



Mariano Martín Martín

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**Mariano Martín Martín**

Surname(s): **Martín Martín**
 Name: **Mariano**
 DNI: **07977093A**
 Date of birth: **24/11/1980**
 Gender: **Male**
 Country of birth: **Spain**
 Aut. region/reg. of birth: **Castile and León**
 City of birth: **Salamanca**
 Land line phone: **(34) 923294479**
 Fax: **(34) 923294574**
 Email: **mariano.m3@usal.es**
 Personal web page: **<http://diarium.usal.es/marianom3>**

Current professional situation

Employing entity: Universidad de Salamanca

Department: Ingeniería Química y Textil, Facultad de Ciencias Químicas

Professional category: Profesor Ayudante doctor/Assistant Professor

Start date: 01/02/2011

Type of contract: Temporary

Dedication regime: Full time

Primary (UNESCO code): 330300 - Chemical technology and engineering

Performed tasks: Currently I am assistant professor at the University of Salamanca in Spain in the department of Chemical Engineering. I have already obtained the government approval as associate professor (acreditación de Titular de Universidad). My research area lies in the field of process design and optimization using a hybrid approach from the experimental evaluation to reactors and other particular equipment to mathematical modeling and optimization of the entire flowsheet in particular in the field of biofuel production processes. From the teaching stand point, I am in charge of Industrial Chemistry in the bachelor degree and Process simulation and Integration at Master and PhD levels apart from teaching at transport phenomena and unit operations labs. En la actualidad ocupo la plaza de ayudante doctor en el departamento de Ingeniería Química y Textil de la Universidad de Salamanca, aunque estoy acreditado a profesor titular desde octubre de 2012. Mi investigación se centra en el campo del diseño y optimización de procesos y productos empleando una metodología híbrida, desde la experimentación para la evaluación de equipos como reactores al modelado y optimización de un proceso completo con particular interés en los biocombustibles. Desde el punto de vista de la docencia, soy profesor responsable de la asignatura de Química industrial del grado en Ingeniería Química y de la asignatura de Simulación e Integración de procesos del máster universitario en Ingeniería Química así como imparto laboratorios de fenómenos de transporte y operaciones unitarias.

Previous positions and activities

	Employing entity	Professional category	Start date
1	Carnegie Mellon University	MICINN Fulbright Postdoc	01/05/2009
2	Procter & Gamble	Postdoctoral Engineer	01/02/2008
3	Universidad de Salamanca		01/02/2004

	Employing entity	Professional category	Start date
		Predoctoral fellowship holder/ Becario predoctoral de investigación	
4	PLASTICOS DUREX, S.A.	Summer Intern	01/07/2002

- Employing entity:** Carnegie Mellon University **Type of entity:** University
Professional category: MICINN Fulbright Postdoc
Start-End date: 01/05/2009 - 31/01/2011 **Duration:** 1 year - 9 months
Performed tasks: My time was mainly devoted to the design of optimal biofuel production processes under the supervision of Prof. Ignacio Grossmann using mathematical programming techniques. Dediqué la mayor parte de mi estancia al desarrollo de procesos óptimos para la producción de biocombustibles supervisado por el Prof. Ignacio Grossmann empleando técnicas de programación matemática.
Applicability in teaching and/or research: I had the opportunity through the MICINN - Fulbright to act as teaching assistant for 80h in the process design class at senior year during two academic courses. Furthermore, we elaborated two CACHE design cases of study currently available at (<http://cache.org/super-store/cache-process-design-case-studies>) Gracias a los beneficios del contrato MICINN - Fulbright , participé en la docencia de la clase "Process design" durante dos cursos académicos y un total de 80h. Además participé en la elaboración de dos estudios de caso de CACHE que están disponibles en (<http://cache.org/super-store/cache-process-design-case-studies>)
- Employing entity:** Procter & Gamble
Professional category: Posdoctoral Engineer
Start-End date: 01/02/2008 - 28/02/2009 **Duration:** 1 year - 1 month
Performed tasks: I was in charge of a research project dealing with the study of complex chemical reactors. I was awarded the P&G research award. Estaba a cargo de un proyecto que tenía como objetivo el estudio de reactores químicos complejos. Se me concedió en P&G research award.
Applicability in teaching and/or research: The time at P&G was really useful in the management of time, people and resources and to learn the industrial way of thinking which is crucial for any engineer and to be capable of inspiring future engineers El tiempo en P&G fue muy útil para optimizar la distribución del tiempo y recursos (materiales y humanos) así como aprender la forma en que la gran industria funciona lo cual es vital para los futuros ingenieros.
- Employing entity:** Universidad de Salamanca **Type of entity:** University
Professional category: Predoctoral fellowship holder/ Becario predoctoral de investigación
Start-End date: 01/02/2004 - 31/01/2008 **Duration:** 4 years
Performed tasks: Graduate studies for the development of my PhD thesis Estudios conducentes a la elaboración de mi tesis doctoral.
Applicability in teaching and/or research: I could take part of teaching activities as teaching assistant based on the FPU program during two academic courses and 120 h. Participé en la docencia durante dos cursos académicos por un total de 120 h gracias a los beneficios complementarios del programa FPU
- Employing entity:** PLASTICOS DUREX, S.A.
Professional category: Summer Intern
Start date: 01/07/2002 **Duration:** 42 days



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CURRÍCULUM VITAE NORMALIZADO

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Education

University education

1st and 2nd cycle studies and pre-Bologna degrees

University degree: Higher degree

Name of qualification: Ingeniero Químico/ Chemical Engineer

City degree awarding entity: Salamanca, Castile and León, Spain

Degree awarding entity: Universidad de Salamanca **Type of entity:** University

Date of qualification: 16/07/2003

Average mark: Outstanding

Prize: Accésit Premio Proyecto fin de carrera Mapfre

Doctorates

Doctorate programme: Reactividad Química y Tecnología del Medio ambiente

Degree awarding entity: Universidad de Salamanca **Type of entity:** University

Date of degree: 18/02/2008

DEA awarding entity: Universidad de Salamanca

Date DEA was awarded: 31/08/2005

European doctorate: Yes

Date of certificate: 18/02/2008

Thesis title: Estudio teórico experimental de la hidrodinámica y la transferencia de masa de burbujas generadas en platos perforados

Thesis director: Miguel A. Galán

Thesis co-director: Francisco J. Montes

Obtained qualification: Outstanding (Sobresaliente cum laude)

Special doctorate award: Yes

Date of award: 2008

Other postgraduate university studies

Postgraduate qualification: Grado de salamanca

Degree awarding entity: Universidad de Salamanca **Type of entity:** University

Faculty, institute or centre: Facultad de Ciencias Químicas

Date of qualification: 07/10/2004

**Specialised, lifelong, technical, professional and refresher training (other than formal academic and healthcare studies)**

- | | | |
|-----------|--|---|
| 1 | Training title: An introduction to gProms
Awarding entity: Process Systems Enterprise
End date: 21/08/2009 | Type of entity: Business
Duration in hours: 30 hours |
| 2 | Training title: Curso de Francés General Nivel 3
Awarding entity: Servicio central de idiomas, Universidad de Salamanca,
End date: 31/01/2008 | Type of entity: University
Duration in hours: 60 hours |
| 3 | Training title: Curso de Alemán General Nivel 4
Awarding entity: Servicio central de idiomas. Universidad de Salamanca
End date: 08/06/2007 | Type of entity: University
Duration in hours: 60 hours |
| 4 | Training title: Certificate in Advance English
Awarding entity: Cambridge
End date: 08/05/2007 | Type of entity: University |
| 5 | Training title: Curso de Alemán General Nivel 3
Awarding entity: Servicio central de idiomas. Universidad de Salamanca
End date: 31/01/2007 | Type of entity: University
Duration in hours: 60 hours |
| 6 | Training title: Curso de Alemán General Nivel 2
Awarding entity: Servicio central de idiomas Universidad de Salamanca
End date: 08/06/2006 | Type of entity: University
Duration in hours: 60 hours |
| 7 | Training title: Curso de Alemán General Nivel 1
Awarding entity: Servicio central de idiomas, Universidad de Salamanca
End date: 31/01/2006 | Type of entity: University
Duration in hours: 60 hours |
| 8 | Training title: First Certificate English
Awarding entity: Cambridge
End date: 12/2005 | Type of entity: University |
| 9 | Training title: Curso de Francés General Nivel 1
Awarding entity: Servicio central de idiomas, Universidad de Salamanca
End date: 09/06/2005 | Type of entity: University
Duration in hours: 60 hours |
| 10 | Training title: Grado Elemental Musica
Awarding entity: Conservatorio profesional Musica de Salamanca
End date: 30/06/1995 | |

Attended advanced, improvement and innovative teacher training and new technology courses and seminars focused on improving teaching

1 Title of course/seminar: PASI 2011

Goals of the course/seminar: Target the new advances in process optimization for senior PhD students and young faculty members (Avances en optimización de procesos para estudiantes de doctorado, postdocs y jóvenes profesores)

Organising entity: NSF - Carnegie Mellon University - **Type of entity:** University
Wisconsin Madison

Start-End date: 19/07/2011 - 29/07/2011

2 Title of course/seminar: Curso de aptitud Pedagógica

Goals of the course/seminar: Basic compulsory training for high school teachers/ Curso obligatorio para la docencia en secundaria

Organising entity: Universidad de Salamanca **Type of entity:** University

Faculty, institute or centre: Facultad de Educación

Duration in hours: 200 hours

Start-End date: 01/10/2004 - 22/12/2004

3 Title of course/seminar: VII Congreso Nacional de Ingeniería Química

Goals of the course/seminar: Evaluate the status of the chemical engineering degree and research in Spain/ Presentación del estado de la ingeniería química y la investigación en ingeniería química en España

Organising entity: INQUISA **Type of entity:** Associations and Groups

Duration in hours: 30 hours

Start-End date: 14/10/2004 - 17/10/2004

4 Title of course/seminar: New trends in chemical engineering

Goals of the course/seminar: Present the new advances in chemical engineering/ Nuevos avances en ingeniería química

Organising entity: Universidad de Salamanca **Type of entity:** University

Duration in hours: 30 hours

Start-End date: 21/02/2004 - 25/02/2004

5 Title of course/seminar: Reactores Multifásicos

Goals of the course/seminar: Present the new trends in chemical reactor design for the case of multiphase reactors/ Tenencias en el diseño de reactores multifásicos

Organising entity: CURSOS DE VERANO DE LA UNIVERSIDAD DE SALAMANCA

Duration in hours: 30 hours

Start-End date: 15/07/2002 - 19/07/2002

Language skills

Language	Speaking	Reading	Writing
French	Intermediate	Elementary	Elementary
German	Intermediate	Intermediate	Intermediate
Spanish	Advanced	Advanced	Advanced
English	Advanced	Advanced	Advanced



Teaching experience

General teaching experience

- 1** **Type of teaching:** International teaching
Name of the course: Process Optimization
Type of programme: Engineering
Type of subject: Obligatory
University degree: Bachelor Chemical Engineering
Start date: 16/02/2015 **End date:** 30/03/2015
End date: 30/03/2015 **Type of hours/ ECTS credits:** Hours
Hours/ECTS credits: 10
Entity: University of Birmingham **Type of entity:** University
Faculty, institute or centre: School of Chemical Engineering
City of entity: United Kingdom
- 2** **Type of teaching:** Official teaching
Name of the course: Exp. Ing Química III
Type of subject: Core
University degree: Grado en Ingeniería Química
Frequency of the activity: 1
Start date: 15/09/2013 **End date:** 01/02/2015
End date: 01/02/2015 **Type of hours/ ECTS credits:** Hours
Hours/ECTS credits: 75
Entity: Universidad de Salamanca **Type of entity:** University
Faculty, institute or centre: Facultad de Ciencias Químicas
- 3** **Name of the course:** Química Industrial
University degree: Grado en Ingeniería Química
Start date: 15/09/2013 **End date:** 01/02/2015
End date: 01/02/2015
Entity: Universidad de Salamanca **Type of entity:** University
Faculty, institute or centre: Facultad de Ciencias Químicas
- 4** **Type of teaching:** Official teaching
Name of the course: Simulación e Integración de procesos
Type of programme: Master's degree **Type of teaching:** In person theory
University degree: Master universitario en Ingeniería Química
Frequency of the activity: 3
Start date: 01/10/2012 **End date:** 20/01/2015
End date: 20/01/2015 **Type of hours/ ECTS credits:** Hours
Hours/ECTS credits: 30
Entity: Universidad de Salamanca **Type of entity:** University
Faculty, institute or centre: Facultad de Ciencias Químicas
Subject language: Spanish



- 5** **Type of teaching:** Official teaching
Name of the course: Química Industrial
Type of programme: Bachelor's degree
University degree: Grado en Químicas
Course given: 2013-2014
Start date: 01/02/2014
End date: 04/2014
Hours/ECTS credits: 10
Entity: Universidad de Salamanca
Faculty, institute or centre: Facultad de Ciencias Químicas
- Type of teaching:** Practical work (classroom-problems)
Frequency of the activity: 1
End date: 01/06/2014
Type of hours/ ECTS credits: Credits
Type of entity: University
- 6** **Type of teaching:** International teaching
Name of the course: Process Optimization
Type of programme: Engineering
Type of subject: Obligatory
University degree: Bachelor Chemical Engineering
Start date: 12/03/2014
End date: 30/03/2014
Hours/ECTS credits: 10
Entity: University of Leeds
Faculty, institute or centre: SPEME
City of entity: United Kingdom
- End date:** 11/04/2014
Type of hours/ ECTS credits: Hours
Type of entity: University
- 7** **Type of teaching:** International teaching
Name of the course: Special Seminars
Type of programme: Doctorate
University degree: PhD Chemical Engineering
Start date: 12/03/2014
End date: 2014
Entity: University of Leeds
Faculty, institute or centre: School of Process
- End date:** 11/04/2014
Type of entity: University
- 8** **Type of teaching:** Official teaching
Name of the course: Productos y Procesos Biotecnológicos
Type of programme: Bachelor's degree
Type of subject: Core
University degree: Grado en Biotecnología
Frequency of the activity: 2
Start date: 01/10/2012
End date: 31/12/2013
Hours/ECTS credits: 17
Entity: Universidad de Salamanca
Faculty, institute or centre: Facultad de Ciencias Químicas
- Type of teaching:** Laboratory work
End date: 31/12/2013
Type of hours/ ECTS credits: Hours
Type of entity: University
- 9** **Name of the course:** Experimentación Ingeniería Química II
Type of programme: Bachelor's degree
Type of subject: Core
University degree: Grado en Ingeniería Química
Frequency of the activity: 1
Start date: 11/02/2013
End date: 30/06/2013
- Type of teaching:** Laboratory work
End date: 30/06/2013
Type of hours/ ECTS credits: Credits



Hours/ECTS credits: 40

Entity: Universidad de Salamanca

Type of entity: University

Faculty, institute or centre: Facultad de Ciencias Químicas

City of entity: Salamanca, Castile and León, Spain

10 Type of teaching: Official teaching

Name of the course: Química Industrial

Type of programme: Engineering

Type of subject: Core

University degree: Ingeniero Químico

Frequency of the activity: 3

Start date: 01/02/2011

End date: 30/06/2013

Hours/ECTS credits: 60

Entity: Universidad de Salamanca

Type of teaching: In person theory

End date: 30/06/2013

Type of hours/ ECTS credits: Hours

Type of entity: University

Faculty, institute or centre: Facultad de Ciencias Químicas

Subject language: Spanish

11 Type of teaching: Official teaching

Name of the course: Process design

Type of programme: Doctorate

Type of subject: Doctorate

University degree: PhD Chemical Engineering

Frequency of the activity: 2

Start date: 07/01/2012

End date: 30/06/2013

Hours/ECTS credits: 7,5

Entity: Universidad de Maribor

Faculty, institute or centre: Chemistry

Subject language: English

Type of teaching: In person theory

End date: 30/06/2012

Type of hours/ ECTS credits: Hours

Type of entity: University

12 Type of teaching: Official teaching

Name of the course: Experimentación en Ingeniería Química III

Type of programme: Engineering

Type of subject: Core

University degree: Ingeniero Químico

Frequency of the activity: 3

Start date: 01/02/2005

End date: 30/06/2012

Hours/ECTS credits: 60

Entity: Universidad de Salamanca

Faculty, institute or centre: Facultad de Ciencias Químicas

Department: Chemical Engineering

Subject language: Spanish

Type of teaching: Laboratory work

End date: 30/06/2012

Type of hours/ ECTS credits: Hours

Type of entity: University

13 Type of teaching: Official teaching

Name of the course: Experimentación en Ingeniería Química II

Type of programme: Engineering

Type of subject: Core

University degree: Ingeniero Químico

Frequency of the activity: 4

Type of teaching: Laboratory work

**Start date:** 01/02/2005**End date:** 30/06/2012**Hours/ECTS credits:** 60**Entity:** Universidad de Salamanca**Faculty, institute or centre:** Facultad de Ciencias Químicas**Subject language:** Spanish**End date:** 30/06/2012**Type of hours/ ECTS credits:** Hours**Type of entity:** University**14 Type of teaching:** Official teaching**Name of the course:** Chemical Process Systems Design**Type of programme:** Bachelor's degree**Type of subject:** Core**University degree:** Bachelor in chemical Engineering**Frequency of the activity:** 2**Start date:** 23/08/2009**End date:** 20/12/2011**Hours/ECTS credits:** 40**Entity:** Carnegie Mellon University**Faculty, institute or centre:** Carnegie Institute of technology**Subject language:** English**End date:** 20/12/2011**Type of hours/ ECTS credits:** Hours**Type of entity:** University**15 Type of teaching:** Official teaching**Name of the course:** Fenómenos de Transporte**Type of programme:** Engineering**Type of subject:** Core**University degree:** Ingeniero Químico**Frequency of the activity:** 1**Start date:** 01/02/2006**End date:** 30/06/2006**Hours/ECTS credits:** 30**Entity:** Universidad de Salamanca**Faculty, institute or centre:** Facultad de Ciencias Químicas**Subject language:** Spanish**Type of teaching:** In person theory**End date:** 30/06/2006**Type of hours/ ECTS credits:** Hours**Type of entity:** University**16 Type of teaching:** Official teaching**Name of the course:** Productos y Procesos Biotechnológicos**Type of programme:** Bachelor's degree**University degree:** Licenciado en Biotecnología**Frequency of the activity:** 1**Start date:** 11/02/2013**End date:** 30/06/2013**Hours/ECTS credits:** 17**Entity:** Universidad de Salamanca**Faculty, institute or centre:** Facultad de Ciencias Químicas**Type of teaching:** Laboratory work**Type of hours/ ECTS credits:** Hours**Type of entity:** University

