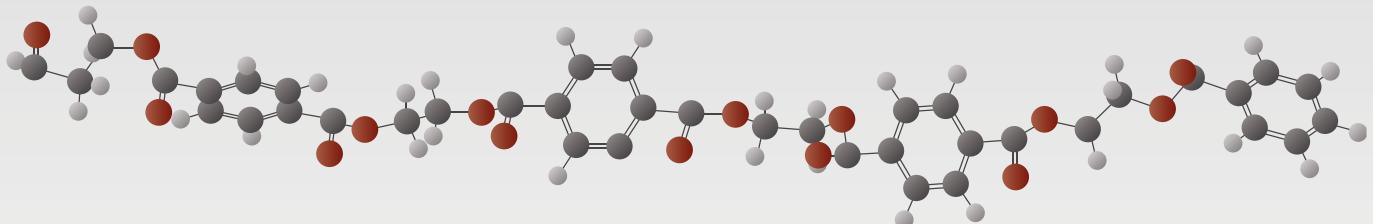


# GEP-SLAP 2022



Donostia-San Sebastián

**8 - 12 MAYO 2022**

**8<sup>th</sup> - 12<sup>th</sup> MAY 2022**

**GEP**

XVI

Reunión del Grupo Especializado de Polímeros GEP  
de la Real Sociedad Española de Química (RSEQ) y de  
la Real Sociedad Española de Física (RSEF)

Meeting of the Group Specialized in Polymers of the  
Spanish Royal Society of Chemistry and Spanish Royal  
Society of Physics

**SLAP**

XVII

Simposio  
Latinoamericano de  
Polímeros  
  
LatinAmerican Polymer  
Symposium

**CIP**

XV

Congreso Iberoamericano  
de Polímeros  
  
IberoAmerican Polymer  
Congress

# SPONSORS

eman ta zabal zazu



Universidad  
del País Vasco

Euskal Herriko  
Unibertsitatea

# POLYMAT



Grupo Especializado de Polímeros  
RSEQ & RSEF



EUSKO JAURLARITZA  
GOBIERNO VASCO

HEZKUNTA SAILA  
DEPARTAMENTO DE EDUCACIÓN



Anton Paar



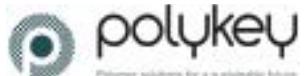
WITTENSTEIN Group



burdinola  
safer labs



Beiersdorf



Polymer solutions for a sustainable future



TA  
Instruments

Análisis Térmico, Rotación y Microcalorimetría



A division of the  
American Chemical Society

ACS APPLIED  
POLYMER MATERIALS



an Open Access Journal by MDPI



NON-ISOCYANATE POLYURETHANES



LION-HEARTED



IONBIKE

# Índice | Index

Bienvenidos	4	Welcome
Comité	5	Committee
Tópicos	6	Topics
Presentación	7	Presentation
Plano del Kursaal	8	Map of Kursaal
Programa	9	Program
Programa social	14	Social program
<b>Lista de contribuciones</b>	<b>15</b>	<b>List of contributions</b>
Invitados	15	Invited
Orales	20	Orals
Flash	32	Flash
Posters	37	Posters
Notas	51	Notes



## Acceso a Internet | Internet Access

**Usuario | Username**

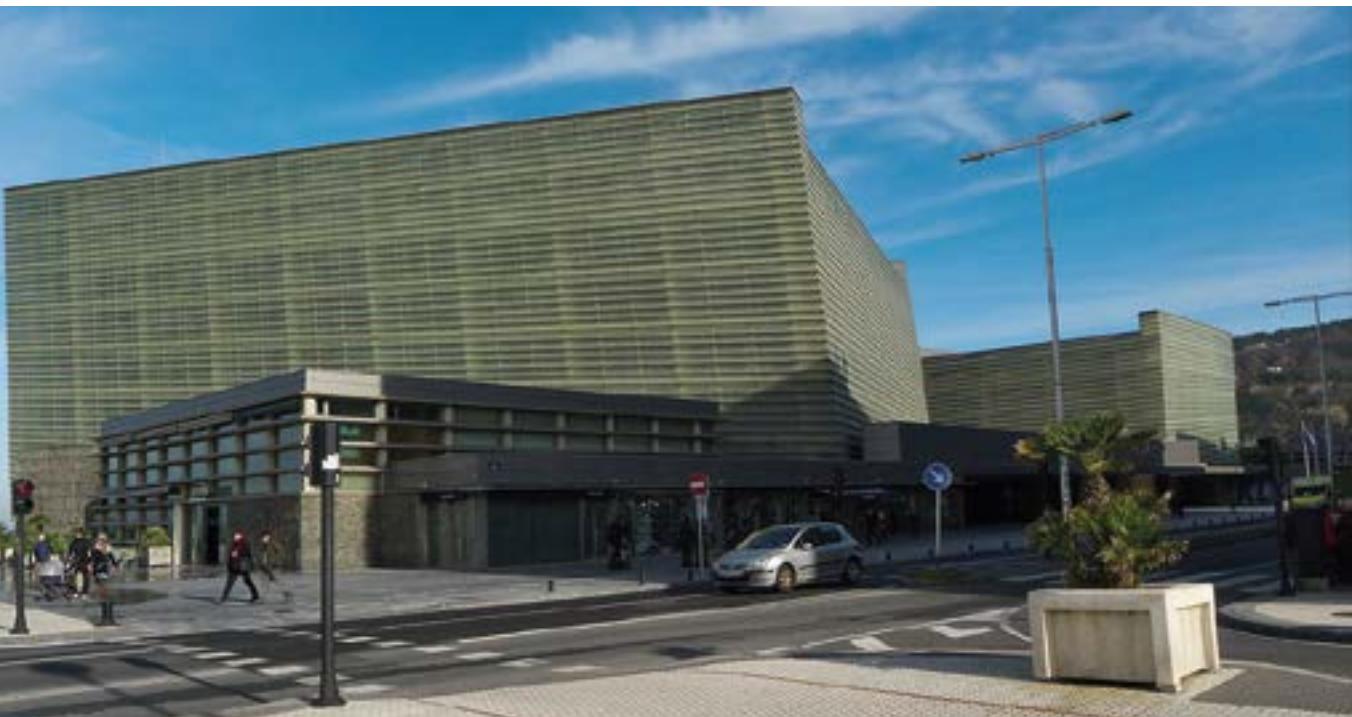
GEPSLAP22

**Contraseña | Password**

Donostia



# Bienvenidos | Welcome



Kursaal, Sede | Venue GEP-SLAP 2022

Después de una espera de dos años, les damos la más cordial bienvenida a Donostia-San Sebastián en donde se llevará a cabo de manera presencial el Congreso

## GEP-SLAP2022.

Este evento reúne tres congresos sobre Polímeros de larga tradición para los países Iberoamericanos que con mucho entusiasmo queremos continuar.

La acogida del evento ha sido extraordinaria y contaremos a lo largo de sus 5 días de duración con la presencia de 375 congresistas y la presentación de 329 trabajos: 5 Conferencias Plenarias, 17 conferencias Key-Note, 42 conferencias invitadas, 116 presentaciones orales, 48 presentaciones Flash + Pósters y 101 presentaciones Pósters.

Nos complace informarles que hemos recibido trabajos de 23 países, entre los cuales se encuentran representados los más importantes grupos de polímeros de Iberoamérica.

Les deseamos que disfruten no solamente de 5 intensos días de conferencias y discusiones sobre todos los campos de la Ciencia de Polímeros, sino también de la bella Ciudad de San Sebastián y sus encantos turísticos.

El Comité Organizador

After a two-year wait, we warmly welcome you to Donostia-San Sebastián, where the **GEP-SLAP2022** Congress will take place in person.

This event brings together three conferences on Polymers with a long tradition for Ibero-American countries that we want to continue with great enthusiasm.

The reception of the event has been extraordinary and the conference will feature the presence of 375 congressmen and the presentation of 329 works throughout its 5 days: 5 Plenary Conferences, 17 Key-Note conferences, 42 invited conferences, 116 oral presentations, 48 Flash presentations + posters, and 101 posters.

We are pleased to inform you that we have received works from 23 countries, among which the most important polymer groups in Ibero-America are represented.

We wish you to enjoy not only 5 intense days of conferences and discussions on all fields of Polymer Science, but also the beautiful City of San Sebastian and its tourist charms.

**The Organizing Committee**

# Comité | Committee

## Presidentes del Comité Organizador Chairpersons

Carmen Mijangos (ICTP-CSIC) España | Spain

David Mecerreyres (POLYMAT-UPV/ EHU) España | Spain

Alejandro J. Müller (POLYMAT-UPV/ EHU) España | Spain

## Comité Organizador Organizing Committee

Rebeca Hernández (ICTP-CSIC), España | Spain

Jaime Martín (POLYMAT-UPV/ EHU), España | Spain

Haritz Sardon (POLYMAT-UPV/ EHU), España | Spain

Agurtzane Mugica (POLYMAT-UPV/ EHU), España | Spain

Nicholas Ballard (POLYMAT) España, | Spain

Miryam Criado (POLYMAT) España, | Spain

M. Villar (PLAPIQUI), Argentina

M.A. De Paoli (Unicamp), Brasil | Brazil

A. Martínez-Richa (U. Guanajuato), México

## Comité Asesor Internacional Scientific Advisory Committee

G. Abraham (INTEMA), Argentina

C. Petzhold (UFRGS), Brasil | Brazil

A. Leiva (PUCC), Chile

B. Rivas (Concepción Univ), Chile

J. R. Vega-Baudrit (LANOTEC), Costa Rica

J. A. Medina Perilla (UniAndes), Colombia

S. Dagreou (UPPA), Francia | France

V. Abetz (Hamburg Univ), Alemania | Germany

N. Hadjichristidis (KAUST), Arabia Saudí | Saudi Arabia

A. Licea Claverie (Inst.Tec.Tijuana), México

E.K. Penott (USB), Venezuela

B. Rojas de Gásque (UDO), Venezuela

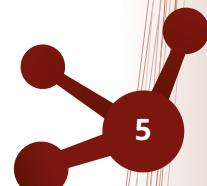
J. Colmereno (CFM, UPV/EHU), España | Spain

Agnieszka Tercjak (UPV/EHU), España | Spain

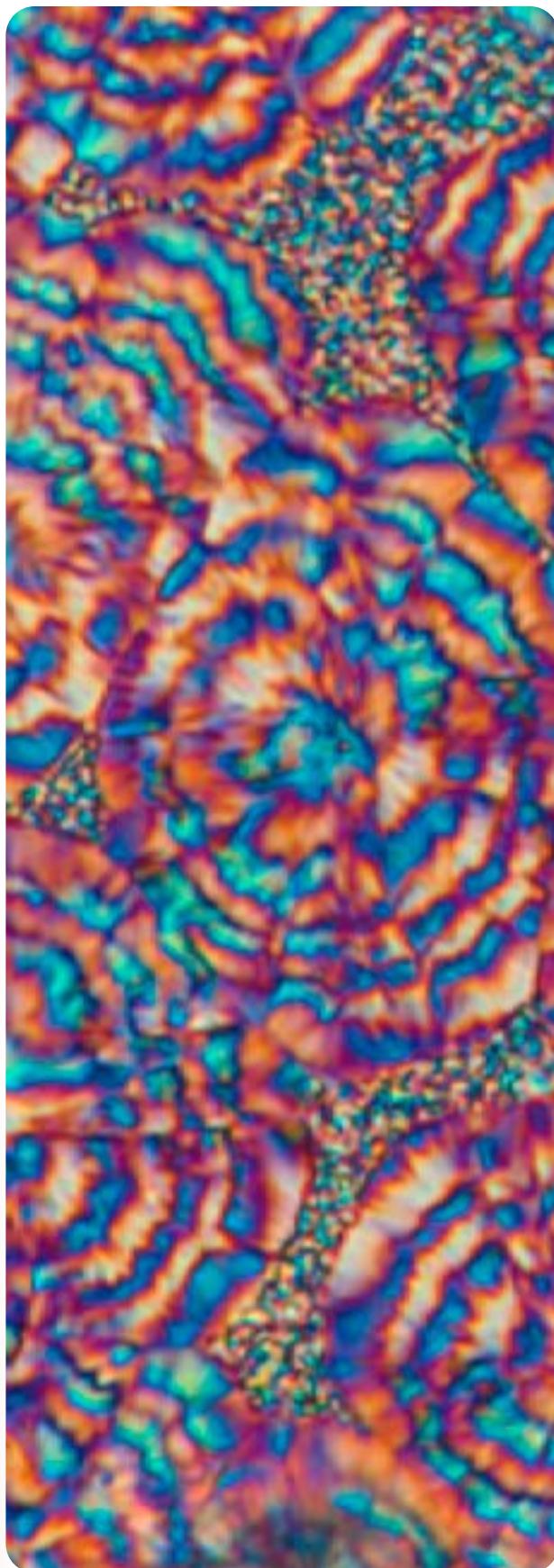
J. San Roman (ICTP-CSIC), España | Spain

A.J. Domingues Silvestre (Aveiro Univ), Portugal

J. A. Acosta Sullcahuaman (PUCP), Perú

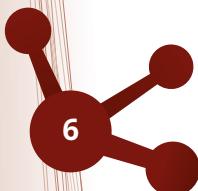


# Tópicos | Topics



- Avances en síntesis y caracterización de polímeros.
- Estructura y propiedades de polímeros, teoría y simulación.
- Reología, procesado, manufactura aditiva y propiedades mecánicas de polímeros.
- Reciclaje de polímeros, polímeros biobasados y biodegradables, economía circular.
- Polímeros para aplicaciones en energía, optoelectrónica y aplicaciones inteligentes.
- Polímeros para aplicaciones biomédicas y nanomedicina, hidrogeles, electrohilado.
- Copolímeros en bloque, polímeros multifásicos, mezclas, nanocomuestos y nanohíbridos.
- IONBIKE: Geles Iónicos: Nueva química y aplicaciones emergentes.
- BIODEST: Síntesis, caracterización, estructura y propiedades de nuevos poliésteres biodegradables.
- NIPU-EJD: Síntesis, caracterización, estructura y propiedades de nuevos poliuretanos sin isocianato.
- Polímeros en la Industria (IND).

- 
- Advances in polymer synthesis and characterization.
  - Polymer structure, properties, theory, and simulation.
  - Rheology, processing, additive manufacturing, and mechanical properties.
  - Polymer recycling, biobased and biodegradable polymers and, circular economy.
  - Polymers for energy applications, sensing, optoelectronics, and smart applications.
  - Polymers for biomedical applications and nanomedicine, hydrogels, electrospinning.
  - Block copolymers, multiphasic polymers, blends, nanocomposites, and nanohybrids.
  - IONBIKE: iongels; from new chemistry towards emerging applications.
  - BIODEST: Synthesis, Characterization, Structure and Properties of Novel Biodegradable Polyesters.
  - NIPU-EJD: Synthesis, Characterization, Structure and Properties of Novel Non-Isocyanate Polyurethanes.
  - Polymers in Industry (IND).



## Tiempos de presentación

Es muy importante limitar los tiempos de presentación dependiendo de la modalidad asignada a su participación:

- **Conferencias Plenarias:**  
45 min (incluyendo 7 min de preguntas)
- **Conferencias Key-Note:**  
30 min (incluyendo 5 minutos de preguntas)
- **Conferencias Invitadas:**  
20 min (incluyendo 4 minutos de preguntas)
- **Conferencias Orales:**  
15 min (incluyendo 3 min de preguntas)
- **Presentaciones de posters tipo Flash:**  
4 minutos, no se permiten preguntas

## Presentation times

It is very important to limit presentation times depending on the modality assigned to your participation:

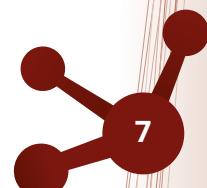
- **Plenary Conferences:**  
45 min (including 7 min of questions)
- **Key-Note Lectures:**  
30 min (including 5 minutes of questions)
- **Invited Lectures:**  
20 min (including 4 minutes for questions)
- **Oral Lectures:**  
15 min (including 3 min of questions)
- **Flash type poster presentations:**  
4 minutes, questions are not allowed

## Instrucciones para presentaciones de carteles Flash

Las presentaciones de póster flash comprenden presentación oral flash (4 minutos) y la tradicional exposición de su trabajo en un póster de papel (las medidas del póster serán 70 cm de ancho y 100 cm de alto). Para la preparación de la presentación oral flash, es importante tener en cuenta que presentará el trabajo de su póster muy brevemente en un máximo de 5 diapositivas, incluida la diapositiva del título. El objetivo de la presentación flash es atraer la atención de la audiencia para que visite su póster y le haga preguntas allí. Respete la duración de 4 minutos de su presentación debido a la necesidad de acomodar a un gran número de participantes en la sesión.

## Instructions for Flash poster presentations

Flash poster presentations comprise flash oral presentation (4 minutes) and the traditional exhibition of your work in a paper poster (the measurements of the poster will be 70 cm width and 100 cm high). For the preparation of the flash oral presentation, it is important to keep in mind that you are shortly presenting the work of your poster in a maximum of 5 slides including the title slide. The goal of the flash presentation is to attract the attention of the audience to visit your poster and ask you questions there. Please respect the 4 minutes duration of your presentation due to the need to accommodate a high number of participants in the session.



# Plano del Kursaal | Map of Kursaal

- # Salas polivalentes  
Multi-purpose rooms
- Pósters  
Posters
- Exposición comercial  
Commercial exhibition
- Zonas café  
Coffee areas
- Secretaría  
Secretariat



# Programa | Program

Domingo 8 | Sunday 8<sup>th</sup>

16:30-18:00	REGISTRO GEP-SLAP 2022   Registration
<p style="text-align: center;"><b>INAUGURACIÓN   CONFERENCE INAUGURATION</b></p> <p style="text-align: center;"><b>ENEKO GOIA</b>, Alcalde de Donostia-San Sebastián   Major of San Sebastián <b>LUIS ORIOL</b>, Universidad de Zaragoza, Presidente del GEP   GEP President <b>CARMEN MIJANGOS</b>, ICTP-CSIC, Conference Chair <b>DAVID MECERREYES</b>, POLYMAT-UPV/EHU, Conference Chair <b>ALEJANDRO J. MÜLLER</b>, POLYMAT-UPV/EHU, Conference Chair</p>	
18:30-19:15	PLENARIO   PLENARY ASUA
19:15-21:00	COCKTAIL DE BIENVENIDA   WELCOME COCKTAIL

## SESIONES | SESSIONS

Polímeros para aplicaciones biomédicas y nanomedicina, hidrogeles, electrohilado	BIO	Polymers for biomedical applications and nanomedicine, hydrogels and electrospinning
Avances en síntesis y caracterización de polímeros	SINT	Advances in polymer synthesis and characterization
Polímeros para aplicaciones en energía, optoelectrónica e inteligentes	ENERG	Polymers for energy applications, sensing, optoelectronics and smart applications
Reciclaje de polímeros, polímeros biobasados y biodegradables, economía circular	REC	Polymer Recycling, biobased and biodegradable polymers and circular economy
Copolímeros de bloque, polímeros multifásicos, mezclas, nanocomuestos y nanohíbridos	COPO	Block copolymers, multiphasic polymers, blends, nanocomposites and nanohybrids
Proyectos europeos y Polímeros en la Industria	EU_IND	European Projects and Polymers in Industry
Estructura y propiedades de polímeros, teoría y simulación	EST	Polymer structure, properties and characterization
Reología, procesado, manufactura aditiva y propiedades mecánicas de polímeros	REO	Rheology, processing, additive manufacturing and mechanical properties



## Lunes 9 | Monday 9<sup>th</sup>

8:00-9:00	REGISTRO GEP-SLAP 2022   Registration				
9:00-9:45	PLENARIO   PLENARY HADJICHRISTIDIS				
	<b>SESIÓN 1   SESSION 1</b> Salas   Rooms <b>1+2</b>	<b>SESIÓN 2   SESSION 2</b> Salas   Rooms <b>4+5</b>	<b>SESIÓN 3   SESSION 3</b> Salas   Rooms <b>6+7</b>	<b>SESIÓN 4 (EU)   SESSION 4 (EU)</b> Salas   Rooms <b>8+9</b>	
Chairpersons	R. Hernandez	H. Sardon	I. Villaluenga	A. J. Müller	
9:55-10:25	<b>KN VILLAR</b>	<b>KN GARCIA</b>	<b>KN LANCEROS</b>	9:55-10:15	<b>INV GRAYSON</b>
10:25-10:45	<b>INV AGUILAR</b>	<b>INV SERRA</b>	<b>INV ORTIZ-VITORIANO</b>	10:15-10:35	<b>INV RAQUEZ</b>
10:45-11:00	BIO1 - Calderon	SINT1 - Maya	ENERG1 - Liras	10:35-10:55	<b>INV CAVALLO</b>
11:00-11:30	Café   Coffee Break				
Chairpersons	M. Calderón	A. Serra	R. Marcilla	D. Mecerreyes	
11:30-11:50	<b>INV HAAG</b>	<b>INV TATON</b>	<b>INV TOMOVSKA</b>	11:30-11:50	<b>INV MOYA</b>
11:50-12:05	BIO2 - García-Astrain	SINT2 - del Barrio Lasheras	ENERG2 - Lingua	11:50-12:10	<b>INV CASADO</b>
12:05-12:20	BIO3 - Oriol	SINT3 - Barroso-Bujans	ENERG3 - Adam Cervera	12:10-12:30	<b>INV MINARI</b>
12:20-12:35	BIO4 - García Fernández	SINT4 - Vidal	ENERG4 - Álvarez Gómez	12:30-12:50	<b>INV FERNANDEZ DE LUIS</b>
12:35-12:50	BIO5 - Bosch Sarobe	SINT5 - Navarro Crespo	ENERG5 - Rico Martínez	12:50-13:05	EU_IND1 - Piccio
12:50-13:05	BIO6 - Andrade del Olmo	SINT6 - Mesa Rueda	ENERG6 - Grieco	13:05-13:20	EU_IND2 - Gallastegui
13:05-13:20	BIO7 - Muñoz-Espí	SINT7 - Elgozhen	ENERG7 - Martín de Leon		
13:20-15:00	COMIDA   LUNCH				
Chairpersons	P. Bosch & M. Criado	J. M. Garcia	S. Lanceros	J. Medina	
15:00-15:30	<b>FLASH 1-6</b>	<b>KN RIVAS</b>	<b>KN MARCILLA</b>	15:00-15:15	REC1 - Flores
				15:15-15:30	REC2 - Siragusa
15:30-15:50	<b>FLASH 7-10</b>	<b>INV SAVE</b>	<b>INV GERBALDI</b>	15:30-15:50	<b>INV ECEIZA</b>
15:50-16:05	<b>FLASH 11-13</b>	SINT 8 - Doyle	ENERG8 - Lizundia	15:50-16:05	REC3 - Vega
16:05-16:20	<b>FLASH 14-16</b>	SINT9 - Afonso Pérez	ENERG9 - Boaretto	16:05-16:20	REC4 - Aguirre Arrese
16:20-16:35	<b>FLASH 17-19</b>	SINT10 - Matesanz	ENERG10 - Culebras	16:20-16:35	REC5 - Romero
16:35-16:50	<b>FLASH 20-22</b>	SINT11 - Jaramillo-Quiceno	ENERG11 - FJ González	16:35-16:50	REC 6 - Merino
16:50-17:05	<b>FLASH 23-25</b>	BIO16 - Hevilla	ENERG12 - Gregorio	16:50-17:05	REC 7 - del Amo
17:05-17:20		REUNION SLAP   MEETING SLAP	ENERG16 - Eguizábal	17:05-17:20	REC 8 - Borrero-López
17:20-19:00	POSTER 1+CAFÉ   POSTER 1+COFFEE				

