



Call for Papers

www.anqueicce2012.org



ANQUE ICCE

2012

24 - 27 June

INTERNATIONAL
CONGRESS OF
CHEMICAL
ENGINEERING



EFCE Event No.701



Supported by:



Invitation

ANQUE, the Spanish's leading organization for Chemistry and Chemical Engineering professionals, with over 11,000 members, has the pleasure to invite you to join us in Seville to discuss and learn about the new exciting frontier areas of research in chemical engineering.

Combining science -chemistry- with the discipline of engineering, chemical engineers have continuously improved our well-being since more than a century, designing and manufacturing materials and products essential to our modern society. ANQUE's main aim is to promote and support professional development in Chemistry and Chemical Technology to move forward professionally and to enrich the world we live in.

ANQUE's International Congress of Chemical Engineering (ANQUE-ICCE 2012) will be a national and international reference in the fields of Chemical Engineering and Chemistry applied to industry. The congress motto is "Innovating for the future".

This congress, beside of the high quality academic level, will have a strong industrial participation. For that, a close collaboration with the Spanish Chemical Industry Federation (FEIQUE), the SusChem Technological Platform and the European Federation of Chemical Engineering (EFCE) have been established.

All key areas for chemical engineers are included in the program. The congress will have a high number of oral communications (plenary conferences, invited keynotes and oral Communications) and poster sessions to favor the discussions and contacts.

The congress intends to have a global participation of the Spanish Chemical Engineering and Applied Chemistry at academic level, since we have contacts with the main Associations in this field and the Scientific Committee includes researchers and professionals from both the academia and the industry and thus we expect that they mobilize the whole sector. Furthermore we will also have the presence of public administrations and private associations interested in the fields of innovation and new technologies related with the chemical sector, as well as of private investors with diverse objectives looking for new opportunities.

Through the centuries the gates of Seville have been open to people from around the world, and this occasion, too, its ready to welcome the participants in ANQUE's International Congress of Chemical Engineering. We hope that the complementary program being offered will facilitate networking and will contribute to the scientific success of the congress at the same time that will allow you to know better our country and our people.



Carlos Negro
ANQUE President

Félix García-Ochoa
Chairman
Scientific Committee

Fernando Romero
Chairman
Organizing Committee

Topics

T1. Separation Processes:

- 1.1. Phase Equilibrium and Phase Transport.
- 1.2. Innovation on Separation Processes.
- 1.3. Membrane Processes.
- 1.4. Simulation and Separation Equipment Design.

T2. Applied Chemical Kinetic and Catalysis:

- 2.1. Kinetics of Complex, Multiphase and Hybrid Processes.
- 2.2. Catalysts. Synthesis and Characterization.
- 2.3. New Catalytic Processes.

T3. Chemical Reactors:

- 3.1. Catalytic and Multiphase Reactors.
- 3.2. Polymerization Reactors.
- 3.3. Electro-, Photo- and Sono-Chemical Reactors. Fuel Cells.

T4. Process Intensification:

- 4.1. Hybrid and Membrane Processes.
- 4.2. Structured Systems. Meso- and Micro-Reactors.
- 4.3. Non-Conventional Energetic Technologies in Chemical Processes.

T5. Process and System Engineering:

- 5.1. Synthesis and Design of Processes.
- 5.2. Simulation, Optimization, Planning and Control of Processes.
- 5.3. Energy Integration and Optimization.

T6. Waste Management and Treatments:

- 6.1. Characterization and Treatments.
- 6.2. Hazardous Wastes and Soil Remediation.
- 6.3. Waste Valorisation and Product Reuse.

T7. Water Integral Management:

- 7.1. Sustainable Management of Water Resources. Emerging Risks.
- 7.2. Water Bodies Quality.
- 7.3. Water and Wastewater Treatments. Advanced Technologies.
- 7.4. Water Reuse.

T8. Energy and Sustainability:

- 8.1. Clean Energy from Fossil Resources. Emission Control.
- 8.2. Renewable Energy.
- 8.3. Efficiency and New Energy Carriers.
- 8.4. Capture, Storage and Use of CO₂.

T9. Bioprocesses and Biocatalysis:

- 9.1. Characterization and Improvement of Biocatalysts.
- 9.2. Bioreactors and Bioprocesses. New Configurations and Applications.
- 9.3. Advanced Bioseparation Technologies.
- 9.4. Modelling of Bioprocesses. Systems Biotechnology.
- 9.5. Biorefinery.

