

**1st International Workshop on
Computer Image Analysis in Agriculture
Aug 27 to 28, 2009
Potsdam, Germany**

The 1st International Workshop on Computer Image Analysis in Agriculture will be held in Potsdam on Aug 27 to 28, 2009.

The workshop focus on the application of imaging techniques and spectroscopic methods in agriculture. These emerging technologies will be increasingly used for monitoring pre- and postharvest processes. Appropriate solutions for agricultural applications are scarce, however. For these specific demands suitable solutions need to be developed in close cooperation between targeted basic research and industry.

The workshop is the first meeting of the working group and the first international event within a series of 14 so far national workshops. It is held as a satellite-meeting preceding the 5th International Technical Symposium on Food Processing, Monitoring Technology in Bioprocesses and Food Quality Management in Potsdam, Germany on August 31 to Sept 2, 2009.

TENTATIVE PROGRAM

Thursday, Aug. 27th

Registration
Technical sessions / Poster session
Cocktail party (get-together)

Friday, Aug. 28th

Technical sessions / Poster sessions
Informal dinner

SCIENTIFIC COMMITTEE (preliminary)

- Enrique Molto, Spain
- Thomas Banhazi, Australia
- Manuela Zude, Germany
- Da-Wen Sun, Ireland
- Laszlo Baranyai, Hungary
- Martin Geyer, Germany
- Thomas Hoffmann, Germany

VENUE

Leibniz Institute for Agricultural Engineering Potsdam-Bornim (ATB)
Max-Eyth-Allee 100
14469 Potsdam, Germany

LANGUAGE

The official language of the workshop will be English.

ACCOMMODATIONS

Rooms at a reduced rate are available at the Mercure Hotel (reservation required before July 30, 2009). Further information will be available in time on our homepage.

INSTRUCTIONS FOR AUTHORS

Please submit your presentation title, keywords and abstract online to the symposium homepage:

www.atb-potsdam.de/CIGR-ImageAnalysis

Please indicate if you prefer oral or poster presentation. The program committee will make the final decisions on the acceptance of abstracts. The deadline for submission is 15/01/2009.

To participate, please submit

- the REGISTRATION form on the working group website
- transfer the registration fee online

WORKSHOP SECRETARIAT

Andrea Gabbert, Andree Jakobs
Leibniz Institute for Agricultural Engineering Potsdam-Bornim (ATB)
Dept. Horticultural Engineering
Max-Eyth-Allee 100
14469 Potsdam-Bornim
Germany
phone: +49-331-5699-611
fax : +49-331-5699-849
email: CBA2009@atb-potsdam.de



Introducing a new
CIGR Working group:

Image Analysis for Agricultural Products and Processes & Invitation for the 1st Workshop

Aug 27 to 28, 2009
Potsdam, Germany

Organized by



Co-sponsored by



TASKS

The working group will meet recent demands on the development of adapted image analyses for process monitoring in agricultural production, during storage and processing of raw material. The process management of the entire supply chain should be supported by means of objective, sensitive, and reliable optical tools for receiving analytical data in a nondestructive way. The applications may be integrated in terrestrial and aerial mapping of natural resources, crop monitoring, precision agriculture, robotics, automatic guidance, livestock farming, non-destructive on-site inspection of product properties, quality control, sanitizing treatments, classification in processing lines and, in general, process automation. Particular focus in the themes will be on (i) the development of advanced sorting techniques, and (ii) the on-site monitoring of processes related to the change of the measured parameter as a function of time. Resulting, the following preliminary keywords are denoted. However, the objectives are subject to any changes with respect to the discussion results at any time.

A. Monitoring

- Gathering recognition parameters for image processing in on-site monitoring of plants and animals
- Interdisciplinary exchange and development of advanced image processing methods in different applications
- Exchange between science and industry for bringing new optical compounds in the focus of scientific working groups supporting new applications

B. Process management

- Image processing with respect to geometric and structure analyses
- Development of phantoms (gold standards)
- Influence of outdoor light conditions
- Changes of recognized parameters in on-site monitoring as a function of time
- Remote inspection of farms, greenhouses, etc via internet

OBJECTIVES AND SCOPE

- **Objectives**
 - To meet recent demands on process monitoring in agricultural production, during storage and processing of raw material
 - To develop objective, sensitive, and reliable optical tools for receiving analytical data in a non-destructive way
- **Scope**
 - Terrestrial and aerial mapping of natural resources
 - Non-destructive, on-site inspection of product properties and quality control
 - Crop monitoring, precision agriculture, precision horticulture, and automatic guidance
 - Livestock farming (both on and off farm applications)
 - Classification in processing lines
 - Robotics or any other process automation

EXPECTED OUTCOMES

- Capture the state-of-the-art of image analyses applications in agronomy
- Enhancement of the collaboration of industry and scientists
- Publication of an outline of recent trends and future needs of industry
- Standardization

GOVERNING BOARD

- Chair: Enrique Molto
- Centro de Agroingenieria, IVIA (ES)
Contact: molto@ivia.es
- Vice-chair group/task A: Thomas Banhazi
- South Australian Research and Development Institute (AU)
- Vice chair group/task B: Manuela Zude
- Leibniz Institute for Agricultural Engineering Potsdam-Bornim, ATB (DE)

IMPORTANT DATES

- | | |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 02/09/2008 | Launch of the WG at the International Conference of Agricultural Engineering, August 31 st to September 4 th , Iguassu Falls City, P.R. Brazil |
| 03/09/2008 | Call for papers for the 1 st Workshop of the WG |
| 15/01/2009 | Abstract submission due |
| 05/03/2009 | Confirmation of contributions |
| 30/05/2009 | Registration due |
| 30/06/2009 | Full paper for publication in the proceedings |
| 27-28/08/2009 | 1 st International Workshop on Computer Image Analysis in Agriculture held in Potsdam, Germany |

JOIN THE WG !
 Contact: molto@ivia.es
 Website: www.atb-potsdam.de/CIGR-ImageAnalysis
 Please register on the website to join the first workshop, and/or to access information of the Working Group

REGISTRATION

The website of the CIGR Working Group on Image Analysis for Advanced Grading, and in-situ Inspection of Agricultural Processes and Products is provided free of charge, but personal registration is required to access the submission of contributions, the database, and to participate in the ring tests.