

# 8<sup>th</sup> YOUNG POLYMER SCIENTISTS SEMINAR

**29th october 2024**

**Sala 110 ICTP-CSIC**

## MADRID

**ICTP - CSIC**

Organisation:  
Instituto de Ciencia y Tecnología de  
Polímeros del CSIC (ICTP-CSIC)



# SEJIPOL2024

## PROGRAM

**8:45 – 9:00**  
**Registration**

**9:00 – 9:15**  
**Welcome**

**9:15 – 9:45**  
**Invited Speaker:**  
**Alberto Sanz de León,**  
**Universidad de Cádiz**

**“Polymers and Polymer  
Based Composites for  
Additive Manufacturing”**

**9:45 – 10:15**  
**ADVANCES IN POLYMER  
SYNTHESIS AND  
CHARACTERIZATION**

**Chair: Anselmo del Prado**

**9:45 - 10:00**  
**Alexis Alvear.**  
**POLYMAT/ICTP-CSIC**  
“Crystallization-Induced  
Hydrogels: Modulating  
Mechanical and Thermal  
Properties for Smart  
Materials”

**10:00 - 10:15**  
**Fernando Martín. UNED**  
**Salamanca. ICTP-CSIC**  
“<sup>1</sup>H NMR as quantitative  
approaches to study  
molecular structure and  
dynamics on rubbers”

**10:15 – 10:35**  
**FLASH PRESENTATIONS**

**Chair: Rosa Barranco**

**Juan Carlos Chicharro**  
**Sestines. ICTP-CSIC**  
“Comparative study of  
vulcanization systems for  
more sustainable materials”

**Elena Navas Ortiz.**  
**ICTP-CSIC**  
“Comparative study of PLA  
with microcellulose fibers  
obtained by melt and  
solution electrospinning”

**Angélica Martín Lorenzo.**  
**ICTP-CSIC**  
“Towards a reversible  
self-crosslinkable  
propylene-anthracene  
copolymers with improved  
thermal and dielectric  
stability”

**Mauricio Vera Arévalo.**  
Universidad de Sevilla  
“Effect of Alginate from  
Rugulopteryx Okamurae  
Seaweed on the 3D-Printing  
of Soy Protein Based  
Materials”

**10:35 – 11:15**

**PHOTOPOL2024-AWARDS**

**COFFEE BREAK + POSTER  
SESSION**

**11:15 – 13:00**  
**BIODEGRADABLE  
POLYMERS AND  
BIOMATERIALS**

**Chairs: Sergio Martín**

**11:15 – 11:30**  
**Pedro Luis Echevarría**  
**Torres. ICTP – CSIC**  
“Biological Properties of  
Cannabidiol-Loaded PLGA  
Nanoparticles Engineered  
by Microfluidics”

**11:30 – 11:45**  
**Santiago Sarasa San**  
**José. INMA-CSIC**  
“Temperature-sensitive  
and DNA-coating  
Polymers by an  
Aza-Michael Reaction”

**11:45 – 12:00**  
**Ana García Crespo.**  
**ICTP-CSIC**  
“Thermosensitive  
hydrogels for skin  
regeneration with  
applications in drug  
delivery and gene therapy”

**12:00 – 12:15**  
**Andrés Cardil Tornos.**  
**IEM-CSIC**  
“Conformational and  
Microrheological study of  
novel biopolymers”

**12:15 – 12:30**  
**Alejandro Hernández**  
**Sosa. ICTP-CSIC**  
“Plasma-derived fibrin  
hydrogels with perfusable  
microchannels: Fabrication  
using sacrificial materials”

**12:30 – 12:45**  
**Sergio Javier Peñas**  
**Nuñez. POLYMAT**  
“Bio-based polymer  
hydrogels for sustainable  
energy applications”

**12:45 – 13:00**  
**Laura Cabrera Villamizar.**  
**IATA-CSIC**  
“Bio-composite  
innovation: merging  
biopolymers and  
agricultural-waste for  
novel materials”