T10. Agrochemical and Food Technology:

- 10.1. Raw Materials: Manufacture and Transformation.
- 10.2. Food Preservation. Food Safety.
- 10.3. Precooked and Functional Foods.
- 10.4. Wine and Oil Technologies.

T11. Green Chemistry and Eco-Innovation:

- 11.1. Sustainable Processes and Products.
- 11.2. Green Solvents: Synthesis, Characterization and Applications.
- 11.3. Green Polymers from Renewable Resources.
- 11.4. New Biosynthetic Strategies.

T12. Nano and Advanced Materials:

- 12.1. Nano-structured Materials. Catalysts. Adsorbents.
- 12.2. Intelligent Materials.
- 12.3. Coatings and Surface Treatments.
- 12.4. Emerging Applications.

T13. New Processes, New Products:

- 13.1. Electro- Photo- and Sono-Chemical Processes.
- 13.2. High Pressure and Supercritical Processes.
- 13.3. Ionic Liquids: New Reaction/Separation Media.
- 13.4. Development of New Products. Fine Chemistry.

T14. Sensors and Biosensors:

- 14.1. Industrial Process Monitoring.
- 14.2. Sensors and Biosensors based on Nano-Materials.
- 14.3. Agro-food, Clinic, Pharmaceutical and Environmental Control Applications.

T15. Chemical Engineering Education:

- 15.1. Chemical Engineering Teaching and Learning in the ESHE.
- 15.2. New Methodologies. Use of TIC and Web.

Plenary Lectures

25th June

Professor Rafiqul Gani

Technical University of Denmark. Scientific Vice-President of EFCE.
Title: "A New Paradigm for Chemical Engineering".

26th June

Professor Manuel Doblare

University of Zaragoza. Scientific Director of Abengoa.
Title: "Research in Chemical Engineering at Abengoa: Objectives, Achievements and Challenges".

27th June

Dr. Hermann J. Feise.

BASF. Senior Research Manager Science Relations.
Title: "Chemical Engineering in Europe - An Industrial Perspective".

Round Tables

INNOVATION AND SUSTAINABILITY

Chairperson: Jesús Arauzo, University of Zaragoza

CHEMICAL ENGINEERING & SOCIETY

Chairperson: Valentín González, Autonomous University of Madrid (UAM), Chemistry and Industry Director.

Specialised symposium and Satellite events

- **“SusChem Spain Annual General Assembly”**: Like its European counterpart (SUSCHEM), our goal is to ensure the competitiveness of the sector in Spain long term through the promotion and implementation of innovative strategic global, with the support of both industry and government.
- **“International Workshop on Environmental Protection and Sustainability of the Chemical and Process Industries.- SAIP 2012”** This workshop will constitute a forum for the debate and exchange of information among companies, administrations and public institutions, research centers and universities, in which the latest initiatives on sustainability assessment will be presented, identifying to what extent the companies may benefit from these voluntary initiatives and discussing the ways to facilitate their practice.
- **“National Symposium on Handling and Hazards of Materials in Industry HANHAZ2012”**: This Symposium receives the support from the Working Party on Mechanics of Particulate Solids (WPMS) of EFCE, aims at joining researchers, teachers, engineers and industrialists to share knowledge and solutions in handling materials and in prevention and protection against hazards in the industry.
- **“National symposium on applications of electrochemical engineering for the remediation of environmental problems. ELECTROENVIRO 2012”**: in the recent years, many applications of electrochemical engineering in the remediation of environmental problems have arisen. This Symposium receives the support from the Working Party on Electrochemical Engineering (WP-EE) of the European Federation of Chemical Engineering (EFCE). The ELECTROENVIRO 2012 Symposium aims at joining researchers, teachers, engineers and industrialists to share knowledge and solutions in solving environmental problems with electrochemical technology.

- **“Paradigms for the Pulp and Paper Industry in the XXI Century: Opportunities for a Sustainable Future”** this symposium will discuss the best practices for an optimum use of natural resources in the paper sector. Concepts based on the biorefinery and biotechnology, as well as improving of conventional processes will be reported.

- **“Young Researchers Network”**: In order to promote an active involvement of young researchers a number of special activities will be organized during the Congress.