## Martes 10 | Tuesday 10<sup>th</sup>

8:00-9:00	REGISTRO GEP-SLAP 2022   Registration			
9:00-9:45	PLENARIO   PLENARY VICENT			
	<b>SESIÓN 1   SESSION 1</b> Salas   Rooms <b>1+2</b>	<b>SESIÓN 2   SESSION 2</b> Salas   Rooms <b>4+5</b>	<b>SESIÓN 3 (EU)   SESSION 3 (EU)</b> Sala   Room <b>3</b>	
Chairpersons	M. R. Aguilar	A. J. Müller	N. Casado	
9:55-10:25	<b>KN NORIEGA</b>	<b>KN ABETZ</b>	9:55-10:15	<b>INV ANTOGNAZZA</b>
10:25-10:45	<b>INV SANTANA</b>	<b>INV BRONSTEIN</b>	10:15-10:35	<b>INV KRAMER</b>
10:45-11:00	BIO8 - Vilas-Vilela	COPO1 - Trigo	10:35-10:55	EU_IND3 - Criado
11:00-11:30	Café   Coffee Break			
Chairpersons	J. C. Rodriguez-Cabello	J. Colmenero	H. Sardon	
11:30-11:50	<b>INV PALZA</b>	<b>INV MEDINA</b>	11:30-11:50	<b>INV MEIER</b>
11:50-12:05	REO6 - Larraza	COPO2 - María Muñoz	11:50-12:10	<b>INV LLEVROT</b>
12:05-12:20	BIO10 - Tomadoni	COPO3 - Schaefer	12:10-12:30	<b>INV CAILLOL</b>
12:20-12:35	BIO11 - Vallejos	COPO4 - Barquero	12:30-12:50	<b>INV DETREMBLEUR</b>
12:35-12:50	BIO12 - Escalera	COPO5 - Hermoso de Mendoza	12:50-13:05	EU_IND4 - Ruiz Rubio
12:50-13:05	BIO13 - Juanes	COPO6 - Rodríguez-Guadarrama		
13:05-13:20	BIO14 - Sanz Horta	COPO7 - Mabel Sánchez		
13:20-15:00	COMIDA   LUNCH			
Chairpersons	N. Ballard & R. Tomovska	C. Gomez	M. Villar	
15:00-15:30	<b>FLASH 26-31</b>	<b>KN ARBE</b>		
15:30-15:45	<b>FLASH 32-34</b>	EST1 - Romay	15:30-15:50	REO1 - Marcos Fdz
15:45-16:00	<b>FLASH 35-37</b>	EST2 - Maiz	15:50-16:05	REO2 - Aguirresarobe
16:00-16:15	<b>FLASH 38-40</b>	EST3 - Larrañaga	16:05-16:20	REO3 - J. Fdz Fdz
16:15-16:30	<b>FLASH 41-43</b>	EST4 - Ramos	16:20-16:35	REO4 - Chabert
16:30-16:45	<b>FLASH 44-46</b>	EST5 - Rodríguez Peña	16:35-16:50	REO5 - González-Benito
16:45-17:00	<b>FLASH 47-48</b>	<b>KN CRESPO</b>	16:50-17:05	BIO9 - González Munduate
17:00-17:15			17:05-17:20	REO7 - De la Flor
17:20-19:00	POSTER 2+CAFÉ   POSTER 2+COFFEE			



## Miércoles 11 | Wednesday 11<sup>th</sup>

8:00-9:00	REGISTRO GEP-SLAP 2022   Registration				
9:00-9:45	PLENARIO   PLENARY KUMAR				
	<b>SESIÓN 1   SESSION 1</b> Salas   Rooms <b>1+2</b>	<b>SESIÓN 2   SESSION 2</b> Salas   Rooms <b>4+5</b>	<b>SESIÓN 3 (INDUSTRIA)   SESSION 3</b> Sala   Room <b>3</b>		
Chairpersons	J. Martin	M. L. Maspoch	C. Mijangos		
9:55-10:25	<b>KN STINGELIN</b>	<b>KN MANCHADO</b>	9:55-10:25	<b>INV TOMAS</b>	
10:25-10:45	<b>INV RIBEIRO</b>	<b>INV ALTSTADT</b>	10:25-10:45	<b>INV LAGARON</b>	
10:45-11:00	EST6 - Aranguren	REC9 - LADMIRAL	10:45-11:05	<b>INV NIETO</b>	
11:00-11:30	Café   Coffee Break				
Chairpersons	Guerrero	C. Petzhold	M. Paulis		
11:30-11:50	<b>INV FILIPPONE</b>	<b>INV ALVAREZ</b>	11:30-11:50	<b>INV ELIZETXEA</b>	
11:50-12:05	EST7 - Gracia Fernández	REC10 - Vitiello	11:50-12:10	<b>INV DEL AGUA</b>	
12:05-12:20	REO8 - Fdz Blázquez	REC11 - Blázquez	12:10-12:30	<b>INV DUPIN</b>	
12:20-12:35	REO9 - Rubio	REC12 - Mosquera	12:30-12:50	<b>INV CORONA</b>	
12:35-12:50	REO10 - Molina	REC13 - Cuellar	12:50-13:10	<b>INV NUÑEZ</b>	
12:50-13:05	REO11 - Calafel	REC14 - A. González			
13:10-15:00	FOTO CONGRESO   CONFERENCE PHOTO + COMIDA   LUNCH				
Chairpersons	Barragan	M. A. Manchado	Del Agua		
15:00-15:30	<b>KN GUERRERO</b>	<b>KN PETZHOLD</b>	15:00-15:20	<b>INV MONJE</b>	
			15:20-15:40	<b>INV ASUETA</b>	
15:30-15:45	REO12 - Urbano	REC15 - Bautista	15:40-15:55	EU_IND5 - Jehanno	
15:45-16:00	REO13 - Fdz San Martín	REC16 - Rangel	15:55-16:10	EU_IND6 - Osorio	
16:00-16:15	REO14 - Haeberle	REC17 - Calvo-Calvo	16:10-16:25	EU_IND7 - Lacruz	
16:15-16:30	REO15 - Aguilar-Bolados	REC18 - de Dios Caputto	16:25-16:40	EU_IND8 - Germán	
16:30-16:45	REO16 - Sanz de León	REC19 - Díez Rodríguez	16:40-16:55	EU_IND9 - Giussi	
16:45-18:45	REUNION GEP Salas 1+2   MEETING GEP Rooms 1+2				
20:30-22:30	CENA DEL CONGRESO   CONFERENCE DINNER				

## Jueves 12 | Thursday 12<sup>th</sup>

8:00-9:00	REGISTRO GEP-SLAP 2022   Registration			
9:00-9:45	PLENARIO   PLENARY LIZ-MARZAN			
	<b>SESIÓN 1   SESSION 1</b> Salas   Rooms <b>1+2</b>	<b>SESIÓN 2   SESSION 2</b> Salas   Rooms <b>4+5</b>	<b>SESIÓN 3   SESSION 3</b> Salas   Rooms <b>6+7</b>	
Chairpersons	A. J. Müller	H. Sardon	F. Barroso	
9:55-10:25	<b>KN MASPOCH</b>	<b>KN KLEIJ</b>	9:55-10:25	<b>KN PENICHE</b>
10:25-10:45	<b>INV ACOSTA</b>	<b>INV VEGA BAUDIT</b>	10:25-10:40	BIO15 - Montané
10:45-11:00	REO18 - Konuray	REC20 - Cabedo	10:40-10:55	BIO17 - Valderrama
11:00-11:30	Café   Coffee Break			
Chairpersons	Vera-Alvarez	A. Eceiza	Peniche	
11:30-11:45	REO19 - Fontana	REC21 - Nicolau	11:30-11:45	BIO18 - Aizarna
11:45-12:00	REO20 - Perchicot	REC22 - Peñas Núñez	11:45-12:00	BIO19 - Olmos
12:00-12:15	REO 21 - Albornoz	ENERG13 - Luque	12:00-12:15	BIO20 - Ronchi
12:15-12:30	REO22 - Martínez Pérez	ENERG14 - Sessini	12:15-12:30	BIO21 - Bondi
12:30-12:45		ENERG15 - Olmedo	12:30-12:45	BIO22 - González Gándara
12:45-13:00			12:45-13:00	BIO23 - De Lama
13:00-13:30	CLAUSURA DEL CONGRESO Y PREMIOS MEJOR POSTER   CLOSING CEREMONY AND POSTER AWARDS			

## PREMIOS POSTER

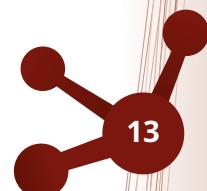
Se otorgarán ocho premios de 250 € a los mejores Poster presentados en el Congreso GEP-SLAP2022, patrocinados por las revistas Polymers (MDPI) y ACS APPLIED POLYMER MATERIALS (ACS).

Los criterios de evaluación incluirán el diseño y contenido estructurado del poster y su calidad científica. Los ganadores se anunciarán en la ceremonia de clausura del congreso.

## POSTER AWARDS

Poster Awards, worth €250 each, are awarded to the eight best posters on display at the GEP-SLAP2022. Poster awards are sponsored by the journals Polymers (MDPI) and ACS APPLIED POLYMER MATERIALS (ACS).

The evaluation criteria will include the design and structured content of the poster and its scientific quality. The winners will be announced at the GEP-SLAP2022 closing ceremony.



# Programa social | Social program

Se ofrecerá un **Cocktail de bienvenida** el día 8 de Mayo a las 19:15h en el Palacio de Congresos Kursaal.

A **Welcome Cocktail** will be offered on May 8th at 19:15h at the Kursaal Conference Center.



El día Miércoles 11 a las 20:30h tendrá lugar la **Cena de Gala del congreso** en el "Hotel de Londres y de Inglaterra", frente a la bahía de La Concha.

[www.hlondres.com](http://www.hlondres.com)

The **Congress Gala Dinner** will take place on Wednesday 11th at 20:30h at the "Hotel de Londres y de Inglaterra", in front of La Concha Bay.

[www.hlondon.com](http://www.hlondon.com)



# **Lista de contribuciones |** **List of contributions**

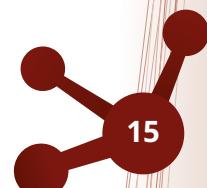
## **INVITADOS | INVITED**

### **Plenary**

- PI 1 Polymer Colloids. A Control Resistant Amazing World | José M. Asua (1) | (1) POLYMAT, University of the Basque Country UPV/EHU
- PI 2 C1, C3 and C5: Three unconventional polymerizations | Nikos Hadjichristidis (1) | (1) King Abdullah University of Science and Technology (KAUST)
- PI 3 Versatile Polypeptide-based Therapeutics for Unmet Clinical Needs | María J. Vicent (1) | (1) Polymer Therapeutics Lab. Centro de Investigación Príncipe Felipe
- PI 4 Controlling Nanoparticle Ordering by Directional Polymer Crystallization | Sanat Kumar (1) | (1) Columbia University
- PI 5 Plasmonic Polymer Nanocomposites | Luis M. Liz-Marzán (1,2,3) | (1) CIC biomaGUNE, (2) CIBER-BBN, (3) Ikerbasque

### **Keynote**

- KN 1 Biodegradable thermoplastic starch (TPS): Present and future applications | Marcelo Villar (1,2) | (1) Departamento de Ingeniería Química, Universidad Nacional del Sur, Bahía Blanca (Argentina), (2) Planta Piloto de Ingeniería Química, PLAPIQUI (UNS-CONICET), Bahía Blanca (Argentina)
- KN 2 Polymer Chemosensors: Sensing Target Species the Easy Way | José Miguel García Pérez (1) | (1) Universidad de Burgos
- KN 3 Polymer materials to remove contaminants in water | Bernabé L. Rivas (1); Daniel Palacio (1); Carla Muñoz (1) | (1) Polymer Department, Faculty of Chemistry, University of Concepcion, Concepcion
- KN 4 Multifunctional and smart polymer based materials: improving integration - expanding application | Senentxu Lanceros-Mendez (1,2) | (1) BCMaterials, Basque Center for Materials, Applications and Nanostructures, UPV/EHU, Leioa (Spain), (2) IKERBASQUE, Basque Foundation for Science, Bilbao, Spain
- KN 5 Redox- Active Conjugated Microporous Polymer as High Performing Electrodes for More Sustainable Batteries | Rebeca Marcilla (1); Nagaraj Patil (1); Antonio Molina (1); Diego A. Alván (1); Rebecca Grieco (1); Marta Liras (1) | (1) IMDEA Energia
- KN 6 Evaluation of pharmaceutical and nutraceutical formulations developed by Hot Melt Extrusion (HME): Case Study | Maria del Pilar Noriega E (1); Laura Restrepo-Uribe (2); Tim Osswald (3) | (1) Daabon Organic Group, (2) ICIPC – Instituto de Capacitación e Investigación del Plástico y del Cacho, (3) University of Wisconsin-Madison
- KN 7 Structure and Properties of Membranes from Self-assembled Block Copolymers | Volker Abetz (1,2) | (1) Helmholtz-Zentrum Hereon, (2) Universität Hamburg

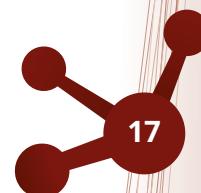


- KN 8 Potential of neutron scattering (combined with other techniques) to investigate the structure and dynamics of polymer-based systems | Arantxa Arbe (1) | (1) Centro de Física de Materiales (CFM) (CSIC--UPV/EHU) -- Materials Physics Center (MPC)
- KN 9 Bacterial Biopolymers for Membrane Development | João G. Crespo (1) | (1) LAQV-REQUIMTE, Dept. of Chemistry, FCT – NOVA University of Lisbon, Caparica, Portugal.
- KN 10 Pushing the limits of electron microscopy of polymers | Enrique Gomez (1) | (1) The Pennsylvania State University
- KN 11 Phase Diagrams of Macromolecular Materials: Comparing the Katana, Swiss Chocolates with Plastic Electronics | Natalie Stingelin (1) | (1) School of Materials Science & Engineering / School of Chemical & Biomolecular Engineering, Georgia Institute of Technology, Atlanta, GA
- KN 12 Absorbent and superabsorbent materials from agro-polymers. Rheology, processing, and applications | Antonio Guerrero (1); Estefanía Álvarez Castillo (1); Mercedes Jiménez Rosado (1); Alberto Romero (1); Carlos Bengoechea (1) | (1) Universidad de Sevilla
- KN 13 New Advances Towards Sustainable Fibre Reinforced Polymer Composites | M.A. Lopez-Manchado (1); A. Santiago Bethencourt (1); M. Peñas Caballero (1); M. Hernandez Santana (1); R. Verdejo (1) | (1) Instituto de Ciencia y Tecnología de Polímeros, ICTP-CSIC, Madrid (Spain)
- KN 14 Polymeric composites from recycled LDPE and coal mining waste: Is it a way to mitigate environmental impacts generated by acid drainage? | Cesar Petzhold (1); Marcelo Gryczak (1) | (1) Institute of Chemistry - Federal University of Rio Grande do Sul - UFRGS
- KN 15 Wastes rubber recycling: toward the design of high added value rubber composites and thermoplastic elastomers | Mª Lluisa Maspoch (1); Nicolas Candau (1); Noel León Albiter (1); Tobias Abt (1); Miguel Sánchez-Soto (1); Orlando Santana (1) | (1) Centre Català del Plàstic – Universitat Politècnica de Catalunya (CCP-UPC, e-PLASCOM, research group)
- KN 16 Functional Polyesters and Polycarbonates from Renewable Carbon Sources | Arjan Kleij (1,2); Arianna Brandolesi (1); Fernando Della Monica (1) | (1) Institute of Chemical Research of Catalonia (ICIQ), (2) Catalan Institute of Research and Advanced Studies (ICREA)
- KN 17 Polymer nanoparticles for delivery of drugs and agrochemicals | Carlos Andrés Peniche Covas (1); Javier González Quiñones (2) | (1) Universidad de La Habana, Cuba, (2) Johannes Kepler University Linz, Institute of Polymer Chemistry, Austria

## Invited

- INV 1 Polymeric Nanoparticles for the treatment of Inflammatory diseases | María Rosa Aguilar (1,2); Eva Espinosa-Cano (1,2); Miguel Huerta-Madroñal (1,2); Patricia Cámara-Sánchez (2,3,4); Joaquín Seras-Franzoso (4); Simo Schwartz Jr (2,4); Ibane Abasolo (2,3,4); Julio San Román (1,2) | (1) Biomaterials Group, Institute of Polymer Science and Technology (ICTP-CSIC), (2) Networking Biomedical Research Centre in Bioengineering, Biomaterials and Nanomedicine (CIBER-BBN), (3) Functional Validation & Preclinical Research (FVPR), Vall d'Hebron Institut de Recerca (VHIR), Universitat Autònoma de Barcelona (UAB), (4) Drug Delivery & Targeting, CIBBIM-Nanomedicine, Vall d'Hebron Institut de Recerca (VHIR), Universitat Autònoma de Barcelona (UAB)
- INV 2 Synthesis and characterization of new fully bio-based poly(acylhydrazone) vanillin vitrimers | Angels Serra (1); Adrià Roig (1); Aina Petrauskaité (1); Silvia De la Flor (1); Xavier Ramis (1,2) | (1) Universitat Rovira i Virgili, (2) Universitat Politècnica de Catalunya

- INV 3 Sintering of composite materials made of recycled plastics and recovered wood particles for the manufacturing of economic-feasible components for the industry | Julio Acosta (1); Adan Arribasplata (1); Luz Brañez (1); Walter Tupia (1) | (1) Sección Ingeniería Mecánica, Facultad de Ciencias e Ingeniería, Pontificia Universidad Católica del Perú
- INV 4 Development of innovative and sustainable agroinputs | Vera Alvarez (1); Merari Chevalier (3); Sergio Martin Saldaña (3); Danila Merino (1); Andrea Yamila Mansilla (2); Florencia Salcedo (2); María José Iglesias (2); Silvana Colman (2); Alberto Chevalier (3); Claudia Casalongue (2) | (1) INTEMA, (2) IIB, (3) GIHON
- INV 5 Naturally-derived biopolymer-based electrolyte for Zn-air batteries | Nagore Ortiz-Vitoriano (1,4); Estibaliz García-Gaitán (1,2,3); Maica C Morant-Miñana (1); Ainhoa Bustinza (1); Igor Cantero (2); Daniel Gónzalez (2) | (1) Centre for Cooperative Research on Alternative Energies (CIC energiGUNE), (2) CEGASA Energía SLU, (3) University of the Basque Country (UPV / EHU), (4) Ikerbasque, Basque Foundation for Science
- INV 6 Graphene-Polymer Porous Composites for CO<sub>2</sub> Capture | Radmila Tomovska (1,2); Nikolaos Politakos (1); Iranzu Barbarin (1); Ronen Zangi (1,2) | (1) POLYMAT, University of the Basque Country, (2) IKERBASQUE, Basque Foundation for Science
- INV 7 Design and modelling of a HDPE nanocomposite film with oxygen scavenging properties with potential application in active packaging systems | Jorge Alberto Medina (1); Juan Felipe Alvarado (1); Daniel Fernando Rozo (1); Luis Miguel Chaparro (1); Felipe Salcedo (1) | (1) Universidad de los Andes, Grupo de Materiales y Manufactura
- INV 8 Reactive processing of Ecofriendly plastics: Manufacture of in situ MFC by FDM from PLA/Bio PA10.10 bioblends | Orlando Santana Pérez (1); Leandro Martínez Orozco (1); Noel León Albiter (1); Tobias Abt (1); Nicolas Candau (1); Miguel Sánchez Soto (1); M. Lluïsa Maspoch Rulduà (1) | (1) Centre Català del Plàstic - Universitat Politècnica de Catalunya (ePLASCOM research group)
- INV 9 New biobased polyurethane materials | Arantxa Eceiza (1); Ainara Saralegi (1); Tamara Calvo-Correas (1); Lorena Ugarte (1); Julen Vadillo (2); Izaskun Larraza (1); Oihane Echeverria (3); Raquel Olmos (1); Stefano Torresi (1); Eider Mendiburu (1) | (1) University of the Basque Country, UPV/EHU, (2) CIDETEC, Basque Research and Technology Alliance (BRTA), (3) Aerospace Unit, Industry and Transport Division, TECNALIA, Basque Research and Technology Alliance (BRTA)
- INV 10 Supramolecular Polyamine Gene Vectors for Cancer Therapy (MSCA RISE SUPROGEN PROJECT) | Sergio E. Moya (1); Cristian Salvador (1,2); Patrizia Andreozzi (1,3) | (1) Soft Matter Nanotechnology, CIC biomaGUNE, San Sebastián (Spain), (2) CIDETEC Nanomedicine, (3) University of Florence
- INV 11 Biorefinería y economía circular de la piña en Costa Rica para la obtención de materiales de alto valor agregado | J.R. Vega-Baudrit (1,2); A.G. Montes de Oca (1); M. Camacho (1); D. Batista (1); S. Paniagua (1); R. Mora (1); C. Redondo (1); R. Pereira (1); Y. Corrales (1); A. Araya (1); L. Castillo (1); M. Lopretti (3) | (1) Laboratorio Nacional de Nanotecnología LANOTEC CENAT, San José, (Costa Rica), (2) Escuela de Química, Universidad Nacional, Heredia (Costa Rica), (3) UDELAR, Montevideo (Uruguay)
- INV 12 Active and smart polymer composites based on MoS<sub>2</sub> layered particles: from packaging to 4D printing applications | Humberto Palza (1); P. Castillo (1); C. Vergara (1); L. Medi (1); F. Olate (1); B. Barraza (1); J. Maureira (1); L. Flores (1) | (1) Facultad de Ciencias Físicas y Matemáticas, Universidad de Chile



- INV 13 Synthesis of photoactive polymer colloids by polymerization in aqueous dispersed media for interfacial singlet oxygen production | Maud Save (1); Charlène Boussiron (1); Luca Petrizza (1); Mickaël Le Bechec (1); Virginie Pellerin (1); Helen Minsky (2); Costantino Creton (2); Patrice Castignolles (3); Marion Gaborieau (3); Sylvie Lacombe (1) | (1) CNRS/ Univ Pau & Pays Adour/ E2S UPPA, IPREM, UMR5254, Pau, France, (2) Laboratory of Soft Matter Science and Engineering, ESPCI Paristech-CNRS-UPMC,(3) Western Sydney University, Australian Centre for Research on Separation Sciences Medical Sciences Research Group, School of Sciences and Health
- INV 14 From Nanostructured Silica Materials to High Performance Polyolefins: Recent Approaches and Developments | M. Rosário Ribeiro (1); Duarte Cecílio (1); João P. Lourenço (2); Auguste Fernandes (1); Ernesto Perez (3); Maria Luísa Cerrada (3) | (1) Centro de Química Estrutural, Institute of Molecular Sciences, Instituto Superior Técnico; Universidade de Lisboa, (2) Faculdade de Ciências e Tecnologia, CIQA – Universidade do Algarve, (3) Instituto de Ciencia y Tecnología de Polímeros (ICTP-CSIC)
- INV 15 Two approaches to tailor crystallization and mechanical properties of semicrystalline polymers and foams thereof by using nanotechnology | Volker Altstädt(1); Michaela Mörl (1); Merve Aksit (1); Mahboubeh Shahnooshi (1) | (1) University of Bayreuth
- INV 16 An overview on crosslinked polymer-based electrolytes for solid-state batteries operating at ambient temperature | Claudio Gerbaldi (1); Marisa Falco (1); Gabriele Lingua (1); Silvia Porporato (1); Ying Zhang (1); Elisa Maruccia (1); Alessandro Piovano (1); Giuseppina Meligrana (1); Giuseppe Antonio Elia (1) | (1) Politecnico di Torino
- INV 17 Universality in the arrest of relaxation dynamics in filled polymers above the percolation threshold | Giovanni Filippone (1) | (1) Università di Napoli Federico II
- INV 18 Selective organic catalysis of polymerization and macromolecular engineering for catalysis | Daniel Taton (1) | (1) University of Bordeaux
- INV 19 Biodegradable Dendritic Polysulfates as Intrinsic Tumor Targeted Drug Nanocarriers | Rainer Haag (1); M Schirner (1); Y. Zhong (1); D. Braatz (1) | (1) Institut für Chemie und Biochemie, Freie Universität Berlin
- INV 20 Towards efficient organic solar cells: Understanding the relationship between conjugated polymer photophysics and their nanostructure | Hugo Bronstein (1) | (1) Cambridge University, UK

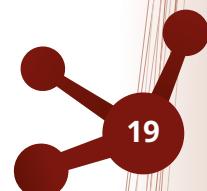
## EU Project

- INV 21 Choliniim-based iongels for bioelectronic applications | R. J. Minari (1,2); G.C. Luque (1,2); A. Aguzin1 (1); L. Ronco (1,2); I. del Agua (3); D. Mecerreyres (4) | (1) Instituto de Desarrollo Tecnológico para la Industria Química (INTEC), CONICET, Santa Fe, Argentina, (2) Facultad de Ingeniería Química, Universidad Nacional del Litoral, Santa Fe, Argentina, (3) Panaxium SAS, Aix-en-Provence, France, (4) POLYMAT, University of the Basque Country UPV/EHU, Donostia-San Sebastian, Spain
- INV 22 Polymeric Mixed Ionic-Electronic Conductors for Energy Storage | Nerea Casado (1); Rafael Del Olmo (1); Maria Forsyth (1,2) | (1) POLYMAT, University of the Basque Country, (2) Deakin University