Experience supervising doctoral thesis and/or final year projects

- 1** **Project title:** Planta de obtención de metanol a partir de dióxido de carbono capturado e hidrógeno renovable
Type of project: End of course project
Entity: Universidad de Salamanca **Type of entity:** University
Student: Beatriz Martín Ríos
Obtained qualification: 8.5 Notable (A)
Date of reading: 05/06/2015
- 2** **Project title:** Planta incineradora de residuos urbanos con aprovechamiento energético
Type of project: End of course project
Entity: Universidad de Salamanca **Type of entity:** University
Student: Leticia Pérez Baos
Obtained qualification: 8.5 Notable (A)
Date of reading: 03/06/2015
- 3** **Project title:** Planta de producción de metanol a partir de glicerina en un proceso integrado de biodiesel
Entity: Universidad de Salamanca **Type of entity:** University
Student: Tamara González Montero
Obtained qualification: 8 Notable (B+)
Date of reading: 29/05/2015
- 4** **Project title:** PLANTA DE OBTENCIÓN DE BIODIESEL: OPTIMIZACIÓN ECONÓMICA DEL PROCESO DE PURIFICACIÓN DE GLICERINA MEDIANTE INTERCAMBIO IÓNICO
Type of project: Minor thesis
Co-director of thesis: Jorge Cuéllar Antequera
Entity: Universidad de Salamanca **Type of entity:** University
Student: Rocía Huerga Morán
Obtained qualification: 9.5 (Sobresaliente (A))
Date of reading: 12/05/2015
- 5** **Project title:** Diseño de una planta termoeléctrica de ciclo combinado alimentado con biogás obtenido a partir de deyecciones ganaderas
Type of project: End of course project
Entity: Universidad de Salamanca **Type of entity:** University
Student: Erick Alexander León Hennenberg
Obtained qualification: 9.5 Sobresaliente (A)
Date of reading: 11/02/2015
- 6** **Project title:** Integración energética de los subproductos en una planta de fundición de grasas
Type of project: End of course project
Co-director of thesis: Mariano Martín Martín
Entity: Universidad de Salamanca **Type of entity:** University
Student: Laura Vivas Frutos
Obtained qualification: 8.0 Notable (B+)
Date of reading: 09/02/2015



- 7** **Project title:** Planta de Producción de 2,5 Dimetilfurano a partir de fructosa
Type of project: End of course project
Co-director of thesis: Mariano Martín Martín
Entity: Universidad de Salamanca **Type of entity:** University
Student: Blanca López Sánchez
Obtained qualification: 8.5 Notable (B+)
Date of reading: 09/02/2015
- 8** **Project title:** Planta de producción de Epiclorhidrina a partir de Glicerol.
Type of project: End of course project
Co-director of thesis: Mariano Martín Martín
Entity: Universidad de Salamanca **Type of entity:** University
Student: Alberto Almena Ruíz
Obtained qualification: 9.0 Sobresaliente (A)
Date of reading: 04/02/2015
- 9** **Project title:** Planta de producción de biobutanol con recuperación de solventes mediante pervaporación
Type of project: End of course project
Co-director of thesis: Mariano Martín Martín
Entity: Universidad de Salamanca **Type of entity:** University
Student: Santiago Malmierca
Obtained qualification: 5.0 Aprobado (C)
Date of reading: 09/10/2014
- 10** **Project title:** Proceso integrado para la producción de vainillina a partir de lignina
Type of project: End of course project
Co-director of thesis: Mariano Martín Martín
Entity: Universidad de Salamanca **Type of entity:** University
Student: Tomás Ordad
Obtained qualification: 8.5 (Notable) (B+)
Date of reading: 08/10/2014
- 11** **Project title:** Planta termosolar con enfriamiento seco
Type of project: End of course project
Co-director of thesis: Mariano Martín Martín
Entity: Universidad de Salamanca **Type of entity:** University
Student: Sandra Velayos Velayos
Obtained qualification: 8.0 Notable (B+)
Date of reading: 07/10/2014
- 12** **Project title:** Planta de producción de ceras por gasificación de residuos forestales y materiales lignocelulósicos
Type of project: End of course project
Co-director of thesis: Mariano Martín Martín
Entity: Universidad de Salamanca **Type of entity:** University
Student: Patricia Muñoz Gago
Obtained qualification: 8.5 (Notable) (B+)
Date of reading: 10/06/2014
- 13** **Project title:** Obtención de metanol a partir de dióxido de carbono mediante energía solar.
Type of project: End of course project
Co-director of thesis: Mariano Martín Martín



Entity: Universidad de Salamanca
Student: Alberto Calvo Vera
Obtained qualification: 6.0 Aprobado (C)
Date of reading: 09/06/2014

Type of entity: University

14 Project title: Planta de producción de 1-3 Dihidroxiacetona a partir de glicerina

Type of project: End of course project

Entity: Universidad de Salamanca

Type of entity: University

Student: Sandra Mateos Rodríguez

Obtained qualification: 7.0 Notable (B)

Date of reading: 07/02/2014

15 Project title: Obtención de fibra de carbono a través de lignina

Type of project: End of course project

Entity: Universidad de Salamanca

Type of entity: University

Student: Carlos Mateos Tapia

Obtained qualification: Sobresaliente 9.0 (A)

Date of reading: 17/10/2013

16 Project title: Planta de producción de disolventes

Type of project: End of course project

Entity: Universidad de Salamanca

Type of entity: University

Student: Miguel Díez Sabín

Obtained qualification: Notable 8.0 (B+)

Date of reading: 17/10/2013

17 Project title: Producción de ácido láctico a partir de materia lignocelulósica.

Type of project: End of course project

Entity: Universidad de Salamanca

Type of entity: University

Student: Martía Cristina Escudero Almaraz

Obtained qualification: 6.0 Aprobado (C)

Date of reading: 14/10/2013

18 Project title: Producción de gas natural sintético a partir de efluentes industriales empleando energía renovable

Type of project: End of course project

Entity: Universidad de Salamanca

Type of entity: University

Student: William Davis Fernández

Obtained qualification: Sobresaliente 9.5 (A)

Date of reading: 03/10/2013

19 Project title: Planta de producción de biopolímeros a partir de glicerol.

Type of project: End of course project

Entity: Universidad de Salamanca

Type of entity: University

Student: Laura Bueno Romo

Obtained qualification: 7.0 Notable (B)

Date of reading: 14/06/2013

20 Project title: Planta desaladora de agua de mar mediante energías renovables

Type of project: End of course project

Entity: Universidad de Salamanca

Type of entity: University

Student: Sandra Romero Díez



Obtained qualification: 8.0 Notable (B+)

Date of reading: 13/06/2013

21 Project title: Planta de producción de silicio para módulos fotovoltaicos

Type of project: End of course project

Entity: Universidad de Salamanca

Type of entity: University

Student: Marta Vidal Otero

Obtained qualification: 8.5 Notable (B+)

Date of reading: 04/06/2013

22 Project title: Planta de producción de DME.

Type of project: End of course project

Entity: Universidad de Salamanca

Type of entity: University

Student: Estela Peral Elena

Obtained qualification: 8.0 Notable (B)

Date of reading: 03/06/2013

23 Project title: Diseño de una central térmica con captura de CO2.

Type of project: End of course project

Entity: Universidad de Salamanca

Type of entity: University

Student: Mónica Martín Rodríguez

Obtained qualification: 9.0 Sobresaliente (A)

Date of reading: 29/05/2013

24 Project title: Planta de producción de energía por Concentración de energía Solar.

Type of project: End of course project

Entity: Universidad de Salamanca

Type of entity: University

Student: Lidia Martín Delgado

Obtained qualification: 7.5 Notable (B)

Date of reading: 02/2013

25 Project title: Producción y uso de hidrógeno a partir de energía solar

Type of project: End of course project

Entity: Universidad de Salamanca

Type of entity: University

Student: Laura Sáez García

Obtained qualification: Sobresaliente 9.0 out of 10 (A)

Date of reading: 25/10/2012

26 Project title: Planta de producción de leche en polvo

Type of project: End of course project

Entity: Universidad de Salamanca

Type of entity: University

Student: Beatriz Muñoz González

Obtained qualification: Notable 7.0 out of 10 (B)

Date of reading: 08/06/2012

27 Project title: Obtención de hidrógeno a partir de materiales lignocelulósicos

Type of project: End of course project

Entity: Universidad de Salamanca

Type of entity: University

Student: Héctor Riesco Malho

Obtained qualification: Notable 8.0 out of 10 (B)

Date of reading: 07/06/2012



28 Project title: Obtención híbrida de combustibles a partir de biomasa y fuentes no renovables

Type of project: End of course project

Entity: Universidad de Salamanca

Type of entity: University

Student: Daniel Sánchez Garbajosa

Obtained qualification: Sobresaliente 9.0 out of 10 (A)

Date of reading: 01/06/2012

29 Project title: Optimization of biodiesel production process using bioethanol

Type of project: Honours degree senior project

Co-director of thesis: Ignacio Grossmann

Entity: Carnegie Mellon University

Student: Kristen Severson

Date of reading: 05/05/2011

Student tutorials

1 Name of the programme: Doctorate

Entity: Universidad de Salamanca

Type of entity: University

Number of tutored students: 1

2 Name of the programme: Mobility programme

Entity: Universidad de Salamanca

Type of entity: University

City of entity: Salamanca, Spain

Number of tutored students: 50

3 Name of the programme: Starting R&D

Entity: Universidad de Salamanca

Type of entity: University

City of entity: Salamanca, Spain

Number of tutored students: 1

Educational or pedagogical publications, books, articles, etc.

1 Mariano Martín Martín. Introduction to Software for Chemical Engineers. *Taylor and Francis*. (United States of America): 2014. Available online at: <<http://www.crcpress.com/product/isbn/9781466599369>>. ISBN 978-1-4665-9936-9

Name of the materials: Introduction to Software for Chemical Engineers

Target group profile: Undergraduates in Chemical Engineering

Date of drafting: 2014

Format: Book

Degree of contribution: Editor or co-editor

Justification of material: Editor and autor of 8 out of 14 chapters C1 Modeling, Simulation, and Optimization in the Chemical Engineering Curriculum Mariano Martín Martín and Ignacio E. Grossmann C2 Modeling, Simulation, and Optimization in the Process and Commodities Industries Iiro Harjunkoski and Mariano Martín Martín C3 Excel for Chemical Engineering Mariano Martín Martín and Luis Martín de Juan C4 MATLAB® for Chemical Engineering Mariano Martín Martín and Luis Martín de Juan C5 PTC® Mathcad for Chemical Engineering Kristen A. Severson, Alberto Martínez Bécáres, and Mariano Martín Martín C8 Modular Process Simulators Rubén Ruiz-Femenía, José A. Caballero Suárez, and Mariano Martín Martín C9 Introduction to gPROMS for Chemical Engineering Carlos Amador Zamarreño, Mariano Martín Martín, and Laura Bueno Romo C11 Use of GAMS for Optimal Process Synthesis and Operation Mariano Martín Martín



- 2** Cheng Cheng; Xian Bin Chua; Benjamin Hauser; Neha Nandakumar; Edward Smongeski; Graham Spicer; Francisco Trespalacios; Pablo García Herreros; Mariano Martín Martín; Ignacio E. Grossmann; Jeffrey Sirola. Conceptual Design of an Aromatics Plant from Shale Gas. pp. 1 - 622. CACHE, 2013. Available online at: <<http://cache.org/super-store/cache-process-design-case-studies#cache-process-design-case-11>>.
Name of the materials: CACHE case studies
Target group profile: Profesores y alumnos grado en Ingeniería Química
Date of drafting: 2013
Format: Manual
Degree of contribution: Author or co-author of entire book
- 3** Matthew Walters; Aislinn McCloskey; Nikunja Kolluri; Rachel Bradley; Kristen Severson; Laura Mckee; Josh Mathews; Courtney Baker; Mariano Martin Martin; Ignacio Grossmann Eper. Conceptual Design of the Supply Chain and Production Facility of Lignocellulosic Bioethanol via Hydrolysis Preliminary design and Economic Analysis. 10, pp. 1 - 542. CACHE, 2011. Available online at: <<http://cache.org/super-store/cache-process-design-case-studies#cache-process-design-case-10>>.
Name of the materials: CACHE Design Case Study/ Vol 10
Target group profile: Profesores y alumnos grado en Ingeniería Química
Date of drafting: 30/05/2011
Format: Manual
- 4** Tadeusz Kuparski; TingHsuan Chang; Ke Lun Chua; Ruien Hu; Tony LoPresti; Austin Good; Bryan Friedman; Christopher Edwards; Mariano Martin Martin; Ignacio Grossmann Epper. Conceptual Design of Second Generation Bioethanol Production via Gasification of LignocellulosicBiomass. 9, pp. 1 - 301. CACHE, 2010. Available online at: <<http://cache.org/super-store/cache-process-design-case-studies#cache-process-design-case-9>>.
Name of the materials: CACHE Process Design Case Studies
Target group profile: Profesores y alumnos del grado de Ingeniero Químico
Date of drafting: 30/05/2010
Format: Manual
- 5** Mariano Martin Martin; Jorge Cuellar Antequera; Maria Luisa García Hourcade; Víctor Gutierrez Pérez; Raquel Olivera; Raúl Rodrigo; Ivan José Vicente. Cuadernos de Reactores: 1.-REACTORES QUÍMICOS. pp. 1 - 241. 2002.
Name of the materials: Cuadernos de Reactores
Date of drafting: 07/10/2002
Format: Manual
- 6** Mariano Martin Martin; Jorge Cuellar Antequera. Cuadernos de Reactores: 2.-REACTORES ELECTROQUÍMICOS. pp. 1 - 243. 2002.
Name of the materials: Cuadernos de Reactores
Date of drafting: 07/10/2002
Format: Manual
- 7** Mariano Martin; Aitor Hornes; Luis Miguel Martin; Ruben Sancho; Maria del Carmen Marquez. Web page. 2002.
Name of the materials: Hidrodesalquilación térmica del tolueno (C₇H₈) para obtención de benceno (C₆H₆)
Date of drafting: 30/09/2002
Format: Web



Participation in innovative teaching projects

- 1** **Project title:** Desarrollo e implementación de actividades para captación de estudiantes y promoción del grado en ingeniería química
Type of participation: Collaborator
Time of working relationship: For a limited time
Funding entity: Universidad de Salamanca **Type of entity:** University
Start-End date: 2013 - 2015
- 2** **Project title:** Elaboración de material didáctico para el aprendizaje de la Ingeniería química
Type of participation: Collaborator
Time of working relationship: For a limited time
Funding entity: Junta de Castilla y León **Type of entity:** Gobierno
Start-End date: 01/10/2000 - 30/09/2002 **Duration:** 2 years