Young Researchers Network

In order to promote an active involvement of young researchers several special activities will be organized during the Congress:

- **“Job Fair Forum”** open to all registered young researchers in the ICCE-ANQUE-2012 Congress. Potential employers and employees will have a chance to meet at the JobFair. Speakers will also report on their own experience and offer valuable tips about founding one's own business or company.
- **“Mobility Opportunities”** a round table with an expert panel will discuss de mobility opportunities available in the field of Chemical Engineering under different initiatives. Young researchers will have the opportunity to share their experiences.
- **“ICCE-ANQUE-2012 AWARDS”** to acknowledge and promote excellence among young scientists, the best Ph.D. Thesis, oral and posters communications presented by young scientists will be awarded.



In the framework of the **International Congress of Chemical Engineering**, that will be held in **Seville, from 24th to 27th June 2012**, young researchers are called to submit their works to apply to the first edition of

ANQUE ICCE 2012 AWARDS for YOUNG RESEARCHERS

The objective of these awards is to acknowledge and promote young people participation in scientific and technical activities that may boost Chemical Science and Technology, both in its fundamental science feature and in its applications, in the different Congress topics.

There are three categories:

“Young PhD Thesis” Award: destined to acknowledge the best PhD Thesis defended in 2009-2012 period. In this category there will be three awards:

- 1st award, with a prize of 1,000€ and supporting Diploma.
- 2nd award, with a prize of 500€ and supporting Diploma.
- 3rd award, with a prize of 250€ and supporting Diploma.

“Best Oral Communication” Award: it will be chosen between oral communications that are presented in the Congress and have applied to the award. In this category there will be an only award with a prize of 300€ and supporting Diploma.

“Best Poster Communication”: chosen between poster communications that are presented in the Congress and have applied to the award. In this category there will be an only award with a prize of 200€ and supporting Diploma.

The jury may give recognition awards in “Best Oral Communication” and “Best Poster Communication” with supporting Diploma.

Executive Committee

President:

Carlos Negro Álvarez, President of ANQUE
Alfredo Vara, ANQUE Cataluña

Vicepresidents:

Leopoldo Martínez Nieto, ANQUE
Félix García-Ochoa, Univ. Complutense of Madrid
Fernando Romero, ANQUE Andalucía

President advisors:

Julio Tijero, Univ. Complutense of Madrid
M^a Carmen Cartagena, Univ. Politécnica of Madrid
M^a del Carmen Lobo, ANQUE
Valentín González, Director of "Química e Industria"

Secretary:

Lorenzo Baselga, ANQUE

Treasurer:

Luis Felipe Rivera, ANQUE

Members:

Juan Frau, President of AQBaleares-ANQUE
Luis Comenge, President of AQ Aragón-ANQUE
Miguel Jaubert, President of AT Canarias-ANQUE
Fernando Villafañe, President of AQCyL-ANQUE
Iván Rivilla, President of AQUICAM-ANQUE
José Costa, President of AQCataluña-ANQUE
Francisco Olivares, President of ATExtremadura-ANQUE
Antonio Macho, President of AQGalicía-ANQUE
Juan José Álvarez Millán, President of AQMadrid-ANQUE
Antonio Bódalo, President of AQMurcia-ANQUE
Guillermo Gutiérrez, President of AQCantabria-ANQUE
Juan Hernández, President of AQCV-ANQUE
Pedro María Alonso, President of AQPV-ANQUE
Miguel Ferrero, President of AQPA-ANQUE
M^a Dolores Jaén, Vicesecretary of ANQUE
Elsa Suárez, ANQUE
Rosa Nomen, IQS, University of Ramon Llul
Oriol Martínez, AEIC

Organizing Committee

President:

- Fernando Romero Guzmán, AQAndalucía-ANQUE and Univ. Sevilla (ES)

Secretary:

- María José Gutiérrez Expósito, AQAAndalucía-ANQUE and Dushara Tours (ES)

Treasurer:

- Carlos Rojas Alcario, AQAndalucía-ANQUE and Nalco Española (ES)

Members:

- Vicente Flores Luque, AQAndalucía-ANQUE and Univ. Sevilla (ES)
- José Muñoz García, AQAndalucía-ANQUE and Univ. Sevilla (ES)
- Rafael Pacheco Reyes, AQAndalucía-ANQUE and Univ. Jaén (ES)
- Alberto Plaza Delgado, AQAndalucía-ANQUE and Químicos del Sur (ES)
- Miguel Ángel Portillo Aguirre, Chemists College from Seville (ES)
- Caridad Riesco de Iturri, AQAndalucía-ANQUE (ES)
- Sebastián Sánchez Villasclaras, AQAndalucía-ANQUE and Univ. Jaén (ES)