- INV 23 Metal-Organic Frameworks polymeric composites for environmental remediation | Roberto Fernández de Luis (1); Ainara Valverde de Mingo (1,2); Gabriel Tovar (3); Jonás Pérez Bravo (3); Arkaitz Fidalgo-Marijuan (1); Luis Lezama Diago (4); Senentxu Lanceros-Méndez (1,5); Guillermo Copello (3) | (1) Basque Center for Materials, Applications & Nanostructures (BCMaterials), (2) Macromolecular Chemistry Group (LABQUIMAC), Department of Physical Chemistry, Faculty of Science and Technology University of the Basque Country (UPV/EHU), (3) Fac. de Farmacia y Bioquímica, (IQUIMEFA-UBA-CONICET) Instituto de Química y Metabolismo del Fármaco, Dept. de Química Analítica y Fisicoquímica, Universidad de Buenos Aires (UBA), (4) Departamento de Química Inorgánica, Facultad de Ciencia y Tecnología University of the Basque Country (UPV/EHU), (5) IKERBASQUE, Basque Foundation for Science
- INV 24 MALDI-TOF MS study of the electrophilic zwitterionic ring expansion of cyclic polymers with various monosubstituted epoxides | Scott Grayson (1); Farihah Haque (1); Jon Matxian (2); Fabienne Barroso-Bujans (2) | (1) Tulane University, (2) Donostia International Physics Center
- INV 25 Surface nucleation of dispersed polyethylene droplets in immiscible blends revealed by polypropylene matrix self-nucleation | Dario Cavallo (1); Enrico Carmeli (1); Seif Eddine Fenni (1); Maria Rosaria Caputo (2); Alejandro J. Muller (2); Davide Tranchida (3) | (1) Dipartimento di Chimica e Chimica Industriale, Università degli studi di Genova, (2) Polymat and Department of Polymers and Advanced Materials: Physics, Chemistry and Technology, Faculty of Chemistry, University of the Basque Country UPV/EHU, (3) Borealis Polyolefine GmbH, Innovation Headquarters
- INV 26 Enhanced aminolysis of cyclic carbonates for sustainable polyhydroxyurethanes | Sylvain Caillol (1) | (1) Institut Charles Gerhardt
- INV 27 Cellulose nanocrystals as renewable nanofillers for the design of biosourced polymeric (nano)composites with advanced thermomechanical properties | Jean-Marie Raquez (1) | (1) University of Mons
- INV 28 Renewable NIPUs – sustainability and other challenges | Michael Meier (1) | (1) Karlsruhe Institute of Technology
- INV 29 Transformation of carbon dioxide into advanced non-isocyanate polyurethanes and sustainable materials | Christophe Detrembleur (1); Florent Monie (1); Maxime Bourguignon (1); Fabiana Siragusa (1); Thomas Habets (1); Bruno Grignard (1) | (1) University of Liege
- INV 30 Light-sensitive Nano and Microstructures based on Conjugated Polymers: Optical control of the Cell Fate | Maria Rosa Antognazza (1) | (1) Italian Institute of Technology, Center for Nano Science and Technology, IIT@PoliMI
- INV 31 Polymer Semiconductor/Electrolyte Interfaces: Novel Concepts for Biomedical Transducers | Tobias Cramer (1) | (1) University of Bologna
- INV 32 Synthesis of waterborne poly(hydroxyurethane)s | Audrey Llevot (1) | (1) University of Bordeaux, CNRS, Bordeaux INP, Laboratoire de Chimie des Polymères Organiques

## Industria

- IND 1 Programas de ayudas públicas de I+D+I, a nivel nacional e internacional, enfocado a los polímeros en la industria | María José Tomás Sánchez (1) | (1) Centro para el Desarrollo Tecnológico Industrial (CDTI)
- IND 2 Polyhydroxalkanoates as Organic Recyclable Food Packaging Materials | Jose María Lagaron (1); C. Prieto (1); A.O. Basar (1); C. Marcoaldi (1); M. Pardo (1,2); L. Cabedo (3) | (1) Novel Materials and Nanotechnology Group, IATA-CSIC, Paterna (Valencia), Spain, (2) R&D Department Bioinicia S.L, Paterna (Valencia), Spain, (3) Polymers and Advanced Materials Group, Universitat Jaume I, Castellón, Spain



- IND 3 Interaction between molecular composition and blown film processing conditions of Polyethylene | Jesús Nieto (1); Anna Helgert (1); Sylvie Vervoort (1); Jaap Den Doelder (1); Kenneth Kearns (1) | (1) Dow
- IND 4 CAPROCAST: Automotive Continuous Fibre Polyamide 6 composite parts based on the “in situ” polymerization of ε-caprolactam | Cristina Elizetxea (1); S. García (1); A. De la Calle (1); O. Ollo (1) | (1) TECNALIA, Basque Research and Technology Alliance (BRTA), Donostia-San Sebastián, Spain.
- IND 5 A sustainable future with plastics | David del Agua Hernández (1) | (1) SABIC, Cartagena (Spain)
- IND 6 Polysaccharide-based emulsifier for lung administration via inhalation | Damien Dupin (1); Marcos Navascuez (1); Raquel Gracia (1); Marco Marradi (3); Natividad Díaz (1); Iraida Loinaz (1); Fernando López-Gállego (2); Jordi Llop (2) | (1) Fundación CIDETEC, (2) CIC-biomagUNE, (3) University of Florence
- IND 7 Practical anionic synthesis of in-chain functional polymers by homo- and copolymerization of silylstyrene monomers with styrene and butadiene | Sergio Corona Galván (1); Roderic Quirk (2); Jonathan Janoski (2); Sumana Roy Chowdhury (2) | (1) Grupo Dynasol, (2) The University of Akron
- IND 8 Star branched polyamides by reactive extrusion: Study on the rheological and mechanical properties for use as matrix in thermoplastic composites | Karina Carla Núñez Carrero (1); Manuel Herrero Villar (2); María Asencio Valentín (1); Julia Guerrero Fernandez (1); Juan Carlos Merino Senovilla (1,2); José María Pastor Barajas (1) | (1) Foundation for Research and Development in Transport and Energy (CIDAUT), (2) Escuela de Ingenierías Industriales, University of Valladolid
- IND 9 Novel bio-based PLA copolymers for more sustainable developments | Belén Monje Martínez (1); Rafael Alonso Ruiz (1); Miguel Ángel Valera Gómez (1) | (1) AIMPLAS
- IND 10 Chemical Recycling of Real Complex Waste Streams | Asier Asueta (1); J. Leivar (1); I. Amondarain (1); L. Fulgencio (1); R. Miguel (1); S. Arnaiz (1); A. Barredo (1); I. Nekoiza (1) | (1) Gaiker Technology Centre, Basque Research and Technology Alliance (BRTA)

## ORALES | ORALS

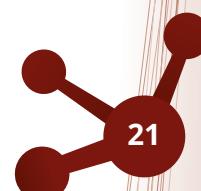
### Orales\_SINT

- O\_SINT 1 Synthesis, characterization and catalytic performance of iron phthalocyanine based knitting aryl polymer | Eva M. Maya (1); A. Valverde-González (1); M. Iglesias (1) | (1) Instituto de Ciencia de Materiales de Madrid (ICMM); Consejo Superior de Investigaciones Científicas (CSIC), Madrid (Spain)
- O\_SINT 2 Neighboring group interactions in dynamic covalent networks | Jesús del Barrio (1); Enrique Guerreiro (1); Joseba Ruiz (1); Pilar Romero (1); Luis Oriol (1) | (1) Universidad de Zaragoza
- O\_SINT 3 Zwitterionic Polymerization with B(C<sub>6</sub>F<sub>5</sub>)<sub>3</sub>: a Simple Access to Branched Cyclic Polyglycidol | Fabienne Barroso-Bujans (1) | (1) Donostia International Physics Center (DIPC)
- O\_SINT 4 Functional Polymeric Marterials Obtained via Controlled Polymerization of Tricoordinated Organoboranes | Fernando Vidal (1,2); Charlotte K. Williams (1); Frieder Jäkle (2) | (1) University of Oxford, (2) Rutgers University - Newark
- O\_SINT 5 Synthesis of P(BMA/HEA) copolymer within AAO nanoreactors. Kinetic study and monomer reactivity ratios | Rodrigo Navarro (1); Laia León-Boigues (1); Carmen Mijangos (1) | (1) Instituto de Ciencia y Tecnología de Polímeros

- O\_SINT 6 Mechanical and Thermal characterization of Epoxy Resin Modified with an Engineering Material | Fabio Augusto Mesa Rueda (1,2,3); Alneira Cuellar Burgos (1,2,3) | (1) Universidad Nacional de Colombia, (2) Laboratorio de Polímeros y Materiales Compuestos, (3) Departamento de Ingeniería Química
- O\_SINT 7 Thiol-ene waterborne coatings and crystallization: towards innovative packaging | Justine Elgoyen (1); Alejandro J. Müller (1,2); Radmila Tomovska (1,2) | (1) POLYMAT, University of the Basque Country UPV/EHU, (2) IKERBASQUE, Basque Foundation for Science
- O\_SINT 8 Hydrolytic degradation of closed cell PET foams | Lucía Doyle (1); I. Weidlich (1) | (1) HafenCity University, Hamburg (Germany)
- O\_SINT 9 Facile Preparation of Hydrophobic PET Surfaces | Elisabet Afonso Pérez (1); Aránzazu Martínez Gómez (1); Andrea Huerta González (1); Pilar Tiemblo Magro (1); Nuria García García (1) | (1) Instituto de Ciencia y Tecnología de Polímeros - Consejo Superior de Investigaciones Científicas (ICTP-CSIC)
- O\_SINT 10 Gas Separation Membranes obtained by Partial Pyrolysis of Polyimides having Polyethylene oxide moieties | Laura Matesanz Niño (1,2); Camino Bartolomé (3); Jesús María Martínez Ilarduya (3); Pedro Prádanos (1); Antonio Hernandez (1); Jesus Ángel De miguel (3); José G. de la Campa (4); Laura Palacio (1); Michele Galizia (5); Cristina Álvarez (1,4); Alfonso González Ortega (2); Ángel Emilio Lozano (1,3,4) | (1) SMAP, UAUVA\_CSIC, Associated Research Unit to CSIC. University of Valladolid, (2) Department of Organic Chemistry, Faculty of Science, University of Valladolid, (3) IU CINQUIMA, University of Valladolid, (4) Department of Macromolecular Chemistry, Institute of Polymer Science and Technology, ICTP-CSIC, (5) CBME, Sarkeys Energy Center, University de Oklahoma
- O\_SINT 11 Thermal cross-linking of silk sericin based hydrogels for soil water retention | Natalia Jaramillo Quiceno (1); Catalina Álvarez López (1) | (1) Universidad Pontificia Bolivariana

## Orales\_COPO

- O\_COPO 1 Porous aramids reinforced with functionalized carbon nanocharges as high-performance materials | Miriam Trigo López (1); Jose Antonio Reglero Ruiz (1); Saúl Vallejos Calzada (1); Félix García García (1); José Miguel García Pérez (1) | (1) Universidad de Burgos
- O\_COPO 2 PVDF arms crystallization in (PVDF)<sub>2</sub>-b-(PEO)<sub>2</sub> miktoarm star block copolymers | Nicolás María (1); Jon Maiz (1,2,3); Alejandro J. Müller (1,3); Nikos Hadjichristidis (4) | (1) POLYMAT and Department of Polymers and Advanced Materials, (2) Centro de Física de Materiales (CFM) (CSIC-UPV/EHU) – Materials Physics Center (MPC), (3) IKERBASQUE, Basque Foundation for Science, (4) King Abdullah University of Science and Technology (KAUST)
- O\_COPO 3 10nm resolution in chemical and topographic analysis of polymer structures | Philip Schäfer (1) | (1) neaspec, nanoscale analytics - attocube systems AG
- O\_COPO 4 Polyurethane-(meth)acrylic hybrids for anticorrosion coatings | Aitor Barquero Salaberria (1,2); Oihane Llorente Zabala (1,2); Jose Ramon Leiza ekondo (1,2); María Paulis Lumbreras (1,2) | (1) Polymat, (2) Euskal Herriko Unibertsitatea UPV/EHU
- O\_COPO 5 Correlation between morphology and mechanical properties of V<sub>2</sub>O<sub>5</sub>/CTA and V<sub>2</sub>O<sub>5</sub>-EPE/CTA nanocomposites from nano to macroscale | Joseba Gomez-Hermoso-de-Mendoza (1); Junkal Gutierrez (1); Agnieszka Tercjak (1) | (1) Universidad del País Vasco/Euskal Herriko Unibertsitatea (UPV/EHU)
- O\_COPO 6 Synthesis, characterization and applications of multibranched styrene-butadiene block copolymers | Luis Antonio Rodríguez-Guadarrama (1) | (1) Grupo Dynasol



O\_COPO 7 FLOWER-LIKE MAGNETIC NANOSTRUCTURES CONFINED INTO POLYVINYL ALCOHOL BEADS | Laura Mabel Sanchez (1); Camila Pereda (1); Daniel Actis (2); Pedro Mendoza Zélis (2); Vera Alejandra Alvarez (1) | (1) Materiales Compuestos Termoplásticos (CoMP), Instituto de Investigaciones en Ciencia y Tecnología de Materiales (INTEMA), CONICET - Universidad Nacional de Mar del Plata (UNMdP). Argentina, (2) Instituto de Física de La Plata (IFLP), CONICET-Departamento de Física, Universidad Nacional de La Plata (UNLP). Argentina.

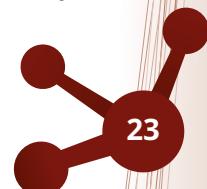
## Orales\_EST

- O\_EST 1 Modelling and experimental validation of temperature influence on thermodynamic of ternary systems | Marta Romay Romero (1); Nazely Diban Gómez (1); Ane Urtiaga Mendaia (1) | (1) Universidad de Cantabria
- O\_EST 2 Neutron scattering investigation of poly(tetrahydrofuran)-based single chain nanoparticles synthesized via "click" chemistry | Jon Maiz (1,2); Ester Verde-Sesto (1); Isabel Asenjo-Sanz (1); Peter Fouquet (3); Lionel Porcar (3); Bernhard Frick (3); José A. Pomposo (1,2,4); Paula Malo de Molina (1,2); Arantxa Arbe (1); Juan Colmenero (1,4,5) | (1) Centro de Física de Materiales (CFM) (CSIC-UPV/EHU)-Materials Physics Center (MPC) Donostia-San Sebastián, Spain, (2) IKERBASQUE-Basque Foundation for Science, Bilbao, Spain, (3) Institut Laue-Langevin, Grenoble, France, (4) Departamento de Polímeros y Materiales Avanzados: Física, Química y Tecnología, Universidad del País Vasco-Euskal Herriko Unibertsitatea (UPV/EHU), Donostia-San Sebastián, Spain, (5) Donostia International Physics Center, Donostia-San Sebastián, Spain.
- O\_EST 3 Aging effects on high toughness poly(L-lactide) composites for resorbable devices | Xabier Larrañaga (1); Jose-Ramon Sarasua (1); Ester Zuza (1) | (1) POLYMAT and Department of Mining-Metallurgy Engineering and Materials Science. Faculty of Engineering in Bilbao, University of the Basque Country (UPV/EHU)
- O\_EST 4 Multiscale simulations applied to polyolefin crystallization | Javier Ramos (1); Juan Francisco Vega (1); Javier Martínez-Salazar (1) | (1) Agencia Estatal Consejo Superior de Investigaciones Científicas
- O\_EST 5 Insight into the Ionic Transport of Solid Polymer Electrolytes in Polyether and Polyester Blends | Sergio Rodriguez Peña (1,2); Leire Meabe (1); Maria Martinez-Ibañez (1); Yan Zhang (1); Elias Lobato (1); Hegoi Manzano (2); Michel Armand (1); Javier Carrasco (1); Heng Zhang (1) | (1) Centre for Cooperative Research on Alternative Energies (CIC energiGUNE), (2) Department of Condensed Matter Phisycs, University of the Basque Country (UPV/EHU)
- O\_EST 6 Time Evolution of Structure and Properties of Vegetable Oil-Based Materials | Mirta Aranguren (1) | (1) Instituto de Investigaciones en Ciencia y Tecnología de Materiales (INTEMA), Facultad de Ingeniería, Universidad Nacional de Mar del Plata-CONICET
- O\_EST 7 Simultaneous Dielectro/Rheological measurements in thermoplastics, rubbers and thermosets materials | Carlos Alberto Gracia Fernández (1); César Del Rio (1); Gonzalo Anguera Pujadas (1) | (1) TA Instruments (Waters Cromatografia SA)

## Orales\_REO

- O\_REPO 1 Design of a PU formulation for tire filling | Angel Marcos Fernandez (1); Rodrigo Navarro (1); Alejandra Rubio (1); Horacio W. Bonifacio (2) | (1) Instituto de Ciencia y Tecnología de Polímeros (CSIC), (2) Valora Teruel SL
- O\_REPO 2 Rheological criteria for material screening in extrusion based additive manufacturing | Robert Aguirresarobe Hernández (1); Itxaso Calafel Martínez (1); José Ignacio Conde (2); Belén Pascual (2); Miguel Tierno (2); Antxon Santamaria (1) | (1) Universidad del País Vasco, (2) Ercros S.A.

- O\_REPO 3 Mechanical properties of cross-linked Elastin Like Recombinamer hydrogels | Julio Fernández Fernández (1); Luis Quintanilla Sierra (1); Mercedes Santos García (1); José Carlos Rodríguez Cabello (1) | (1) BIOFORGE Lab, University of Valladolid
- O\_REPO 4 Non-intrusive temperature measurement to predict the morphology of PEEK/PEI interphase in ultrasonic welding of thermoplastic composites | Fabrice Carassus (3); Margot Bonmatin (1,2); France Chabert (1); Gérard Bernhart (2); Thierry Cutard (2); Toufik Djilali (3) | (1) École Nationale d'Ingénieurs de Tarbes, Laboratoire Génie de Production (LGP), Université de Toulouse, INP-ENIT, Tarbes, France, (2) Institut Clément Ader (ICA); Université de Toulouse; CNRS, IMT Mines Albi, INSA, ISAE-SUPAERO, UPS; Tabes, France, (3) Lauak France, Tarbes, France
- O\_REPO 5 Solution Blow Spinning a Recent Approach to Prepare Multifunctional Thermoplastic Composites | Javier González-Benito (1); Dania Olmos Díaz (1); Víctor Manuel Ruiz (1); Jorge Teno (2); José Ernesto Domínguez (3); Ali Kasiri (4) | (1) Universidad Carlos III de Madrid, (2) R&D Department, Bioinicia S.L., (3) Universidad Tecnológica del Centro de Veracruz, (4) Universidad Rey Juan Carlos
- O\_REPO 6 FDM 3D printing of cellulose and graphene based flexible polyurethane nanocomposite filaments | Izaskun Larraza (1); Julen Vadillo (1,2); Tamara Calvo-Correas (1); Alvaro Tejado (3); Cristina Peña-Rodríguez (1); Aitor Arbelaitz (1); Arantxa Eceiza (1) | (1) Universidad del País Vasco/ Euskal Herriko Unibertsitatea (UPV/EHU), (2) Université de Pau et des Pays de l'Adour (UPPA), (3) TECNALIA
- O\_REPO 7 Improving the adhesive properties of thiol-acrylate-epoxy thermosets obtained by dual-curing procedure | Silvia De la Flor (1); Claudio Russo (1); Francesc Bustamante (1); Xavier Fernández-Francos (2) | (1) Universitat Rovira i Virgili, (2) Universitat Politècnica de Catalunya
- O\_REPO 8 Thermomechanical behaviour and interface characterization of PEEK/PEI multilayer composites | Juan Pedro Fernández blázquez (1); Ángel Alvaredo-Atienza (1); Verónica San Miguel Arnanz (3); Álvaro Ridruejo Rodríguez (2) | (1) Instituto IMDEA Materiales, (2) Departamento de Ciencia de Materiales, ETSI Caminos, Universidad Politécnica de Madrid, (3) Departamento de Ciencia e Ingeniería de Materiales e ingeniería Química, Universidad Carlos III de Madrid.
- O\_REPO 9 Development of Electrospun Kraft Lignin/Cellulose Acetate with Potential Application as Template to Produce Oleogels | José Fernando Rubio Valle (1); María del Carmen Sanchez Carrillo (1); Concepción Valencia Barragan (1); José Enrique Martín Alfonso (1); José María Franco Gomez (1) | (1) Pro2TecS – Chemical Product and Process Technology Research Center. Department of Chemical Engineering and Materials Science. Universidad de Huelva. ETSI.
- O\_REPO 10 Orthotropic Mechanical Properties of Carbon Fibres Reinforced ABS Composite Fabricated by Material Extrusion 3D Printing | Andoni Molina (1); D. A. Ramírez (1); Q.M. Valverde (1); J. A. Acosta (1) | (1) Pontificia Universidad Católica del Perú
- O\_REPO 11 Ductile biomaterials for extrusion-based 3D printing | Itxaso Calafel Martínez (1); Robert Aguirresarobe (1); Oihane Varela (1); Antxon Santamaría (1) | (1) POLYMAT-EHU/UPV
- O\_REPO 12 Coated nanoparticles for enhanced distribution and softness of physical nanocomposite hydrogels | Bruno Urbano (1); Susana Sánchez (1) | (1) Universidad de Concepción
- O\_REPO 13 Viscoelastic behavior and bioadhesion of hydrogels to optimize ophthalmic drug delivery application | Mercedes Fernandez (1); Itxaso Calafel (1); Antxon Santamaría (1); David Esporrín-Ubieto (2); Marcelo Calderón (2) | (1) POLYMAT and Department of Polymers and Advanced Materials: Physics, Chemistry and Technology, Faculty of Chemistry, Basque Country University UPV/EHU, (2) POLYMAT Basque Center for Macromolecular Design and Engineering, Applied Chemistry Department, Basque Country University UPV/EHU

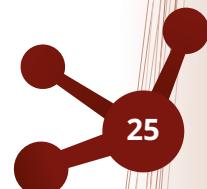


- O\_REPO 14 Characterization of the frequency and temperature dependency of the viscoelastic Poisson's ratio by combining axial and torsional measurements in a single rheometer | Jan Haeberle (1); José Rodriguez Agudo (1); Christopher Giehl (1); Dominik Fauser (2); Gunther Arnold (1); Holger Steeb (2) | (1) Anton Paar Germany GmbH, Ostfildern, Germany, (2) Institute of Applied Mechanics (CE), University of Stuttgart, Stuttgart, Germany
- O\_REPO 15 Preparation and characterization of graphitic-based FKM fluoroelastomer compounds | Héctor Aguilar Bolados (1); Alejandro Zagal (1); Bruno Urbano (1); Santiago Maldonado-Magnere (2); Mehrdad Yazdani-Pedram (2) | (1) Universidad de Concepción, (2) Universidad de Chile
- O\_REPO 16 Synthesis and characterization of graphene-based nanocomposites via stereolithography | Alberto Sanz de León (1); Sergio I Molina (1) | (1) Universidad de Cádiz
- O\_REPO 17 Thermo-mechanical effects of post-processing on the performance of 3D printed continuous fibre composites | Cristina Pascual-González (1); Juan P. Fenández-Blázquez (1) | (1) Institute IMDEA Materials, Getafe, Madrid, Spain
- O\_REPO 18 Stress-relaxing thermosets with easily regulated bond exchange kinetics | Osman Konuray (1); Sasan Moradi (1); Xavier Fernández-Francos (1); Àngels Serra (2); Xavier Ramis (1); José María Morancho (1) | (1) Universitat Politècnica de Catalunya, (2) Universitat Rovira i Virgili
- O\_REPO 19 Electrochemical multi-sensors obtained by applying a electric discharge treatment to 3D-printed poly(lactic acid) | Adrian Fontana Escartin (1,2); Sonia Lanzalaco (1); Oscar Bertran Canovas (2); Carlos Aleman Llanso (1,3) | (1) Departament d'Enginyeria Química and Barcelona Research Center in Multiscale Science and Engineering, EEBE, Universitat Politècnica de Catalunya, Barcelona, Spain, (2) Departament de Física EETAC, Universitat Politècnica de Catalunya, Castelldefels, Spain, (3) Institute for Bioengineering of Catalonia (IBEC), The Barcelona Institute of Science and Technology, Barcelona Spain
- O\_REPO 20 Manufacture and characterization of all recycled opaque-PET/PP microfibrillar blend | Romain Perchicot (1); Mojtaba Kharghanian (1); Silvia Irusta (2); Cristina Yus Argon (2); Frederic Leonardi (1); Sylvie Dagreou (1) | (1) Université de Pau et des Pays de l'Adour (UPPA), (2) Aragon Institute of nanoscience (INA)
- O\_REPO 21 The role of lignin in the rheological, morphological, and electrical characteristics of lignocellulose nanofibrils | Gregory Albornoz-Palma (1); Roberto Teruel-Juanes (2); Miguel Pereira (1); Amparo Ribes-Greus (2) | (1) Universidad de Concepción, (2) Universitat Politècnica de València
- O\_REPO 22 Rheological studies of a 3D Printable Sodium Alginate/Vitreous Humor Ink | Alberto Martínez Pérez (1); Esmeralda Zuñiga-Aguilar (1); Lorena Rivera (1) | (1) Universidad Autónoma de Ciudad Juárez

