# CAC-2004 Chemometrics in Analytical Chemistry

New Challenges for a Maturing Science

Welcome





September 2004 20<sup>th</sup> to 23<sup>rd</sup> Lisbon, Portugal

# 2nd ANNOUNCEMENT and CALL for PAPERS

Organized by the

Centre for Biological and Chemical Engineering

Instituto Superior Técnico

TECHNICAL UNIVERSITY OF LISBON

#### Invitation

On behalf of the Organizing Committee of CAC-2004 we invite you to join us in Lisbon (Portugal) for the Ninth Chemometrics in Analytical Chemistry Conference. Following the tradition of the preceding CAC conferences, emphasis will be on new developments and applications of chemometrics in Biosciences, Chemistry, Food, Environmental, Chemical and Process Engineering. We hope to provide you with an interesting scientific program and to organize a conference that will stimulate the exchange and collaboration between chemometricians and practioneers (analytical chemists, bio-scientists, engineers). Your active participation and contributions are highly appreciated. We also hope that you will enjoy the many attractions of Lisbon.

Prof. Joaquim M.S. Cabral (Presiding Chairman) Prof. Joaquim E. Silva (co-Chairman) Prof. Jose C. Menezes (Chairman) Eng. Mário G. Rodrigues (secretariat)

# **Conference Aim and Scope**

CAC meetings are held every two years. CAC meetings have a special aura not only due to the usual attendance of most of the founding fathers of chemometrics but because of two other factors. First, a balanced turn up of practioneers and scientists, industry and academic affiliates is achieved in all meetings as a direct result of the pervasive nature of chemometrics. And second, the conference layout with a well-achieved balance between topical plenary lectures, oral lectures, time for questions, and plenty of time for discussions at the posters sessions, makes CAC meetings an ideal place for both young and senior attendees to meet and share their experiences and knowledge in chemometrics.

In 2004 the conference motto is "New Challenges for a Maturing Science". The perceived areas in which Chemometrics is a requirement and is likely to consolidate or make a big impact are:

- 1. Systems biology and "omic"-biosciences
- 2. In-silico chemometrics, miniaturized and high-throughput applications
- 3. Biomedical, image analysis, in-vivo non-invasive monitoring
- 4. Chemometrics in Safety and Societal Issues (food, environmental, bio-risk)
- 5. Process spectroscopy and in-process QC (PAT)
- 6. Faster process development and product design
- 7. Process chemometrics, supervision and diagnosis
- 8. New / improved methods (mathematical or statistical) in sampling, data-analysis, monitoring, modelling, calibration, regulatory acceptance etc





# **Organizing Committee**

Joaquim M.S. Cabral (Presiding Chairman) Joaquim E. Silva (co-Chairman) Jose C. Menezes (Chairman) Mário G. Rodrigues (secretariat)

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# **Scientific Committee**

Booksh, K. (USA)
Brereton, R. (GB)
Buydens, L. (NL)
Clementi, S. (I)
Duewer, D.L. (USA)
Ferreira, M. (BR)
Forina, M. (I)
Gallagher, N.B (USA)
Gasteiger, J. (D)
Geladi, P. (S)
Gemperline, P.J. (USA)
Havel, J. (CZ)
Hopke, P. (USA)

Koch, M. (USA)
Kowalski, B. (USA)
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Varmuza, K. (A)
Walczak, B. (PL)
Wentzell, P.D. (CA)
Wise, B.M. (USA)
Wold, S. (S)
Zupan, J. (SLO)





#### **Who Should Attend**

In the last decade chemometrics became an enabling science for many disciplines other than analytical and process analytical chemistry. Most notably biological, pharmaceutical, chemical and process engineering areas, imaging and biomedical areas, food and environmental areas, have emerged or consolidated as areas where chemometrics already has or will play a decisive role. As such, practioneers and scientists from industry or academic affiliation, working in any of the above areas will potentially be interested in the new developments and on knowing more on established techniques.

CAC meetings are an ideal place for both young and senior attendees to meet and share their experiences and knowledge in chemometrics.