Scientific Committee

Chairman:

García-Ochoa Felix (UCM, ES)

Vice-Chairmans:

Bodalo, Antonio (U. Murcia, ES)

Irabien, Angel (U. Cantabria, ES)

Secretary:

Blanco, Angeles (UCM, ES)

Vice-Secretary:

Monte, Concepción (UCM, ES)

Members:

Adanez, Juan (CSIC-Zaragoza, ES)

Aguado, Jose (URJC, ES)

Azapagic, Adisa (U. Manchester, UK)

Arauzo, Jesus (U. Zaragoza, ES)

Arce, Alberto (U. Santiago Compostela, ES)

Bertrand, Jöel (CNRS, FR)

Bilbao, Javier (U. País Vasco, ES)

Biscans, Béatrice (U. Toulouse, FR)

Bröckel, Ulrich (Umwelt-Campus Birkenfeld, DE)

Carranza, Francisco (Univ. Sevilla, ES)

Cordero, Tomas (U. Málaga, ES)

Cortes, Vicente (U. Sevilla, ES)

Diaz, Mario (U. Oviedo, ES)

Dionysiou, Dionysios (University of Cincinnati, USA)

Dominguez-Ramos, Antonio (U. Cantabria, ES)

Drioli, Enrico (U. Calabria, IT)

Economou, Ioannis (Aghia Paraskevi, GR)

Esplugas, Santiago (U. Barcelona, ES)

Ferreira, Guilherme (U. Faro, PT)

Gani, Rafiqul (Technische U. Denmark, DK)

García-Lopez, Jose L. (CSIC-CIB-Madrid, ES)

García-Calvo, Eloy (UAH, ES)

Gonzalez-Velasco, Juan R. (U. País Vasco, ES)

Gonzalez, Valentín (UAM, ES)

Hernandez, Francisco (U.P. Cartagena, ES)

Jimenez, Laureano (URiV, ES)

Jullian, Sophie (IFP-Lyon, FR)

Jungbauer, Alois (U. NRLS Vienna, AT)

Kraslawski, Andrzej (Lappeenranta U. Tech., FIN)

Knorr, Dietrich (Technische U. Berlin, DE)

Ladero, Miguel (UCM, ES)

Loewe, Holger (U. Mainz, DE)

Marcilla, Antonio (U. Alicante, ES)

Martin, Antonio (U. Cordoba, ES)

Martinez, Leopoldo (U. Granada, ES)

Meier, Willi (Dechema-EFCE, DE)

Menendez, Miguel (U. Zaragoza, ES)

Menendez, Rosa (CSIC-Oviedo, ES)

Merchuk, Jose C. (U. Ben Gurion, IL)

Mirasol, José R. (U. Malaga, ES)

Monzon, Antonio (U. Zaragoza, ES)

Mulet, Antonio (U. P. Valencia, ES)

Ortiz, Inmaculada (U. Cantabria, ES)

Pingarron, Jose Manuel (UCM, ES)

Pitt, Martin J. (Sheffield, UK)

Poletto, Massimo (U. Salerno, IT)

Prats, Daniel (U. Alicante, ES)

Rodrigo, Manuel (U. Cast.-La Mancha, ES)

Rodriguez, Juan J. (UAM, ES)

Rodriguez-Somolinos, Francisco (UCM, ES)

Rosello, Carme (U. Islas Baleares, ES)

Santamaria, Jesus (U. Zaragoza, ES)

Sastre, Ana (U. Politec. Cataluña, ES)

Serrano, David (URJC, ES)

Sotelo, Jose L. (UCM, ES)

Track, Thomas (DECHEMA, DE)

Valero, Francisco (UAB, ES)

Valverde, Jose L. (U. Cast. La Mancha, ES)

Abstracts submission

The selection of the communications will be carried out based on a submitted abstract of maximum 2 pages. This abstract must be submitted in English and has to be sent in electronic format, as a Microsoft Word file, by e-mail to:

scientificsecretary@anqueicce2012.org

REVIEW PROCESS

All abstracts will be independently reviewed by, at least, three independence reviewers.

A group of selected papers, by the Scientific Committee, will be invited to submit a full paper to be published as in-focus issues in selected scientific and technical journals.