## **Orales\_BIO**

- O\_BIO 1 Near infrared (NIR) responsive nanogels for combinatorial cancer treatment | Marcelo Calderon (1) | (1) POLYMAT - Basque center for macromolecular design and engineering
- O\_BIO 2 3D-printed Hydrogel-based Plasmonic Scaffolds for SERS Sensing and Imaging | Clara García Astrain (1,2); Malou Henriksen Lacey (1,2); Beatriz Molina (1); Elisa Lenzi (1); Judith Langer (1); Dorleta Jimenez de Aberasturi (1,2,3); Luis M Liz-Marzán (1,2,3) | (1) CICBIOMAGUNE, Basque Research and Technology Alliance (BRTA), (2) CIBER-BBN, Centro de Investigación Biomédica en Red de Bioingeniería Biomateriales, y Nanomedicina, (3) Ikerbasque Basque Foundation for Science

- O\_BIO 3 Amphiphilic block copolymers containing 2,6-diacylaminopyridine moieties as nanocarriers prepared by different techniques for biomedical applications | Luis Oriol (1,2); Miriam Abad (1,2); Laura Usón (1,3,4); Gracia Mendoza (3,4,5); Martina Nardi (6); Manuel Arruebo (1,3,4); Víctor Sebastián (1,3,4); Eva Blasco (7); Milagros Piñol (1,2) | (1) Instituto de Nanociencia y Materiales de Aragón (INMA) - Universidad de Zaragoza, (2) Departamento de Química Orgánica, Facultad de Ciencias, Universidad de Zaragoza, (3) Department of Chemical Engineering and Environmental Technologies, University of Zaragoza, (4) Networking Research Centre on Bioengineering, Biomaterials and Nanobiomedicine (CIBER-BNN), (5) Aragon Health Research Institute (ISS Aragon), (6) Institute for Chemical Technology and Polymer Chemistry (ITCP), Karlsruhe Institute of Technology (KIT), (7) Ruprecht-Karls-Universität Heidelberg, Organic Chemistry Institute (OCI)-Centre of Advanced Materials (CAM)
- O\_BIO 4 Composite polysaccharide scaffolds for bone tissue regeneration | Luis García-Fernández (1,2); Hector García-Robledo (3); Basilio de la Torre (3); Rocio Martín-López (4); Juan Parra (2,4); Blanca Vázquez-Lasa (1,2) | (1) Grupo de Biomateriales, Instituto de Ciencia y Tecnología de Polímeros (ICTP-CSIC), (2) Centro de Investigación Biomédica en Red en Bioingeniería, Biomateriales y Nanomedicina, (3) Hospital Ramón y Cajal, (4) Unidad Asociada de I+D al CSIC Unidad de Investigación Clínica y Biopatología Experimental. Complejo Asistencial de Ávila, SACYL
- O\_BIO 5 CLEAR POLYURETHANE COATINGS WITH EXCELLENT VIRICIDAL PROPERTIES. PREPARATION, CHARACTERIZATION AND RAPID INACTIVATION OF CORONAVIRUSES: HUMAN HCoV-229E AND SARS-CoV-2 | Paula Bosch Sarobe (1) | (1) Instituto de Ciencia y Tecnología de Polímeros, ICTP-CSIC, Departamento de Química Macromolecular Aplicada, Madrid (2) Grupo de Síntesis Orgánica y Bioevaluación, Instituto Pluridisciplinar (UCM), Unidad Asociada al ICTP, IQM (CSIC), Madrid, Spain, (3) Centro de Biología Molecular Severo Ochoa-CSIC, Madrid, Spain
- O\_BIO 6 Antibacterial catechol-based polymeric coatings onto Ti6Al4V surfaces for application as biomedical implants | Jon Andrade del Olmo (1,2); Jose María Alonso (1); Leyre Pérez Álvarez (2,3); Virginia Sáez Martínez (1); Leire Ruiz Rubio (2,3); Miguel Ángel Pacha Olivenza (4,5); Raúl Pérez González (1); Jose Luis Vilas Vilela (2,3) | (1) i+Med S. Coop. Parque Tecnológico de Álava, Vitoria-Gasteiz, Álava, Spain, (2) Grupo de Química Macromolecular (LABQUIMAC), Departamento de Química Física, Facultad de Ciencia y Tecnología, Universidad del País Vasco UPV/EHU, Leioa, Spain, (3) BCMaterials, Basque Center for Materials, Applications and Nanostructures, UPV/EHU Leioa, Spain, (4) Department of Biomedical Sciences, Faculty of Medicine, University of Extremadura, Badajoz, Spain, (5) Networking Research Center of Bioengineering, Biomaterials and Nanomedicine (CIBER-BBN), Badajoz, Spain.
- O\_BIO 7 Polysaccharide/Silica Hybrid Hydrogels for Controlled Release: From Macroscopic to Nanosized Systems | Rafael Muñoz-Espí (1); Asmaa Elzayat (1); Francisco F. Pérez-Pla (1) | (1) Universitat de València
- O\_BIO 8 3-D Printed bi-functional hybrid alginate hydrogel actuators | José Luis Vilas-Vilela (1); Leire Ruiz-Rubio (1); Cristian Mendes-Felipe (1); Antonio Veloso-Fernández (1); Leyre Pérez-Álvarez (1); José Manuel Laza-Terroba (1); Caterina Lopes (1); Isabel Moreno (1) | (1) University of the Basque Country (UPV/EHU)
- O\_BIO 9 3D printing of starch-based tablets for on demand drug delivery | Kizkitza González Munduate (1); Izaskun Larraza Arocena (1); Arantxa Eceiza Mendiguren (1); Nagore Gabilondo López (1) | (1) University of the Basque Country (UPV/EHU)
- O\_BIO 10 Pure agar-based microcapsules: electrosprayability and morphological study | Barbara Tomadoni (1); Maria Jose Fabra (2,3); Amparo Lopez Rubio (2,3) | (1) Research Institute of Materials Science and Technology (INTEMA, CONICET-UNMDP), Mar del Plata (Argentina), (2) Institute of Agrochemistry and Food Technology (IATA-CSIC), Paterna (Spain), (3) Interdisciplinary Platform for Sustainable Plastics Towards a Circular Economy- Spanish National Research Council (SusPlast-CSIC), Madrid (Spain)



- O\_BIO 11 A reusable antimicrobial material for its use in food packaging as an absorbent food pad | Saul Vallejos (1); Lara González-Ceballos (1); José Carlos Guirado-Moreno (1); Marta García-Guembe (1); Jordi Rovira (1); Beatriz Melero (1); Ana Arnaiz (1); Ana María Diez (1); José Miguel García (1) | (1) Universidad de Burgos
- O\_BIO 12 Elastin-like recombinamer based nanodevices for targeted breast cancer gene-therapy | Sara Escalera-Anzola (1); Sofía Serrano-Ducar (1); Mónica Queipo-Riera (1); Raquel Muñoz (1); Alessandra Girotti (1); Francisco Javier Arias (1) | (1) Smart Biodevices for Nanomedicine, University of Valladolid
- O\_BIO 13 Characterization of Elastin-like Recombinamer-Based Membranes produced at a Liquid-Liquid Interface | Diana Juanes-Gusano (1); Lubinda Mbundi (1); Miguel Gonzalez (1); Jose Carlos Rodriguez-Cabello (1) | (1) Universidad de Valladolid
- O\_BIO 14 Modifying fibrin hydrogels through succinimidyl ester functionalized polymers | Raúl Sanz-Horta (1); Ana Matesanz (2); Diego Velasco (2); José Luis Jorcano (2); Alberto Gallardo (1); Helmut Reinecke (1); Carlos Elvira (1) | (1) Consejo Superior de Investigaciones Científicas, (2) Universidad Carlos III de Madrid
- O\_BIO 15 Design and assembly of biodegradable capsules based on novel alginate hydrogel composite suitable for the encapsulation of blue dye | Xavier Montané (1); Yasmin Kabalan (1); Bartosz Tylkowski (2); Silvia de la Flor (1); Marta Giamberini (1) | (1) Universitat Rovira i Virgili, (2) Eurecat, Centre Tecnològic de la Química de Catalunya
- O\_BIO 16 Incorporation of poly(mannitol sebacate) into PLA electrospun fibers | Victor Hevilla (1); Agueda Sonseca (2); Coro Echeverria (1); Alexandra Muñoz-Bonilla (1); Marta Fernández-García (1) | (1) ICTP-CSIC, (2) Instituto de Tecnología de Materiales de la Universitat Politècnica de València
- O\_BIO 17 Synthesis of chitosan nanoparticles - TPP and its application in the loading and release of the ethanolic extract of the Phyllanthus stipulatus (raf.) Webster (chancapiedra) | Ana Cecilia Valderrama (1); Carlos Salazar Gallupe (1); Golfer Muedas Taype (1); Ingrid Collantes Díaz (1); Christian Jacinto Hernandez (1) | (1) Universidad Nacional De Ingeniería
- O\_BIO 18 Smart Hybrid Multifunctional Bioinks and their Application in 3D-printing of Disease Models | Uxue Aizarna Lopetegui (1); Carlos Renero Lecuna (1); Clara García Astrain (1,2); Luis Liz-Marzáñ (1,2,3); Malou Henriksen Lacey (1,2); Dorleta Jiménez de Aberasturi (1,2,3) | (1) CIC biomaGUNE, Basque Research and Technology Alliance (BRTA), Donostia-San Sebastián, Spain, (2) Centro de Investigación Biomédica en Red de Bioingeniería Biomateriales, y Nanomedicina (CIBER-BBN), Donostia-San Sebastián, Spain, (3) Ikerbasque Basque Foundation for Science, Bilbao, Spain.
- O\_BIO 19 Design of drug-loaded 3D printing biomaterial inks and tailor-made pharmaceutical forms for controlled release | Raquel Olmos Juste (1); Olatz Guaresti (1); Tamara Calvo Correas (1); Nagore Gabilondo (1); Arantxa Eceiza (1) | (1) UPV/EHU
- O\_BIO 20 Optical modulation of cardiomyocytes derived from human induced pluripotent stem cells by red light-absorbing conjugated polymer | Carlotta Ronchi (1); Marta Mazzola (2); Camilla Galli (2); Gabriele Tullii (1); Silvia Crasto (2); Camilla Marzuoli (1,3); Elisa Di Pasquale (2,4); Maria Rosa Antognazza (1) | (1) 1Center for Nano Science and Technology@Polimi, Istituto Italiano di Tecnologia, Milano, Italy, (2) Humanitas Clinical and Research Center-IRCCS, Milan, Italy, (3) Politecnico di Milano, Physics Dept,Milano, Italy, (4) Institute of Genetic and Biomedical Research (IRGB), UOS of Milan – National Research Council of Italy (CNR), Milan, Italy
- O\_BIO 21 Photocurrent and Photovoltage Generation Dynamics at the Organic Semiconductor/Water Interface in p-Type Conjugated Polymers | Luca Bondi (1); Edgar Gutiérrez-Fernández (2); Camilla Marzuoli (4); Gabriele Tullii (3); Jaime Martín-Pérez (2); David Mecerreyres (2); Maria Rosa Antognazza (3); Beatrice Fraboni (1); Tobias Cramer (1) | (1) Università di Bologna, (2) POLYMAT-UPV/EHU, (3) CNST-IIT, (4) Politecnico di Milano

- O\_BIO 22 Novel Composite Nanofibers by Green Electrospinning | Edurne González (1); Aitor Barquero (1); Eva Stefanovska (2); Jose Ramon Leiza (1); María Paulis (1) | (1) POLYMAT, University of the Basque Country UPV/EHU, (2) Ss Cyril and Methodius University
- O\_BIO 23 Doxycycline-loaded ACP NPs and their incorporation in electrospun PLA fibers for regulated drug release in antitumoral therapy | María del Carmen De Lama-Odría (1); Juana Mercedes del Valle-Mendoza (2); Immaculada Martínez-Rovira (3,4); Ibraheem Yousef (3); Jordi Puiggallí (1,5); Luis J. del Valle (1,5) | (1) Chemical Engineering Department, Escola d'Enginyeria de Barcelona Est-EEBE, Universitat Politècnica de Catalunya, Barcelona (Spain)., (2) School of Medicine, Research and Innovation Center of the Health Sciences, Universidad Peruana de Ciencias Aplicadas, and Laboratorio de Biología Molecular, Instituto de Investigación Nutricional, Lima (Peru)., (3) MIRAS Beamline BL01, ALBA-CELLS Synchrotron, Barcelona (Spain)., (4) Ionizing Radiation Research Group, Physics Department, Universitat Autònoma de Barcelona (UAB), Barcelona (Spain)., (5) Barcelona Research Center for Multiscale Science and Engineering, Universitat Politècnica de Catalunya, Barcelona (Spain)

## **Orales\_ENERG**

- O\_ENERG 1 Hybrid materials based on Conjugated Porous Polymers (CPPs) as photocatalysts in artificial photosynthesis | Marta Liras (1); Carmen G. López-Calixto (1); Laura Collado (1,2); Miguel Gómez-Mendoza (1); Teresa Naranjo (1); Mariam Barawi (1); Javier Marugán (2); Víctor A. de la Peña O'Shea (1) | (1) IMDEA energy, (2) Universidad Rey Juan Carlos
- O\_ENERG 2 Unique solid carbonate-based single ion conducting block copolymer for high-voltage lithium metal batteries | Gabriele Lingua (1); Patrick Grysar (2); Petr S. Vlasov (3); Pierre Verge (2); Alexander S. Shaplov (2); Claudio Gerbaldi (1) | (1) GAME Lab, Department of Applied Science and Technology (DISAT), Politecnico di Torino, Italy, (2) Luxembourg Institute of Science and Technology (LIST), Luxembourg, (3) Department of Macromolecular Chemistry, Saint-Petersburg State University, Saint Petersburg, Russia
- O\_ENERG 3 Nanoencapsulation of Phase Change Materials and Integration in Polymer Coatings for Thermal Energy Storage | Inés Adam-Cervera (1); Christian Rodríguez-Boscà (1); José F Serrano-Claumarchirant (1); Mario Culebras (1); Clara Maria Gómez (1); Rafael Muñoz-Espí (1) | (1) Institut de Ciència dels Materials (ICMUV), Universitat de València
- O\_ENERG 4 POROUS CARBON FIBERS FROM PAN-BASED COPOLYMER FOR ENERGY APPLICATIONS | Ainhoa Álvarez Gómez (1); Berna Serrano Prieto (1); Verónica San Miguel Arnanz (1); Juan Pedro Fernández Blázquez (2) | (1) Universidad Carlos III De Madrid, (2) Instituto Imdea Materiales
- O\_ENERG 5 Enhancement of CO<sub>2</sub>/N<sub>2</sub> separation using Mixed Matrix Membranes containing a Porous Organic Polymer | Sandra Rico Martínez (1); Antonio Hernández Giménez (2); Cristina Álvarez Sancho (1,2,3); Ángel E. Lozano López (1,2,3); Jesús Ángel Miguel Martín (1); Pablo Espinet Rubio (1) | (1) IU CINQUIMA, University of Valladolid, Valladolid (Spain), (2) SMAP, UA-UVA\_CSIC, Associated Research Unit to CSIC, University of Valladolid, Valladolid (Spain), (3) Department of Applied Macromolecular Chemistry, Institute of Polymer Science and Technology, ICTP-CSIC, Madrid (Spain)
- O\_ENERG 6 A Significantly Improved Polymer| Ni(OH)<sub>2</sub> Alkaline Rechargeable Battery Using Anthraquinone-based Conjugated Microporous Polymer Anode | Rebecca Grieco (1); Antonio Molina (1); Jaime S. Sanchez (2); Nagaraj Patil (1); Rebeca Marcilla (1) | (1) imdea energy, (2) Industrial and Materials Science, Chalmers University of Technology
- O\_ENERG 7 Transparent insulating polymers, from imagination to reality | Judith Martín-de León (1); Victoria Bernardo (2); Miguel Ángel Rodriguez-Perez (1) | (1) Universidad de Valladolid, (2) CellMat Technologies S.L.



- O\_ENERG 8 Cellulose and its derivatives as a platform for energy storage | Erlantz Lizundia (1,2); Senentxu Lanceros-Mendez (2,3) | (1) University of the Basque Country, (2) BCMaterials, Basque Centre for Materials, Applications and Nanostructures, (3) IKERBASQUE, Basque Foundation for Science
- O\_ENERG 9 SAFELiMOVE: Advanced all solid-state safe lithium metal technology towards vehicle electrification | Nicola Boaretto (1); Leire Meabe (1); Itziar Aldalur (1); Haritz Perez (1); Elias Lobato (1); Xabier Casas (1); Pierre Ranque (1); María Martínez (1) | (1) Centre for Cooperative Research on Alternative Energies (CIC energiGUNE)
- O\_ENERG 10 Lignin, the sustainable biopolymer to develop the next generation of energy materials | Mario Culebras Rubio (1); José F. Serrano Claumarchirant (1); Maurice Collins (2); Rafael Muñoz Espi (1); Andrés Cantarero (1); Clara Gomez Clari (1) | (1) Universidad de Valencia, (2) University of Limerick
- O\_ENERG 11 Graphite/activated carbon-conducting polymers composite materials for electrochemical applications | Francisco González (1); Abigail Suárez (1); Susan Flores (1); Carmina Terán (1); Marco Garcia-Lobato (1) | (1) Universidad Autónoma de Coahuila
- O\_ENERG 12 PEO gel polymer electrolytes based on Li-doped ionic liquids and Deep eutectic solvents | Víctor Gregorio Martínez (1); Nuria García García (1); Pilar Tiemblo Magro (1) | (1) Instituto de Ciencia y Tecnología de Polímeros (ICTP-CSIC)
- O\_ENERG 13 Biocompatible and printable cholinium based iongels for body sensor applications | Gisela Luque (1,2); Matias Picchio (1); Ana Martins (3); Antonio Dominguez-Alfaro (3); Nicolás Ramos (3); Isabel Del Agua (4); Bastien Marchiori (4); Liliana Tomé (3); Roque Minari (1,2); Mecerreyes David (3) | (1) Instituto de Desarrollo Tecnológico para la Industria Química (INTEC), CONICET, (2) Facultad de Ingeniería Química, Universidad Nacional del Litoral, (3) POLYMAT, University of the Basque Country UPV/EHU, (4) Panaxium SAS
- O\_ENERG 14 Sustainable large-scale production of green bioplastics with piezoelectric properties | Valentina Sessini (1); Jesús Damián Burgoa (1); Christian Rentero (1); Asier Medel García (1); Jean-Marie Raquez (2); Marta E. G. Mosquera (1) | (1) Universidad de Alcalá, (2) University of Mons
- O\_ENERG 15 Poly(ethylene oxide)/Poly(lactic acid) blends as Solid Polymer Electrolytes for high-temperature lithium batteries | Jorge Luis Olmedo Martínez (1); Luca Porcarelli (1,2); Gregorio Guzmán González (1); Itxaso Calafel (1); Maria Forsyth (1,2); David Mecerreyes (1); Alejandro J. Müller (1) | (1) POLYMAT and Department of Polymers and Advanced Materials: Physics, Chemistry and Technology, Faculty of Chemistry, University of the Basque Country UPV/EHU, (2) ARC Centre of Excellence for Electromaterials Science and Institute for Frontier Materials, Deakin University
- O\_ENERG 16 Novel hybrid Cu<sub>2</sub>O-polymer based photocathodes for solar fuel generation | Alejandro García Eguizábal (1); Miguel García Tecedor (1); Freddy Oropeza (1); Mariam Barawi (1); Marta Liras (1); Víctor A. De La Peña O'Shea. (1) | (1) IMDEA Energía

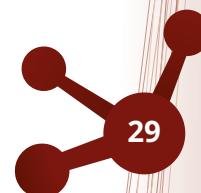
## **Orales\_EU\_IND**

- EU\_IND 1 Mixed ionic and electronic conductive eutectogels for wearable health monitoring | Matias Luis Piccio (1); Antonela Gallastegui (2); Nerea Casado (2); Lopez-Larrea Naroa (2); Marchiori Bastien (3); Del Agua Isabel (3); Criado-Gonzalez Miryam (2); Mantione Daniele (4); Roque Javier Minari (1); David Mecerreyes (2,5) | (1) Instituto de Desarrollo Tecnológico para la Industria Química (INTEC), CONICET, Santa Fe, Argentina, (2) POLYMAT University of the Basque Country UPV/EHU, Donostia-San Sebastián, Spain, (3) Panaxium SAS, Aix-en-Provence, France., (4) POLYKEY POLYMERS s.l., Donostia-San Sebastian, Spain, (5) Ikerbasque, Basque Foundation for Science, Bilbao, Spain

- EU\_IND 2 Proton Trap Effect on Catechol-Pyridine Redox Polymer Nanoparticles as Organic Electrodes for Lithium Batteries | Antonela Gallastegui (1); Daniela Minudri (1); Nerea Casado (1); Nicolas Goujon (1); Nagaraj Patil (2); Rebeca Marcilla (2); Christophe Detrembleur (3); David Mecerreyes (1) | (1) POLYMAT, (2) Electrochemical Processes Unit (IMDEA Energy), (3) Centre for Education and Research on Macromolecules (CERM)
- EU\_IND 3 Poly(3-hexylthiophene) porous materials for bio-photonics | Miryam Criado-Gonzalez (1); Edgar Gutierrez-Fernandez (1); Luca Bondi (2); Camilla Marzuoli (3); Elena Gabirondo (1); Gabriele Tulli (3); Jaime Martín (1,4,5); Maria Rosa Antognazza (3); Tobias Cramer (2); David Mecerreyes (1,4) | (1) POLYMAT and Department of Polymers and Advanced Materials: Physics, Chemistry and Technology. Faculty of Chemistry, Basque Country University UPV/EHU, San Sebastián (Spain), (2) Department of Physics and Astronomy. University of Bologna, (Italy)., (3) Center for Nano Science and Technology@PoliMi, Istituto Italiano di Tecnologia, Milano (Italy), (4) Ikerbasque, Basque Foundation for Science, Bilbao (Spain), (5) Universidade da Coruña, Grupo de Polímeros, Centro de Investigacións Tecnolóxicas (CIT), Ferrol (Spain)
- EU\_IND 4 Photoprintable polycaprolactone triol based polyurethane acrylated resin | Leire Ruiz Rubio (1,3); Cristian Mendes Felipe (1,3); Antonio Veloso Fernández (1); Leyre Pérez Álvarez (1,3); Caterina Lopes (1); José Manuel Laza (1); Isabel Moreno (2); José Luis Vilas Vilela (1,3) | (1) Macromolecular Chemistry Group, Department of Physical Chemistry, Faculty of Science and Technology, University of the Basque Country, (2) Macromolecular Chemistry Group, Department of Organic and Inorganic, Faculty of Science and Technology, University of the Basque Country UPV/EHU, (3) Basque Center for Materials, Applications and Nanostructures, Martina Casiano Building, UPV/EHU Science Park
- EU\_IND 5 From lab to market, opportunities and challenges of a young spin-off | Jehanno Coralie (1,2); Basterretxea Andere (1); Mecerreyes David (2); Sardon Haritz (2) | (1) POLYKEY POLYMERS, (2) POLYMAT
- EU\_IND 6 Polymers in wound care and upcoming challenges in the field | Ernesto Rafael Osorio Blanco (1); Anne Wibaux (1); Maike Kuhlmann (1) | (1) Beiersdorf AG
- EU\_IND 7 Fluorine-free waterborne textile finishing agents for anti-stain and solvent-water separation based on low surface energy (co)poly(methacrylate)s | Amado Lacruz (1,3); Mireia Salvador (1); Miren Blanco (2); Karmele Vidal (2); Antxon Martínez de Ilarduya (3) | (1) Color Center, S.A., (2) Tekniker, Basque Research and Technology Alliance (BRTA), (3) Universitat Politècnica de Catalunya (UPC)
- EU\_IND 8 Green chemistry in aqueous polyurethane dispersion | Lorena Germán Ayuso (1); Jose María Cuevas Zarraga (1); Rubén Cobos (1); Rubén Seoane (1); José Luis Vilas-Vilela (2,3) | (1) Gaiker Centro Tecnológico, Basque Research and Technology Alliance (BRTA), (2) Macromolecular Chemistry Group (LABQUIMAC), Department of Physical Chemistry, Faculty of Science and Technology, University of the Basque Country UPV/EHU, (3) BCMaterials, Basque Center for Materials, Applications and Nanostructures, UPV/EHU Science Park
- EU\_IND 9 Y-TEC: The major company of R&D in Argentina and Its purpose of becoming a regional leader of innovative polymer development for the oil and gas industry | Juan Martín Giussi (1); IN. Vega (1) | (1) YPF-Tecnología SA YPF-CONICET, Berisso (Argentina)