Participation in conferences with talks focused on teacher training

- 1** **Name of the event:** Symposium Teaching Process Simulation
Type of event: Conference
City of event: MADRID, Bahrain
Date of presentation: 05/10/2015
Organising entity: chemcad **Type of entity:** Business
Start date: 05/10/2015 **End date:** 05/10/2015
Number of hours: 10 hours
Simulación de procesos con CHEMCAD: Desde los inicios en el aula a la simulación de biorefinerías integradas.
- 2** **Name of the event:** PASI
Type of event: Workshop
City of event: Rio de Janeiro, Brazil
Organising entity: CMU, NSF, Wisconsin Madison
Start date: 19/07/2011 **End date:** 29/07/2011
Number of hours: 80 hours
- 3** **Name of the event:** VII Congreso Nacional de Ingeniería Química
Type of event: Conference
City of event: Salamanca, Spain
Organising entity: Universidad de Salamanca **Type of entity:** University
Start date: 14/10/2004 **End date:** 17/10/2004
Number of hours: 30 hours
- 4** **Name of the event:** Reactores multifásicos
Type of event: Workshop
Type of participation: Attendant/Asistente
Target group profile: PhD Students, Young faculty / Estudiantes de doctorado y jóvenes doctores
City of event: Salamanca, Spain
Organising entity: Universidad de Salamanca **Type of entity:** University
Start date: 15/07/2002 **End date:** 19/07/2002
Number of hours: 30 hours

**Other activities/achievements not included above**

- 1 **Description of the activity:** Tribunal Grado de Salamanca
Organising entity: Universidad de Salamanca **Type of entity:** University
End date: 2011
- 2 **Description of the activity:** Tribunal de proyectos fin de carrera
Organising entity: Universidad de Salamanca **Type of entity:** University
- 3 **Description of the activity:** Tribunal trabajo fin de máster
Organising entity: Universidad de Salamanca **Type of entity:** University

Most relevant contributions of your teaching CV

- 1 **Description:** Final Lecture Chemical Engineers
Organising entity: Undergraduates Prom
End date: 16/05/2015
- 2 **Description:** Final lecture Chemical Engineers
City of activity: Salamanca,
Organising entity: Undergraduates Prom. Facultad de Ciencias Químicas
End date: 04/05/2013
- 3 **Description:** Top three professor in chemical engineering
Organising entity: Class of 2012 & 2014 Chemical Engineering Univ. Salamanca
End date: 05/05/2012
- 4 **Description:** Highly positive evaluation
Organising entity: Carnegie Mellon University **Type of entity:** University
End date: 18/10/2010

Healthcare experience**Other activities/achievements not included above**

- 1 **Other relevant activities:** Quality coordinator Master in Chemical Engineering
Entity where project took place: Universidad de Salamanca **Type of entity:** University
End date: 30/09/2014 **Start date:** 05/07/2011
- 2 **Other relevant activities:** Head of the Master Studies in Chemical Engineering
Entity where project took place: University of Salamanca **Type of entity:** University
Start date: 01/10/2014



- 3 Other relevant activities:** Mobility coordinator (Coordinador de movilidad)
Entity where project took place: Universidad de Salamanca **Type of entity:** University
Start date: 23/01/2012

Scientific and technological experience

Research and development groups/teams

Name of the group: Grupo de excelencia
Aims of the group: Transport phenomena studies
Type of collaboration: Co-authorship of projects and their development
Affiliation entity: Universidad de Salamanca **Type of entity:** University
Start date: 01/02/2011 **Duration:** 10 months

Scientific or technological activities

R&D projects funded through competitive calls of public or private entities.

- 1 Name of the project:** Multiobjective Optimization Strategies for the Design of Sustainable Biofuel Processes
Entity where project took place: Carnegie Mellon University
Name principal investigator (PI, Co-PI....): Ignacio Grossmann
Start-End date: 2010 - 2014
Total amount: 343.285
- 2 Name of the project:** Development of a technology to produce microcapsules, based on the formation of drops from viscous non-Newtonian liquids sprayed through fan-jet nozzles, to use in cancer treatment
Entity where project took place: Universidad de Salamanca **Type of entity:** University
City of entity: Salamanca, Spain
Name principal investigator (PI, Co-PI....): Eva M Martín del Valle
Nº of researchers: 9
Start-End date: 2011 - 2013
Total amount: 1.500.000
- 3 Name of the project:** Purificación de proteínas mediante interacciones bioespecíficas en películas ultrafinas tipo langmuir-blodgett
Entity where project took place: Universidad de Salamanca **Type of entity:** University
City of entity: Salamanca, Castile and León, Spain
Nº of researchers: 3
Start-End date: 01/01/2012 - 31/12/2012
Total amount: 14.400
- 4 Name of the project:** Optimization of biofuel production processes
Entity where project took place: Carnegie Mellon University **Type of entity:** University



City of entity: Pittsburgh, United States of America
Name principal investigator (PI, Co-PI....): Mariano Martin
Nº of researchers: 2
Start-End date: 01/05/2009 - 31/01/2011

- 5** **Name of the project:** Technical understanding of highly complicated and complex three phase reactor systems
Entity where project took place: Procter and Gamble
City of entity: Newcastle Upon Tyne, Northumberland and Tyne and Wear, United Kingdom
Nº of researchers: 4
Start-End date: 01/02/2008 - 28/02/2008

- 6** **Name of the project:** Procesos de transporte gas-líquido: efecto de la viscosidad y de la coalescencia en el escalado de equipos
Entity where project took place: Universidad de Salamanca **Type of entity:** University
City of entity: Salamanca, Castile and León, Spain
Nº of researchers: 5
Start-End date: 01/01/2006 - 31/01/2008

- 7** **Name of the project:** Caracterización y mejora de los procesos de transporte en sistemas de contacto gas-líquido
Entity where project took place: Universidad de Salamanca **Type of entity:** University
City of entity: Salamanca, Castile and León, Spain
Nº of researchers: 5
Start-End date: 01/10/2003 - 31/12/2005

- 8** **Name of the project:** Desarrollo de un sistema inteligente de liberación dual (termoterapia y quimioterapia) para aplicación en tumores cancerosos via in situ
Entity where project took place: Universidad de Salamanca **Type of entity:** University
City of entity: Salamanca, Castile and León, Spain
Nº of researchers: 6
Start date: 01/01/2013
Total amount: 107.000

R&D non-competitive contracts, agreements or projects with public or private entities

Name of the project: Technical understanding of highly complicated and complex three phase reactor systems
Degree of contribution: Coordinator of total project, network or consortium
Name principal investigator (PI, Co-PI....): Mariano Martín
Nº of researchers: 5
Start date: 01/02/2008 **Duration:** 1 year - 1 month



Results

Industrial and intellectual property

Title registered industrial property: Basic model for the washing process

Inventors/authors/obtainers: Mariano Martín Martín; Zayeed Alam; Elizabeth Alam; David York

Entity holder of rights: Procter and Gamble

Country of inscription: United Kingdom

Scientific and technological activities

Scientific production

H index: 16

Publications, scientific and technical documents

- 1** William Davis Fernández; Mariano Martín Martín. Optimal year-round operation for methane production from CO₂ and Water using wind energy. Energy. 69, pp. 497 - 505. Elsevier, 2014. ISSN 0360-5442
Type of production: Article **Format:** Journal
Impact source: SCOPUS **Category:** Science Edition - THERMODYNAMICS
Impact index in year of publication: 3.487 **Journal in the top 25%:** Yes
Position of publication: 4 **No. of journals in the cat.:** 52
Relevant publication: Yes
- 2** Mariano Martín Martín; Ignacio E. Grossmann. Optimal engineered algae composition for the integrated simultaneous production of bioethanol and biodiesel. AIChE J.59 - 8, pp. 2872 - 2883. AIChE, 2013. ISSN 0001-1541
Type of production: Article **Format:** Journal
Position of signature: 1 **Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee
Impact source: SCOPUS **Category:** Chemical Engineering (miscellaneous)
Impact index in year of publication: 2.49 **Journal in the top 25%:** Yes
Position of publication: 24 **No. of journals in the cat.:** 187
Citations: 16
Relevant results: Nominado al premio ENI 2014.
Relevant publication: Yes
- 3** Mariano Martín Martín; Francisco J. Montes Sánchez; Miguel A. Galán Serrano. Bubbling process in stirred tank reactors II: Agitator effect on the mass transfer rates. Chemical Engineering Science. 63, pp. 3223 - 3234. Elsevier, 2008. ISSN 0009-2509
Type of production: Article **Format:** Journal
Position of signature: 1

Impact source: SCOPUS

Impact index in year of publication: 1.88

Position of publication: 7

Source of citations: SCOPUS

Relevant publication: Yes

Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Category: Chemical Engineering (miscellaneous)

Journal in the top 25%: Yes

No. of journals in the cat.: 187

Citations: 24

- 4** Ramkumar Karuppiah; Andreas Peschel; Ignacio Grossmann; Mariano Martín Martín; Wade Martinson; Luca Zullo. Energy Optimization for the Design of corn-based ethanol plants. AIChE Journal. 56 - 6, pp. 1499 - 1525. Wiley InterScience, 2008. ISSN 0001-1541

Type of production: Article

Position of signature: 4

Impact source: SCOPUS

Impact index in year of publication: 1.88

Position of publication: 8

Source of citations: SCOPUS

Relevant publication: Yes

Format: Journal

Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Category: Chemical Engineering (miscellaneous)

Journal in the top 25%: Yes

No. of journals in the cat.: 187

Citations: 83

- 5** Mariano Martín Martín; Francisco J. Montes Sánchez; Miguel A. Galán Serrano. Bubble coalescence at sieve plates: II. Effect of coalescence on mass transfer. Superficial Area versus bubble oscillations. Chemical Engineering Science. 62, pp. 1741 - 1752. Elsevier, 2007. ISSN 0009-2509

Type of production: Article

Position of signature: 1

Impact source: SCOPUS

Impact index in year of publication: 1.78

Position of publication: 9

Source of citations: SCOPUS

Relevant publication: Yes

Format: Journal

Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Category: Chemical Engineering (miscellaneous)

Journal in the top 25%: Yes

No. of journals in the cat.: 187

Citations: 24

- 6** Mariano Martín Martín; William Davis Fernández. Optimal integration of the year-round operation for methane production from CO₂ and water using wind, solar and biomass. Comp. Aid. Chem. Eng., 35, pp. 2261 - 2266. Elsevier, 2015. ISBN 978-0-444-63429-0

Type of production: Chapters of books

Position of signature: 1

Format: Book

Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

- 7** Mariano Martín Martín; Ignacio Grossmann. Optimal production of furfural and DMF from algae and switchgrass. Comp. Aid. Chem. Eng., 35, pp. 1043 - 1049. 2015. ISBN 978-0-444-63429-0

Type of production: Chapters of books

Position of signature: 1

Format: Book

Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

- 8** Linlin Yang; Mariano Martín Martín; Ignacio Grossmann. Optimization Models for Process Water Networks and their Application to Biofuel Processes. Sustainability of Products, Processes and Supply Chains: Theory and Applications. pp. 3 - 32. 2015. ISBN 9780444634917

Type of production: Chapters of books

Format: Book

**Position of signature: 2**

- 9** Mariano Martín Martín; Ignacio E. Grossmann. Process systems engineering approach to biofuel plant design. Biomass and Biofuels: Advanced Biorefineries for Sustainable Production and Distribution. 2015. Available online at: <<http://www.crcpress.com/product/isbn/9781466595316>>. ISBN 978-1-4665-9531-6
Type of production: Chapters of books
Position of signature: 1
Format: Book
Degree of contribution: Author or co-author of chapter in book
- 10** Optimal annual operation of the dry cooling system of a Concentrated Solar Energy Plant in the South of Spain. Energy. 84, pp. 774 - 782. Elsevier, 2015. ISSN 0360-5442
Type of production: Article
Impact source: SCOPUS
Impact index in year of publication: 3.487
Position of publication: 4
Format: Journal
Category: Science Edition - THERMODYNAMICS
Journal in the top 25%: Yes
No. of journals in the cat.: 52
- 11** Marta Vidal Otero; Mariano Martín Martín. Optimal coupling of biomass and solar energy for the production of electricity and chemicals. Computers & Chemical Engineering. 72, pp. 273 - 283. Elsevier, 2015. Available online at: <DOI:10.1016/j.compchemeng.2013.11.006>. ISSN 0098-1354
Type of production: Article
Position of signature: 2
Impact source: SCOPUS
Impact index in year of publication: 2.091
Position of publication: 12
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Category: Science Edition - ENGINEERING, CHEMICAL
Journal in the top 25%: Yes
No. of journals in the cat.: 187
- 12** Optimal production of biodiesel (FAEE) and bioethanol from switchgrass. Ind Eng. Chem Res. 54, pp. 4337 - 4346. A.C.S., 2015. ISSN 0888-5885
Type of production: Article
Impact source: SCOPUS
Impact index in year of publication: 2.235
Position of publication: 30
Format: Journal
Category: Chemical Engineering (miscellaneous)
Journal in the top 25%: Yes
No. of journals in the cat.: 133
- 13** Laura Bueno Romo; Caudío Andrés Toro Aedo; Mariano Martín Martín. Techno-economic evaluation of the production of added value polymers from glycerol. Chem. Eng. Res. Des. 93, pp. 432 - 440. Elsevier, 2015. ISSN 0263-8762
Type of production: Article
Position of signature: 3
Impact source: SCOPUS
Impact index in year of publication: 2.281
Position of publication: 37
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Category: Chemical Engineering
Journal in the top 25%: Yes
No. of journals in the cat.: 133
- 14** Mariano Martín Martín; Alberto Martínez Bécare. Addressing Uncertainty in formulated products and process design. Industrial engineering Chemistry Research. 10.1021/acs.iecr.5b0, ACS, 2015. ISSN 0888-5885
Type of production: Articles in the press
Position of signature: 1
Impact source: SCOPUS
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Category: Chemical Engineering (miscellaneous)

**Impact index in year of publication:****Position of publication:** 30**Journal in the top 25%:** Yes**No. of journals in the cat.:** 133

- 15** Mariano Martín Martín; Ignacio E. Grossmann. Integrating Glycerol to Methanol vs. Glycerol to Ethanol within the Production of Biodiesel from Algae. 24th ESCAPE. Comp. Aided. Chem. Eng. 33, pp. 85 - 90. Elsevier, 2014. ISBN 978-0-444-63456-6
Collection: Comp. Aided. Chem. Eng
Type of production: Chapters of books **Format:** Book
Degree of contribution: Author or co-author of chapter in book
- 16** Lidija Cucek; Mariano Martín Martín; Ignacio E. Grossmann; Zdravko Kravanja. Large-Scale Biorefinery Supply Network – Case Study of the European Union. 24th ESCAPE. Comp. Aided. Chem. Eng. 33, pp. 319 - 324. Elsevier, 2014. ISBN 978-0-444-63456-6
Collection: Comp. Aided. Chem. Eng
Type of production: Chapters of books **Format:** Book
Degree of contribution: Author or co-author of chapter in book
- 17** Marta Vidal; Lidia Martín; Mariano Martín Martín. Optimal Integration of a Concentrated Solar Plant Facility with a Biomass Based Polygeneration System. 24th ESCAPE. Comp. Aided. Chem. Eng. 33, pp. 1603 - 1608. Elsevier, 2014. ISBN 978-0-444-63456-6
Collection: Comp. Aided. Chem. Eng
Type of production: Chapters of books **Format:** Book
Degree of contribution: Author or co-author of chapter in book
- 18** Laura Bueno Romo; Claudio Toro; Mariano Martín Martín. Scale-up and Techno-economical Study for the Production of Polyesters from Glycerol. 24th ESCAPE. Comp. Aided. Chem. Eng. 33, pp. 43 - 48. Elsevier, 2014. ISBN 978-0-444-63456-6
Collection: Comp. Aided. Chem. Eng
Type of production: Chapters of books **Format:** Book
Degree of contribution: Author or co-author of chapter in book
- 19** Verónica de la Cruz; Sara Hernández; Mariano Martín Martín; Ignacio Grossmann. Self-sufficient Integrated Algae Based Facility for Diesel Substitutes: FAEE and Glycerol Ethers. PROCEEDINGS OF THE 8th INTERNATIONAL CONFERENCE ON FOUNDATIONS OF COMPUTERAIDED PROCESS DESIGN. 34, pp. 495 - 500. (United States of America): Elsevier_CACHE, 2014. ISBN 978-0-444-63433-7
Type of production: Chapters of books **Format:** Book
Position of signature: 3 **Degree of contribution:** Author or co-author of chapter in book
- 20** Mariano Martín Martín. Carbon Capture, How and then What?. J Adv Chem Eng. pp. e102. Omics, 2014. ISSN 2090-455X
Type of production: Article **Format:** Journal
- 21** Verónica de la Cruz; Sara Hernández; Mariano Martín Martín; Ignacio E. Grossmann. Integrated synthesis of Biodiesel, Bioethanol, lbutene and glycerol ethers from algae. Industrial Eng. Chem. Res. 53 - 28, pp. 11371 - 11383. A.C.S., 2014. ISSN 0888-5885
Type of production: Article **Format:** Journal
Impact source: SCOPUS **Category:** Chemical Engineering (miscellaneous)
Impact index in year of publication: 2.235 **Journal in the top 25%:** Yes
Position of publication: 30 **No. of journals in the cat.:** 133

