



## Chemical Recycling of Plastic Materials

Over the last few years, the business landscape is undergoing major changes, mainly related to the adaptation to the paradigms of the circular economy and the need to convert waste into real resources, with recycling gaining special relevance.

The recycling of plastic materials is an important economic sector and is expected to grow considerably in the coming years.

Chemical recycling is a complementary solution to mechanical recycling, mainly for food contact applications, high quality or for the recycling of e.g., mixed waste, but also for separated waste.

There are different types of chemical recycling applicable to plastic waste (both thermoplastics and thermosets) with their own specific processes to produce substances of interest to the chemical industry and recycled materials.

It is necessary to know what possibilities exist in chemical recycling, what are the advantages, what are the limitations, what is the main equipment and the products generated.

Call open all year.

You will have two months to complete the course from the moment you decide to start it.

### Plazo preinscripción

Hasta el 15 de diciembre 2024 o hasta completar aforo



#### Fecha y horario

Del 19 de ene al 22 de dic 2024



#### Duración

40 horas lectivas



#### Ubicación

Online



#### Precio

Empresa asociada:  
408€

Empresa no asociada:  
510€

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## Objetivos

- Learn the characteristics of plastic materials and waste.
- Identify the different types of chemical recycling applicable to plastic waste.
- Understand the complementarity of chemical recycling and mechanical recycling.
- Understand the different existing processes, their characteristics and the products obtained.
- Analyse some of the aspects related to legal issues and the control of recycled content (mass balance).
- Learn the trends in chemical recycling.

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## ¿A quién va dirigido?

- Technicians in the plastics industry, raw materials, waste managers and recyclers.
- Technical students who want to familiarise themselves with and explore the possibilities presented by chemical recycling.
- Priority registration will be given to industrial partners and customers.

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## Temario

### PLASTICS MATERIALS AND THEIR WASTE.

- Use of plastic materials.
- Characteristics of plastic waste.

### CHEMICAL RECYCLING.

- > Waste hierarchy and recovery processes.
- > Chemical recycling: general characteristics.
- > Waste pre-treatment.
- > Legislation and regulations.

#### SOLVOLYSIS.

- > General characteristics.
- > Characteristics and equipment.
- > Examples.
- > Trends.

#### THERMAL CRACKING.

- > General.
- > Characteristics and equipment.
- > Examples.
- > Trends.

#### BIOLOGICAL CRACKING.

- > General.
- > Equipment.
- > Characteristics and examples.
- > Trends.

#### PHYSICAL RECYCLING.

- > General.
- > Physical recycling techniques.
- > Applications and examples.

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## Convocatorias abiertas

**Del 19 de ene al 22 de dic 2024**

 Online

## Profesorado



**Mireia Fernández Bazán**

Personal investigador de AIMPLAS /  
AIMPLAS Researcher

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## Metodología

- > The course has been designed to be taught online through AIMPLAS Plastics Academy, providing flexibility to follow it, at any time and from any place.
  - > The course is modular and consists of interactive multimedia contents. AIMPLAS professional technicians collaborate in its development and implementation, and, through personalised tutorials and other tools offered by the web will help the student to understand everything related to the chemical recycling of plastic waste.
  - > A Q&A videoconference session with a maximum duration of one hour.
  - > You will have two months to complete the course.
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### Organiza:



**AIMPLAS**  
INSTITUTO TECNOLÓGICO  
DEL PLÁSTICO