## Orales\_REC

- O\_REC 1 Mechanical properties of thermoreversible polyurethane adhesives by flat punch indentation | Araceli Flores Aguilar-Amat (1); Susana Quiles-Díaz (1); Horacio J Salavagione (1); Marián A. Gómez-Fatou (1); Helga Seyler (1) | (1) Instituto de Ciencia y Tecnología de Polímeros, CSIC



- O\_REC 2 Engineering the next generation of plastics: degradable polycarbonates from waste resources | [Fabiana Siragusa](#) (1); [Jeremy Demarteau](#) (2); [Thomas Habets](#) (1); [Bruno Grignard](#) (1); [Haritz Sardon](#) (2); [Christophe Detrembleur](#) (1) | (1) Center for Education and Research on Macromolecules (CERM), CESAM Research Unit, University of Liège, (2) POLYMAT, University of the Basque Country UPV/EHU
- O\_REC 3 Study of polymer interactions for the eco-design of packaging multilayers | [Juan Francisco Vega Borrego](#) (1); [Virginia Souza-Egipsy Sánchez](#) (1); [Maria Teresa Expósito Espinosa](#) (2); [Javier Ramos Díaz](#) (1); [Javier Martínez-Salazar Bascuñana](#) (1) | (1) Instituto de Estructura de la Materia (CSIC), (2) Universidad Rey Juan Carlos
- O\_REC 4 Incorporation of degradable Crosslinkers into Waterborne Pressure Sensitive Adhesives: Towards removable Adhesives | [Miren Aguirre](#) (1); [Fabian Wenzel](#) (1); [Jose R. Leiza](#) (1) | (1) POLYMAT, Euskal Herriko Unibertsitatea UPV/EHU
- O\_REC 5 Influence of composition and processing conditions on malt-sprout based bioplastics obtained by injection moulding | [Alberto Romero](#) (1); [María Alonso-González](#) (1,2); [Víctor Pérez-Puyana](#) (1); [Pablo Sánchez-Cid](#) (1); [Manuel Félix](#) (2) | (1) Departamento de Ingeniería Química, Facultad de Química, Universidad de Sevilla, (Spain), (2) Departamento de Ingeniería Química, Escuela Politécnica Superior, Universidad de Sevilla, (Spain)
- O\_REC 6 Optimization of the preparation conditions of vegetable waste-derived bioplastics intended for agricultural applications | [Danila Merino](#) (1); [Roberto Simonutti](#) (2); [Giovanni Perotto](#) (1); [Athanassia Athanassiou](#) (1) | (1) Istituto Italiano di Tecnologia, (2) Università di Milano-Bicocca
- O\_REC 7 GLYCOLYSIS OF ADVANCED POLYURETHANES COMPOSITES CONTAINING STYRENE- ACRYLONITRILE AND CALCIUM CARBONATE AS FILLERS | [Jesús del Amo León](#) (1); [Ana María Borreguero Simón](#) (1); [Juan Francisco Rodríguez Romero](#) (1) | (1) Instituto de Tecnología Química y Medioambiental (ITQUIMA), UCLM
- O\_REC 8 Coal tar residues as precursors of hypercrosslinked polymers: using mechanosynthesis as a green synthesis protocol | [Antonio M. Borrero-López](#) (1); [Jimena Castro-Gutiérrez](#) (1); [Alain Celzard](#) (1); [Vanessa Fierro](#) (1) | (1) Institut Jean Lamour (IJL), Université de Lorraine, CNRS, Epinal, France
- O\_REC 9 Catalyst-free transesterification vitrimers: the remarkable activating effect of Fluorine | [Vincent Ladmiral](#) (1); [Florian Cuminet](#) (1,2); [Dimitri Berne](#) (1); [Sébastien Lemouzy](#) (1); [Christine Joly-Duhamel](#) (1); [Eric Dantras](#) (2); [Eric Leclerc](#) (1); [Sylvain Caillol](#) (1); [Rinaldo Poli](#) (3) | (1) ICGM, (2) CIRIMAT, (3) LCC
- O\_REC 10 Effect of natural fibers on degradation of polylactic acid biocomposites | [Libera Vitiello](#) (1); [Martina Salzano de Luna](#) (1); [Giovanni Filippone](#) (1) | (1) Dipartimento di Ingegneria Chimica, dei Materiali e della Produzione Industriale, Università di Napoli Federico II, Naples (Italy)
- O\_REC 11 Recycling metallocene isotactic polypropylene: the effect of antioxidants incorporation | [Enrique Blázquez-Blázquez](#) (1); [Tamara M. Díez-Rodríguez](#) (1); [Ernesto Pérez](#) (1); [María L. Cerrada](#) (1) | (1) Instituto de Ciencia y Tecnología de Polímeros (ICTP-CSIC)
- O\_REC 12 Aluminium complexes as active catalysts for the homo and co-polymerization of terpene epoxides in batch and REX conditions | [Marta Elena Gonzalez Mosquera](#) (1); [Valentina Sessini](#) (1); [Miguel Palenzuela](#) (1); [Christian Rentero](#) (1); [Jesus Damian](#) (1); [Belen Monje](#) (2); [Carolina Acosta](#) (2); [Begoña Galindo](#) (2); [Miguel Ángel Valera](#) (2) | (1) Universidad de Alcalá, (2) Aimplas

- O\_REC 13 Thermal and mechanical characterization of composite material Epoxy-rubber recycled tire | Alneira Cuellar Burgos (1,2,3); Cristian Alejandro Garcia Acosta (1,2,3); Fabio Augusto Mesa Rueda (1,2,3) | (1) Universidad Nacional de Colombia, (2) Laboratorio de Polímeros y Materiales Compuestos, (3) Departamento de Ingeniería Química
- O\_REC 14 Study of the crosslinking of wall materials in the microencapsulation of omega-3 rich oils | Agustín González (1); Paola A. Gimenez (1); Antonela E. Bergesse (1); Nahuel Camacho (1); Pablo D. Ribotta (1); Marcela L. Martinez (1) | (1) Universidad Nacional de Córdoba. Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET)
- O\_REC 15 Evaluation of the compatibility of PVC/PBAT-PLA blends | Mayka Irina Bautista Betancur (1); Juliana Lasprilla Botero (1); Ricardo Santana Castillo (1) | (1) Proquinual SAS
- O\_REC 16 Imidazolium-based hypercrosslinked ionic polymer to promote the oxidative esterification of furfural | Elizabeth Rangel Rangel (1); Beatriz Fuerte (1); Marta Iglesias (1); Eva Maya (1) | (1) Instituto de Ciencia de Materiales de Madrid (ICMM), Consejo Superior de Investigaciones Científicas (CSIC)
- O\_REC 17 Advanced and traditional processing of thermoplastic polyurethane waste | Tamara Calvo-Correas (1); Miriam Benitez (1); Izaskun Larraza (1); Lorena Ugarte (1); Cristina Peña-Rodríguez (1); Arantxa Eceiza (1) | (1) Universidd del País Vasco/Euskal Herriko Unibertsitatea (UPV/EHU)
- O\_REC 18 Synthesis of Polyurethanes as high-added value products from Chemical Upcycling of PET waste | María Dolores de Dios Caputto (1); Rodrigo Navarro Crespo (1); Alejandra Rubio (1); Ángel Marcos-Fernández (1) | (1) ICTP-CSIC
- O\_REC 19 Composites Based on Poly(Lactic Acid) (PLA) and SBA-15: Effect of Mesoporous Silica on Isothermal Crystallization from Either Glass or Molten State | Tamara María Díez Rodríguez (1); Enrique Blázquez Blázquez (1); Ernesto Pérez Tabernero (1); María Luisa Cerrada García (1) | (1) Instituto de Ciencia y Tecnología de Polímeros (ICTP-CSIC)
- O\_REC 20 Towards industrial use of PHA: performance and end of life | Luis Cabedo (1); Patricia Feijoo (1); Kerly Samaniego-Aguilar (1); Anna Marín (1); Estefanía Sánchez-Safont (1); Alex Arrillaga (2); Jon Anakabe (2); José Tena (3); José García-March (3); Sergio Torres-Giner (4); José María Lagarón (4); José Gámez-Pérez (1) | (1) Universitat Jaume I, (2) Leartiker S.Coop, (3) Universidad Católica de Valencia, (4) IATA-CSIC
- O\_REC 21 Development of a Bio-based High Pressure Laminate (HPL) by Partial Replacement of Phenol with Hardwood Kraft Lignin: Design, Optimization and Scaling-up | Veronica Nicolau (1); Micaela Peralta (1) | (1) GPol, Facultad Regional San Francisco, Universidad Tecnológica Nacional
- O\_REC 22 Preparation of poly(butylene succinate)-based novel materials: layer-by-layer assembly of biopolymers and its combination with polysaccharides | Mario Iván Peñas (1,2); Rebeca Hernández (1); Alejandro J. Müller (2,3) | (1) Instituto de Ciencia y Tecnología de Polímeros - Consejo Superior de Investigaciones Científicas (ICTP-CSIC), (2) POLYMAT y Universidad del País Vasco (UPV/EHU), (3) IKERBASQUE

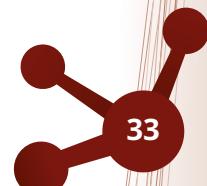
# FLASH

---

## Lunes | Monday

- FLASH-ENERG 1 How Plasmon Nanoparticles Can Improve the Power Performance in Wearable Thermoelectric Materials | José Francisco Serrano-Claumarchirant (1); Mario Culebras Rubio (1); Inés Adam-Cervera (1); Rafael Abargues López (1); Andrés Cantarero Sáez (2); Rafael Muñoz-Espí (1); Clara María Gómez Clari (1) | (1) Institute of Materials Science, University of Valencia, Valencia, Spain, (2) Molecular Science Institute, University of Valencia, Valencia, Spain
- FLASH-ENERG 2 Porous Organic Polymers Containing Active Metal Centers for Suzuki–Miyaura Heterocoupling Reactions | Noelia Esteban Hernández (1,4); Maria L Ferrer (2); Conchi O Ania (3); Jose G de la Campa (4); Angel E Lozano (1,4,5); Cristina Alvarez (1,4,5); Jesús A Miguel (1) | (1) IU CINQUIMA, University of Valladolid, Valladolid (Spain), (2) Materials Science Factory Instituto de Ciencia de Materiales de Madrid, ICMM-CSIC, Madrid (Spain), (3) CEMHTI CNRS (UPR 3079), University of Orléans, Orléans (France), (4) Department of Applied Macromolecular Chemistry, Instituto de Ciencia y Tecnología de Polímeros, ICTP-CSIC, Madrid (Spain), (5) SMAP, UA- UVA\_CSIC, Associated Research Unit to CSIC, University of Valladolid, Valladolid (Spain)
- FLASH-ENERG 3 Nitrogen-Containing Conjugated Polymers from Bulk Thermally Induced Polymerization of Diaminomaleonitrile | Carlos Hortelano De La Fuente (1); Marta Ruiz Bermejo (2); Jose Luis De La Fuente Gomez (1) | (1) Instituto Nacional De Técnica Aeroespacial, (2) Centro De Astrobiología, Cab
- FLASH-ENERG 4 QCM gas sensors based on -waterborne polymer/graphene nanoribbon composites | Ana Trajcheva (1); Radmila Tomovksa (1) | (1) POLYMAT, Facultad de Ciencias Químicas, University of the Basque Country UPV/EHU
- FLASH-ENERG 5 Chitosan/graphene oxide aerogels for broad-spectrum water purification | Martina Salzano de Luna (1,2); Chiara Santillo (2); Marino Lavorgna (2); Giovanni Filippone (1) | (1) Department of Chemical, Materials and Production Engineering - University of Naples Federico II, (2) Institute for Polymers, Composites and Biomaterials - National Research Council of Italy
- FLASH-ENERG 6 Aging effect on catechol redox polymer nanoparticles and its application as organic electrode in an aqueous hybrid supercapacitor | Ousmane Camara (1,2); Antonela Gallastegui (1); Daniela Minudri (1); Nagaraj Patil (2); Rebecca Grieco (2); David Mecerreyes (1); Rebeca Marcilla (2) | (1) UPV/EHU - POLYMAT, (2) Electrochemical Process Unit, IMDEA Energy
- FLASH-SINT 8 Poly(oxazolidone)s as the next generation of non-isocyanate polyurethanes | Thomas Habets (1) | (1) Université de Liège
- FLASH-SINT 9 Synthesis of Polyurethanes by Utilizing Continuous Flow Reactors and Real-Time Process Monitoring | Xabier Lopez de Pariza (1); Tim Erdmann (2); Pedro L. Arrechea (2); Nathaniel H. Park (2); James L. Hedrick (2); Haritz Sardon (1); Charles Dausse (2); Leron Perez (2) | (1) UPV/EHU-POLYMAT, (2) IBM Almaden Research Center

- FLASH-SINT 11 Tailoring glass fiber surface for the polymerization and crystallization of anionic polyamide 6 to improve the composite properties | France Chabert (1); Achraf Belkhir (1,2); Olivier De Almeida (2); Nick Virgilio (3); Hélène Welemane (1); Valérie Nassiet (1) | (1) Laboratoire Génie de Production (LGP), Université de Toulouse, INP-ENIT, Tarbes, France, (2) Institut Clément Ader, Université de Toulouse, CNRS UMR, IMT Mines Albi, UPS, INSA, ISAE-SUPAERO, Campus Jarlard, Albi, France, (3) CREPEC, Department of Chemical Engineering, Polytechnique Montréal, Montréal, Canada
- FLASH-SINT 12 Membranas de nanofibras electrohiladas | Laura Margarita Valencia Osorio (1); Mónica Lucía Álvarez Láinez (1) | (1) Eafit University
- FLASH-SINT 13 Inline monitoring of particle size in emulsion polymerization processes by Photon Density Wave (DPW) Spectroscopy | Usue Olatz Aspiazu (1); Marvin Münzberg (2); Jose Ramon Leiza (1); Maria Paulis (1) | (1) POLYMAT, Kimika Aplikatua saila, Kimika Fakultatea, University of the Basque Country UPV/EHU, Donostia-San Sebastián (Spain), (2) innoFSPEC Potsdam, Institute of Chemistry, University of Potsdam, Potsdam (Germany).
- FLASH-SINT 14 Nylon 7 10: An odd-even polyamide with peculiar crystalline structures and morphologies | Matteo Arioli (1); Jordi Puiggalí (1,2); Lourdes Franco (1,2) | (1) Departament d'Enginyeria Química, Universitat Politècnica de Catalunya, Escola d'Enginyeria de Barcelona Est-EEBE, Barcelona, Spain, (2) Barcelona Research Center in Multiscale Science and Engineering, Barcelona, Spain
- FLASH-SINT 15 Thermal and tensile properties of a composite system with recycled tire / epoxy resin modified by castor oil | Christian Alejandro Garcia Acosta (1); Alneira Cuellar Burgos (1); Fabio Mesa Rueda (1) | (1) universidad nacional de colombia sede manizales
- FLASH-BIO 16 Polypeptidic Redox-responsive Drug Delivery: Drug Loading Influences Polymer Conformation and Activity | Tetiana Melnyk (1); Inma Conejos-Sánchez (1); Oleksandr Zagorodko (2); Ester Masiá (1); Angel Montero Carcaboso (3); María Jesus Vicent (1) | (1) Centro de Investigación Príncipe Felipe, (2) Eindhoven University of Technology, (3) Hospital Sant Joan de Déu
- FLASH-BIO 17 Modulation of the thermal sensitivity of Vinylcaprolactam-based copolymer hydrogels | Pedro Liz Basteiro (1); Alberto Gallardo Ruiz (1); Carlos Elvira Pujalte (1); Enrique Martínez Campos (1); Felipe Reviriego Picón (1); Helmut Reinecke (1); Juan Rodríguez Hernández (1) | (1) Instituto de Ciencia y Tecnología de Polímeros, ICTP-CSIC
- FLASH-BIO 18 Thermoresponsive polycarbonates functionalized with ureido groups having UCST behaviour in aqueous solution | Javier Martín Martín (1); Luis Oriol Langa (1); Milagros Piñol Lacambra (1); Manual Arruebo Gordo (1); Víctor Sebastián Cabeza (1) | (1) Instituto de Nanociencia y Materiales de Aragón (INMA), CSIC-Universidad de Zaragoza
- FLASH-BIO 19 Biofunctionalized particles for successful removal of bilirubin in critical patients with liver failure | María del Prado Garrido Martín (1); Juan Francisco Rodríguez Romero (1); Ana María Borreguero Simón (1); María Jesús Ramos Marcos (1); Manuel Carmona Franco (1); Francisco Javier Redondo Calvo (2); David Padilla Valverde (2) | (1) Instituto de Tecnología Química y Medioambiental (ITQUIMA), Universidad de Castilla-La Mancha, (2) Unidad de Investigación Traslacional, Hospital General Universitario de Ciudad Real (SESCAM)
- FLASH-BIO 20 Porous polycaprolactone/gelatin/graphene oxide scaffolds prepared by non-solvent induced phase separation method | Carlos Loyo (1); Humberto Palza (2); Paula Zapata (1) | (1) Departamento de Ciencias del Ambiente, Facultad de Química y Biología, Universidad de Santiago de Chile (USACH), Grupo Polímeros, Santiago, Chile, (2) Departamento de Ingeniería Química, Biotecnología y Materiales, Facultad de Ciencias Físicas y Matemáticas, Universidad de Chile, Santiago, Chile



- FLASH-BIO 21 Fine tuning thermoresponsive behaviour of nanogels to enhance antimicrobial delivery | Maria Soledad Orellano (1); Agustin Picco (2); Cristian Huck (3); Carlos Escudero (4); Marcelo Calderón (1,5) | (1) POLYMAT, Applied Chemistry Department, Faculty of Chemistry, University of the Basque Country UPV/EHU, (2) CONICET, Instituto de Investigaciones Fisicoquímicas Teóricas y Aplicadas, (3) ITECA, Laboratorio de Cristalografía Aplicada, Universidad Nacional de San Martín, Argentina, (4) LBA Synchrotron Light Source, Experiments Division, Cerdanyola del Vallès, Spain, (5) Ikerbasque, Basque Foundation for Science,
- FLASH-BIO 22 Solution Blow Spun PEO/TiO<sub>2</sub> Nanocomposites: Monitoring of Structural changes and Study of Thermal behavior | Dania Olmos Díaz (1); Jorge Teno Díaz (2); Gustavo González Gaitano (3); Javier González Benito (1) | (1) Universidad Carlos III de Madrid, (2) Bioinicia SL, (3) Universidad de Navarra
- FLASH-BIO 23 Construction of biocapsules from glycolipid-like conjugates | Jackeline Soto-Cruz (1,2); Vincent Mukuaya (1); Mehwish Naz (1); Paipei Zhang (1); José Saavedra-Arias (4); Giovanni Sáenz-Arce (4); Oscar Rojas-Carrillo (2,3); Hongjing Dou (1) | (1) State key laboratory of metal matrix composites, School of Materials Science and Engineering - Shanghai JiaoTong University, (2) Laboratorio de Polímeros (POLIUNA), (3) CENIBiot (Centro Nacional De Innovaciones Biotecnológicas), (4) Departamento de Física, Universidad Nacional.
- FLASH-BIO 24 SUCCINIC ACID USED AS CROSSLINKING AGENT IN MODIFIED CELLULOSE EXTRACTED FROM OAT HULL | Jessica Fernanda Pereira (1); Marin Beatriz Marjorie (1); Mali Suzana (1) | (1) State University of Londrina
- FLASH-BIO 25 Tri-peptide functionalized alginate hydrogels as bioinks for 3D extrusion printing | Alejandro Hernández Sosa (1); Miryam Criado González (2); Fouzia Boulmedais (3); Luís Rojo del Olmo (1,4); Maria Rosa Aguilar de Armas (1,4) | (1) Instituto de Ciencia y Tecnología de Polímeros (ICTP-CSIC), Madrid, Spain, (2) POLYMAT and Department of Polymers and Advanced Materials: Physics, Chemistry and Technology, University of the Basque Country UPV/EHU, San Sebastián, Spain, (3) Université de Strasbourg, CNRS, Institut Charles Sadron (UPR 22), Strasbourg, France, (4) CIBER-BBN, Instituto de Salud Carlos III. Madrid, Spain

## Martes | Tuesday

- FLASH-BIO 26 Sericin/cellulose-based scaffolds for future biomedical application: evaluation of ethanol treatments | Maria Camila Arango (1); Yuliet Montoya (1); Maria Celeste Iglesias (2); Maria Soledad Peresin (2); Santiago Betancourt Parra (1); Catalina Alvarez Lopez (1); John Bustamante (1) | (1) Universidad Pontificia Bolivariana, (2) Auburn University
- FLASH-BIO 27 Eudragits: Versatile polymers for the preparation of physical-crosslinked hydrogels with mucus adhesion. From bench to animal model assays | David Esporrín Ubieto (1); Maria Mercedes Fernandez (2); Ayla Basasoro (3); Ana Sonzogni (4); Arantxa Acera (5,6); Itxaso Calafel (2); Marcelo Calderón (1,6) | (1) POLYMAT - Basque Center For Macromolecular Design And Engineering, University of the Basque Country, (2) POLYMAT - Institute for Polymer Materials, University of the Basque Country, (3) Biodonostia Health Research Institute, (4) Instituto de Desarrollo Tecnológico para la Industria Química - Universidad Nacional del Litoral, (5) University of the Basque Country, (6) Ikerbasque, Basque Foundation for Science
- FLASH-BIO 28 Anti-inflammatory Poly(L-Lactide)-based biocoating for surgical implants | Julia Sánchez Bodón (1); Isabel Moreno Benítez (1); Leire Ruiz Rubio (1); José Luis Vilas Vilela (1) | (1) UPV(EHU)
- FLASH-BIO 29 Influence of Choline Bitartrate Ionic liquid on thermal and mechanical properties of PLGA/CNTs electrospun mats | Vanessa Oliveira Castro (1,2); Sébastien Livi (1); Claudia Merlini (2) | (1) INSA LYON, (2) Federal University of Santa Catarina

