

Biocarbon based Polymers for Sustainable Material Development

Deliverable D4.2

Network-wide training events reports – R1



**Funded by the
European Union**

This Project has received funding from the
European Union (Marie Skłodowska-Curie Grant
Agreement No 101073223)

Lead Beneficiary

ULIEGE

Delivery date

10 05 2024

Dissemination level

PUBLIC

Version

1.0

Document information

Grant Agreement Number	101073223
Acronym	D-Carbonize
Start date of project (Duration)	01/03/2023 (48 months)
Document due date	31/03/2024
Submission date	10/05/2024
Authors	ICIQ/ULIEGE
Deliverable number	D4.2
Deliverable name	Network-wide training events reports – R1
WP	WP4 – Training

Version	Date	Author	Description
v 0.1	19/03/2024	ICIQ	Creation
v 0.2	22/04/2024	ULIEGE	Revision
v 1.0	02/05/2024	ICIQ	Final revision Final approval by the Steering Board

Executive Summary

This document, D4.2 Network-wide training events reports-R1 is a deliverable of the **D-Carbonize** Project, which is funded by the European Union's Horizon Europe Programme under Grant Agreement No. 101073223. The document describes the activities carried out during the first **D-Carbonize** Workshop & kick-off meeting co-organized by ICIQ and RUG (24-25 January, Tarragona, Spain).

Index

1. Introduction 4

2. First Workshop Overview 4

 2.1 Objectives..... 4

 2.2 Organization and Results 4

 2.3 Documentation 6

Annex I. Workshop Agenda 7

Annex II. List of Participants 8

1. Introduction

The main training objective of **D-Carbonize** is to create a new generation of scientists that represent the future leaders in the design and implementation of new and improved functional materials enabled by renewable and sustainable carbon feedstock and a circular vision, thereby revolutionizing the plastic production industry. This will be supported by workshops and schools on both scientific and soft skills facilitated by all members of the consortium.

The first **D-Carbonize** Workshop (WS1) introduced the basic concepts of catalysis, organic and polymer chemistry relevant for CO₂ and biobased materials transformation, and green chemistry principles and metrics. Furthermore, it was provided knowledge about management of the PhD project, dissemination & communication and research integrity.

It was mainly a face-to-face event, but a few partners/DCs were not able to join in person. For those that were not able to attend in person (either due to VISA issues, health problems or tight work agendas) a zoom link was provided and they were able to virtually follow the whole event and participate.

2. First Workshop Overview

2.1 Objectives

The first **D-Carbonize** Workshop (WS1) was focused on an intensive scientific and soft skills training covering all the basic aspects of the project. The aim of this WS1 was to guarantee to all DCs an equal and common access to the knowledge/skills needed for the realization of the **D-Carbonize** objectives. A second very important objective was to meet all the consortium partners (supervisors, mentors, managers) and the DCs in person, because it is truly important to facilitate contact and networking for the consortium fellows as earlier as possible in the project.

2.2 Organization and Results

The first **D-Carbonize** Workshop was co-organized by ICIQ and RUG and took place at ICIQ facilities in Tarragona (Spain). During this first workshop, the official kick-off meeting of the project was also held. Both DCs and consortium partners (beneficiaries and associated partners) participated in the two-days event. Participant's list can be consulted in Annex I of this document.



The programme included several sessions, comprising scientific and soft skills training (see Annex I. Agenda):

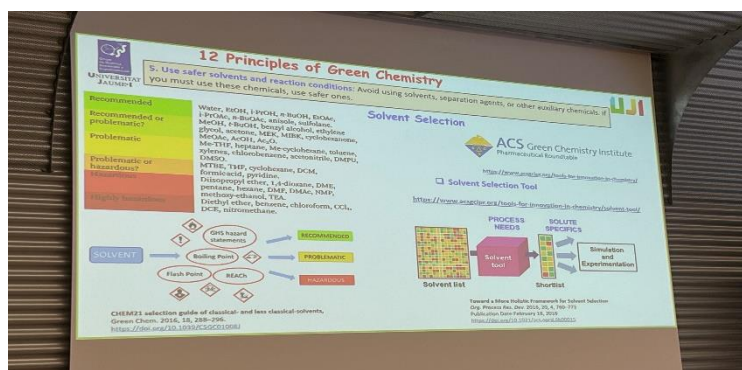
- How to succeed in your PhD (Marina Moreno)
- Introduction to Organic Chemistry (Dr. Eduardo García-Verdugo)
- Research Integrity (Dr. Paolo Pescarmona)
- Team building activity (moderated by Paolo Pescarmona)
- Introduction to Polymer Chemistry (Dr. José Berrocal)
- Introduction to Catalysis (Dr. Christopher Whiteoak)
- Supervisory Board & Management (ICIQ management team)
- Dissemination & Communication (ICIQ communication team)

Besides the training sessions, the first day, the doctoral candidates started introducing their scientific background and their individual project (see Annex III. DCs Presentations).

Marina Moreno was in charge to deliver a workshop focused on “How to succeed in your PhD?” and the soft skills needed. She is an external expert in coach and human skills with more than fifteen years of experience, who has invited specifically for the WS1.



Dr. Eduardo García-Verdugo was invited to give a lecture in Organic Chemistry, as expert in Catalysis, Green Chemistry and Materials Chemistry, knowledge necessary for all the DCs to successfully develop their individual projects within the D-Carbonize network. Dr. García-Verdugo is professor and coordinator of the Supramolecular and Sustainable Chemistry Group at Universitat Jaume I (UJI), Spain.