# **Confirmed Invited Speakers**

Bhavik Bakshi (Ohio State University, USA)

James M. Brown (ExxonMobil, USA)

Lutgarde Buydens (Universiteit Nijmegen, NL)

Marc Champagne (Tembec, CA)

Marcia Ferreira (UNICAMP, BR)

Paul J. Gemperline, (North Carolina, USA)

Age K. Smilde (TNO, NL)

David Haaland (Sandia Labs, USA)

Sabine Van Huffel (Katholieke Universiteit Leuven, BE)

Anna de Juan (Universitat de Barcelona, ES)

Nouna Kettaneh (Umetrics Inc., SE)

Theodora Kourti (McMaster University, CA)

Harald Martens (Maforsk, NO)

Magni Martens (The Royal Veterinary and Agricultural University, DK)

Elaine Martin (University of Newcastle-Upon-Tyne, UK)

Babatunde A. Ogunnaike (University of Delaware, USA)

Michael J. Piovoso (Penn State University, USA)

Douglas Rutledge (Institut National Agronomique, FR)

Roma Tauler (IIQAB CID-CSIC, Barcelona, ES)

Peter Wentzell (Dalhousie University, CA)

Barry M Wise (Eigenvector Research Inc, USA)

Svante Wold (Umetrics Group, SE)





# **Call For Papers**

Submission of abstracts for poster and oral presentations should be done through CAC-2004's website: http://dequim.ist.utl.pt/cac2004.

The Young Chemometrician Award will take place at the Conference Banquet and a prize for the best poster presented at CAC-2004 will be given on the closing session of Thursday 23<sup>rd</sup>.

#### **Deadlines**

Submission of abstracts for oral & poster contributions
Notification of acceptance of abstracts
Deadline for registration with all inclusive Social Program
package as bonus

March 15, 2004 May 15, 2004

June 30, 2004

Conference proceedings will be published as a special volume of ELSEVIER's *Analytica Chimica Acta* (only papers submitted during CAC-2004 that meet ACA refereeing process will be included in the special volume).

#### **Main Themes & Sessions**

As CAC-2004 motto suggests - "New Challenges for a Maturing Science" - original contributions from, but not limited to, any of the areas below are sought:

- 1. Systems biology and "omic"-biosciences
- 2. In-silico chemometrics, miniaturized and high-throughput applications
- 3. Biomedical, image analysis, in-vivo non-invasive monitoring
- 4. Chemometrics in Safety and Societal Issues (food, environmental, bio-risk)
- 5. Process spectroscopy and in-process QC (PAT)
- 6. Faster process development and product design
- 7. Process chemometrics, supervision and diagnosis
- 8. New / improved methods (mathematical or statistical) in sampling, data-analysis, monitoring, modelling, calibration, regulatory acceptance etc





#### **Fees**

Registration fees include: welcome reception, conference materials, lunches, coffee-breaks and all inclusive Social Program if paid before 1<sup>st</sup> of July 2004.

Social Program includes a tour to the World Heritage Village of SINTRA, via LISBON's coastline and a banquet dinner at the renowned COLARES wine cellar.

Conference	Before July 1st	July 1st €600 (includes Social Program)		
Registration	After June 30 <sup>th</sup>	€600 (excludes Social Program)		
Fee	Student (proof required) apply 50% to the above fees (wh			
Social Program Before July 1st		included in the Conference registration fee		
Registration	After June 30 <sup>th</sup>	ne 30 <sup>th</sup> €100		
Fee	Accompanying Person	€100		
	Student (proof required)	€75 if paid after June 30 <sup>th</sup>		

# **Pre-Conference Courses & Workshops**

- 1 Chemometrics without Equations (or Hardly Any) Eigenvector Research Inc. (USA)
- 2 Multivariate Image Analysis Eigenvector Research Inc. (USA)
- 3 Design of Experiments in Industrial R&D Umetrics Co. (SE)
- 4 Proper Reference Sampling: The Critical Success Factor K. Esbensen, PhD (Alborg Univ., DK)
- 5 Separating Physical from Chemical Information in Spectra (EMSC) H. Martens, PhD (MATFORSK, NO)
- Process Chemometrics & Process Analytical Technology for Abnormal Situation Detection: Improve Quality Control for Product & Process - T.Kourti, PhD (McMaster Univ., CA)