- FLASH-BIO 30 EVALUATION OF BACTERIAL CELLULOSE AS A BIOMATERIAL IN THE TREATMENT OF BULLYUS EPIDERMOLYSIS | Angie Viviana Salguero Parra (1); Alis Pataquiva Mateus (1) | (1) Universidad Jorge Tadeo Lozano
- FLASH-BIO 31 Light-induced modulation of endothelial cells physiological activity mediated by red light-absorbing conjugated polymer-based nanoparticles | Gabriele Tullii (1); Edgar Gutiérrez-Fernández (2); Carlotta Ronchi (1); Christian Bellacanzone (1); Luca Bondi (3); Tobias Cramer (3); Miryam Criado-Gonzalez (2); Jaime Martin (2,4,5); David Mecerreyes (2,5); Maria Rosa Antognazza (1) | (1) Center for Nano Science and Technology@PoliMi Istituto Italiano di Tecnologia, Milan, Italy, (2) POLYMAT and Department of Polymers and Advanced Materials: Physics, Chemistry and Technology. Faculty of Chemistry, Basque Country University UPV/EHU, San Sebastián (Spain), (3) Department of Physics and Astronomy, University of Bologna, Bologna, Italy, (4) Universidade da Coruña, Grupo de Polímeros, Centro de Investigaciones Tecnológicas (CIT), Ferrol (Spain), (5) Ikerbasque, Basque Foundation for Science, Bilbao, Spain
- FLASH-BIO 32 Injectable hydrogels loaded with mesenchymal stem cells for bone regeneration therapies | Luis Rojo del Olmo (1) Daniel Fernández-Villa (1,2); Luis Rojo (1,2); Blanca Vázquez-Lasa (1,2) | (1) Instituto de Ciencia y Tecnología de Polímeros, Consejo Superior de Investigaciones Científicas (ICTP-CSIC), (2) Centro de Investigación Biomédica en Red de Bioingeniería, Biomateriales y Nanomedicina (CIBER-BBN)
- FLASH-REO 33 The influence of fenbendazole on poly(ethylene oxide) thermal and processing properties | Gilberto Silva Nunes Bezerra (1); Vicente Froes Moritz (1); Declan M Devine (1); Joseph Geever (1); Luke Geever (1) | (1) Technological University of the Shannon: Midlands Midwest
- FLASH-REO 34 New conducting and scalable polymer composites for 3D printing composed by PLA and MWCNT | Silvia Lage-Rivera (1); Ana I. Ares-Pernas (1); Goretti Arias-Ferreiro (1); Aurora Lasagabáster-Latorre (2); María Victoria González-Rodríguez (1); María-José Abad (1) | (1) Universidad da Coruña, Campus Industrial de Ferrol, Grupo de Polímeros-CIT, 15403 Ferrol, A coruña, Spain, (2) Dpto Química Orgánica I, Escuela de Óptica, Universidad Complutense de Madrid, Madrid, Spain
- FLASH-REO 35 Inducing molecular chain orientation of poly(L-lactic acid) out of melt for future piezoelectric applications | Richard Schönlein (1,2); Robert Aguirresarobe (1); Jone M. Urgartemendia (2) | (1) POLYMAT and Polymers and Advanced Materials: Physics, Chemistry and Technology, Faculty of Chemistry, University of Basque Country UPV/EHU, (2) POLYMAT and Department of Mining-Metallurgy Engineering and Materials Science, School of Engineering EIB 1, University of Basque Country UPV/EHU
- FLASH-REO 36 Study of a novel 3D-printed piezocapacitive pressure sensor based on vat polymerization of an polianiline/lignin acrylic resin | Goretti Arias-Ferreiro (1); Sonia Dopico-García (1); Aurora Lasagabáster-Latorre (2); M. Pablo Ligero (3); Ana Ares-Pernas (1); Silvia Lage-Rivera (1); Pedro Costa (4); Senentxu Lanceros-Mendez (5,6); María José Abad (1) | (1) Universidad da Coruña, Campus Industrial de Ferrol, Grupo de Polímeros-CIT, Ferrol, Spain, (2) Dpto Química Orgánica I, Facultad de Óptica, Universidad Complutense de Madrid, Madrid, Spain, (3) Universidad da Coruña, Enxeñería Química Ambiental Group-CICA, A Coruña, Spain, (4) Centro de Física, Universidad do Minho, Braga, Portugal, (5) BCMaterials, Basque Center for Materials, Applications and Nanostructures, UPV/EHU, Leioa, Spain, (6) IKERBASQUE, Basque Foundation for Science, Bilbao, Spain
- FLASH-REC 37 Recovery of Polyurethane Foams Waste For Chemical Deployment Through the Glycolysis Process in the Circular Economy Concept | Diego Fernando Triana Navarro (1); Alneira Cuellar Burgos (1); Fabio Augusto Mesa Rueda (1); Juan Sebastian Rey Valencia (1) | (1) Universidad Nacional De Colombia

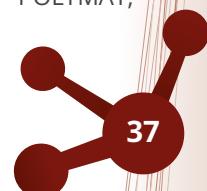
FLASH-REC 38	Devulcanized tyre rubber as a reinforcement for self-healing rubbers: Key factors   <u>Luis Eduardo Alonso Pastor</u> (1); Karina Carla Nuñez Carrero (2); Marianella Hernández Santana (3); José María Pastor Barajas (1,2)   (1) Departamento de Física de la Materia Condensada, Universidad de Valladolid (UVA), Valladolid, España, (2) Fundación para la Investigación y el Desarrollo en Transporte y Energía (CIDAUT), Parque Tecnológico de Boecillo, Valladolid, España, (3) Instituto de Ciencia y Tecnología de Polímeros (ICTP-CSIC), Madrid, España
FLASH-REC 39	Compostable polymeric materials for active food packaging   <u>Ignacio Mena Prado</u> (1); Alexandra Muñoz Bonilla (1); Adolfo del Campo (1); Julián Jiménez Reinosa (1); José Francisco Fernández Lozano (1)   (1) Csic
FLASH-REC 40	Structure properties of recycled rubber compounds from end-of-life tires   <u>Zenen Zepeda Rodríguez</u> (1); Fernando Martín Salamanca (1); Juan López Valentín (1); Rebeca Herrero Caldeón (1); Alberto Fernández Torres (1); Rodrigo Navarro Crespo (1)   (1) Instituto de Ciencia y Tecnología de Polímeros (ICTP-CSIC)
FLASH-REC 41	Enhancement of the fatigue life of recycled opaque PET from household milk bottle wastes   <u>Adrian Korycki</u> (1); Christian Garnier (1); Silvia Irusta (2); France Chabert (1)   (1) LGP-ENIT-INPT, Université de Toulouse, (2) Department of Chemical and Environmental Engineering, Institute of Nanoscience of Aragon, University of Zaragoza
FLASH-REC 42	Sustainable slippery liquid infused surfaces   <u>María Hernández Rivas</u> (1); Nuria García García (1); Pilar Tiemblo Magro (1); Aránzazu Martínez Gómez (1); Elisabet Layla Afonso Pérez (1)   (1) Instituto de Ciencia y Tecnología de Polímeros. Consejo Superior de Investigaciones Científicas. (ICTP-CSIC)
FLASH-REC 43	THERMOSET POLYURETHANES BASED ON BIOBASED POLYOLS FOR STRUCTURAL COMPOSITES   <u>Oihane Echeverria Altuna</u> (1); Olatz Ollo (1); Tamara Cavo Correas (2); Isabel Harismendy (1); Arantxa Eceiza (2)   (1) TECNALIA, Basque Research and Technology Alliance (BRTA), (2) EHU/UPV, Euskal Herriko Unibertsitatea
FLASH-COPO 44	h-BN modification using hydroxylation and grafting and its incorporation into PMMA/PA6 polymer blend   <u>Abdelwahab Boukheit</u> (1); Aurélie Taguet (1); Belkacem Otazaghine (1); France Chabert (2)   (1) IMT Mines Alès, (2) ENIT-INPT University of Toulouse
FLASH-COPO 45	Synthesis of tunable core-shell nanoparticles by emulsion processes   <u>Jakes Udabe</u> (1); Neha Tiwari (2); Agustin Picco (3); Cristian Huck (4); Carlos Escudero (5); Marcelo Calderon (1,6)   (1) POLYMAT, Applied Chemistry Department, Faculty of Chemistry, University of the Basque Country UPV/EHU, Donostia - San Sebastián, España, (2) University of Bayreuth, Faculty of engineering science, Biofabrication, Germany (3) INIFTA-UNLP-CONICET, Instituto de Investigaciones Fisicoquímicas Teóricas y Aplicadas, La Plata, Argentina, (4) ITECA, Laboratorio de Cristalográfia Aplicada, Universidad Nacional de San Martin, Argentina, (5) ALBA Synchrotron Light Source, Experiments Division, Cerdanyola del Vallès, Spain, (6) Ikerbasque, Basque Foundation for Science, Bilbao, España
FLASH-COPO 46	Impact of rGO in PVDF/PMMA blends on thermal and dielectric properties   <u>Ingrid Esguerra Arce</u> (1); Berna Serrano Prieto (1); Harvey Amorín González (2); Cristina Pascual González (3); Juan Pedro Fernández Blàzquez (4)   (1) Universidad Carlos III de Madrid, (2) Instituto de Ciencia de Materiales de Madrid, (ICMM, CSIC), (3) Universidad Rey Juan Carlos, (4) IMDEA Instituto Materiales

FLASH-EST 47	Advanced characterization of rubber compounds using a combination of experimental techniques   <u>Fernando Martín Salamanca</u> (1); Zenen Zepeda Rodríguez (1); Antonio González Jiménez (2); Rebeca Herrero (1); Alberto Fernández Torres (1); Rodrigo Navarro (1); Juan López Valentín (1)   (1) ICTP-CSIC, (2) URJC
FLASH-IONBIKE 48	Gelatin and phenolic compounds based iongels for bioelectronic applications   <u>Ana Aguzin</u> (1); Gisela Carina Luque (1,2); Ludmila Irene Ronco (1,2); Isabel del Agua (3); Gregorio Guzman (4); Bastien Marchiori (3); Liliana Tomé (5); Luis Gugliotta (1,2); Roque Minari (1,2); David Mecerreyres (4,6)   (1) Instituto de Desarrollo Tecnológico para la Industria Química (INTEC), CONICET, (2) Facultad de Ingeniería Química (FIQ), Universidad Nacional del Litoral (UNL), (3) Panaxium SAS, (4) POLYMAT, Basque Country University UPV/EHU, (5) LAQV-REQUIMTE, Chemistry Department, NOVA School of Science and Technology, Universidade Nova de Lisboa, (6) PIkerbasque, Basque Foundation for Science

## POSTERS

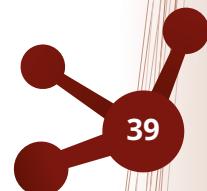
### Lunes | Monday

- P-ENERG 1 How Plasmon Nanoparticles Can Improve the Power Performance in Wearable Thermoelectric Materials | José Francisco Serrano-Claumarchirant (1); Mario Culebras Rubio (1); Inés Adam-Cervera (1); Rafael Abargues López (1); Andrés Cantarero Sáez (2); Rafael Muñoz-Espí (1); Clara María Gómez Clari (1) | (1) Institute of Materials Science, University of Valencia, Valencia, Spain, (2) Molecular Science Institute, University of Valencia, Valencia, Spain
- P-ENERG 2 Porous Organic Polymers Containing Active Metal Centers for Suzuki–Miyaura Heterocoupling Reactions | Noelia Esteban Hernández (1,4); Maria L Ferrer (2); Conchi O Ania (3); Jose G de la Campa (4); Angel E Lozano (1,4,5); Cristina Alvarez (1,4,5); Jesús A Miguel (1) | (1) IU CINQUIMA, University of Valladolid, Valladolid (Spain), (2) Materials Science Factory Instituto de Ciencia de Materiales de Madrid, ICMM-CSIC, Madrid (Spain), (3) CEMHTI CNRS (UPR 3079), University of Orléans, Orléans (France), (4) Department of Applied Macromolecular Chemistry, Instituto de Ciencia y Tecnología de Polímeros, ICTP-CSIC, Madrid (Spain)., (5) SMAP, UA- UVA\_CSIC, Associated Research Unit to CSIC, University of Valladolid, Valladolid (Spain)
- P-ENERG 3 Nitrogen-Containing Conjugated Polymers from Bulk Thermally Induced Polymerization of Diaminomaleonitrile | Carlos Hortelano De La Fuente (1); Marta Ruiz Bermejo (2); Jose Luis De La Fuente Gomez (1) | (1) Instituto Nacional De Técnica Aeroespacial , (2) Centro De Astrobiología, Cab
- P-ENERG 4 QCM gas sensors based on -waterborne polymer/graphene nanoribbon composites | Ana Trajcheva (1); Radmila Tomovksa (1) | (1) POLYMAT, Facultad de Ciencias Químicas, University of the Basque Country UPV/EHU
- P-ENERG 5 Chitosan/graphene oxide aerogels for broad-spectrum water purification | Martina Salzano de Luna (1,2); Chiara Santillo (2); Marino Lavorgna (2); Giovanni Filippone (1) | (1) Department of Chemical, Materials and Production Engineering - University of Naples Federico II, (2) Institute for Polymers, Composites and Biomaterials - National Research Council of Italy
- P-ENERG 6 Aging effect on catechol redox polymer nanoparticles and its application as organic electrode in an aqueous hybrid supercapacitor | Ousmane Camara (1,2); Antonela Gallastegui (1); Daniela Minudri (1); Nagaraj Patil (2); Rebecca Grieco (2); David Mecerreyres (1); Rebeca Marcilla (2) | (1) UPV/EHU - POLYMAT, (2) Electrochemical Process Unit, IMDEA Energy



- P-ENERG 8 Polyionic scaffolds for the fabrication of chemoenzymatic integrated nanoreactos | Pablo Muñumer(1,2); Ana Beloqui Elizazu (1,2,3) | (1) POLYMAT, (2) University of the Basque Country (UPV/EHU), (3) Ikerbasque Foundation of Science
- P-ENERG 9 Metal-organic enzyme nanogels as nanointegrated self-reporting systems for the detection of glucose | Daniel Sanchez de Alcazar (1,2); Ana Beloqui (1,2,3); Pablo Muñumer (1,2) | (1) POLYMAT, (2) University of the Basque Country (UPV/EHU), (3) Ikerbasque Foundation of Science
- P-ENERG 10 Chloroaluminate gel electrolytes based on imidazolium ionic liquid copolymers/ AlCl<sub>3</sub>:urea for aluminium secondary batteries | Teresa Corrales (1); Jesús L. Pablos (1); Pilar Tiemblo (1); Gary Ellis (1) | (1) Instituto de Ciencia y Tecnología de Polímeros (CSIC)
- P-ENERG 11 Thermal behavior of high mobility polymer IDTBT | Nicolás Ramos Gómez (1,2); Jaime Martín Pérez (1,2,3) | (1) POLYMAT, (2) UPV/EHU, (3) Universidade da Coruña
- P-ENERG 12 Shape memory effect on electrospun fibres based on PLA | Laura Peponi (1); Adrian Leones (1); Valentina Salaris (1); Daniel Lopez (1); Marcela Lieblich (2); Stefano Fiori (3) | (1) ICTP-CSIC, (2) CENIM-CSIC, (3) Condensa Quimica
- P-ENERG 13 A novel application for sensory polymers as colorimetric anticounterfeit and security labels | José Carlos Guirado Moreno (1); Marta Guembe García (1); José Miguel García (1); Roberto Aguado (2); Artur J. M. Valente (2); Saúl Vallejos (1,2) | (1) University of Burgos, (2) University of Coimbra
- P-ENERG 14 Synthesis and characterization of novel dendronized poly(2-oxazoline)s: precursors in the construction of biomimetic membranes | Jordi Guardià (1); Alireza Zare (1); Marta Giamberini (1); Jose Antonio Reina (1); Xavier Montané (1) | (1) Universitat Rovira i Virgili
- P-ENERG 15 Contact Electrification in Polymer Materials for Energy Harvesting | Kaspars Malnieks (1); Andris Sutka (1); Linards Lapcinskis (1) | (1) Riga Technical university
- P-ENERG 16 Study of bitumen/paraffin wax blends for thermal energy storage applications | Clara Delgado-Sánchez (1); Coraima Gutiérrez-Blandón (1); Antonio A. Cuadri (1); Pedro Partal (1); Francisco J. Navarro (1) | (1) Pro2TecS-Chemical Product and Process Technology Centre, Department of Chemical Engineering, Physical Chemistry and Materials Science, University of Huelva, 21071, Huelva, Spain).
- P-ENERG 17 Improving Thermoelectric Efficiency in Acrylic Fabrics without Compromising Mechanical Properties | Clara María Gómez (1); Jose Francisco Serrano-Claumarchirant1 (1); Mario Culebras (1); Ines Adam (1); Andrés Cantarero (1); Rafael Muñoz-Espí (1) | (1) Universidad de Valencia
- P-ENERG 18 Solid-phase synthesis as convenient strategy for the development of oriented protein-polymer hybrids | Marcos Heredero (1,2); Ana Beloqui Elizazu (1,2,3) | (1) University of the Basque Country (UPV/EHU), (2) POLYMAT - UPV/EHU, (3) Ikerbasque Foundation of Science
- P-ENERG 19 Analysis of the Dielectric Properties of Modified Polysulfone Membranes for CO<sub>2</sub> Capture | Borja Pascual-José (1); A. Zare (2); M. Giamberini (2); José Antonio Reina (3); A. Ribes-Greus (1) | (1) Institute of Technology of Materials (ITM), Universitat Politècnica de València (UPV), València (Spain), (2) Department of Chemical Engineering, Universitat Rovira I Virgili (URV), Tarragona (Spain), (3) Department of Analytical Chemistry and Organic Chemistry, Universitat Rovira I Virgili (URV), Tarragona (Spain).
- P-ENERG 20 Biocatalyst supported on structured reactors through polymeric linkers | Oihane Sanz (1); Aitor Ontoria (1); Leire Unanue (1); Marcelo Calderón (1,2,3); Ana Beloqui (1,2,3) | (1) Faculty of Chemistry, Basque Country University UPV/EHU, (2) POLYMAT-BERC, Basque Country University UPV/EHU, (3) IKERBASQUE

- P-ENERG 21 Cheap and easily processable polymer-based electrolytes for sustainable sodium-ion batteries | Giuseppe Antonio Elia (1,2); Silvia Porporato (1,2); Alessandro Piovano (1,2); Marisa Falco (1,2); Gabriele Lingua (1,2); Mattia Bartoli (3); Elisa Maruccia (1,2); Alberto Tagliaferro (3); Giuseppina Meligrana (1,2); Claudio Gerbaldi (1,2) | (1) Department of Applied Science and Technology (DISAT), Politecnico di Torino, (2) National Reference Center for Electrochemical Energy Storage (GISEL) - INSTM, (3) Department of Applied Science and Technology (DISAT), Politecnico di Torino
- P-SINT 22 Poly(oxazolidone)s as the next generation of non-isocyanate polyurethanes | Thomas Habets (1) | (1) Université de Liège
- P-SINT 23 Synthesis of Polyurethanes by Utilizing Continuous Flow Reactors and Real-Time Process Monitoring | Xabier Lopez de Pariza (1); Tim Erdmann (2); Pedro L. Arrechea (2); Nathaniel H. Park (2); James L. Hedrick (2); Haritz Sardon (1); Charles Dausse (2); Leron Perez (2) | (1) UPV/EHU-POLYMAT, (2) IBM Almaden Research Center
- P-SINT 25 Tailoring glass fiber surface for the polymerization and crystallization of anionic polyamide 6 to improve the composite properties | France Chabert (1); Achraf Belkhiri (1,2); Olivier De Almeida (2); Nick Virgilio (3); Hélène Welemane (1); Valérie Nassiet (1) | (1) Laboratoire Génie de Production (LGP), Université de Toulouse, INP-ENIT, Tarbes, France, (2) Institut Clément Ader, Université de Toulouse, CNRS UMR 5312, IMT Mines Albi, UPS, INSA, ISAE-SUPAERO, Albi, France, (3) CREPEC, Department of Chemical Engineering, Polytechnique Montréal, Montréal, Canada
- P-SINT 26 Membranas de nanofibras electrohiladas | Laura Margarita Valencia Osorio (1); Mónica Lucía Álvarez Láinez (1) | (1) Eafit University
- P-SINT 27 Inline monitoring of particle size in emulsion polymerization processes by Photon Density Wave (DPW) Spectroscopy | Usue Olatz Aspiazu (1); Marvin Münzberg (2); Jose Ramon Leiza (1); Maria Paulis (1) | (1) POLYMAT, Kimika Aplikatua saila, Kimika Fakultatea, University of the Basque Country UPV/EHU, Donostia-San Sebastián (Spain)., (2) innoFSPEC Potsdam, Institute of Chemistry, University of Potsdam, Potsdam (Germany).
- P-SINT 28 Nylon 7 10: An odd-even polyamide with peculiar crystalline structures and morphologies | Matteo Arioli (1); Jordi Puiggalí (1,2); Lourdes Franco (1,2) | (1) Departament d'Enginyeria Química, Universitat Politècnica de Catalunya, Escola d'Enginyeria de Barcelona Est-EEBE, Barcelona, Spain, (2) Barcelona Research Center in Multiscale Science and Engineering, Barcelona, Spain
- P-SINT 29 Thermal and tensile properties of a composite system with recycled tire / epoxy resin modified by castor oil | Christian Alejandro Garcia Acosta (1); Alneira Cuellar Burgos (1); Fabio Mesa Rueda (1) | (1) universidad nacional de colombia sede manizales
- P-SINT 30 Effect of molecular weight on nucleation, growth and overall crystallization of poly( $\epsilon$ -caprolactone) | Ainhoa Fernández Tena (1,2); Leire Sangroniz (1,2); Gonzalo Guerrica-Echevarria (1,2); Olivier Coulembier (3); Alejandro J. Müller (1,2,4) | (1) University of the Basque Country (UPV/EHU), (2) POLYMAT, (3) University of Mons (UMONS), (4) IKERBASQUE
- P-SINT 31 Crystallization, morphology, thermal and barrier properties of synthetic poly(hydroxybutyrate) | Maria Rosaria Caputo (1); Haritz Sardon (1); Eugene Y.X. Chen (3); Andrew H. Westlie (3); Xiaoyan Tang (3); Alejandro J. Müller (1,2) | (1) POLYMAT and Department of Polymers and Advanced Materials: Physics, Chemistry and Technology, Faculty of Chemistry, University of the Basque Country UPV/EHU, Donostia-San Sebastián, Spain, (2) IKERBASQUE, Basque Foundation for Science, Bilbao, Spain, (3) Chemistry Research Building, Colorado State university, Colorado