- 22** Lidija Cucek; Mariano Martín Martín; Ignacio E. Grossmann; Zdravko Kravanja. Multiperiod Synthesis of Integrated Biomass and Bioenergy Supply Network. Computers Chemical Engineering. 66, pp. 57 - 70. Elsevier, 2014. ISSN 0098-1354
- Type of production:** Article
Position of signature: 2
- Impact source:** SCOPUS
Impact index in year of publication: 2.07
Position of publication: 12
- Format:** Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Category: Chemical Engineering (miscellaneous)
Journal in the top 25%: Yes
No. of journals in the cat.: 187
- 23** Lidija Cucek; Mariano Martín Martín; Ignacio E. Grossmann; Zdravko Kravanja. Multiperiod Synthesis of Integrated Biomass and Bioenergy Supply Network. Computers Chemical Engineering. 66, pp. 57 - 70. Elsevier, 2014. ISSN 0098-1354
- Type of production:** Article
Position of signature: 2
- Impact source:** SCOPUS
Impact index in year of publication: 2.091
Position of publication: 20
- Format:** Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Category: Computer Science
Journal in the top 25%: Yes
No. of journals in the cat.: 97
- 24** Mariano Martín Martín. On the challenges of the use and integration of renewable energy sources. Energ. Res. J.5 - 1, pp. 1 - 3. Science Publications, 2014. ISSN 1949-0151
- Type of production:** Article
Format: Journal
- 25** Mariano Martín Martín; Ignacio Grossmann. Optimal Simultaneous Production of Hydrogen and Liquid Fuels from Glycerol: Integrating the Use of Biodiesel Byproducts. Industrial Engineering Chemistry Research. 10.1021/ie500067d, ACS, 2014. ISSN 0888-5885
- Type of production:** Article
Position of signature: 1
- Impact source:** SCOPUS
Impact index in year of publication: 2.206
Position of publication: 19
- Format:** Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Category: Chemical Engineering (miscellaneous)
Journal in the top 25%: Yes
No. of journals in the cat.: 187
- 26** Mariano Martín Martín; Ignacio E. Grossmann. Optimal Simultaneous Production of Hydrogen and Liquid Fuels from Glycerol: Integrating the Use of Biodiesel Byproducts. Ind. Eng. Chem. Res. 53 - 18, pp. 7730 - 7745. A.C.S., 2014. ISSN 0888-5885
- Type of production:** Article
Impact source: SCOPUS
Impact index in year of publication: 2.24
Position of publication: 30
- Format:** Journal
Category: Chemical Engineering (miscellaneous)
Journal in the top 25%: Yes
No. of journals in the cat.: 133
- 27** Mariano Martín Martín; Ignacio E. Grossmann. Optimal simultaneous enhanced production of biodiesel and bioethanol from algae oil via Glycerol fermentation. App. Energy. 135, pp. 108 - 114. Elsevier, 2014. ISSN 0306-2619
- Type of production:** Article
Impact source: SCOPUS
Impact index in year of publication: 5.261
Position of publication: 1
- Format:** Journal
Category: Energy (miscellaneous)
Journal in the top 25%: Yes
No. of journals in the cat.: 110



- 28** William Davis Fernández; Mariano Martín Martín. Optimal year-round operation for methane production from CO₂ and Water using wind and/or Solar energy. J. Cleaner Production. 80, pp. 252 - 261. Elsevier, 2014. ISSN 0959-6526
- Type of production:** Article
Impact source: SCOPUS
Impact index in year of publication: 3.398
Position of publication: 15
- Format:** Journal
Category: Renewable Energy, Sustainability and the Environment
Journal in the top 25%: Yes
No. of journals in the cat.: 62
- 29** William Davis Fernández; Mariano Martín Martín. Optimal year-round operation for methane production from CO₂ and Water using wind and/or Solar energy. J. Cleaner production. 80, pp. 252 - 261. Elsevier, 2014. ISSN 0959-6526
- Type of production:** Article
Impact source: SCOPUS
Impact index in year of publication: 3.398
Position of publication: 15
- Format:** Journal
Category: Renewable Energy, Sustainability and the Environment.)
Journal in the top 25%: Yes
No. of journals in the cat.: 62
- 30** William Davis Fernández; Mariano Martín Martín. Optimal year-round operation for methane production from CO₂ and Water using wind energy. Energy. 69, pp. 497 - 505. 2014. Available online at: <10.1016/j.energy.2014.03.043>. ISSN 0360-5442
- Type of production:** Article
Position of signature: 2
Impact source: ISI
Impact index in year of publication: 3.651
Position of publication: 5
- Format:** Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Category: Energy (miscellaneous)
Journal in the top 25%: Yes
No. of journals in the cat.: 189
- 31** Mariano Martín Martín; Ignacio E. Grossmann. Optimization simultaneous production of ethanol and ibutene from Switchgrass. J. Biomass Bioenergy. 61, pp. 93 - 103. Elsevier, 2014. Available online at: <10.1016/j.biombioe.2013.11.022>. ISSN 0961-9534
- Type of production:** Article
Position of signature: 1
Impact source: SCOPUS
Impact index in year of publication: 2.975
Position of publication: 8
- Format:** Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Category: Energy (miscellaneous)
Journal in the top 25%: Yes
No. of journals in the cat.: 189
- 32** Marta Vidal Otero; Mariano Martín Martín. Planta de producción de silicio para módulos fotovoltaicos. Era Solar. 180, pp. 24 - 35. S.A.P.T. PUBLICACIONES TÉCNICAS, S.L., 2014. ISSN 0212-4157
- Type of production:** Article
Format: Journal
- 33** Marta Vidal Otero; Mariano Martín Martín. Planta de producción de silicio para módulos fotovoltaicos. ERA SOLAR. 180, pp. 24 - 35. SAPT Publicaciones Técnicas S.L., 2014. Available online at: <http://erasolar.es/EDICION%20DIGITAL/ERASOLAR-DIGITAL-180/PROMO/DEMO-ERASOLAR-180.html#p=10>. ISSN 0212-4157
- Type of production:** Article
Position of signature: 2
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

- 34** Ignacio E. Grossmann; Mariano Martín Martín; Linlin Yang. Review of Optimization Models for Integrated Process Water Networks and their Application to Biofuel Processes. Current opinion in Chemical Engineering. 5, pp. 101 - 109. Elsevier, 2014. Available online at: <<http://dx.doi.org/10.1016/j.coche.2014.07.003>>. ISSN 2211-3398
Type of production: Article
Position of signature: 2
Impact source: SCOPUS
Impact index in year of publication: 2.167
Position of publication: 11
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Category: Energy (miscellaneous)
Journal in the top 25%: Yes
No. of journals in the cat.: 189
- 35** Ignacio E. Grossmann; Mariano Martín Martín; Linlin Yang. Review of Optimization Models for Integrated Process Water Networks and their Application to Biofuel Processes. Current Opinion on Chemical Engineering. 5, pp. 101 - 109. Elsevier, 2014. ISSN 2211-3398
Type of production: Article
Impact source: SCOPUS
Impact index in year of publication: 2.167
Position of publication: 11
Format: Journal
Category: Energy (miscellaneous)
Journal in the top 25%: Yes
No. of journals in the cat.: 189
- 36** Mariano Martín Martín; Ignacio E. Grossmann. Simultaneous dynamic optimization and heat integration for the co-production of diesel substitutes: Biodiesel (FAME & FAEE) and glycerol ethers from algae oil. Ind. Eng. Chem. Res. 53, pp. 11371 - 11383. A.C.S., 2014. ISSN 0888-5885
Type of production: Article
Impact source: SCOPUS
Impact index in year of publication: 2.235
Position of publication: 33
Format: Journal
Category: Chemical Engineering (miscellaneous)
Journal in the top 25%: Yes
No. of journals in the cat.: 133
- 37** Mariano Martín Martín; Ignacio Grossmann. Simultaneous dynamic optimization and heat integration for the co-production of diesel substitutes: Biodiesel (FAME & FAEE) and glycerol ethers from algae oil. Ind. Eng. Chem. Res. 53, pp. 11371 - 11383. ACS, 2014. ISSN 0888-5885
Type of production: Article
Impact source: SCOPUS
Impact index in year of publication: 2.24
Position of publication: 30
Format: Journal
Category: Chemical Engineering (miscellaneous)
Journal in the top 25%: Yes
No. of journals in the cat.: 133
- 38** Verónica de la Cruz; Sara Hernández; Mariano Martín Martín; Ignacio E. Grossmann. Integrated synthesis of Biodiesel, Bioethanol, Ibutene and glycerol ethers from algae. Ind. Eng. Chem. Res. 10.1021/ie5022738, ACS, 2014. Available online at: <[10.1021/ie5022738](http://dx.doi.org/10.1021/ie5022738)>. ISSN 0888-5885
Type of production: Articles in the press
Position of signature: 3
Impact source: SCOPUS
Impact index in year of publication: 2.24
Position of publication: 30
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Category: Chemical Engineering (miscellaneous)
Journal in the top 25%: Yes
No. of journals in the cat.: 133
- 39** Mariano Martín Martín; Ignacio E. Grossmann. Optimal simultaneous enhanced production of biodiesel and bioethanol from algae oil via Glycerol fermentation. Applied Energy. 10.1016/j.apenergy.2014.08.054, Elsevier, 2014. Available online at: <[10.1016/j.apenergy.2014.08.054](http://dx.doi.org/10.1016/j.apenergy.2014.08.054)>. ISSN 0306-2619
Type of production: Articles in the press
Format: Journal

**Position of signature:** 1**Impact source:** SCOPUS**Impact index in year of publication:** 5.261**Position of publication:** 1**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee**Category:** Energy (miscellaneous)**Journal in the top 25%:** Yes**No. of journals in the cat.:** 110

- 40** Mariano Martín Martín; Alberto Martínez Bécares. A methodology for simultaneous product and process design in the customer products industry: The case study of the laundry business. 23rd ESCAPE. Computer aided chemical engineering. 32, pp. 715 - 720. Lappeeranta(Finland): Elsevier, 2013. ISBN 978-0-444-63234-0

Collection: Computer aided chemical engineering**Type of production:** Chapters of books**Format:** Book**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

- 41** Lidija Cucek; Mariano Martín Martín; Ignacio E. Grossmann; Zdravko Kravanja. Multiperiod synthesis of a biorefinery's supply network. 23rd ESCAPE. Computer aided chemical engineering. 32, pp. 73 - 78. Elsevier, 2013. ISBN 978-0-444-63234-0

Type of production: Chapters of books**Format:** Book**Position of signature:** 2**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

- 42** Mariano Martín Martín; Alberto Martínez Bécares. A Methodology for simultaneous process and product design in the consumer products industry: The case study of the laundry business. Chem. Eng. Res. Des.91, pp. 795 - 809. Elsevier, 2013. Available online at: <DOI : 10.1016/j.cher>. ISSN 0263-8762

Type of production: Article**Format:** Journal**Position of signature:** 1**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee**Impact source:** SCOPUS**Category:** Science Edition - ENGINEERING, CHEMICAL**Impact index in year of publication:** 1.968**Journal in the top 25%:** Yes**Position of publication:** 37**No. of journals in the cat.:** 133

- 43** Mariano Martín Martín; Ignacio E. Grossmann. ASI: Towards the optimal integrated production of biodiesel with internal recycling of methanol produced from glycerol. Environmental Progress & Sustainable Energy. 32 - 4, pp. 791 - 801. John Wiley and Sons, 2013. Available online at: <DOI 10.1002/ep.11836>. ISSN 1944-7450

Type of production: Article**Format:** Journal**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee**Impact source:** SCOPUS**Category:** Renewable Energy, Sustainability and the Environment**Impact index in year of publication:** 0.865**Journal in the top 25%:** No**Position of publication:** 27**No. of journals in the cat.:** 62**Source of citations:** SCOPUS**Citations:** 2

- 44** Mariano Martín Martín; Ignacio Grossmann. On the systematic synthesis of sustainable biorefineries. Ind. Eng. Chem. Res.52, pp. 3044 - 3064. ACS, 2013. ISSN 0888-5885

Type of production: Article**Format:** Journal**Position of signature:** 1**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee**Impact source:** SCOPUS**Category:** Science Edition - ENGINEERING, CHEMICAL**Impact index in year of publication:** 2.07**Journal in the top 25%:** Yes

Position of publication: 30

Source of citations: SCOPUS

Citations: 0

Source of citations: SCOPUS

Citations: 11

- 45** Kristen Severson; Mariano Martín Martín; Ignacio Grossmann. Optimal integration for biodiesel production using bioethanol. AIChE Journal. 59 - 3, pp. 834 - 844. Wiley, 2013. ISSN 0001-1541

Type of production: Article

Format: Journal

Position of signature: 2

Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Impact source: SCOPUS

Category: Chemical Engineering (miscellaneous)

Impact index in year of publication: 2.03

Journal in the top 25%: Yes

Position of publication: 21

No. of journals in the cat.: 189

Source of citations: SCOPUS

Citations: 2

- 46** Mariano Martín Martín; Ignacio Grossmann. Optimal use of Hybrid feedstock, Switchgrass and Shale gas, for the Simultaneous production of Hydrogen and Liquid Fuels. Energy. 55, pp. 378 - 391. Elsevier, 2013. ISSN 0360-5442

Type of production: Article

Format: Journal

Position of signature: 1

Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Impact source: SCOPUS

Category: Energy (miscellaneous)

Impact index in year of publication: 3.487

Journal in the top 25%: Yes

Position of publication: 5

No. of journals in the cat.: 189

Citations: 8

- 47** Lidia Martín Delgado; Mariano Martín Martín. Optimal year-round operation of a Concentrated Solar Energy Plant in the South of Europe. Applied Thermal Engineering. 59, pp. 627 - 633. Elsevier, 2013. Available online at: <DOI:10.1016/j.applthermaleng.2013.06.031>. ISSN 1359-4311

Type of production: Article

Format: Journal

Position of signature: 2

Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Impact source: SCOPUS

Category: Energy Engineering and Power Technology

Impact index in year of publication: 2.389

Journal in the top 25%: Yes

Position of publication: 12

No. of journals in the cat.: 74

- 48** Cristina Rodríguez Rivero; José Nogareda; Mariano Martín Martín; Eva Martín del Valle; Miguel Galán Serrano. Validation and modeling of a process for microparticle production from non-Newtonian fluids by CFD. Powder technology. DOW, ELSEVIEWER, 2013. Available online at: <doi: 10.1016/j.powtec.2013.05.050>. ISSN 0032-5910

Type of production: Article

Format: Journal

Position of signature: 3

Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Impact source: SCOPUS

Category: Chemical Engineering (miscellaneous)

Impact index in year of publication: 2.08

Journal in the top 25%: Yes

Position of publication: 27

No. of journals in the cat.: 187

- 49** Mariano Martín Martín; Ignacio Grossmann. BIOptPACK: A Library of models for Optimization of Biofuel Production Processes. 22nd ESCAPE. Comp. Aid. Chemical Engineering. 30, pp. 16 - 20. Elsevier, 2012. ISBN 978-0-444-59519-5
Collection: Comp. Aid. Chemical Engineering
Type of production: Chapters of books
Position of signature: 1
Format: Book
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
- 50** Mariano Martín Martín; Ignacio Grossmann. Systematic synthesis of sustainable biorefineries. Integrated Biorefineries: Design, Analysis, and Optimization. pp. 325 - 347. Taylor & Francis, 2012. ISBN 978-1-439-80346-2
Type of production: Chapters of books
Position of signature: 1
Format: Book
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
- 51** Mariano Martín Martín; Ignacio Grossmann. Energy optimization of bioethanol production via hydrolysis of switchgrass. AIChE Journal. 58 - 5, pp. 1538 - 1549. Wiley, 2012. ISSN 0001-1541
Type of production: Article
Position of signature: 1
Impact source: SCOPUS
Impact index in year of publication: 2.03
Position of publication: 21
Source of citations: SCOPUS
Citations: 24
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Category: Chemical Engineering (miscellaneous)
Journal in the top 25%: Yes
No. of journals in the cat.: 189
Relevant results: 5th Top cited paper AICHE 2012 <http://onlinelibrary.wiley.com/journal/10.1002/%28ISSN%291547-5905/homepage/MostCited.html#cited12>
- 52** Mariano Martín Martín; Ignacio Grossmann. Simultaneous Optimization and Heat Integration for Biodiesel Production from Cooking Oil and Algae. Industrial & Engineering Chemistry Research. 51 - 23, pp. 7998 - 8014. ACS, 2012. ISSN 0888-5885
Type of production: Article
Position of signature: 1
Impact source: SCOPUS
Impact index in year of publication: 2.07
Position of publication: 19
Source of citations: SCOPUS
Citations: 27
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Category: Chemical Engineering (miscellaneous)
Journal in the top 25%: Yes
No. of journals in the cat.: 187
- 53** Lidija Cucek; Mariano Martín Martín; Zdravko Kravanja; Ignacio Grossmann. Integration of Process Technologies for the Simultaneous Production of fuel Ethanol and food from Corn grain and stover. 21st ESCAPE. Computer Aided Process Engineering. 29, pp. 2004 - 2008. Elsevier, 2011. ISBN 978-0-444-53569-6
Collection: Comp. Aid. Chemical Engineering
Type of production: Chapters of books
Position of signature: 1
Format: Book
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
- 54** Mariano Martín Martín; Ignacio Grossmann. Process optimization of F-T Diesel production from biomass. 21st ESCAPE. Computer Aid. Chem. Eng. 29, pp. 1698 - 1702. Elsevier, 2011. ISBN 978-0-444-53569-6
Collection: Comp. Aid. Chemical Engineering
Type of production: Chapters of books
Position of signature: 1
Format: Book



Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

- 55** Mariano Martín Martín; Ignacio Grossmann. Energy Optimization of Bioethanol Production via Gasification of Switchgrass. AIChE Journal. 57 - 12, pp. 3408 - 3428. Wiley, 2011. ISSN 0001-1541

Type of production: Article

Position of signature: 1

Impact source: SCOPUS

Impact index in year of publication: 2.03

Position of publication: 23

Source of citations: SCOPUS

Format: Journal

Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Category: Chemical Engineering (miscellaneous)

Journal in the top 25%: Yes

No. of journals in the cat.: 187

Citations: 42

Relevant results: 7th Top cited paper AIChE 2011 <http://onlinelibrary.wiley.com/journal/10.1002/%28ISSN%291547-5905/homepage/MostCited.html#cited12>

- 56** Mariano Martín Martín; Ignacio Grossmann. Energy optimization of hydrogen production from lignocellulosic biomass. Computers and Chemical Engineering. 35, pp. 1798 - 1806. Elsevier, 2011. ISSN 0098-1354

Type of production: Article

Position of signature: 1

Impact source: SCOPUS

Impact index in year of publication: 2.07

Position of publication: 16

Source of citations: SCOPUS

Format: Journal

Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Category: Chemical Engineering (miscellaneous)

Journal in the top 25%: Yes

No. of journals in the cat.: 187

Citations: 25

Relevant results: (21/25 hottest articles July / Sep 2011)

- 57** Lidija Cucek; Mariano Martín Martín; Ignacio Grossmann; Zdravko Kravanja. Energy, water and process technologies integration for the simultaneous production of ethanol and food from the entire corn plant. Computers and Chemical Engineering. 35, pp. 1547 - 1557. Elsevier, 2011. ISSN 0098-1354

Type of production: Article

Position of signature: 2

Impact source: SCOPUS

Impact index in year of publication: 2.07

Position of publication: 16

Source of citations: SCOPUS

Format: Journal

Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Category: Chemical Engineering (miscellaneous)

Journal in the top 25%: Yes

No. of journals in the cat.: 187

Citations: 29

Relevant results: Top cited paper 2010-2012 Comp. Chem. Eng Most Cited Articles, 2010 - 2012 Articles, 2010-2012 Awarded to: L. Cucek, M. Martin, I.E. Grossmann, Z. Kravanja

- 58** Mariano Martín Martín; Elvis Ahmetovic; Ignacio Grossmann. Optimization of Water Consumption in Second Generation bioethanol plants. Ind. Eng. Chem. Res. 50, pp. 3705 - 3721. ACS, 2011. ISSN 0888-5885

Type of production: Article

Position of signature: 1

Impact source: SCOPUS

Impact index in year of publication: 2.07

Position of publication: 20

Source of citations: SCOPUS

Format: Journal

Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Category: Chemical Engineering (miscellaneous)

Journal in the top 25%: Yes

No. of journals in the cat.: 187

Citations: 17

- 59** Mariano Martín Martín; Ignacio Grossmann. Process Optimization of FT-Diesel Production from Lignocellulosic Switchgrass. Industrial & Engineering Chemistry Research. 50 - 23, pp. 13485 - 13499. ACS, 2011. ISSN 0888-5885
- Type of production:** Article
Position of signature: 1
- Impact source:** SCOPUS
- Impact index in year of publication:** 2.07
Position of publication: 29
- Source of citations:** SCOPUS
- Format:** Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Category: Science Edition - ENGINEERING, CHEMICAL
Journal in the top 25%: Yes
Citations: 38
- 60** Mariano Martín Martín; Miguel A. Galán Serrano; Ramón Cerro; Francisco J. Montes Sánchez. Shape oscillating bubbles: hydrodynamics and mass transfer - a review. Bubble Science, Engineering and Technology. 3 - 2, pp. 48 - 63. W. S. Maney & Son Ltd, 2011. ISSN 1758-8960
- Type of production:** Article
Position of signature: 1
- Relevant results:** Invited paper to the new journal
- Format:** Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
- 61** Mariano Martín Martín; Ignacio Grossmann. Superstructure optimization of Lignocellulosic Bioethanol plants. 20th ESCAPE. Computer aided chemical engineering. 28, pp. 943 - 948. Pergamon-Elsevier Science Ltd Colección, 2010. ISBN 978-0-444-53569-6
- Type of production:** Chapters of books
Position of signature: 1
- Format:** Book
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
- 62** Ramkumar Karuppiah; Mariano Martín Martín; Ignacio Grossmann. A simple heuristic for reducing the number of scenarios in two-stage stochastic programming. Computers and Chemical Engineering. 34, pp. 1246 - 1255. Elsevier, 2010. ISSN 0098-1354
- Type of production:** Article
Position of signature: 2
- Impact source:** SCOPUS
Impact index in year of publication: 2.07
Position of publication: 12
- Source of citations:** SCOPUS
- Format:** Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Category: Chemical Engineering (miscellaneous)
Journal in the top 25%: Yes
No. of journals in the cat.: 187
Citations: 14
- 63** Mariano Martín Martín; Francisco J. Montes Sánchez; Miguel A. Galán Serrano. Approximate theoretical solution for the Sherwood number of oscillating bubbles. Chemical Engineering and Processing. 49, pp. 245 - 254. Elsevier, 2010. ISSN 0255-2701
- Type of production:** Article
Position of signature: 1
- Impact source:** SCOPUS
Impact index in year of publication: 1.73
Position of publication: 17
- Source of citations:** SCOPUS
- Format:** Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Category: Chemical Engineering (miscellaneous)
Journal in the top 25%: Yes
No. of journals in the cat.: 187
Citations: 4

- 64** Ignacio Grossmann; Mariano Martín Martín. Energy and Water Optimization in Biofuel Plants. Chinese Journal of Chemical Engineering. 18 - 6, pp. 914 - 922. Elsevier, 2010. ISSN 1004-9541
Type of production: Article
Position of signature: 2
Impact source: SCOPUS
Impact index in year of publication: 0.9
Position of publication: 53
Source of citations: SCOPUS
Relevant results: Invited paper
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Category: Chemical Engineering (miscellaneous)
Journal in the top 25%: No
No. of journals in the cat.: 187
Citations: 32
- 65** Mariano Martín Martín; Francisco J. Montes Sánchez; Miguel A Galán Serrano. Mass transfer rates from bubbles in stirred tanks operating with viscous fluids. Chemical Engineering Science. 65, pp. 3814 - 3824. Elsevier, 2010. ISSN 0009-2509
Type of production: Article
Position of signature: 1
Impact source: SCOPUS
Impact index in year of publication: 2.38
Position of publication: 7
Source of citations: SCOPUS
Relevant results: (17/25 Hottest articles Chemical Engineering Science April June 2010)
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Category: Chemical Engineering (miscellaneous)
Journal in the top 25%: Yes
No. of journals in the cat.: 187
Citations: 9
- 66** Elvis Ahmetovic; Mariano Martín Martín; Ignacio Grossmann. Optimization of Energy and Water Consumption in Corn-Based Ethanol Plants. Ind. Eng. Chem. Res. 49, pp. 7972 - 7982. ACS, 2010. ISSN 0888-5885
Type of production: Article
Position of signature: 2
Impact source: SCOPUS
Impact index in year of publication: 2.07
Position of publication: 16
Source of citations: SCOPUS
Relevant results:
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Category: Chemical Engineering (miscellaneous)
Journal in the top 25%: Yes
No. of journals in the cat.: 187
Citations: 52
- 67** Mariano Martín Martín; Zayeed Alam; Elizabeth Alam; David York. Basic model for the washing process. Procter and Gamble, 2009.
Type of production: Scientific and technical document or report
Position of signature: 1
Relevant results: This is an internal technical report for P&G
Format: Scientific and technical document or report
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
- 68** Mariano Martín Martín; Francisco J. Montes Sánchez; Miguel A. Galán Serrano. Mass transfer from oscillating bubbles in bubble column reactors. Chemical Engineering Journal. 151, pp. 79 - 88. Elsevier, 2009. ISSN 1385-8947
Type of production: Article
Position of signature: 1
Impact source: SCOPUS
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Category: Chemical Engineering (miscellaneous)

**Impact index in year of publication:** 2.82**Position of publication:** 13**Source of citations:** SCOPUS**Journal in the top 25%:** Yes**No. of journals in the cat.:** 187**Citations:** 9

- 69** Mariano Martín Martín; Francisco J. Montes Sánchez; Miguel A Galán Serrano. Physical explanation of the empirical coefficients of gas-liquid mass transfer equations. Chemical Engineering Science. 64, pp. 410 - 425. Elsevier, 2009. ISSN 0009-2509

Type of production: Article**Position of signature:** 1**Impact source:** SCOPUS**Impact index in year of publication:** 2.14**Position of publication:** 8**Source of citations:** SCOPUS**Format:** Journal**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee**Category:** Chemical Engineering (miscellaneous)**Journal in the top 25%:** Yes**No. of journals in the cat.:** 187**Citations:** 8

- 70** Mariano Martín Martín; Francisco J. Montes Sánchez; Miguel A. Galán Serrano. Theoretical modelling of the effect of surface active species on the mass transfer in bubble column reactors. Chemical Engineering Journal. 155, pp. 272 - 284. Elsevier, 2009. ISSN 1385-8947

Type of production: Article**Position of signature:** 1**Impact source:** SCOPUS**Impact index in year of publication:** 2.82**Position of publication:** 13**Source of citations:** SCOPUS**Format:** Journal**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee**Category:** Chemical Engineering (miscellaneous)**Journal in the top 25%:** Yes**Citations:** 13

- 71** Mariano Martín Martín; Francisco J. Montes Sánchez; Miguel A Galán Serrano. Bubbling process in stirred tank reactors I: Agitator effect on bubble size, formation and rising. Chemical Engineering Science. 63, pp. 3212 - 3222. Elsevier, 2008. ISSN 0009-2509

Type of production: Article**Position of signature:** 1**Impact source:** SCOPUS**Impact index in year of publication:** 1.88**Position of publication:** 7**Source of citations:** SCOPUS**Format:** Journal**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee**Category:** Chemical Engineering (miscellaneous)**Journal in the top 25%:** Yes**No. of journals in the cat.:** 187**Citations:** 15**Relevant results:** (19/25 Hottest articles Chemical Engineering Science April June 2008)

- 72** Mariano Martín Martín; Francisco J. Montes Sánchez; Miguel A. Galán Serrano. Influence of Impeller Type on the Bubble Breakup Process in Stirred Tanks. Ind. Eng. Chem. Res. 47, pp. 6251 - 6263. ACS, 2008. ISSN 0888-5885

Type of production: Article**Position of signature:** 1**Impact source:** SCOPUS**Impact index in year of publication:** 1.9**Position of publication:** 12**Source of citations:** SCOPUS**Format:** Journal**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee**Category:** Chemical Engineering (miscellaneous)**Journal in the top 25%:** Yes**No. of journals in the cat.:** 187**Citations:** 14

- 73** Mariano Martín Martín; Francisco J. Montes Sánchez; Miguel A Galán Serrano. Mass Transfer Rates from Oscillating Bubbles in Bubble Columns Operating with viscous fluids. Ind. Eng. Chem. Res.47, pp. 9527 - 9536. ACS, 2008. ISSN 0888-5885
Type of production: Article
Position of signature: 1
Impact source: SCOPUS
Impact index in year of publication: 1.9
Position of publication: 12
Source of citations: SCOPUS
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Category: Chemical Engineering (miscellaneous)
Journal in the top 25%: Yes
No. of journals in the cat.: 187
Citations: 8
- 74** Mariano Martín Martín; Francisco J. Montes Sánchez; Miguel A. Galán Serrano. On the contribution of the scales of mixing to the oxygen transfer in stirred tanks. Chemical Engineering Journal. 145, pp. 232 - 241. Elsevier, 2008. ISSN 1385-8947
Type of production: Article
Position of signature: 1
Impact source: SCOPUS
Impact index in year of publication: 2.81
Position of publication: 13
Source of citations: SCOPUS
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Category: Chemical Engineering (miscellaneous)
No. of journals in the cat.: 187
Citations: 16
- 75** Mariano Martín Martín; Juan M. García; Francisco J. Montes Sánchez; Miguel A. Galán Serrano. On the effect of the orifice configuration on the coalescence of growing bubbles. Chemical Engineering and Processing. 47, pp. 1799 - 1809. Elsevier, 2008. ISSN 0255-2701
Type of production: Article
Position of signature: 1
Impact source: SCOPUS
Impact index in year of publication: 1.52
Position of publication: 23
Source of citations: SCOPUS
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Category: Chemical Engineering (miscellaneous)
Journal in the top 25%: Yes
No. of journals in the cat.: 187
Citations: 15
- 76** Mariano Martín Martín; Francisco J. Montes Sánchez; Miguel A. Galán Serrano. Oxygen transfer from growing bubbles: Effect of the physical properties of the liquid. Chemical Engineering Journal. 128, pp. 21 - 32. Elsevier, 2007. ISSN 1385-8947
Type of production: Article
Position of signature: 1
Impact source: SCOPUS
Impact index in year of publication: 1.71
Position of publication: 13
Source of citations: SCOPUS
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Category: Chemical Engineering (miscellaneous)
Journal in the top 25%: Yes
No. of journals in the cat.: 187
Citations: 10
- 77** Mariano Martín Martín; Francisco J. Montes Sánchez; Miguel A. Galán Serrano. Numerical calculation of shapes and detachment times of bubbles generated from a sieve plate. Chemical Engineering Science. 61, pp. 363 - 369. Elsevier, 2006. ISSN 0009-2509

**Type of production:** Article**Position of signature:** 1**Impact source:** SCOPUS**Impact index in year of publication:** 1.63**Position of publication:** 6**Source of citations:** SCOPUS**Format:** Journal**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee**Category:** Chemical Engineering (miscellaneous)**Journal in the top 25%:** Yes**No. of journals in the cat.:** 187**Citations:** 25

- 78** Mariano Martín Martín; Francisco J. Montes Sánchez; Miguel A. Gálan Serrano. On the influence of the liquid physical properties on bubble volumes and generation times. Chemical Engineering Science. 61, pp. 5196 - 5203. Elsevier, 2006. ISSN 0009-2509

Type of production: Article**Position of signature:** 1**Impact source:** SCOPUS**Impact index in year of publication:** 1.63**Position of publication:** 6**Source of citations:** SCOPUS**Format:** Journal**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee**Category:** Chemical Engineering (miscellaneous)**Journal in the top 25%:** Yes**No. of journals in the cat.:** 187**Citations:** 20

- 79** Mariano Martín Martín; Aitor Hornés Martínez; Luis M Martín Tamames; Rubén Sancho; M. Carmen Márquez. Simulación de la fabricación de benceno a partir de tolueno: Aplicación del simulador comercial CHEMCAD. Ingeniería Química. Octubre - 406, pp. 140 - 150. Alcion, 2003. ISSN 0210-2064

Type of production: Article**Position of signature:** 1**Format:** Journal**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

Relevant results: IT IS A WELL SPREAD PUBLICATION TYPICALLY AVAILABLE IN THE LIBRARIES OF THE CHEMICAL COMPANIES ACROSS SPAIN WHICH NOT ONLY PRESENT RESEARCH PAPERS BUT THE NEWS OF THE SPANISH CHEMICAL INDUSTRY

Works submitted to national or international conferences

- 1** **Title of the work:** Optimal production of furfural and DMF from algae and switchgrass
Name of the conference: ESCAPE/PSE
Type of event: Conference
Type of participation: Speaker
City of event: Copenhagen, Denmark
Date of event: 03/06/2015
Organising entity: DTU- EFCE
With external admission assessment committee: Yes
Type of contribution: Chapters of books
 Mariano Martín Martín; Ignacio Grossmann. 37, pp. 1043 - 1049. 2015. ISBN 978-0-444-63429-0
- 2** **Title of the work:** Optimal integration of the year-round operation for methane production from CO₂ and water using wind, solar and biomass
Name of the conference: ESCAPE/PSE
Type of event: Conference
Type of participation: Speaker
City of event: Copenhagen, Denmark
Date of event: 01/06/2015



Organising entity: DTU- EFCE

Type of contribution: Chapters of books

Mariano Martín Martín; William Davis Fernández. 37, pp. 2261 - 2266. Elsevier, 2015. ISBN 9780444634290

3 Title of the work: . Optimal Simultaneous Production of Biodiesel (FAEE) and Bioethanol from Switchgrass

Name of the conference: AIChE Annual Meeting

Type of event: Conference

City of event: Atlanta,

Date of event: 19/11/2014

Organising entity: AIChE

Type of entity: Foundation

Mariano Martín Martín; Ignacio E. Grossmann.