Another of the training sessions consisted of a research integrity lecture, focusing on how to behave in an ethically responsible and safe way when doing research, that includes information about data management and plagiarism. The session was conducted by Dr. Paolo Pescarmona from the University of Groningen (RUG), one of the consortium partners and co-organizer of this workshop.

The first day of the workshop finalised with a team building activity where all the DCs and consortium partners participated, and it was moderated by Paolo Pescarmona. The activity consisted on a game played with card decks and some instructions received from the moderator. The activity facilitated the communication and respect between team members as we worked together toward a common goal. Other skills trained were trust-building, problem-solving and decision-making. All in all, a very positive experience for all participants.

Over the second day, two more scientific lectures were delivered by two scientific experts. The first one was an introduction to Polymer Chemistry, where Dr. José Berrocal, ICIQ Group Leader, explained the main types of polymers, their basic thermal properties and different synthetic strategies. Dr. Berrocal is an expert in organic and polymer chemistry. His group is active in designing and understanding stimuli-responsive materials devoted for potential sustainable and environmental applications.

The second one, was dedicated to Catalysis. Dr. Christopher Whiteoak was invited to introduce the concept and basics of catalysis, how CO₂ can be used as reagent and approaches to recycling using catalysis, providing some specific examples for better understanding. Dr. Whiteoak is a professor at the University of Alcalá, Spain, and his work is focused on the use of first-row transition metals in the development of new catalytic C-H activation and functionalization protocols and utilization of carbon dioxide as a renewable feedstock.

The soft skills training was completed with a final session focused on dissemination & communication. ICIQ's communication team, with wide experience in scientific and projects communication, was in charge to give a broad overview on general knowledge on Projects results dissemination and project activities communication and outreach. In addition, the D-Carbonize Dissemination & Communication Plan was also presented.

2.3 Documentation

DCs and consortium partners will have full access to all the presentations and files related to the WS1 through the project intranet (<https://www.auranet.org/?mark=21>).

Additionally, two news were posted on **D-Carbonize** website and shared on social media, announcing the workshop and summarizing it after it was finished (<https://dcarbonizeproject.eu/activities/>).

Annex I. Workshop Agenda

WS1 – Workshop 1: Catalysis for CO₂ Conversion



D-Carbonize WS1 & Kick-off Agenda

Institute of Chemical Research of Catalonia (ICIQ)

Av. Països Catalans, 16 – 43007 – Tarragona (Spain)

24 – 25 January 2024

Wednesday, 24 January 2024

Time	Topic	Presenter
09:00 – 09:30	Welcome and Project Overview	Arjan Kleij (ICIQ)
09:30 – 10:15	Introduction of the Doctoral Candidates (DCs) (3 min/each)	All DCs
10:15 – 10:45	Coffee break	
10:45 – 13:00	How to succeed in your PhD	Marina Moreno
13:00 – 14:00	Lunch	
14:00 – 15:30	Introduction to Organic Chemistry	Eduardo García-Verdugo (UJI)
15:30 – 17:00	Research Integrity	Paolo Pescarmona (RUG)
17:00 – 17:30	Coffee break	
17:30 – 18:30	Team building activity	All DCs (Moderated by Paolo Pescarmona)
20:30	Dinner	

Thursday, 25 January 2024

Time	Topic	Presenter
09:00 – 10:30	Introduction to Polymer Chemistry	José Berrocal (ICIQ)
10:30 – 11:00	Coffee break	
11:00 – 12:30	Introduction to Catalysis	Christopher Whiteoak (UAH)
12:30 – 13:15h	Supervisory Board & Management	SB members, ICIQ Management Team
13:15 – 14:15	Lunch	
14:15 – 16:00	Dissemination & Communication	Communication Team (ICIQ)
16:00	End of the meeting	



Funded by the
European Union

This Project has received funding from the European Union (Marie Skłodowska-Curie Grant Agreement No 101073223)

Annex II. List of Participants

The first **D-Carbonize** Workshop was attended by the DCs and the consortium partners.

D-Carbonize DCs:

- Enrico Lanaro
- Natalia Kulbacka
- Lilas Aubel
- Florian Barbaz
- Angelo Scopano
- Giovanni Berluti
- Hussein Tabaja (online)
- Nishant Chaudhary (online)
- Owais Sheikh Ahmed
- Elia Cecchetto
- Sara Faoro

Consortium Partners:

- Arjan Kleij (ICIQ)
- Eva Alcázar (ICIQ)
- Anna Banet (ICIQ)
- Christophe Detrembleur (ULIEGE) (online)
- Bruno Grignard (ULIEGE)
- Paolo Pescarmona (RUG)
- Stephen K. Hashmi (UHEI)
- Jean-François Carpentier (CNRS) (online)
- Sophie Guillaume (CNRS) (online)
- Alberto Barranca (AIMPLAS)
- Miguel Ángel Valera (AIMPLAS)
- Serafin Garcia (AIMPLAS)
- Coralie Jehanno (POLYKEY)
- Jaroslaw Mormul (BASF)
- Paola Grossi (Corning)
- Jean-Michel Thomassin (CELABOR) (online)

Speakers:

- Christopher Whiteoak (UAH)
- Eduardo Garcia-Verdugo (UJI)
- José Berrocal (ICIQ)
- Paolo Pescarmona (RUG)
- Marina Moreno
- ICIQ communication Team (Arnau Jordà & Joan Guillem Mayans)

Advisory Board:

- Johannes G. de Vries (LIKAT)
- Vanni Parenti (DOW)
- Aaron David Bojarski (SABIC)