & Drinks included.

Social Dinner

 Wednesday October 22nd at 20:00h.

 Hotel Las Arenas.

Remember to bring your badge!

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