4 Title of the work: Optimal Year-Round Operation For Methane Production From CO2 And Water Using Wind And/Or Solar Energy

Name of the conference: AIChE Annual Meeting

Type of event: Conference

City of event: Atlanta,

Date of event: 18/11/2014

Organising entity: AIChE

Type of entity: Foundation

William Davis Fernández; Mariano Martín Martín.

5 Title of the work: Sustainable Biorefinery Supply Network using a Concept of Eco- and Total Profit – Case Study of the European Union

Name of the conference: AIChE Annual Meeting

Type of event: Conference

City of event: Atlanta,

Date of event: 17/11/2014

Organising entity: AIChE

Lidija Cucek; Mariano Martín Martín; Ignacio E. Grossmann; Zdravko Kravanja.

6 Title of the work: Multi-Objective Biorefinery Network Synthesis at EU Level.

Name of the conference: 2nd International Congress on Energy Efficiency and Energy Related Materials

City of event: Cincinnati,

Date of event: 16/10/2014

End date: 19/10/2014

Organising entity: AIChE

Lidija Cucek; Mariano Martín Martín; Ignacio E. Grossmann; Zdravko Kravanja.

7 Title of the work: Self-sufficient integrated algae based facility for diesel substitutes:FAEE and glycerol ethers

Name of the conference: FOCAPD 2014

Type of event: Conference

Type of participation: Poster

Geographical area: Non EU International

Reasons for participation: Review before acceptance

City of event: Seattle, United States of America

Date of event: 17/07/2014

Organising entity: AIChE

With external admission assessment committee: Yes

Type of contribution: Chapters of books

Verónica de la Cruz; Sara Hernández Navarro; Mariano Martín Martín; Ignacio E. Grossmann.



8 Title of the work: Integrating Glycerol to Methanol vs. Glycerol to Ethanol within the Production of Biodiesel from Algae

Name of the conference: ESCAPE 2014

Type of event: Conference

Type of participation: Speaker

Geographical area: European Union

Reasons for participation: Review before acceptance

City of event: Budapest, Hungary

Date of event: 15/06/2014

End date: 18/06/2014

Organising entity: Hungarian Chemical Society

Publication in conference proceedings: Yes

Type of entity: Associations and Groups

With external admission assessment committee: Yes

Type of contribution: Chapters of books

Mariano Martín Martín; Ignacio E. Grossmann. Elsevier,

9 Title of the work: Large-Scale Biorefinery Supply Network – Case Study of the European Union

Name of the conference: ESCAPE 2014

Type of event: Conference

Type of participation: Speaker

Geographical area: European Union

Reasons for participation: Review before acceptance

City of event: Budapest, Hungary

Date of event: 15/06/2014

End date: 18/06/2014

Organising entity: Hungarian Chemical Society

Publication in conference proceedings: Yes

Type of entity: Associations and Groups

With external admission assessment committee: Yes

Type of contribution: Chapters of books

Lidija Cucek; Mariano Martín Martín; Ignacio E. Grossmann; Zdravko Kravanja. Elsevier,

10 Title of the work: Optimal Integration of a Concentrated Solar Plant Facility with a Biomass Based Polygeneration

Name of the conference: ESCAPE 2014

Type of event: Conference

Type of participation: Poster

Geographical area: European Union

Reasons for participation: Review before acceptance

City of event: Budapest, Hungary

Date of event: 15/06/2014

End date: 18/06/2014

Organising entity: Hungarian Chemical Society

Publication in conference proceedings: Yes

Type of entity: Associations and Groups

With external admission assessment committee: Yes

Marta Vidal Otero; Lidia Martín; Mariano Martín Martín. Elsevier,

11 Title of the work: Scale-up and Techno-economical study for the Production of Polyesters from Glycerol

Name of the conference: ESCAPE 2014

Type of event: Conference

Type of participation: Speaker

Geographical area: European Union

Reasons for participation: Review before acceptance

City of event: Budapest, Hungary

Date of event: 15/06/2014

End date: 18/06/2014

Organising entity: Hungarian Chemical Society

Type of entity: Associations and Groups

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Laura Bueno Romo; Claudio Toro Aedo; Mariano Martín Martín. Elsevier,

- 12 Title of the work:** Biorefinery Supply Networks from the Regional to the Continental Level
Name of the conference: NAU#NO-STRU#NI SIMPOZIJ SA ME#UNARODNIM U#EŠ#EM
Type of event: Conference **Geographical area:** Non EU International
Reasons for participation: Upon invitation
City of event: Tuzla, Serbia
Date of event: 14/11/2013
End date: 15/11/2013
Organising entity: University of Tuzla
Lidija Cucek; Mariano Martín Martín; Ignacio E. Grossmann; Zdravko Kravanja.

- 13 Title of the work:** Optimal Simultaneous Production of Bio-Isobutene and Bioethanol from Switchgrass
Name of the conference: AIChE annual meeting
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Speaker **Reasons for participation:** Review before acceptance
City of event: San Francisco, United States of America
Date of event: 06/11/2013
Organising entity: AIChE
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Mariano Martín Martín; Ignacio E. Grossmann. Available online at:
<<http://www3.aiche.org/proceedings/Conference.aspx?ConfID=Annual-2013>>.

- 14 Title of the work:** Simultaneous dynamic optimization and heat integration for the co-production of diesel substitutes: Biodiesel (FAME & FAEE) and glycerol ethers from cooking or algae oil
Name of the conference: AIChE annual meeting
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Speaker **Reasons for participation:** Review before acceptance
City of event: San Francisco, United States of America
Date of event: 06/11/2013
Organising entity: AIChE
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Ignacio E. Grossmann; Mariano Martín Martín. Available online at:
<<http://www3.aiche.org/proceedings/Conference.aspx?ConfID=Annual-2013>>.

- 15 Title of the work:** Continental Biorefinery Supply Networks for the Production of Transportation Fuels
Name of the conference: 3rd International Congress on Sustainability Science & Engineering
Geographical area: Non EU International
Type of participation: Invited speaker **Reasons for participation:** Upon invitation
City of event: Cincinnati, United States of America
Date of event: 14/08/2013
Organising entity: AIChE
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Lidija Cucek; Mariano Martín Martín; Ignacio E. Grossmann; Zdravko Kravanja.

- 16** **Title of the work:** A methodology for simultaneous product and process design in the customer products industry: The case study of the laundry business
Name of the conference: ESCAPE 23
Type of event: Conference
Type of participation: Speaker
Geographical area: International
Reasons for participation: Review before acceptance
City of event: Laaperanta., Finland
Date of event: 09/06/2013
End date: 12/06/2013
Organising entity: Laaperanta University of Technology
City organizing entity: Laaperanta., Finland
Publication in conference proceedings: Yes
With external admission assessment committee: Yes
Type of contribution: Chapters of books
Alberto Martínez Bécares; Mariano Martín Martín. Available online at: <http://www.escape23.fi/preliminary-technical-programme>.
- 17** **Title of the work:** Multi-period Synthesis of a Biorefinery's Supply Networks
Name of the conference: ESCAPE 23
Type of event: Conference
Type of participation: Poster
Geographical area: International
Reasons for participation: Review before acceptance
City of event: Laaperanta, Finland
Date of event: 09/06/2013
End date: 12/06/2013
Organising entity: Laaperanta university of Technology
City organizing entity: Laaperanta, Finland
Publication in conference proceedings: Yes
With external admission assessment committee: Yes
Type of contribution: Chapters of books
Lidija #u#ek; Mariano Martín Martín; Ignacio E. Grossmann; Zdravko Kravanja. Available online at: <http://www.escape23.fi/preliminary-technical-programme>.
- 18** **Title of the work:** Thermochemical Biomass Processing
Name of the conference: Bioeconomy in Argentina: Present and Future
Type of event: Conference
Type of participation: Speaker
Geographical area: International
Reasons for participation: Upon invitation
City of event: Buenos Aires, Argentina
Date of event: 22/03/2013
Organising entity: Ministerio de Ciencia Tecnología e Innovación Productiva
Type of entity: Public Research Body
City organizing entity: Buenos Aires, Argentina
With external admission assessment committee: No
Mariano Martín Martín.
- 19** **Title of the work:** Systematic synthesis of sustainable biorefineries: Integration of Alternative Technologies
Name of the conference: International Process Integration Jubilee.
Type of event: Conference
Type of participation: Poster
Geographical area: Non EU International
Reasons for participation: Review before acceptance
City of event: Goteborg, Sweden
Date of event: 18/03/2013

Organising entity: Chalmers University of Technology

Type of entity: University

City organizing entity: Goteborg, Sweden

With external admission assessment committee: Yes

Mariano Martín Martín; Ignacio Grossmann.

20 Title of the work: Optimization Models of Water Networks and their Application to the Synthesis of Biofuel Processes

Name of the conference: 3rd International Conference on Sustainable Chemical Product and Process Engineering

Type of event: Conference

Geographical area: Non EU International

Type of participation: Invited speaker

Reasons for participation: Upon invitation

City of event: Dalian, China

Date of event: 2013

Organising entity: AIChE

Type of entity: Foundation

With external admission assessment committee: Yes

Ignacio E. Grossmann; Mariano Martín; Linlin Yang.

21 Title of the work: Multi-Objective Optimization of Biorefinery Supply Network

Name of the conference: AIChE annual meeting 2012

Type of event: Conference

Geographical area: Non EU International

Type of participation: Speaker

Reasons for participation: Review before acceptance

City of event: Pittsburgh, United States of America

Date of event: 01/11/2012

Organising entity: American Institute of Chemical Engineers

Type of entity: Associations and Groups

City organizing entity: Pittsburgh, United States of America

Publication in conference proceedings: Yes

With external admission assessment committee: Yes

Lidija Cucek; Mariano Martín Martín; Ignacio Grossmann; Zdravko Kravanja. Available online at: <<http://www.aiche.org/conferences/aiche-annual-meeting/2012>>. ISBN 978-0-8169-1073-1

22 Title of the work: Simultaneous production of Liquid Fuels and Hydrogen from hybrid feedstock: Switchgrass and Shale gas

Name of the conference: AIChE annual meeting 2012

Type of event: Conference

Geographical area: Non EU International

Type of participation: Speaker

Reasons for participation: Review before acceptance

City of event: Pittsburgh, United States of America

Date of event: 01/11/2012

Organising entity: American Institute of Chemical Engineers

Type of entity: Associations and Groups

City organizing entity: Pittsburgh, United States of America

Publication in conference proceedings: Yes

With external admission assessment committee: Yes

Mariano Martín Martín; Ignacio Grossmann. Available online at:

<<http://www.aiche.org/conferences/aiche-annual-meeting/2012>>. ISBN 978-0-8169-1073-1

23 Title of the work: Integration of bioethanol in the production of biodiesel.

Name of the conference: AIChE annual meeting 2012

Type of event: Conference

Geographical area: Non EU International

**Type of participation:** Speaker**Reasons for participation:** Review before acceptance**City of event:** Pittsburgh, United States of America**Date of event:** 30/10/2012**Organising entity:** American Institute of Chemical Engineers**Type of entity:** Associations and Groups**City organizing entity:** Pittsburgh, United States of America**Publication in conference proceedings:** Yes**With external admission assessment committee:** Yes

Kristen Severson; Mariano Martín Martín; Ignacio Grossmann. Available online at:
 <<http://www.aiche.org/conferences/aiche-annual-meeting/2012>>. ISBN 978-0-8169-1073-1

- 24 Title of the work:** Optimal simultaneous production of Hydrogen and liquid fuels from Glycerol: Integrating the use of biodiesel byproducts

Name of the conference: AIChE annual meeting 2012**Type of event:** Conference**Geographical area:** Non EU International**Type of participation:** Speaker**City of event:** Pittsburgh, United States of America**Date of event:** 30/10/2012**Organising entity:** American Institute of Chemical Engineers**Type of entity:** Associations and Groups**City organizing entity:** Pittsburgh, United States of America**Publication in conference proceedings:** Yes**With external admission assessment committee:** Yes

Mariano Martín Martín; Ignacio Grossmann. Available online at:
 <<http://www.aiche.org/conferences/aiche-annual-meeting/2012>>. ISBN 978-0-8169-1073-1

- 25 Title of the work:** Predicting modeling for the generation of microcapsules using CFD.

Name of the conference: AIChE annual meeting 2012**Type of event:** Conference**Geographical area:** Non EU International**Type of participation:** Speaker**Reasons for participation:** Review before acceptance**City of event:** Pittsburgh, United States of America**Date of event:** 29/10/2012**Organising entity:** American Institute of Chemical Engineers**Type of entity:** Associations and Groups**City organizing entity:** Pittsburgh, United States of America**Publication in conference proceedings:** Yes**With external admission assessment committee:** Yes

José Nogareda; Mariano Martín Martín; Eva Martín del Valle; Miguel A Galán Serrano. Available online at:
 <<http://www.aiche.org/conferences/aiche-annual-meeting/2012>>. ISBN 978-0-8169-1073-1

- 26 Title of the work:** Synthesis of Optimally-Integrated Biomass and Bioenergy Supply Network

Name of the conference: Slovenian Chemical Days**Type of event:** Conference**Geographical area:** National**Type of participation:** Speaker**Reasons for participation:** Review before acceptance**City of event:** Portorož, Slovenia**Date of event:** 12/09/2012**Organising entity:** University of Maribor**Type of entity:** University**City organizing entity:** Maribor, Slovenia**Publication in conference proceedings:** Yes



With external admission assessment committee:
Yes

Lidija Cucek; Mariano Martín Martín; Ignacio Grossmann; Zdravko Kravanja. Available online at: <http://skd.fkkt.uni-mb.si/>. ISBN 978-961-248-354-8

27 Title of the work: BIOOptPACK: A Library of models for Optimization of Biofuel Production Processes

Name of the conference: ESCAPE 22

Type of event: Conference

Type of participation: Speaker

Geographical area: Non EU International

Reasons for participation: Review before acceptance

City of event: London, Inner London, United Kingdom

Date of event: 18/06/2012

Organising entity: University College London

Type of entity: University

City organizing entity: London, Inner London, United Kingdom

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Mariano Martín Martín; Ignacio Grossmann. 30, pp. 16 - 20. Available online at: <http://www.icheme.org/escape22>. ISBN 978-0-444-59519-5

28 Title of the work: Predicting modeling for the generation of microcapsules using CFD

Name of the conference: XII Mediterranean congress of Chemical Engineering.

Type of event: Conference

Type of participation: Speaker

Geographical area: European Union

Reasons for participation: Review before acceptance

City of event: Barcelona, Catalonia, Spain

Date of event: 18/11/2011

Organising entity: EXPOQUIMIA

Type of entity: Foundation

City organizing entity: Barcelona, Catalonia, Spain

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

José Nogareda; Mariano Martín Martín; Eva M. Martín del Valle; Miguel A Galán Serrano. Available online at: <http://www.ub.edu/congmedit/>. ISBN 978-84-615-4777-7

29 Title of the work: Simultaneous optimization, heat and water integration for biodiesel production from cooking oil & algae

Name of the conference: XII Mediterranean congress of Chemical Engineering.

Type of event: Conference

Type of participation: Speaker

Geographical area: European Union

Reasons for participation: Review before acceptance

City of event: Barcelona, Catalonia, Spain

Date of event: 18/11/2011

Organising entity: EXPOQUIMIA

Type of entity: Foundation

City organizing entity: Barcelona, Catalonia, Spain

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Mariano Martín Martín; Ignacio Grossmann. Available online at: <http://www.ub.edu/congmedit/>. ISBN 978-84-615-4777-7

30 Title of the work: Energy and Water Optimization in Biofuel Plants

Name of the conference: 6th Sino-US Joint conference of Chemical Engineering

Type of event: Conference

Type of participation: Invited speaker

Geographical area: Non EU International

Reasons for participation: Upon invitation



City of event: Beijing, China

Date of event: 08/11/2011

Organising entity: Chinese Academy of Sciences.

Type of entity: Public Research Body

City organizing entity: Beijing, China

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Ignacio Grossmann; Mariano Martín Martín. Available online at:
<<http://ceb.dlut.edu.cn/a/xinwenzhong/xskytz/2011/0923/1594.html>>.