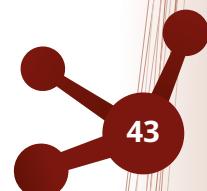


- P-SINT 32 Effects of Composition and Supercooling on the Isothermal Crystallization Kinetics of Isodimorphic PBS-ran-PCL Random Copolymers | Maryam Safari (1,2) | (1) UPV, (2) POLYMAT
- P-SINT 33 Study of the inter-particle crosslinking reactions in waterborne coatings | Maria Paulis (1); Sheraz Tariq (1); Lourdes Irusta (1); Mercedes Fernández (1) | (1) POLYMAT-University of the Basque Country-UPV/EHU
- P-SINT 34 Characterization of the Internal Particle Morphology and Internal Grafting Properties of ABS Polymer Particles | Ainara Agirre Mikelarena (1,2); Miren Aguirre Arrese (1,2); Jose Ramon Leiza Recondo (1,2) | (1) Universidad del País Vasco/Euskal Herriko Unibertsitatea (UPV/EHU), (2) POLYMAT, Basque Center for Macromolecular Design and Engineering
- P-SINT 35 Use of zwitterionic monomer for colloidal stabilization of waterborne polymer dispersions | Sumi Murali Nair (1) | (1) POLYMAT
- P-SINT 36 Thermoplastic elastomers based in functionalized polycarbonate-containing triblock copolymers from renewable resources | Aarón Pérez Das Dores (1); Gerard Lligadas Puig (1); Juan Carlos Ronda Bargalló (1); Marina Galià Clua (1); Virginia Cádiz Deleito (1) | (1) Universitat Rovira i Virgili - Grup de recerca: SUSPOL
- P-SINT 37 The influence of 4-(7-Octen-1-yl)-N,N-diphenylaniline on the SSA thermal fractionation and isothermal crystallization of polypropylene | Yilong Liao (1); Ruining Shang (2); Li Pan (2); Zhe Ma (2); Alejandro J. Müller (1,3) | (1) POLYMAT and Department of Polymers and Advanced Materials: Physics, Chemistry and Technology, Faculty of Chemistry, University of Basque Country UPV/EHU, San Sebastián (Spain), (2) Tianjin Key Lab of Composite and Functional Materials, School of Materials Science and Engineering, Tianjin University, 1Tianjin (China) , (3) IKERBASQUE, Basque Foundation for Science, Bilbao (Spain)
- P-SINT 38 Exploration and synthesis of novel polyols obtained from biobased diols | Ane Olazabal (1,2); Coralie Jehanno (1,2); Andere Basterretxea (1); Haritz Sardon (1,2) | (1) POLYKEY POLYMERS, (2) POLYMAT
- P-SINT 39 Synthesis of poly-L-lactic acid using potassium-based catalysts | Christian Rentero Llorente (1); Asier Medel García (1); Jesús Damián Burgoa (1); Velentina Sessini (1); Marta Elena González Mosquera (1) | (1) Universidad de Alcalá
- P-SINT 40 Synthesis in Continuous Flow Reactors of Polycarbonates to Bio-Applications | E. Cordero (1,2); X. Lopez de Pariza (1); H. Sardon (1) | (1) UPV/EHU-POLYMAT, (2) 2Universidad de Ciencias Médicas, Costa Rica
- P-SINT 41 Injectable hybrid hydrogel physically crosslinked based on carrageenan and green graphene for tissue repair | Danny Robert Moncada (1); L. Barral (1,2); Y. Farrag (2); B. Montero (1); M. Rico (1); R. Bouza (1,3) | (1) Universidade da Coruña, Grupo de Polímeros, Departamento de Física y Ciencias de la Tierra, Escuela Universitaria Politécnica, (2) IDIS (Instituto de Investigación Sanitaria de Santiago), Molecular and Cellular Cardiology Group, Santiago University Clinical Hospital, Building, (3) IDIS (Instituto de Investigación Sanitaria de Santiago), NEIRID Group (Neuroendocrine Interactions in Rheumatology and Inflammatory Diseases), Santiago University Clinical Hospital
- P-SINT 42 Origin of Exciton Dissociation in Hybrid Organic-Aqueous Electrolyte Devices | Manuel Gößwein (1); A.Gagliardi (1) | (1) Associate Professorship Simulation of Nanosystems for Energy Conversion, Department of Electrical and Computer Engineering, Technical University of Munich
- P-SINT 43 Design of Sensitive Hydrogel Composites for Body Thermoregulation | Marjorie Gabriela Garzón Altamirano (1,2); J. Odent (1); J. Lejeune (2); A. Cayla (2); C. Campagne (2); E. Devaux (2); Jean Marie Raquez (1) | (1) Laboratory of Polymeric and Composite Materials (LPCM), Center of Innovation and Research in Materials and Polymers (CIRMAP), University of Mons (UMONS), (2) Laboratory of Textile Materials Engineering (GEMTEX), Ecole Nationale Supérieure des Arts et Industries Textile (ENSAIT)

- P-BIO 45 Polypeptidic Redox-responsive Drug Delivery: Drug Loading Influences Polymer Conformation and Activity | Tetiana Melnyk (1); Inma Conejos-Sánchez (1); Oleksandr Zagorodko (2); Ester Masiá (1); Angel Montero Carcaboso (3); Maria Jesus Vicent (1) | (1) Centro de Investigación Príncipe Felipe, (2) Eindhoven University of Technology, (3) Hospital Sant Joan de Déu
- P-BIO 46 Modulation of the thermal sensitivity of Vinylcaprolactam-based copolymer hydrogels | Pedro Liz Basteiro (1); Alberto Gallardo Ruíz (1); Carlos Elvira Pujalte (1); Enrique Martínez Campos (1); Felipe Reviriego Picón (1); Helmut Reinecke (1); Juan Rodríguez Hernández (1) | (1) Instituto de Ciencia y Tecnología de Polímeros, ICTP-CSIC
- P-BIO 47 Thermoresponsive polycarbonates functionalized with ureido groups having UCST behaviour in aqueous solution | Javier Martín Martín (1); Luis Oriol Langa (1); Milagros Piñol Lacambra (1); Manual Arruebo Gordo (1); Víctor Sebastián Cabeza (1) | (1) Instituto de Nanociencia y Materiales de Aragón (INMA), CSIC-Universidad de Zaragoza
- P-BIO 48 Biofunctionalized particles for successful removal of bilirubin in critical patients with liver failure | María del Prado Garrido Martín (1); Juan Francisco Rodríguez Romero (1); Ana María Borreguero Simón (1); María Jesús Ramos Marcos (1); Manuel Carmona Franco (1); Francisco Javier Redondo Calvo (2); David Padilla Valverde (2) | (1) Instituto de Tecnología Química y Medioambiental (ITQUIMA), Universidad de Castilla-La Mancha, (2) Unidad de Investigación Traslacional, Hospital General Universitario de Ciudad Real (SESCAM)
- P-BIO 49 Porous polycaprolactone/gelatin/graphene oxide scaffolds prepared by non-solvent induced phase separation method | Carlos Loyo (1); Humberto Palza (2); Paula Zapata (1) | (1) Departamento de Ciencias del Ambiente, Facultad de Química y Biología, Universidad de Santiago de Chile (USACH), Grupo Polímeros, Santiago, Chile, (2) Departamento de Ingeniería Química, Biotecnología y Materiales, Facultad de Ciencias Físicas y Matemáticas, Universidad de Chile, Santiago, Chile
- P-BIO 50 Fine tuning thermoresponsive behaviour of nanogels to enhance antimicrobial delivery | Maria Soledad Orellano (1); Agustín Picco (2); Cristian Huck (3); Carlos Escudero (4); Marcelo Calderón (1,5) | (1) POLYMAT, Applied Chemistry Department, Faculty of Chemistry, University of the Basque Country UPV/EHU, (2) CONICET, Instituto de Investigaciones Fisicoquímicas Teóricas y Aplicadas, (3) ITECA, Laboratorio de Cristalográfia Aplicada, Universidad Nacional de San Martin, Argentina, (4) LBA Synchrotron Light Source, Experiments Division, Cerdanyola del Vallès, Spain, (5) Ikerbasque, Basque Foundation for Science,
- P-BIO 51 Solution Blow Spun PEO/TiO<sub>2</sub> Nanocomposites: Monitoring of Structural changes and Study of Thermal behavior | Dania Olmos Díaz (1); Jorge Teno Díaz (2); Gustavo González Gaitano (3); Javier González Benito (1) | (1) Universidad Carlos III de Madrid, (2) Bioinicia SL, (3) Universidad de Navarra
- P-BIO 52 Construction of biocapsules from glycolipid-like conjugates | Jackeline Soto-Cruz (1,2); Vincent Mukuaya (1); Mehwish Naz (1); Paipei Zhang (1); José Saavedra-Arias (4); Giovanni Sáenz-Arce (4); Oscar Rojas-Carrillo (2,3); Hongjing Dou (1) | (1) State key laboratory of metal matrix composites, School of Materials Science and Engineering - Shanghai JiaoTong University, (2) Laboratorio de Polímeros (POLIUNA), (3) CENIBIOT (Centro Nacional De Innovaciones Biotecnológicas), (4) Departamento de Física, Universidad Nacional.
- P-BIO 53 SUCCINIC ACID USED AS CROSSLINKING AGENT IN MODIFIED CELLULOSE EXTRACTED FROM OAT HULL | Jessica Fernanda Pereira (1); Marin Beatriz Marjorie (1); Mali Suzana (1) | (1) State University of Londrina

P-BIO 54	Tri-peptide functionalized alginate hydrogels as bioinks for 3D extrusion printing   <u>Alejandro Hernández Sosa</u> (1); Miryam Criado González (2); Fouzia Boulmedais (3); Luís Rojo del Olmo (1,4); Maria Rosa Aguilar de Armas (1,4)   (1) Instituto de Ciencia y Tecnología de Polímeros (ICTP-CSIC), Madrid, Spain, (2) POLYMAT and Department of Polymers and Advanced Materials: Physics, Chemistry and Technology, University of the Basque Country UPV/EHU, San Sebastián, Spain, (3) Université de Strasbourg, CNRS (UPR 22), Institut Charles Sadron Strasbourg, France, (4) CIBER-BBN, Instituto de Salud Carlos III. Madrid, Spain
P-BIO 55	Dynamic covalent systems based on 2-formylphenylboronic acid derivatives   <u>Enrique Guerreiro Gómez</u> (1,2); María Pilar Romero Soria (1,2); Luis Oriol Langa (1,2); Jesús del Barrio Lasheras (1,2)   (1) Universidad de Zaragoza, (2) Instituto
P-BIO 56	Nanocarriers based on orthogonal clickable block copolycarbonates   <u>Sara Bescós Ramo</u> (1); Javier Martín Martín (1); Milagros Piñol Lacambra (1); Luis Oriol Langa (1)   (1) Instituto de Nanociencia y Materiales de Aragón (INMA), CSIC-Universidad de Zaragoza
P-BIO 58	Nanoparticles made of poly(g-glutamic acid) derivatives for drug delivery systems   <u>Porochista Dorost</u> (1); Antxon Martínez de llarduya (1); Montserrat García Álvarez (1)   (1) Universitat Politècnica de Catalunya
P-BIO 59	Evaluation of enantiomeric compounds sorption by Pirkle-type chiral selector based on polymer membranes   <u>Priscila Vedovello</u> (1,2); Carla Fernandes (2,3); Maria Elizabeth Tiritan (2,3,4); Caio Marcio Paranhos (1)   (1) Federal University of São Carlos, (2) Faculty of Pharmacy, University of Porto, (3) Interdisciplinary Centre of Marine and Environmental Research (CIIMAR), (4) University Institute of Health Sciences
P-BIO 60	Functional triblock copolymers using lactide enantiomers prepared by ring-opening polymerization   <u>Alfredo Martínez Cutillas</u> (1,2); Antxon Martínez de llarduya (1); Sejin Oh (2)   (1) Universitat Politècnica de Catalunya, (2) Artificial Nature S.L.
P-BIO 61	Wound-healing hydrogels synthetized by photopolymerization to improve skin tissue repair and disinfection   <u>Gonzalo Emanuel Cagnetta</u> (1); Antonela Gallastegui (2); Josefa Martucci (3); Luis Ibarra (4); Sol Martinez (1); Rodrigo Palacios (1); Carlos Chesta (1); Lorena Gomez (1)   (1) Instituto de Investigaciones en Tecnologías Energéticas y Materiales Avanzados (IITEMA), (2) POLYMAT, (3) Instituto de Investigaciones en Ciencia y Tecnología de Materiales (INTEMA), (4) Instituto de Biotecnología Ambiental y Salud (INBIAS)
P-BIO 62	Role of QK peptide and proteolytic sequences in the promotion and direction of angiogenesis in Elastin-Like Recombinamer (ELR) hydrogels   <u>Fernando González-Pérez</u> (1); Arturo Ibáñez-Fonseca (1); Matilde Alonso (1); José Carlos Rodríguez-Cabello (1)   (1) Universidad de Valladolid
P-BIO 63	Elaboration of levothyroxine-selective molecularly imprinted nanostructured films   <u>Diana Alejandra Estenoz</u> (1); Federico Adrian Fookes (1); Carlos Alberto Busatto (1); Natalia Casis (1)   (1) INTEC (UNL-CONICET)
P-BIO 64	Design and preparation of injectable carboxymethyl chitosan/PEG based hydrogels for soft tissue engineering   <u>Nikolaos Politakos</u> (1); Carlos Busatto (2); Neha Tiwari (1); Diana Alejandra Estenoz (2); Marcelo Calderón (1,3)   (1) POLYMAT, Faculty of Chemistry, Basque Country University UPV/EHU, San Sebastián , (2) INTEC (Universidad Nacional del Litoral – CONICET). Santa Fe, (3) Ikerbasque, Basque Foundation for Science, Bilbao
P-NIPU-EJD 65	Sustainable derivatization of water-soluble polyamines for coating applications   <u>Luca Narducci</u> (1,2); Bruno Grignard (1); Dafni Moatsou (2); Michael A. R. Meier (2); Christophe Detrembleur (1)   (1) University of Liège, (2) Karlsruhe Institute of Technology

P-NIPU-EJD 66	3D Printing of CO <sub>2</sub> -Based Non-Isocyanate Polyurethanes   <u>Marco Caliari</u> (1,2); Nicolas Zivic (1); Alvaro Gomez Lopez (1); Thomas Habets (2); Haritz Sardon (1); Bruno Grignard (2); Christophe Detrembleur (2)   (1) Basque Country University UPV/EHU, (2) University of Liège
P-NIPU-EJD 67	Study of transurethanization reaction in non isocyanate polyurethanes   <u>Pauline Bron</u> (1,2); Haritz Sardon (1); Sylvain Caillol (2); Vincent Ladmiral (2); Lourdes Irusta (1)   (1) POLYMAT, Department of Polymers and Advanced Materials: Physics, Chemistry and Technology, University of the Basque Country UPV/EHU, Donostia-San Sebastián, Spain, (2) ICGM, University of Montpellier, CNRS, ENSCM, Montpellier, France
P-NIPU-EJD 68	Non-Isocyanate Polyurethanes based composites: a new route to more sustainable structural composites   <u>Guillem Seychal</u> (1,2); Connie Ocando (1); Nora Aranburu (2); Bruno Grignard (3); Christophe Detrembleur (3); Haritz Sardon (2); Leila Bonnaud (4); Jean-Marie Ravez (1)   (1) University of Mons UMONS, (2) University of Basque Country UPV/EHU, (3) University of Liege ULiege, (4) Materia Nova asbl
P-NIPU-EJD 69	Preparation and characterization of biocomposites from non-isocyanate polyurethanes and cellulose nanocrystals   <u>Pavithra Wijeratne</u> (1,2); Connie Ocando (2); Jean-Marie Ravez (2); Qi Zhou (1)   (1) KTH Royal Institute of Technology, Sweden, (2) University of Mons, Belgium
P-NIPU-EJD 70	Study on the synthesis of new bio-based diamines from terpenes   <u>Francesca Chiara Destaso</u> (1); Henri Cramail (2); Michael A. R. Meier (1)   (1) Karlsruhe Institute of Technology, (2) University of Bordeaux
P-NIPU-EJD 71	New strategies to produce self-blown NIPU foams from easily accessible reactive formulations   <u>Florent Monie</u> (1,2); Bruno Grignard (2); Thomas Vidil (1); Etienne Grau (1); Henri Cramail (1); Christophe Detrembleur (2)   (1) Laboratoire de Chimie des Polymères Organiques (LCPO), University of Bordeaux, CNRS, Bordeaux INP, UMR Pessac, France, (2) Center for Education and Research on Macromolecules (CERM), CESAM Research Unit, University of Liège, Liège, Belgium
P-NIPU-EJD 72	Aminolysis of activated cyclic carbonates for the synthesis of non-isocyanates polyurethanes   <u>Federico Mundo</u> (1,3); Sylvain Caillol (1); Michael Meier (2,3); Vincent Ladmiral (1)   (1) ICGM, Univ Montpellier, CNRS, ENSCM, Montpellier, France, (2) Laboratory of Applied Chemistry, Institute of Organic Chemistry (IOC), Karlsruhe Institute of Technology (KIT), Karlsruhe, Germany, (3) Laboratory of Applied Chemistry, Institute of Biological and Chemical Systems-Functional Molecular Systems (IBCS-FMS), Karlsruhe Institute of Technology (KIT), Karlsruhe, Germany.
P-NIPU-EJD 73	Design of NIPUs through transfer reactions and complementary reactions   <u>Nichollas Guimarães Jaques</u> (1,2); Audrey Llevot (1); Étienne Grau (1); Thomas Vidil (1); Michael A. R. Meier (2); Henri Cramail (1)   (1) University of Bordeaux (LCPO), (2) Karlsruhe Institute of Technology (IOC and IBMCS-FMS)
P-NIPU-EJD 74	Study of the kinetics for the synthesis of novel NIPUs by continuous reactive extrusion   <u>Katherine Gouveia</u> (1,2); Connie Ocando (1); Jean-Marie Ravez (1); Vincent Ladmiral (2); Sylvain Caillol (2)   (1) University of Mons, (2) University of Montpellier
P-NIPU-EJD 75	TEMPO-oxidized Nanocelluloses as Emulsion Stabilizers for Waterborne NIPU Latexes   <u>Hsin-Chen Chen</u> (1); Henri Cramail (2); Audrey Llevot (2); Qi Zhou (1)   (1) KTH Royal Institute of Technology, (2) Université de Bordeaux
P-NIPU-EJD 76	Chemical recycling of non-isocyanate polyurethanes   <u>Seyedeh Maliheh Razavi Esfali</u> (1); Bruno Grignard (1); Haritz Sardon (2); Christophe Detrembleur (1)   (1) university of Liege, (2) University of the Basque Country - UPV/EHU



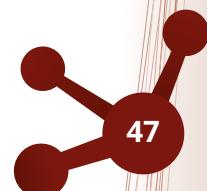
## Martes | Tuesday

- P-BIO 77 Sericin/cellulose-based scaffolds for future biomedical application: evaluation of ethanol treatments | Maria Camila Arango (1); Yuliet Montoya (1); Maria Celeste Iglesias (2); Maria Soledad Peresin (2); Santiago Betancourt Parra (1); Catalina Alvarez Lopez (1); John Bustamante (1) | (1) Universidad Pontificia Bolivariana, (2) Auburn University
- P-BIO 78 Eudragits: Versatile polymers for the preparation of physical-crosslinked hydrogels with mucus adhesion. From bench to animal model assays | David Esporrín Ubieto (1); Maria Mercedes Fernandez (2); Ayla Basasoro (3); Ana Sonzogni (4); Arantxa Acera (5,6); Itxaso Calafel (2); Marcelo Calderón (1,6) | (1) POLYMAT - Basque Center For Macromolecular Design And Engineering, University of the Basque Country, (2) POLYMAT - Institute for Polymer Materials, University of the Basque Country, (3) Biodonostia Health Research Institute, (4) Instituto de Desarrollo Tecnológico para la Industria Química - Universidad Nacional del Litoral, (5) University of the Basque Country, (6) Ikerbasque, Basque Foundation for Science
- P-BIO 79 Anti-inflammatory Poly(L-Lactide)-based biocoating for surgical implants | Julia Sánchez Bodón (1); Isabel Moreno Benítez (1); Leire Ruiz Rubio (1); José Luis Vilas Vilela (1) | (1) UPV(EHU)
- P-BIO 80 Influence of Choline Bitartrate Ionic liquid on thermal and mechanical properties of PLGA/CNTs electrospun mats | Vanessa Oliveira Castro (1,2); Sébastien Livi (1); Claudia Merlini (2) | (1) INSA LYON, (2) Federal University of Santa Catarina
- P-BIO 81 EVALUATION OF BACTERIAL CELLULOSE AS A BIOMATERIAL IN THE TREATMENT OF BULLYUS EPIDERMOLYSIS | Angie Viviana Salguero Parra (1); Alis Pataquiva Mateus (1) | (1) Universidad Jorge Tadeo Lozano
- P-BIO 82 Light-induced modulation of endothelial cells physiological activity mediated by red light-absorbing conjugated polymer-based nanoparticles | Gabriele Tullii (1); Edgar Gutiérrez-Fernández (2); Carlotta Ronchi (1); Christian Bellacanzone (1); Luca Bondi (3); Tobias Cramer (3); Miryam Criado-Gonzalez (2); Jaime Martin (2,4,5); David Mecerreyres (2,5); Maria Rosa Antognazza (1) | (1) Center for Nano Science and Technology@PoliMi Istituto Italiano di Tecnologia Milan, Italy, (2) POLYMAT and Department of Polymers and Advanced Materials: Physics, Chemistry and Technology. Faculty of Chemistry, Basque Country University UPV/EHU, San Sebastián (Spain), (3) Department of Physics and Astronomy, University of Bologna, Bologna, Italy, (4) Universidade da Coruña, Grupo de Polímeros, Centro de Investigacións Tecnolóxicas (CIT), Ferrol (Spain), (5) Ikerbasque, Basque Foundation for Science, Bilbao, Spain
- P-BIO 83 Injectable hydrogels loaded with mesenchymal stem cells for bone regeneration therapies | Luis Rojo (1,2); Daniel Fernández-Villa (1,2); Blanca Vázquez-Lasa (1,2) | (1) Instituto de Ciencia y Tecnología de Polímeros, Consejo Superior de Investigaciones Científicas (ICTP-CSIC), (2) Centro de Investigación Biomédica en Red de Bioingeniería, Biomateriales y Nanomedicina (CIBER-BBN)
- P-BIO 84 Hyaluronic acid-based hydrogels crosslinked at physiological conditions | Luis Andrés Pérez Pérez (1,2); Rebeca Hernández Velasco (2); José María Alonso Carnicero (1); Raúl Pérez González (1); Virginia Sáez-Martínez (1) | (1) I+Med, (2) CSIC-ICTP
- P-BIO 85 Multi-responsive Hydrogels for Biomedical Applications | María Regato Herbella (1,2); Antonella Gallastegui (1); Miryam Criado (1); David Mecerreyres (1); Sergio Moya (2) | (1) Polymat, (2) Cic Biomagune
- P-BIO 86 Synthesis of functionalized branched cyclic-poly(glycidol) | Carlo Andrea Pagnacco (1,2); Fabienne Barroso-Bujans (1,2,3) | (1) Donostia International Physics Center (DIPC), (2) Materials Physics Center (CFM), (3) IKERBASQUE - Basque Foundation for Science

- P-BIO 87 Optimization and characterization of electrospun nanofibers with bovine serum albumin | Rocío Díaz Puertas (1); Alberto Falcó (1); Ricardo Mallavia (1) | (1) Universidad Miguel Hernández
- P-BIO 88 NANO-REINFORCED POLYMERIC FIBRES OBTAINED BY ELECTROSPINNING | Valentina Salaris (1); Adrian Leones (1); Daniel Lopez (1); Laura Peponi (1) | (1) ICTP-CSIC
- P-BIO 89 Design of Polymeric Theranostics for Breast Cancer Treatment | Maria Medel (1); Snežana Đorđević (1); Inmaculada Conejos (1); David Charbonnier (1); Ana Armiñán (1); María J. Vicent (1) | (1) Centro de Investigacion Principe Felipe
- P-BIO 90 Yolk-shell thermo-responsive hybrid nanogels based on upconverting nanoparticles for cancer theranostic | Huiyi Wang (1); Marcelo Calderón (1,2) | (1) POLYMAT and Applied Chemistry Department, (2) IKERBASQUE, Basque Foundation for Science
- P-BIO 92 Novel antioxidant catalase-SENs nanoreactors for biomedical applications | Irene Alonso-Sampedro (1); Daniel Sánchez (1); Edurne Marin (2); Aitor Larrañaga (2); Ana Beloqui (1,3) | (1) POLYMAT and Department of Applied Chemistry, University of the Basque Country, (2) Basque Country University UPV/EHU, (3) Ikerbasque Foundation for Science
- P-BIO 93 cPGMA-lysozyme assemblies with effective antimicrobial properties | Miguel Palenzuela Cebrián (1); Laura Valenzuela (1); Georgiana Amariei (1); Juan Francisco Vega (2); Marta Elena González Mosquera (1); Roberto Rosal (1) | (1) Universidad de Alcalá (UAH), (2) Instituto de Estructura de la Materia, IEMCSIC
- P-BIO 94 Sustainable Carbon Dots as promising material for biomedical applications | Camilla Marzuoli (1,2); Gabriele Tullii (1); Paola Lagonegro (3); Umberto Giovanella (3); Christian Bellacanzone (1); Mariacecilia Pasini (3); Maria Rosa Antognazza (1) | (1) Istituto Italiano Di Tecnologia, (2) Politecnico Di Milano, (3) Istituto Di Scienze E Tecnologie Chimiche
- P-BIO 95 Biomedical textile converted to a thermosensitive sensor and SERS device | Elaine Armelin (1); Sonia Lanzalaco (1); Pau Gil (1); Júlia Mingot (1); Carlos Alemán (1) | (1) Universitat Politècnica de Catalunya
- P-REO 96 The influence of fenbendazole on poly(ethylene oxide) thermal and processing properties | Gilberto Silva Nunes Bezerra (1); Vicente Froes Moritz (1); Declan M Devine (1); Joseph Geever (1); Luke Geever (1) | (1) Technological University of the Shannon: Midlands Midwest
- P-REO 97 New conducting and scalable polymer composites for 3D printing composed by PLA and MWCNT | Silvia Lage-Rivera (1); Ana I. Ares-Pernas (1); Goretti Arias-Ferreiro (1); Aurora Lasagabáster-Latorre (2); María Victoria González-Rodríguez (1); María-José Abad (1) | (1) Universidade da Coruña, Campus Industrial de Ferrol, Grupo de Polímeros-CIT, 15403 Ferrol, A coruña, Spain, (2) Dpto Química Orgánica I, Escuela de Óptica, Universidad Complutense de Madrid, Madrid, Spain
- P-REO 98 Inducing molecular chain orientation of poly(L-lactic acid) out of melt for future piezoelectric applications | Richard Schönlein (1,2); Robert Aguirresarobe (1); Jone M. Urgartemendia (2) | (1) POLYMAT and Polymers and Advanced Materials: Physics, Chemistry and Technology, Faculty of Chemistry, University of Basque Country UPV/EHU, (2) POLYMAT and Department of Mining-Metallurgy Engineering and Materials Science, School of Engineering EIB 1, University of Basque Country UPV/EHU