**13:00 – 14:15**  
**LUNCH**

**14:15 – 14:45**  
**Invited Speaker:**  
**Marian Cruz Tejedor,**  
**REPSOL**

**“Thanks to the Spanish  
Research Council, my  
journey or storytelling”**

**14:45 – 16:30**  
**POLYMERS AND  
COMPOSITES FOR  
ADVANCED  
APPLICATIONS**

**Chair: Enrique Blázquez**

**14:45 – 15:00**  
**Miriam Guadaño**  
**Sánchez. ICTP-CSIC**  
“Synthesis of polymeric  
matrices doped with  
fluorescent silica  
nanoparticles (Dye@SiO<sub>2</sub>)  
for polymer optical fibers  
POFs) development as  
future solar concentrators  
(LSCs)”

**15:00 – 15:15**  
**Nazish Jabeen.**  
**Universidad de Valencia**  
“Tailoring n-type  
thermoelectric properties  
in lignin-derived hydrogel  
through amination”

**15:15 – 15:30**  
**Álvaro Vázquez Romero.**  
**ICTP-CSIC**  
“Ionic cellulose aerogels  
for industrial wastewater  
treatment”

**15:30 – 15:45**  
**David Martín Crespo.**  
**ICTP-CSIC**  
“Optimization of the VARI  
process and recycling of  
laminates produced with  
Akelite resin”

**15:45 – 16:00**  
**Clemente Rodríguez.**  
**ICTP-CSIC**  
“Development of  
Sustainable  
Electrochemical  
Separators Based on  
Polylactic Acid Membranes  
for Secondary Batteries”

**16:00 – 16:15**  
**Patricia Martínez García.**  
**NANOesMAT, UNED**  
“Modification of the  
wettability of polymers by  
laser irradiation with  
nanosecond and  
femtosecond pulses”

**16:15 – 16:30**  
**Rayane Akoumeh.**  
**Qatar University**  
“Advanced 3D Printing  
Techniques for fabricating  
Hierarchically Porous  
Membranes for Efficient  
Oil-Water Separation”

**16:30 – 16:50**  
**FLASH PRESENTATIONS**

**Chair: Daniel Domingo**  
**López**

**Paula García Abril.**  
**Aerofybers Technologies**  
**SL**  
“Composite aerogels  
based on cellulose fibres  
and acid collagen for  
potential applications as  
wound dressings”

**Daniel Lechuga Cruz.**  
**ICTP-CSIC**  
“Bacterial cellulose and  
collagen bilayer systems  
for the controlled release  
of bioactive compounds”

**Jorge Mercado Rico.**  
**ICTP-CSIC**  
“Development of  
biomaterial inks based on  
pectin and hyaluronic acid  
hydrogels for 3D printing”

**María Carracedo Pérez.**  
**Universidad de Santiago**  
**de Compostela.**  
“ECO-strategies to obtain  
sterile aerogels”

**16:50 – 17:35**  
**SUSTAINABILITY,  
VALORIZATION AND  
POLYMER RECYCLING**

**Chair: Suman Thakur**

**16:50 – 17:05**  
**Itziar Mas Giner.**  
**ICTP-CSIC**  
“There is no glitch in the  
matrix: Different  
elastomeric matrices and  
self-healing capability”

**17:05 – 17:20**  
**María Blanco Vales.**  
**Universidad de Santiago**  
**de Compostela**  
“Reprocessing of  
biopolymer-based  
aerogels”

**17:20 – 17:35**  
**Ángela Matarin Serrano.**  
**ICMM-CSIC**  
“Quinone-based  
hyper-crosslinked  
polymers as  
photocatalysts for  
valorization of glycerol”

**17:50**  
**POLYMERS MDPI**  
**AWARD FOR THE BEST  
ORAL COMMUNICATION**

**CLOSING SESSION**

**Organised by ICTP-CSIC:**

Luis García  
Miryam Criado  
Luis Rojo  
Gema Rodríguez  
Mercedes Pintado