31 Title of the work: Process optimization of bioethanol production via Hydrolysis of Switchgrass

Name of the conference: AIChE annual meeting 2011

Type of event: Conference

Geographical area: Non EU International

Type of participation: Speaker

Reasons for participation: Review before acceptance

City of event: Minnesota, United States of America

Date of event: 20/10/2011

Organising entity: American Institute of Chemical Engineers

Type of entity: Associations and Groups

City organizing entity: Minnesota, United States of America

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Mariano Martín Martín; Ignacio Grossmann. Available online at:
<<http://www.aiche.org/conferences/aiche-annual-meeting/2011>>. ISBN 978-0-8169-1070-0

32 Title of the work: Energy optimization of Hydrogen production from biomass

Name of the conference: AIChE annual meeting 2011

Type of event: Conference

Geographical area: Non EU International

Type of participation: Speaker

Reasons for participation: Review before acceptance

City of event: Minnesota, United States of America

Date of event: 18/10/2011

Organising entity: American Institute of Chemical Engineers

Type of entity: Associations and Groups

City organizing entity: Minnesota, United States of America

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Mariano Martín Martín; Ignacio Grossmann. Available online at:
<<http://www.aiche.org/conferences/aiche-annual-meeting/2011>>. ISBN 978-0-8169-1070-0

33 Title of the work: Energy optimization of lignocellulosic based diesel

Name of the conference: ESCAPE 21

Type of event: Conference

Geographical area: European Union

Type of participation: Poster

Reasons for participation: Review before acceptance

City of event: Chalkidiki, Thessaloniki, Greece

Date of event: 30/05/2011

Organising entity: Aristotle University of Thessaloniki

Type of entity: University

City organizing entity: Thessaloniki, Greece

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes



Mariano Martín Martín; Ignacio Grossmann. 29, pp. 1698 - 1702. Available online at: <http://www.escape-21.gr/>. ISBN 978-0-444-53569-6

- 34 Title of the work:** Energy, Water and Process Technologies Integration for the simultaneous production of ethanol and food from the entire corn plant

Name of the conference: ESCAPE 21

Type of event: Conference

Type of participation: Poster

Geographical area: European Union

Reasons for participation: Review before acceptance

City of event: Chalkidiki, Thessaloniki, Greece

Date of event: 30/05/2011

Organising entity: Aristotle University of Thessaloniki

Type of entity: University

City organizing entity: Thessaloniki, Greece

Publication in conference proceedings: Yes

With external admission assessment committee: Yes

Lidija Cucek; Mariano Martín Martín; Ignacio Grossmann; Zdravko Kravanja. 29, pp. 2004 - 2008. Available online at: <http://www.escape-21.gr/>. ISBN 978-0-444-53569-6

- 35 Title of the work:** Optimization of water consumption in bioethanol plants

Name of the conference: AIChE annual meeting 2010

Type of event: Conference

Type of participation: Speaker

Geographical area: Non EU International

Reasons for participation: Review before acceptance

City of event: Salt Lake City, United States of America

Date of event: 12/11/2010

Organising entity: American Institute of Chemical Engineers

Type of entity: Associations and Groups

City organizing entity: Salt Lake City, United States of America

Publication in conference proceedings: Yes

With external admission assessment committee: Yes

Mariano Martín Martín; Elvis Ahmetovic; Ignacio Grossmann. Available online at: <http://www.aiche.org/conferences/aiche-annual-meeting/2010>. ISBN 978-0-8169-1065-6

- 36 Title of the work:** Energy optimization of Bioethanol production via Gasification of Switchgrass

Name of the conference: AIChE annual meeting 2010

Type of event: Conference

Type of participation: Speaker

Geographical area: Non EU International

Reasons for participation: Review before acceptance

City of event: Salt Lake City, United States of America

Date of event: 10/11/2010

Organising entity: American Institute of Chemical Engineers

Type of entity: Associations and Groups

City organizing entity: Salt Lake City, United States of America

Publication in conference proceedings: Yes

With external admission assessment committee: Yes

Mariano Martín Martín; Ignacio Grossmann. Available online at: <http://www.aiche.org/conferences/aiche-annual-meeting/2010>. ISBN 978-0-8169-1065-6

- 37 Title of the work:** Superstructure optimization of Lignocellulosic Bioethanol plants

Name of the conference: ESCAPE 20

Type of event: Conference

Geographical area: European Union



Type of participation: Speaker

Reasons for participation: Review before acceptance

City of event: Naples, Italy

Date of event: 08/06/2010

Organising entity: CMCI Polytechnico de Milano

Type of entity: University

City organizing entity: Milano, Italy

Publication in conference proceedings: Yes

With external admission assessment committee: Yes

Mariano Martín Martín; Ignacio Grossmann. 28, pp. 943 - 948. Available online at: <http://www.aidic.it/escape20/>. ISBN 978-0-444-54298-4

38 Title of the work: Energy and Water Optimization in Biofuel Plants

Name of the conference: 2nd Intl. Symposium on Sustainable Chemical Product and Process Engineering

Type of event: Conference

Geographical area: Non EU International

Type of participation: Invited speaker

Reasons for participation: Upon invitation

City of event: HangZhou, China

Date of event: 10/05/2010

Organising entity: Zhejiang University of Technology

City organizing entity: HangZhou, China

Publication in conference proceedings: Yes

With external admission assessment committee: Yes

Ignacio Grossmann; Mariano Martín Martín.

39 Title of the work: A Simple Heuristic for Reducing the Number of Scenarios in Two-stage Stochastic Programming

Name of the conference: AIChE annual meeting 2009

Type of event: Conference

Geographical area: Non EU International

Type of participation: Speaker

Reasons for participation: Review before acceptance

City of event: Nashville, United States of America

Date of event: 12/11/2009

Organising entity: American Institute of Chemical Engineers

Type of entity: Associations and Groups

City organizing entity: Nashville, United States of America

Publication in conference proceedings: Yes

With external admission assessment committee: Yes

Ramkumar Karupiah; Mariano Martín Martín; Ignacio Grossmann. Available online at: <https://aiche.confex.com/aiche/2009/webprogram/start.html>. ISBN 978-0-8169-1058-6

40 Title of the work: Coalescence of Bubbles: A Case Study

Name of the conference: WCCE-8

Type of event: Conference

Geographical area: Non EU International

Type of participation: Poster

Reasons for participation: Review before acceptance

City of event: Montreal, Canada

Date of event: 25/08/2009

Organising entity: Canadian Society for chemical engineering

City organizing entity: Montreal, Canada

Publication in conference proceedings: Yes

With external admission assessment committee: Yes

Sandra Orvalho; Mariano Martín Martín; Maria Fugasova; Marek Ruzicka; Jiri Drahos. Available online at: <http://www.wcce8.org/index.html>. ISBN 0-920804-44-6



- 41 Title of the work:** Theoretical mass transfer in bubble columns operating with viscous fluids
Name of the conference: WCCE-8
Type of event: Conference
Type of participation: Speaker
Geographical area: Non EU International
Reasons for participation: Review before acceptance
City of event: Montreal, Canada
Date of event: 25/08/2009
Organising entity: Canadian Society for chemical engineering
City organizing entity: Montreal, Canada
Publication in conference proceedings: Yes
With external admission assessment committee: Yes
Mariano Martín Martín; Elena Cachaza Gianzo; Elena Díaz Martín; Francisco J. Montes Sánchez; Miguel A. Galán Serrano. Available online at: <<http://www.wcce8.org/index.html>>. ISBN 0-920804-44-6
- 42 Title of the work:** Decreasing the surface tension of the liquid phase in a partially aerated bubble column: Hold up and volumetric mass transfer coefficient variation
Name of the conference: WCCE-8
Type of event: Conference
Type of participation: Speaker
Geographical area: Non EU International
Reasons for participation: Review before acceptance
City of event: Montreal, Canada
Date of event: 24/08/2009
Organising entity: Canadian Society for chemical engineering
City organizing entity: Montreal, Canada
Publication in conference proceedings: Yes
With external admission assessment committee: Yes
Elena Cachaza Gianzo; Mariano Martín Martín; Elena Díaz Martín; Francisco J. Montes Sánchez; Miguel A. Galán Serrano. Available online at: <<http://www.wcce8.org/index.html>>. ISBN 0-920804-44-6
- 43 Title of the work:** Aspects of coalescence of pairs of bubbles
Name of the conference: CHISA 2008
Type of event: Conference
Type of participation: Poster
Geographical area: European Union
Reasons for participation: Review before acceptance
City of event: Prague, Czech Republic
Date of event: 25/08/2008
Organising entity: Czech society of chemical engineers
Type of entity: Associations and Groups
City organizing entity: Prague, Czech Republic
Publication in conference proceedings: Yes
With external admission assessment committee: Yes
Sandra Orvalho; Mariano Martín Martín; Maria Fijasova; Marek Ruzicka; Jiri Drahos. pp. 879 - 879. Available online at: <<http://www.chisa.cz/2008/>>. ISBN 978-80-02-02050-9
- 44 Title of the work:** On coalescence of pairs of bubbles
Name of the conference: CHISA 2007
Type of event: Conference
Type of participation: Poster
Geographical area: National
Reasons for participation: Review before acceptance
City of event: Sumava, Czech Republic
Date of event: 17/10/2007



Organising entity: Czech society of chemical engineers

City organizing entity: Prague, Czech Republic

Publication in conference proceedings: Yes

Type of entity: Associations and Groups

With external admission assessment committee: Yes

Sandra Orvalho; Mariano Martín Martín; Maria Fijasova; Marek Ruzicka; Jiri Drahos. pp. 204 - 204.
Available online at: <<http://www.chisa.cz/2007/>>.

45 Title of the work: Energy Optimization of Corn-Based Bio-Ethanol Plants

Name of the conference: ECCE 6

Type of event: Conference

Type of participation: Speaker

Geographical area: European Union

Reasons for participation: Review before acceptance

City of event: Copenhagen, Denmark

Date of event: 20/09/2007

Organising entity: European Federation of Chemical Engineers

City organizing entity: Copenhagen, Denmark

Publication in conference proceedings: Yes

With external admission assessment committee: Yes

Andreas Peschel; Ramkumar Karupiah; Mariano Martín Martín; Ignacio Grossmann; Luca Zullo; Wade Martinson. Available online at: <<http://www.ecce6.kt.dtu.dk/>>. ISBN 978-87-91435-57-9

46 Title of the work: Effect of the impeller type on the break up of the bubbles in a stirred tank

Name of the conference: ECCE 6

Type of event: Conference

Type of participation: Speaker

Geographical area: European Union

Reasons for participation: Review before acceptance

City of event: Copenhagen, Denmark

Date of event: 17/09/2007

Organising entity: European Federation of Chemical Engineers

City organizing entity: Copenhagen, Denmark

Publication in conference proceedings: Yes

With external admission assessment committee: Yes

Mariano Martín Martín; Francisco J. Montes Sánchez; Miguel A. Galán Serrano. Available online at: <<http://www.ecce6.kt.dtu.dk/>>. ISBN 978-87-91435-57-9

47 Title of the work: A Superstructure Optimization Approach for the Design of Corn-Based Ethanol Plants

Name of the conference: AIChE Annual Meeting 2006

Type of event: Conference

Type of participation: Speaker

Geographical area: Non EU International

Reasons for participation: Review before acceptance

City of event: San Francisco, United States of America

Date of event: 17/11/2006

Organising entity: American Institute of Chemical Engineers

Type of entity: Associations and Groups

City organizing entity: San Francisco, United States of America

Publication in conference proceedings: Yes

With external admission assessment committee: Yes

Andreas Peschel; Ramkumar Karupiah; Mariano Martín Martín; Ignacio Grossmann; Luca Zullo; Wade Martinson. ISBN 0-8169-1012-X



- 48** **Title of the work:** Stirred tanks: A Physical Explanation for the Exponents of Classical Empirical Mass Transfer Equations
Name of the conference: AIChE annual meeting 2006
Type of event: Conference
Type of participation: Speaker
Geographical area: Non EU International
Reasons for participation: Review before acceptance
City of event: San Francisco, United States of America
Date of event: 16/11/2006
Organising entity: American institute of chemical engineers
City organizing entity: San Francisco, United States of America
Publication in conference proceedings: Yes
With external admission assessment committee: Yes
Mariano Martín Martín; Francisco J. Montes; Miguel A. Galán. ISBN 0-8169-1012-X
- 49** **Title of the work:** Mass Transfer from Growing and Oscillating Rising Bubbles
Name of the conference: AIChE annual meeting 2006
Type of event: Conference
Type of participation: Speaker
Geographical area: Non EU International
Reasons for participation: Review before acceptance
City of event: San Francisco, United States of America
Date of event: 13/11/2006
Organising entity: American Institute of chemical Engineers
Type of entity: Foundation
City organizing entity: San Francisco, United States of America
Publication in conference proceedings: Yes
Mariano Martín Martín; Francisco J. Montes Sánchez; Miguel A. Galán Serrano. ISBN 0-8169-1012-X
- 50** **Title of the work:** Coalescence in bubble columns: Hydrodynamics and Mass transfer
Name of the conference: CHISA 2006
Type of event: Conference
Type of participation: Speaker
Geographical area: European Union
Reasons for participation: Review before acceptance
City of event: Prague, Praha, Czech Republic
Date of event: 28/08/2006
Organising entity: Czech society of chemical engineering
Type of entity: Public Research Body
City organizing entity: Prague, Praha, Czech Republic
Publication in conference proceedings: Yes
With external admission assessment committee: Yes
Mariano Martín Martín; Juan M. García; Francisco J. Montes Sánchez; Miguel A. Galán Serrano. pp. 686 - 687. Available online at: <<http://www.chisa.cz/2006/>>. ISBN 80-86059-45-6
- 51** **Title of the work:** Hydrodynamics of Single and Multiple Bubbles Generated from a Sieve Plate
Name of the conference: X Mediterranean Congress of Chemical Engineering
Type of event: Conference
Type of participation: Speaker
Geographical area: European Union
Reasons for participation: Review before acceptance
City of event: Barcelona, Catalonia, Spain
Date of event: 16/11/2005
Organising entity: EXPOQUIMIA
City organizing entity: Barcelona, Catalonia, Spain
Publication in conference proceedings: Yes



With external admission assessment committee:
Yes

Mariano Martín Martín; Juan M. García; Elena Díaz Martín; Francisco J. Montes Sánchez; Miguel A. Galán Serrano. Available online at: <<http://www2.ub.edu/10mediterraneo/>>.

Works submitted to national or international seminars, workshops and/or courses

- 1** **Title of the work:** Perspectives of use of biomass a in the US and Spain: Bioethanol, Biodiesel and advanced biomass uses
Name of the event: Reneseg
City of event: Copenhagen, Denmark
Date of event: 30/05/2015
Organising entity: Network Manager Position - VCO Network
Mariano Martín Martín; Ignacio Grossmann.
- 2** **Title of the work:** Mathematical methods for Process and Product Design
Name of the event: Internationalization of the University of Maribor
City of event: Maribor, Slovenia
Date of event: 04/05/2015
End date: 08/05/2015
Organising entity: University of Maribor
Mariano Martín Martín.
- 3** **Title of the work:** Integrating Solar and Biomass for the production of Fuels and Power
Name of the event: Seminar
Type of event: Seminar
City of event: London,
Date of event: 07/11/2014
Organising entity: Energy Institute UCL. London.
Martiano Martín Martín.
- 4** **Title of the work:** Integrating renewables (Wind, Solar and Biomass) for the production of Fuels and Power
Name of the event: Internationalization University of Maribor
Type of event: Workshop
City of event: Marbo, Slovenia
Date of event: 03/11/2014
End date: 05/11/2014
Organising entity: University of Maribor
- 5** **Title of the work:** Optimization of Biomass, Wind and Solar for the production of fuels and power
Type of event: Seminar
City of event: London, United Kingdom
Date of event: 11/07/2014
Organising entity: University College London
Mariano Martín Martín.
- 6** **Title of the work:** Process and product design: From Biofuels to consumer goods
Type of event: Seminar
City of event: Birmingham, United Kingdom
Date of event: 25/03/2014



Organising entity: University of Birmingham
Mariano Martín Martín.

7 Title of the work: Glycerol as an interesting raw material: Byproduct integration

Name of the event: Seminar

City of event: Maribor,

Date of event: 29/01/2014

Organising entity: University of Maribor

City organizing entity: Maribor, Slovenia

Mariano Martín Martín.

8 Title of the work: Thermochemical biomass processing

Name of the event: ALCUENET

City of event: San José, Costa Rica

Date of event: 09/10/2013

Organising entity: Government

Type of entity: Public Research Body

9 Title of the work: Simultaneous process and product design: Biofuels and consumer goods

Name of the event: Seminar

City of event: Leeds, United Kingdom

Date of event: 23/05/2013

Organising entity: University of Leeds

Mariano Martín Martín.

10 Title of the work: First principle analysis and design of multiphase equipment.

Name of the event: Seminar

Type of event: Seminar

Geographical area: European Union

City of event: Leeds, United Kingdom

Date of event: 22/05/2013

Organising entity: University of Leeds

Mariano Martín Martín.

11 Title of the work: El papel del ingeniero químico y de Procesos para un mundo sostenible

Name of the event: Final Lecture Chemical Engineering. 2008-2013

City of event: Salamanca, Spain

Date of event: 04/05/2013

Organising entity: Delegación Alumnos Ing. Químicos

12 Title of the work: TOWARDS INTEGRATION OF PROCESS AND PRODUCT DESIGN

Name of the event: Seminar Series

Type of event: Seminar

Geographical area: International

City of event: Bahía Blanca, Argentina

Date of event: 18/03/2013

Organising entity: PLAPIQUI

City organizing entity: Bahía Blanca, Argentina

Mariano Martín Martín.