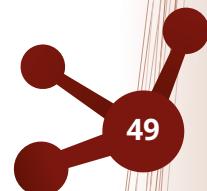
- P-REO 99 Study of a novel 3D-printed piezocapacitive pressure sensor based on vat polymerization of an polianiline/lignin acrylic resin | Goretti Arias-Ferreiro (1); Sonia Dopico-García (1); Aurora Lasagabáster-Latorre (2); M. Pablo Ligero (3); Ana Ares-Pernas (1); Silvia Lage-Rivera (1); Pedro Costa (4); Senentxu Lanceros-Mendez (5,6); María José Abad (1) | (1) Universidade da Coruña, Campus Industrial de Ferrol, Grupo de Polímeros-CIT, Ferrol, Spain, (2) Dpto Química Orgánica I, Facultad de Óptica, Universidad Complutense de Madrid, Madrid, Spain, (3) Universidade da Coruña, Enxeñería Química Ambiental Group-CICA, A Coruña, Spain, (4) Centro de Física, Universidade do Minho, Braga, Portugal, (5) BCMaterials, Basque Center for Materials, Applications and Nanostructures, UPV/EHU Leioa, Spain, (6) IKERBASQUE, Basque Foundation for Science, Bilbao, Spain
- P-REO 100 Adhesive, mechanical and thermal properties of epoxy and epoxy/PCL blends cured with ionic liquids | Lidia Orduña Velasco (1,2); Nerea Alegre Santa Cruz (1,2); Iker Razquin Martin (1,2); Nora Aranburu Okariz (1,2); Gonzalo Guerrica-Echevarría Estanga (1,2) | (1) Universidad del País Vasco EHU/UPV, (2) POLYMAT
- P-REO 101 Electrical behaviour of 3D printed carbon nanotube-based polybutylene succinate-co-adipate nanocomposites | Eneko Iruretagoyena Ajuria (1); Robert Aguirresarobe (1); Nora Aranburu (1) | (1) UPV/EHU
- P-REO 102 Vinylogous urethane-based vitrimers obtained by suspension polymerization | Laura Ballester Bayarri (1); Robert Aguirresarobe Hernandez (1); Nicholas Ballard (1,2) | (1) Polymat/ EHU, (2) Ikerbasque Basque Foundation for Science
- P-REO 103 Extrusion-based 3D printed atenolol tablets with poly(vinyl alcohol) inks | Laura Saenz-del-Burgo (1,2,3); Markel Lafuente-Merchan (1,2,3); Sandra Ruiz-Alonso (1,2,3); Albert Espina-Noguera (1,2); Jose Luis Pedraz (1,2,3) | (1) NanoBioCel Group, Laboratory of Pharmacy and Pharmaceutical Technology, Faculty of Pharmacy, University of the Basque Country, UPV/EHU, Vitoria-Gasteiz, Spain, (2) Networking Center on Bioengineering, Biomaterials and Nanomedicine (CIBER-BBN), (3) Bioaraba Health Research Institute, NanoBioCel Research Group, E-01009 Vitoria-Gasteiz, Spain
- P-REO 104 Dynamic polyurethane thermosets: triggering associative exchange reactions by visible light | Giulia Vozzolo (1); Fermín Elizalde (1); Daniele Mantione (1); Lourdes Irusta (1); Haritz Sardon (1) | (1) University of the Basque Country (UPV/EHU)
- P-REO 105 High-performance co-polyesters for material-extrusion 3D printing: A molecular perspective of weld properties | Andrea Costanzo (1); Dario Cavallo (1); Claire McIlroy (2) | (1) Department of Chemistry and Industrial Chemistry, University of Genoa, (2) School of Mathematics and Physics, University of Lincoln
- P-REO 106 Intermolecular compatibility in thermoplastic-thermoset couples applied to high performance composites | Enrique Hernández-Murillo (1); Luis Palenzuela (2); Cristina Elizetxea (2); Rober Hernandez Aguirresarobe (1); Nora Aranburu (1); Gonzalo Guerrica-echevarría (1) | (1) Department of Advanced Polymers and Materials: Physics, Chemistry and Technology, Faculty of Chemistry, University of the Basque Country (UPV/EHU), San Sebastián (Spain), (2) TECNALIA, Donostia-San Sebastián (Spain)
- P-REO 107 Effect of processing on the super-toughness of blends based on bio-based polyamide 4,10 | Itziar Otaegi Tena (1); Nora Aranburu Ocariz (1); Gonzalo Guerrica-Echevarría Estanga (1) | (1) POLYMAT & Department of Advanced Polymers and Materials: Physics, Chemistry and Technology
- P-REO 108 Rheological and adhesion performance of UV-curable polyurethane adhesives: Optimizing the reagents proportions | Adrián Tenorio Alfonso (1); David B Guzmán (2); Francisco Germán Blandón Cumbreiras (2); Concepción Valencia (1); Uwe Pischel (2); José M Franco (1) | (1) Pro2TecS-Chemical Product and Process Technology Centre, Department of Chemical Engineering, Physical Chemistry and Materials Science, University of Huelva, Huelva (Spain), (2) CIQSO-Centre for Research in Sustainable Chemistry and Department of Chemistry, University of Huelva, Huelva (Spain).

- P-REC 109 Recovery of Polyurethane Foams Waste For Chemical Deployment Through the Glycolysis Process in the Circular Economy Concept | Diego Fernando Triana Navarro (1); Alneira Cuellar Burgos (1); Fabio Augusto Mesa Rueda (1); Juan Sebastian Rey Valencia (1) | (1) Universidad Nacional De Colombia
- P-REC 110 Devulcanized tyre rubber as a reinforcement for self-healing rubbers: Key factors | Luis Eduardo Alonso Pastor (1); Karina Carla Nuñez Carrero (2); Marianella Hernández Santana (3); José María Pastor Barajas (1,2) | (1) Departamento de Física de la Materia Condensada, Universidad de Valladolid (UVa), Valladolid, España, (2) Fundación para la Investigación y el Desarrollo en Transporte y Energía (CIDAUT), Valladolid, España, (3) Instituto de Ciencia y Tecnología de Polímeros (ICTP-CSIC), Madrid, España
- P-REC 111 Compostable polymeric materials for active food packaging | Ignacio Mena Prado (1); Alexandra Muñoz Bonilla (1); Adolfo del Campo (1); Julián Jiménez Reinosa (1); José Francisco Fernández Lozano (1) | (1) Csic
- P-REC 112 Structure properties of recycled rubber compounds from end-of-life tires | Zenen Zepeda Rodríguez (1); Fernando Martín Salamanca (1); Juan López Valentín (1); Rebeca Herrero Caldeón (1); Alberto Fernández Torres (1); Rodrigo Navarro Crespo (1) | (1) Instituto de Ciencia y Tecnología de Polímeros (ICTP-CSIC)
- P-REC 113 Enhancement of the fatigue life of recycled opaque PET from household milk bottle wastes | Adrian Korycki (1); Christian Garnier (1); Silvia Irusta (2); France Chabert (1) | (1) LGP-ENIT-INPT, Université de Toulouse, (2) Department of Chemical and Environmental Engineering, Institute of Nanoscience of Aragon, University of Zaragoza
- P-REC 114 Sustainable slippery liquid infused surfaces | María Hernández Rivas (1); Nuria García García (1); Pilar Tiemblo Magro (1); Aránzazu Martínez Gómez (1); Elisabet Layla Afonso Pérez (1) | (1) Instituto de Ciencia y Tecnología de Polímeros. Consejo Superior de Investigaciones Científicas. (ICTP-CSIC)
- P-REC 115 THERMOSET POLYURETHANES BASED ON BIOBASED POLYOLS FOR STRUCTURAL COMPOSITES | Oihane Echeverria Altuna (1); Olatz Ollo (1); Tamara Cavo Correas (2); Isabel Harismendy (1); Arantxa Eceiza (2) | (1) TECNALIA, Basque Research and Technology Alliance (BRTA), (2) EHU/UPV, Euskal Herriko Unibertsitatea
- P-REC 116 Enzymatic polymerization of macrolides and their cyclodepolymerization | Antxon Martínez de llarduya Sáez de Asteasu (1); Alfredo Martínez Cutillas (1,3); Salvador León Cabanillas (2); Sejin Oh (3) | (1) Universitat Politècnica de Catalunya, (2) Universidad Politécnica de Madrid, (3) Artificial Nature S.L.
- P-REC 117 Environmental and physical characterization of chitosan/collagen scaffolds | Koro de la Caba (1,2); Mireia Andonegi (1); Pedro Guerrero (1,2,3) | (1) Universidad del País Vasco/Euskal Herriko Unibertsitatea (UPV/EHU), (2) BCMaterials, (3) Proteinmant materials SL
- P-REC 118 Bio-inspired electro-conductive soy protein films | Pedro Guerrero (1,2,3); Jone Uranga (1); Koro de la Caba (1,2) | (1) Universidad del País Vasco/Euskal Herriko Unibertsitatea (UPV/EHU), (2) BCMaterials, (3) Proteinmant materials SL
- P-REC 119 Exploring the effect of different compatibilizers on the properties of model and recycled Polyethylene/ Polypropylene blends: a way to obtain upgraded materials | Jorge Sebastián Coba-Daza (1,2); Davide Tranchida (2); Dario Cavallo (3); Ajelandro J. Müller (1) | (1) POLYMAT, (2) Borealis, (3) University of Genova
- P-REC 120 Fast SSA thermal fractionation protocol for characterization of polyolefin blends from mechanical recycling | Magdalena Góra (1,2); Davide Tranchida (2); Andreas Albrecht (2); Alejandro J. Müller (3,4); Dario Cavallo (1) | (1) Dipartimento di Chimica e Chimica Industriale, Università degli studi di Genova, Genova (Italy). , (2) Borealis Polyolefine GmbH, Innovation Headquarters, Linz (Austria)., (3) POLYMAT and Polymer Science and Technology Department, Faculty of Chemistry, University of the Basque Country UPV/EHU, Donostia-San Sebastián (Spain)., (4) IKERBASQUE, Basque Foundation for Science, Bilbao (Spain).



P-REC 121	Biobased polymers derived from itaconic acid with clickable groups to conjugate bioactive molecules   <u>Alberto Chiloeches Suárez</u> (1); <u>Marta Fernández García</u> (1); <u>Alexandra Muñoz Bonilla</u> (1); <u>Coro Echeverría Zabala</u> (1)   (1) Instituto de Ciencia y Tecnología de Polímeros (ICTP-CSIC)
P-REC 122	Temperature Modulated DSC for Composition Analysis of Recycled Polyolefin Blends   <u>Andromeda Scoppio</u> (1,2); <u>Dario Cavallo</u> (3); <u>Alejandro J. Müller</u> (2); <u>Davide Tranchida</u> (1)   (1) Borealis GmbH, (2) POLYMAT-University of the Basque Country, (3) Università degli Studi di Genova
P-REC 123	Chitosan derivatives based on dynamic imine chemistry for pH-dependent release of antifungal volatiles   <u>Raquel Heras-Mozos</u> (1); <u>Rafael Gavara</u> (1); <u>Pilar Hernández-Muñoz</u> (1)   (1) IATA-CSIC
P-REC 124	Chitosan derivatives with enhanced antimicrobial activity   <u>Carolina Muñoz-Nuñez</u> (1); <u>Alexandra Muñoz-Bonilla</u> (1); <u>Marta Fernández-García</u> (1)   (1) CSIC
P-REC 125	Designing new composites for eco-friendly electronic applications   <u>María José Abad López</u> (1); <u>David Fernández</u> (1); <u>María Victoria González Rodríguez</u> (1); <u>Goretti Arias Ferreiro</u> (1); <u>Silvia Lage Rivera</u> (1); <u>María Sonia Dopico García</u> (1); <u>Ana Isabel Ares Pernas</u> (1)   (1) Universidad de A Coruña
P-REC 126	Chemical valorisation of polylactide aided by the protic ionic liquid 2-hidroxyethylammonium acetate   <u>José David Badia</u> (1); <u>Alexander Björling</u> (1); <u>Cristina Almonacil Gámez</u> (1); <u>Ramón Fernández Domene</u> (1); <u>Amparo Cháfer</u> (1)   (1) Universitat de València
P-REC 127	Glycolysis of post-consumer poly (ethylene terephthalate) with the protic ionic liquid 2-hidroxyethylammonium acetate as catalyst   <u>Amparo Chafer</u> (1); <u>Alejandro Gamir-Cobacho</u> (1); <u>Ramón Fernández-Domene</u> (1); <u>José David Badia</u> (1)   (1) Universitat de València
P-REC 129	Organocatalytic carbamate scission for the selective depolymerisation of polyurethanes into ureas   <u>Ion Olazabal Lorea</u> (1); <u>Coralie Jehanno</u> (2); <u>Haritz Sardon</u> (1)   (1) Polymat, (2) Polykey
P-REC 130	Orthogonal Reactivity of Thiols towards Cyclic Carbonates for the Preparation of Self-Blowing Polycarbonate Foams   <u>Tansu Abbasoglu</u> (1); <u>Haritz Sardon</u> (1); <u>Lourdes Irusta</u> (1)   (1) POLYMAT-University of Basque Country (UPV-EHU)
P-REC 131	Screening of novel acid-base mixtures as organocatalysts for polycondensation of polyethers polyols   <u>Flore Kilens</u> (1,2)   (1) POLYKEY POLYMERS, (2) POLYMAT
P-REC 132	Combination of disulfide – vinylogous urethane chemistry and their application in vitrimer materials   <u>Jacopo Teotonico</u> (1); <u>Fernando Ruiperez</u> (1); <u>Haritz Sardon</u> (1); <u>Nicholas Ballard</u> (1)   (1) POLYMAT
P-REC 133	Performance Improvement of a Geocomposite Through a Material Formulation Based on Recycled Polymer and PLA with Reinforcement in SiO <sub>2</sub> layer   <u>Omar Santiago Mayorga Diaz</u> (1,2); <u>Johan Esteban Garcia Puentes</u> (1,2)   (1) IEEE universidad nacional, (2) EMB universidad nacional
P-REC 134	Magnetic inks based on water- soluble cellulose derivatives for screen printing   <u>Mikel Rincon-Iglesias</u> (1); <u>Nikola Peřinka</u> (1); <u>Erlantz Lizundia</u> (1,2); <u>Senentxu Lanceros-Méndez</u> (1,3)   (1) BCMaterials, Basque Center for Materials, Applications and Nanostructures, UPV/EHU Leioa, Spain, (2) Department of Graphic Design and Engineering Projects, Faculty of Engineering in Bilbao, University of the Basque Country (UPV/EHU), Bilbao, Spain, (3) IKERBASQUE, Basque Foundation for Science, Bilbao, Spain.
P-COP0 135	h-BN modification using hydroxylation and grafting and its incorporation into PMMA/PA6 polymer blend   <u>Abdelwahab Boukheit</u> (1); <u>Aurélie Taguet</u> (1); <u>Belkacem Otazaghine</u> (1); <u>France Chabert</u> (2)   (1) IMT Mines Alès, (2) ENIT-INPT University of Toulouse

- P-COPO 136 Synthesis of tunable core-shell nanoparticles by emulsion processes | Jakes Udabe (1); Neha Tiwari (2); Agustin Picco (3); Cristian Huck (4); Carlos Escudero (5); Marcelo Calderon (1,6) | (1) POLYMAT, Applied Chemistry Department, Faculty of Chemistry, University of the Basque Country UPV/EHU, Donostia-San Sebastián, España, (2) University of Bayreuth, Faculty of engineering science, Biofabrication, Germany, (3) INIFTA-UNLP-CONICET, Instituto de Investigaciones Fisicoquímicas Teóricas y Aplicadas La Plata, Argentina, (4) ITECA, Laboratorio de Cristalografía Aplicada, Universidad Nacional de San Martín, Argentina, (5) ALBA Synchrotron Light Source, Experiments Division, Cerdanyola del Vallès, Spain, (6) Ikerbasque, Basque Foundation for Science, Bilbao, España
- P-COPO 137 Impact of rGO in PVDF/PMMA blends on thermal and dielectric properties | Ingrid Esguerra Arce (1); Berna Serrano Prieto (1); Harvey Amorín González (2); Cristina Pascual González (3); Juan Pedro Fernández Blàzquez (4) | (1) Universidad Carlos III de Madrid, (2) Instituto de Ciencia de Materiales de Madrid, (ICMM, CSIC) , (3) Universidad Rey Juan Carlos, (4) IMDEA Instituto Materiales
- P-COPO 138 Effect of plasticizer release on the final properties of latex films for industrial coatings | Wichsuda Tangsongcharoen (1); Maria Paulis (1) | (1) Polymat University of the Basque Country UPV/EHU
- P-COPO 139 PLA based-Nanocomposites: product assessment and sustainability | Helena Oliver-Ortega(1); Francesc Xavier Espinach (1); Manel Alcalà (1); Alba Bala (2); Maria Àngels Pèlach (1); José Alberto Méndez (1) | (1) Universitat de Girona , (2) Universitat Pompeu Fabra
- P-COPO 140 Processability of nanocomposites materials based on PLA reinforced with polar nanoclays for its use in food industry | José Alberto Méndez González (1); Helena Oliver-Ortega (1); Fernando Julián Pérez (1); Josep Tresserras Picas (1) | (1) Universitat de Girona
- P-COPO 141 Highly conductive hybrid solid-state electrolyte based on Li<sub>3</sub>InCl<sub>6</sub> | Natalia Stankiewicz (1); Grazia Accardo (2); Pedro López-Aranguren (2); Irune Villaluenga (1) | (1) POLYMAT, Basque Country University UPV/EHU, San Sebastián (Spain), (2) Centre for Cooperative Research on Alternative Energies (CIC energiGUNE), Basque Research and Technology Alliance (BRTA), Vitoria-Gasteiz (Spain)
- P-COPO 143 Thermoset-based blend nanocomposites with continuous percolated structures by reactive compatibilization | Raquel Giménez Pérez(1); Berna Serrano Prieto (1); Juan Carlos Cabanelas Valcarcel (1) | (1) Universidad Carlos III de Madrid
- P-COPO 144 Ordered Nanostructures formed by Epitaxial Crystallization of Polyethylene-Syndiotactic Polypropylene Di-Block Copolymers | Alessandra Cicolella(1); Rocco Di Girolamo (1); Miriam Scoti (1); Giovanni Talarico (1); Claudio De Rosa (1) | (1) Università degli Studi di Napoli Federico II
- P-COPO 145 Influence of the polymer ligand features on the synthesis and properties of luminescent ZnO QDs | Leire San José Peraita (1); Isabel Quijada Garrido (1); Olga García Ballesteros (1); Mar López González (1) | (1) Instituto de Ciencia y Tecnología de Polímeros (ICTP-CSIC)
- P-EST 146 Advanced characterization of rubber compounds using a combination of experimental techniques | Fernando Martín Salamanca (1); Zenen Zepeda Rodríguez (1); Antonio González Jiménez (2); Rebeca Herrero (1); Alberto Fernández Torres (1); Rodrigo Navarro (1); Juan López Valentín (1) | (1) ICTP-CSIC, (2) URJC
- P-EST 147 CRYSTALLIZATION KINETICS OF POLYFLUORENE THIN FILMS BY FAST SCANNING CHIP CALORIMETRY | Valentina Pirela (1,2); Alejandro J. Müller (2,3); Jaime Martín (2,3) | (1) POLYMAT, (2) Faculty of Chemistry, University of the Basque Country UPV/EHU, (3) IKERBASQUE



- P-EST 148 Reproducing the Calorimetric Glass Transition Trace of Simplified Industrial Polymer Mixtures from the Modelling of Dielectric Relaxation and the Input of Small Angle Neutron Scattering | Numera Shafqat (1,2); Angel Alegria (1,3); Arantxa Arbe (1); Nicolas Malicki (2); Severin Dronet (2); Lionel Porcar (4); Juan Colmenero (1,3,5) | (1) Centro de Física de Materiales (CSIC, UPV/EHU) and Materials Physics Center MPC, San Sebastián (Spain), (2) Manufacture Francaise des Pneumatiques MICHELIN, France, (3) Departamento de Polímeros y Materiales Avanzados: Física, Química y Tecnología (UPV/EHU), San Sebastián, Spain, (4) Institut Laue-Langevin, France, (5) Donostia International Physics Center (DIPC), San Sebastián, Spain
- P-EST 149 Covalent adaptable networks (CANs): contribution of the network structure and catalyst to the molecular dynamics | Amparo Ribes Greus (1); Oscar Gil Castell (1,2); Angels Serra (2); Silvia De la Flor (2) | (1) Universitat Politècnica de València, (2) Universitat Rovira i Virgili
- P-IONBIKE 150 Gelatin and phenolic compounds based iongels for bioelectronic applications | Ana Aguzin (1); Gisela Carina Luque (1,2); Ludmila Irene Ronco (1,2); Isabel del Agua (3); Gregorio Guzman (4); Bastien Marchiori (3); Liliana Tomé (5); Luis Gugliotta (1,2); Roque Minari (1,2); David Mecerreyres (4,6) | (1) Instituto de Desarrollo Tecnológico para la Industria Química (INTEC), CONICET, (2) Facultad de Ingeniería Química (FIQ), Universidad Nacional del Litoral (UNL), (3) Panaxium SAS, (4) POLYMAT, Basque Country University UPV/EHU, (5) LAQV-REQUIMTE, Chemistry Department, NOVA School of Science and Technology, Universidade Nova de Lisboa, (6) PIkerbasque, Basque Foundation for Science
- P-IONBIKE 151 3D printing of PEDOT:PSS conductive polymer by Digital Light Processing for application in bioelectronics | Naroa López Larrea (1); Miryam Criado González (1); Isabel del Agua (2); Bastien Marchiori (2); Antonio Domínguez Alfaro (1); Nuria Alegret (1); David Mecerreyres (1,3) | (1) POLYMAT, University of the Basque Country (UPV/EHU), (2) Panaxium SAS, (3) Ikerbasque, Basque Foundation for Science
- P-BIO 152 Hydrogels Derived from Poly(gamma-Glutamic Acid) Nanofibers for the Release of Hydrophilic Antibacterial Drugs | Hamidreza Kasbiyan (1); Omid Yousefzade (1); Estelle Simiand (1); Núria Saperas (1); Jordi Puiggalí (1,2); Luis J. del Valle (1,2) | (1) Departament d'Enginyeria Química, Universitat Politècnica de Catalunya, Escola d'Enginyeria de Barcelona Est-EEBE, Barcelona , Spain., (2) Barcelona Research Center for Multiscale Science and Engineering, Universitat Politècnica de Catalunya, Escola d'Enginyeria de Barcelona Est-EEBE, Barcelona, Spain.
- P-COPO 154 Microwave-assisted acetylation of lignin as an efficient tool for structuring castor oil-based oleogels | Concepción Valencia (1); Antonio M. Borrero-López (1); Ling Wang (2); Li Haiming (2); Tainise V. Lourençon (2); Mikhail Balakshin (2); José M. Franco (1); Orlando J. Rojas (3) | (1) Pro2TecS – Chemical Process and Product Technology Research Centre. Dept. Chemical Engineering, ETSI. Campus de "El Carmen". Universidad de Huelva. (2) Department of Bioproducts and Biosystems, School of Chemical Engineering, Aalto University, Espoo, Finland, (3) Bioproducts Institute, Departments of Chemical and Biological Engineering, Chemistry and Wood Science, The University of British Columbia, Vancouver, Canada.