COURSE /	TYPE	Duration	Schedule	Price (€)	
WORKSHOP				Academic	Industrial
1	Hands-On	one day	Sat, 18/Sep	200	400
2	Hands-On	one day	Sun, 19/Sep	200	400
3	Workshop	one day	Sun, 19/Sep	200	400
4	Workshop	one day	Sat, 18/Sep	200	400
5	Workshop	half day	Sat, 18/Sep	200	400
6	Workshop	one day	Sun, 19/Sep	200	400





#### Location

In 2004 Lisbon will be a vibrant city as Portugal hosts Rock'n Rio in May, the European Football Championship in June and other major international congresses during the summer months.

Lisbon is a city with 2 million inhabitants located by the Atlantic Ocean shore. It is the capital of Portugal, the most western country of continental Europe. Lisbon dates back to pre-Roman times and has a rich cultural and historical heritage being today a cosmopolitan city with a significant percentage of its population either English or French speaking.

Lisbon has frequent daily flight connections with most major cities in the world. September is still high season with mild late summer weather.

CAC-2004 will be hosted by the Centre for Biological & Chemical Engineering (Technical University of Lisbon) at the Lisbon Campus of the almost 100-years old Science & Technology Institute (IST). IST's Congress Center is a 300 comfortable seat facility with wireless networking, satellite rooms for posters sessions, and is adjacent to a Holiday Inn where the congress lunches will be served.

CAC-2004 social program will include a tour in Lisbon and the nearby world heritage village of Sintra ending with dinner at a renowned wine cellar. Participants and accompanying persons may make the most of their stay in Portugal and visit after the conference other places of interest, such as the city of Porto (300 km north of Lisbon), second to no other in the country, which has a very rich historical heritage and is famous for its Port Wine.

#### **Accomodation**

As September is still high season make your Hotel reservation in advance. As 2004 is expected to be a very busy tourist year, it will be wise to make good use of the blocked rooms at selected Hotels with which preferred rates have been negotiated a year in advance.

All the hotels are situated in the city center, some within walking distance (5-15 min) of the Conference venue. Please refer to CAC-2004's web site (see the Hotel list link) for more information, a list of Hotels and downloadable booking forms will be available, to be faxed directly to the Hotel of your choice.



# **Payment Details**

All payments (conference, social program and/or course registrations) must be made to IST - INSTITUTO SUPERIOR TECNICO (VAT PT 501 507 930) - either by VISA, AMEX or an EU drawn check in EUROS with <u>expenses paid by issuer</u> and sent by mail or fax (whatever applies) to CAC-2004 Secretariat (see address details below). An invoice can be sent if requested. Invoices must be requested well in advance so that payment is made before the closing dates above. A receipt will be issued by IST on all payments received.

Lodging (Hotel reservation and payment) is handled directly with your choice of Hotel. A recomended list of conveniently located Hotels with which CAC-2004 has established preferred rates is available from the Conference website together with a reservation form to be sent directly to the Hotel.

All cancellations made before July 1st will be fully refunded. After that date a penalty will be applied: 10% if the cancelaltion occurs up to 2 months before CAC-2004, 30% if made one month before; 50% if made 2 weeks before (100% for pre-conference course registrations); 100% after September 6th (with Conference materials shipped one week after the conference to the registrant).

## **Conference Secretariat**

Nuno Vieira Matos (11-6.11) CAC-2004 Centre for Biological & Chemical Engineering I.S.T., Av. Rovisco Pais 1049-001 Lisbon, Portugal

email - cac2004@ist.utl.pt voice - (+351) 21 841 9838 fax - (+351) 21 841 9197

## **Conference Website**

For updated information, registration, paper submission and other aspects of attending CAC-2004, please visit the conference website http://dequim.ist.utl.pt/cac2004 or contact the conference secretariat by any of the means above.

The following organizations have agreed to sponsor to various degrees and ways CAC-2004 (good as of February 1st)









# Xarxa Catalana de Quimiometria



# FCT Fundação para a Ciência e a Tecnologia

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