- 13** **Title of the work:** PSE for sustainability
Name of the event: Academic seminar
Type of event: Seminar
Geographical area: Non EU International
City of event: Concepción, Chile
Date of event: 23/11/2012
Organising entity: Universidad de Concepción
City organizing entity: Concepcion, Chile
Mariano Martín. **Reasons for participation:** Upon invitation
- 14** **Title of the work:** SYSTHEMATIC OPTIMAL DESIGN OF BIOFUEL PRODUCTION PROCESSES
Name of the event: Workshop
Type of event: Workshop
Geographical area: Non EU International
City of event: Concepción, Chile
Date of event: 22/11/2012
Organising entity: CIPA
Mariano Martín. **Reasons for participation:** Upon invitation
- 15** **Title of the work:** Optimization of process and product design
Name of the event: Industrial seminar
Type of event: Seminar
Geographical area: European Union
City of event: Newcastle Upon Tyne, United Kingdom
Date of event: 22/06/2012
Organising entity: P&G
City organizing entity: Newcastle Upon Tyne, United Kingdom
Mariano Martín. **Reasons for participation:** Upon invitation
Type of entity: Technological Centre
- 16** **Title of the work:** Synthesis and optimization of biofuels production processes
Name of the event: Energy systems engineering Special Seminar
Type of event: Seminar
Geographical area: Non EU International
City of event: Pittsburgh, United States of America
Date of event: 20/04/2011
Organising entity: Carnegie Mellon University
City organizing entity: Pittsburgh, United States of America
Mariano Martín. Available online at: <<http://egon.cheme.cmu.edu/esi/seminars.html>>. **Reasons for participation:** Upon invitation
Type of entity: University
- 17** **Title of the work:** Energy and Water consumption in 1st and 2nd Generation bioethanol production processes
Name of the event: Academic Seminar
Type of event: Seminar
Geographical area: European Union
City of event: Maribor, Slovenia
Date of event: 10/05/2010
Organising entity: University of Maribor
City organizing entity: Maribor, Slovenia
Mariano Martín. **Reasons for participation:** Upon invitation
Type of entity: University



- 18 Title of the work:** Modelling, Simulation & Optimization of Biochemical Processes.
Name of the event: Academic Seminar
Type of event: Seminar
Geographical area: European Union
City of event: Tarragona, Spain
Date of event: 18/03/2010
Organising entity: Universitat Rovira i Virgili
City organizing entity: Tarragona, Spain
 Mariano Martín.
- Reasons for participation:** Upon invitation
- Type of entity:** University
- 19 Title of the work:** Water and Energy Optimization of Biofuel
Name of the event: Energy Systems Initiative (ESI)
Type of event: Seminar
Geographical area: Non EU International
City of event: Pittsburgh, United States of America
Date of event: 07/03/2010
Organising entity: Carnegie Mellon University
City organizing entity: Pittsburgh, United States of America
 Mariano Martín. Available online at:
http://egon.cheme.cmu.edu/esi/docs/pdf/optimization_biofuels_martin.pdf.
- Type of entity:** University
- 20 Title of the work:** Simulation & Optimization of Chemical Processes: From the micro scale to the macro scale
Name of the event: Industrial Seminar
Type of event: Seminar
Geographical area: Non EU International
City of event: Cincinnati, United States of America
Date of event: 04/02/2010
Organising entity: P&G
City organizing entity: Cincinnati, United States of America
 Mariano Martín.
- Reasons for participation:** Upon invitation
- Type of entity:** Business
- 21 Title of the work:** Perspectives of use of biomass a in the US and Spain: Bioethanol, Biodiesel and advanced biomass uses
Name of the event: Renewable Systems Engineering
City of event: Copenhagen, Denmark
Organising entity: Reneseng-607415 FP7-PEOPLE-2013-ITN

R&D management and participation in scientific committees

Scientific, technical and/or assessment committees

- 1** **Committee title:** AICHE
Affiliation entity: American Institute Chemical Engineers
Start date: 2009
- 2** **Committee title:** UEFSDI
Primary (UNESCO code): 330311 - Industrial chemistry
Affiliation entity: Romanian Government

Organization of R&D activities

- 1** **Title of the activity:** AIChE Annual Meeting
Type of activity: Congress
Convening entity: American Institute Chemical Engineering
City convening entity: Salt Lake City, United States of America
Type of participation: Chairman
Start-End date: 08/11/2015 - 13/11/2015
Geographical area: Non EU International
Type of entity: Foundation
Duration: 5 days
- 2** **Title of the activity:** 3rd International Conference on Sustainable Chemical Product and Process Engineering
Type of activity: International Conference
Convening entity: AICHE
City convening entity: Dalian, China
Type of participation: Organiser
Start-End date: 27/05/2013 - 30/05/2013
Geographical area: Non EU International
Type of entity: Foundation
- 3** **Title of the activity:** New trends in chemical engineering
Type of activity: Simposio internacional
City of event: Salamanca, Spain
Convening entity: Universidad de Salamanca
City convening entity: Salamanca, Castile and León, Spain
Type of participation: Organiser
Start-End date: 21/02/2004 - 25/02/2004
Geographical area: Non EU International
Type of entity: University
Duration: 5 days
- 4** **Title of the activity:** Chair in ESCAPE/PSE conference
City convening entity: Copenhagen, Denmark
Type of participation: Chairman
Start date: 01/06/2015



R&D management

- 1** **Name of the activity:** Review Editor Frontiers in Process and Energy Systems
Performed tasks: Editor
Start date: 04/2014
- 2** **Name of the activity:** Regional Editor Energy Research Journal.
Type of management: Group management
Performed tasks: Editorial Work
Entity: Editorial **Type of entity:** Business
Start date: 2014
- 3** **Name of the activity:** Associated editor Journal of Advanced Chemical
Type of management: Management of R&D&I actions and projects
Performed tasks: Editorial work
Start date: 2011
- 4** **Name of the activity:** Subject editor Latin American Applied Research
Type of management: Management of R&D&I actions and projects
Performed tasks: Editorial work
Entity: República Argetina
Start date: 2011

Evaluation and revision of R&D projects and articles

- 1** **Name of the activity:** Referee
Performed tasks: Research Project Evaluator
Entity where activity was carried out: FONCYT **Type of entity:** Public Research Body
Start date: 2015
- 2** **Name of the activity:** Book referee
Performed tasks: Referee
Entity where activity was carried out: Taylor and Francis Editorial **Type of entity:** Business
Type of activity: Review of articles in scientific or technological journals
Access system: By public merit **Geographical area:** Non EU International
Start date: 2012
- 3** **Name of the activity:** Referee
Performed tasks: Research project evaluation
Entity where activity was carried out: UESFI **Type of entity:** State agency
City of entity: Romania
Frequency of the activity: 15
Geographical area: European Union
Start date: 2012



- 4** **Name of the activity:** Referee
Performed tasks: Research project evaluation
Entity where activity was carried out: GACR **Type of entity:** State agency
City of entity: Czech Republic
Frequency of the activity: 5
Geographical area: European Union
Start date: 2011
- 5** **Name of the activity:** Referee
Performed tasks: Research project evaluation
Entity where activity was carried out: Netherlands **Type of entity:** State agency
 Organization for Scientific research
Type of activity: Referee R&D projects **Frequency of the activity:** 1
Geographical area: European Union
Start date: 2011
- 6** **Name of the activity:** Referee
Performed tasks: Research project evaluation
Entity where activity was carried out: Agencia **Type of entity:** Government agency
 Nacional de Evaluación y Prospectiva
Frequency of the activity: 6
Geographical area: National
Start date: 2011
- 7** **Name of the activity:** Reviewer
Performed tasks: Referee
Entity where activity was carried out: Journal **Type of entity:** Editorials
Type of activity: Review of articles in scientific or **Frequency of the activity:** 200
 technological journals
Access system: By public merit **Geographical area:** International
Start date: 2006

Other achievements

Stays in public or private R&D centres

- 1** **Entity:** University of Birmingham **Type of entity:** University
City of entity: Birmingham, United Kingdom
Start-End date: 16/02/2015 - 27/03/2015 **Duration:** 1 month - 15 days
Funding entity: Erasmus +
Name of programme: Erasmus Visiting Professor
Goals of the stay: Guest
Provable tasks: Teaching and Research
- 2** **Entity:** University of Leeds **Type of entity:** University
Faculty, institute or centre: School of Process, Environmental and Materials Engineering
City of entity: Leeds, United Kingdom
Start-End date: 12/03/2014 - 11/04/2014 **Duration:** 1 month
Funding entity: Erasmus



Name of programme: Erasmus Visiting Professor

Goals of the stay: Guest

- 3** **Entity:** Univ. Maribor **Type of entity:** University
Faculty, institute or centre: Chemistry Technology
City of entity: Maribor, Slovenia
Start-End date: 27/01/2014 - 31/01/2014 **Duration:** 5 days
Funding entity: Erasmus
Name of programme: Erasmus Visiting Professor
Goals of the stay: Guest
- 4** **Entity:** Univ. Maribor **Type of entity:** University
Faculty, institute or centre: Chemistry Technology
City of entity: Maribor, Slovenia
Start-End date: 28/01/2013 - 01/03/2013 **Duration:** 5 days
Funding entity: Erasmus
Name of programme: Erasmus Visiting Professor
Goals of the stay: Guest
- 5** **Entity:** Universidad de Maribor **Type of entity:** University
City of entity: Maribor, Slovenia
Start-End date: 23/01/2012 - 27/01/2012 **Duration:** 5 days
Funding entity: Erasmus
Name of programme: Erasmus Visiting Professor
Goals of the stay: Guest
Provable tasks: Teaching within the ERASMUS program for visiting professors
- 6** **Entity:** Carnegie Mellon University **Type of entity:** University
Faculty, institute or centre: Chemical Engineering
City of entity: Pittsburgh, United States of America
Start-End date: 01/05/2009 - 31/01/2011 **Duration:** 1 year - 9 months
Goals of the stay: Post-doctoral
Provable tasks: Biofuel production process optimal design
- 7** **Entity:** Procter and gamble **Type of entity:** Business
Faculty, institute or centre: Newcastle technical Centre
City of entity: Newcastle Upon Tyne, Northumberland and Tyne and Wear, United Kingdom
Start-End date: 01/02/2008 - 28/02/2009 **Duration:** 1 year - 1 month
Goals of the stay: Post-doctoral
Provable tasks: Study of complex multiphase reactors
- 8** **Entity:** Academy of Sciences of the Czech republic
City of entity: Prague, Czech Republic
Start-End date: 11/06/2007 - 10/09/2007 **Duration:** 3 months
Goals of the stay: Doctorate
Provable tasks: Bubble coalescence studies
- 9** **Entity:** Carnegie Mellon University **Type of entity:** University
Faculty, institute or centre: Carnegie Institute of Technology
City of entity: Pittsburgh, United States of America
Start-End date: 29/08/2006 - 28/11/2006 **Duration:** 3 months



Goals of the stay: Doctorate

Provable tasks: Heat integration of corn based bioethanol plant

10 Entity: CIPA Universidad de Concepción

Type of entity: University Centres and Structures and Associated Bodies

City of entity: Concepción, Chile

Start date: 18/11/2012

Duration: 5 days

Goals of the stay: Guest

Provable tasks: Workshops and seminars in process design

Obtained grants and scholarships

1 Name of the grant: Erasmus visiting professors program

Aims: Teaching

Awarding entity: Universidad de Salamanca

Conferral date: 28/01/2013

Duration: 5 days

End date: 01/02/2013

Entity where activity was carried out: Universidad de Maribor

2 Name of the grant: USAL mobility awards under agreement

Aims: Workshop

Awarding entity: Universidad de Salamanca

Type of entity: University

Conferral date: 18/11/2012

Duration: 5 days

End date: 23/11/2012

Entity where activity was carried out: Universidad de Concepción

3 Name of the grant: Erasmus visiting professors program

Aims: Teaching

Awarding entity: Universidad de Salamanca

Conferral date: 23/01/2012

Duration: 5 days

End date: 27/01/2012

Entity where activity was carried out: Universidad de Maribor

4 Name of the grant: Beca Contrato de postdoc MICINN - Fulbright

Aims: Post-doctoral

Awarding entity: MICINN

Type of entity: Public Research Body

Conferral date: 22/12/2008

Duration: 1 year - 9 months

End date: 31/01/2011

Entity where activity was carried out: Carnegie Mellon University

Faculty, institute or centre: Carnegie Institute of Technology

5 Name of the grant: Beca de Investigación en el programa de formación del profesorado universitario (FPU)

Aims: Pre-doctoral

Awarding entity: Ministerio de Educación, Política Social y Deporte

Type of entity: Public Research Body

Conferral date: 01/02/2004

Duration: 4 years

End date: 31/01/2008

Entity where activity was carried out: Universidad de Salamanca

Faculty, institute or centre: Facultad de Ciencias Químicas

**6 Name of the grant:** Beca-colaboración**Aims:** Ultimo año**Awarding entity:** Ministerio de Educación, Política Social y Deporte**Type of entity:** State agency**Conferral date:** 2001**Duration:** 9 months**End date:** 2002**Entity where activity was carried out:** Universidad de Salamanca**Faculty, institute or centre:** Facultad de Ciencias Químicas**7 Name of the grant:** Erasmus Visiting Professor**Aims:** Visiting professor**Awarding entity:** Universidad de Salamanca**Type of entity:** University**Conferral date:** 2015**Duration:** 1 month**Entity where activity was carried out:** Univ. Birmingham**8 Name of the grant:** Erasmus Visiting Professor**Aims:** Visiting professor**Awarding entity:** Universidad de Salamanca**Type of entity:** University**Conferral date:** 2014**Duration:** 5 days**Entity where activity was carried out:** Univ. Maribor**9 Name of the grant:** Erasmus Visiting Professor**Aims:** Visiting professor**Awarding entity:** Universidad de Salamanca**Type of entity:** University**Conferral date:** 2014**Duration:** 1 month**Entity where activity was carried out:** Univ. Leeds**10 Name of the grant:** FPU mobility award (Bolsa de viaje de las becas FPU)**Aims:** Pre-doctoral**Awarding entity:** Ministerio de Ciencia e Innovación. **Type of entity:** Public Investigación**Conferral date:** 2007**Duration:** 3 months**Entity where activity was carried out:** Academy of Sciences of the Czech republic**Faculty, institute or centre:** Institute of chemical process fundamentals**11 Name of the grant:** FPU mobility award (Bolsa de viaje de las becas FPU)**Aims:** Pre-doctoral**Awarding entity:** Ministerio de Ciencia e Innovación. **Type of entity:** Public Investigación**Conferral date:** 2006**Duration:** 3 months**Entity where activity was carried out:** Carnegie Mellon University**Scientific societies and professional associations****Name of the society:** American Institute of Chemical Engineers**City affiliation entity:** New York, United States of America**Start date:** 2009



Prizes, mentions and distinctions

- 1** **Description:** Certificate of excellence in Reviewing
Awarding entity: Editorial Elsevier **Type of entity:** Associations and Groups
Conferral date: 2013
Recognition linked: Contribution to the quality of the journal
- 2** **Description:** ACS reviewer recognition
Awarding entity: Americal Chemical Society
Conferral date: 12/2011
- 3** **Description:** P&G award
Awarding entity: P&G **Type of entity:** Technological Centre
City awarding entity: Newcastle Upon Tyne, Northumberland and Tyne and Wear, United Kingdom
Conferral date: 2009
- 4** **Description:** Premio Extraordinario de Doctorado
Awarding entity: Universidad de Salamanca **Type of entity:** University
City awarding entity: Salamanca, Castile and León, Spain
Conferral date: 2008
- 5** **Description:** Accésit Premio Proyecto Fin de Carrera Mapfre
Awarding entity: Mapfre - Universidad de Salamanca **Type of entity:** Foundation
City awarding entity: Salamanca, Castile and León, Spain
Conferral date: 2003

Other distinctions (professional or business career)

- 1** **Description:** Acreditación Titular (Associate Professor)
Awarding entity: Agencia Nacional de Evaluación de la Calidad y Acreditación **Type of entity:** Agencia
Conferral date: 24/10/2012
- 2** **Description:** Habilitación Contratado Doctor (Senior Lecturer)
Awarding entity: Agencia Nacional de Evaluación de la Calidad y Acreditación **Type of entity:** Agencia
Conferral date: 14/07/2010
- 3** **Description:** Professorat Lector
Awarding entity: AGENCIA PER A LA QUALITAT DEL SISTEMA UNIVERSITARI DE CATALUNYA
Conferral date: 16/06/2010
- 4** **Description:** Habilitación Profesor Ayudante doctor
Awarding entity: Agencia Nacional de Evaluación de la Calidad y Acreditación **Type of entity:** Public body
Conferral date: 30/04/2008