Deadlines

15 March 2012	Abstracts submission.
27 April 2012	Notification to the authors.
10 May 2012	End of reduced registration fee. Preliminary scientific programme.

Registration Fees

To register in the Congress, please fill in the online registration form available at the website: **www.anqueicce2012.org**

Fees per person	Before 10.05.12	After 10.05.12
General registration	550 €	650 €
Members of ANQUE, COQ, EFCE and SusChem	450 €	550 €
Post-graduated students*	250 €	350 €

*This reduced fee is applicable to PhD and Master students. To benefit from it, they should submit a certification issued by the Department Head indicating the student's situation together with the registration form and the bank transfer justification.

Both for oral and poster communications, authors must submit their abstract **before 15th March 2012** for its evaluation by the scientific committee. The notification of acceptance will be communicated to the authors **before 27th April 2012**.

Sponsors/media partners

ANQUE ICCE 2012 will provide an ideal platform for industry presentation in form of sponsoring, exhibition, individual scientific sessions or seminars as well as receptions. Tailored sponsoring to suit your company is possible.

A press office will be available during the congress.

Congress fees include attendance to all the sessions (plenary lectures, round tables, oral and posters sessions), the programme, abstract booklet (and/or CD-Rom), list of participants, coffee breaks and social events. Taxes are included in the given fees.

A maximum of 2 communications per registration can be presented.

Bank data for the payment of the congress fees are:

From Spain:

"Código Cuenta Cliente (C.C.C.)"
0081 0155 86 0002344039

From outside Spain:

International Bank Account Number (I.B.A.N.): ES 31 0081
0155 86 0002344039.
SWIFT/BIC Code: BSABESBB.

Venue

The congress will be held in the **Convention Center of Hotel Sylken Al-Andalus Palace**. The Convention Center is completed with the provision of the most advanced service supervised by a team specialised in event organisation and management.

This modern, well-lit hotel, fully renewed in 2006, comes up like an oasis in the orange-blossom city, among the gardens of Heliopolis district and near Maria Luisa Park and its main square (Plaza de España). With its 623 rooms, Silken Al-Andalus Hotel stands out for its spacious facilities, radiating light and freshness, inviting the guest to enjoy its more than 15,000 m² garden areas, take a relaxing bath in its unique swimming-pool, rest in its large rooms with free connection to the Internet or taste a glass of wine in its piano-bar while listening to live music.

It only takes 10 minutes to get to the hotel from the historical centre of Seville and there is easy access from Santa Justa Station and the airport. The exquisite treatment given by Silken Al-Andalus Hotel's staff makes it the ideal environment to feel Silken's service philosophy: persons always first. Silken Al-Andalus Hotel turns the stay in Seville into an experience that can always be repeated.

Hotel Sylken Al-Andalus Palace

Av. de la Palmera s/n, esquina Paraná

41012 Seville (Spain)

Telephone: (+34) 954 230 600

Fax: (+34) 954 231 912

E-mail: silkenandalus@hoteles-silken.com

Web:

www.hoteles-silken.com/hotel-al-andalus-palace-sevilla/centro-de-convenciones/

How to reach:

www.hoteles-silken.com/hotel-al-andalus-palace-sevilla/como-llegar-al-hotel

Special room rates have been arranged for Congress participants
See booking form on Web page

Hotel Sylken Al-Andalus Palace



Seville

There are places so full of beauty and history; with so much to unveil to the traveler that, at first sight, they might appear immense. Seville is one of those privileged places.

A magical city, cultural melting pot, with an unbeatable showcase of art displayed in its monuments and sites; the non-stop atmosphere of a fair in its streets and squares; the warmth of its friendly people...Halfway between passion and innovation; feeling and tradition.



The wealth of its offer, with a multitude of things to see and experience, turn a mere walk around the city into an endless chain of new sensations.



Contact

ANQUE

C/ Lagasca nº 27, 1º E, 28001 Madrid (Spain)

Telephone: (+34) 91 431 07 03

Fax: (+34) 91 576 52 79

E-mail:

General topics:

congresssecretary@anqueicce2012.org

Scientific topics:

scientificsecretary@anqueicce2012.org

www.anqueicce2012.org



ANQUE ICCE

2012

24 - 27 June

INTERNATIONAL
CONGRESS OF
CHEMICAL
ENGINEERING



EFCE Event No.701

