

IMG – Program

Aug. 27th to 28th, 2009
Potsdam, Germany

Thursday, August 27

Thursday 12:00 – 14:00 Registration

Thursday, August 27

14:00 – 15:45

14:00 – 14:30

Welcome and introduction
Enrique Molto

14:30 – 15:00

Hyperspectral imaging for food quality evaluation
Da-Wen Sun

15:00 – 15:45

Image based 3D inspection of surfaces and objects
Michael Heizmann

Coffee Break

16:30 – 17:50

Chair: Laszlo Baranyai

16:30 – 16:50

Computer vision developments for the automatic inspection of fresh and processed fruits
José Blasco, Nuria Aleixos, Sergio Cubero, Florentino Juste, Juan Gómez-Sanchis, Vicente Alegre, Enrique Moltó

16:50 – 17:10

Analysis of color variations on sunflower crop images, owing to changes in environmental illumination.
Gonzalo Ruiz Ruiz, Luis Manuel Navas, Jaime Gómez Gil

17:10 – 17:30

ImageInspector: a multipurpose system for agri-food products
Gianfranco Venora, Oscar Grillo, Rossella Saccone, Concetta Ravalli

17:30 – 17:50

Comparison of different classification algorithms for weed detection from images based on shape parameters
Martin Weis, Till Rumpf, Roland Gerhards, Lutz Plümer

19:00

Dinner

Friday, August 28

Chair: Manuela Zude

- 09:30 – 09:50 Potential applications of hyperspectral Imaging for quality control in dairy foods
Aoife A. Gowen, J. Burger, D. O'Callaghan, C.P. O'Donnell
- 09:50 – 10:10 Species discrimination using spectral/spatial descriptive statistics
Scott D. Noble, Ralph B. Brown
- 10:10 – 10:30 How to achieve gold standards in agricultural applications?
László Baranyai, Andrée Jacobs

Coffee Break

Chair: Michael Heizmann

- 10:45 – 11:05 Usability study of 3D time-of-flight cameras for automatic plant phenotyping
Ralph Klose, Jaime Penlington, Arno Ruckelshausen
- 11:05 – 11:25 Calculation of flow vector in plants by non-destructive imaging using neutron radiography
Uzuki Matsushima, Wolfgang Graf, Nikolay Kardjilov, Hiroshi Shono, Werner B. Herppich
- 11:25 – 11:45 Monitoring optical properties of apple tissue during cool storage
László Baranyai, Christian Regen, Manuela Zude
- 11:45 – 12:05 Systems for multisensor navigation and 3D-modelling
Anko Börner, Ines Ernst, Denis Griebach
- 12:15 - 13:15 *Lunch*
- 13:30 - 15:00 Poster presentations (5 Minutes each)

Preliminary results on the non-invasive diagnosis of superficial scald in 'Rocha' pear by fluorescence imaging

Ana Margarida Cavaco, D. Antunes, J. Marques da Silva, R. Antunes, R. Guerra

Synchrotron x-ray CT of rose peduncles – evaluation of tissue damage by radiation

Uzuki Matsushima, Wolfgang Graf, Simon Zabler, Ingo Manke, Martin Dawson, Gerard Choinka, Werner B. Herppich

Image processing for the determination of jam browning kinetics

Davide Ricauda Aimonino, Lorenzo Comba, Paolo Gay

Detection of weeds using image processing and clustering

Martin Weis, Roland Gerhards

Correlation between vegetation indices and leaf n content and dry matter production in *Brachiaria decumbens*

Mario Cupertino da Silva Júnior, Francisco de Assis de Carvalho Pinto, Daniel Marçal de Queiroz, Enrique Anastácio Alves, Luis Manuel Navas Gracia, Jaime Gomez Gil

Structure investigation of soil aggregates treated with different organic matter using X-ray micro tomography

Keiko Nakano, Werner B. Herppich, Nikolay Kardjilov, Ingo Manke, Andre Hilger, Martin Dawson, Kinya Masuda, Yoshitaka Hara, Uzuki Matsushima

Determination of bread crumb porosity using statistical analysis of surface pattern

Aniko Lambert-Meretei, György Csima, Medea Nogula-Nagy, László Baranyai, András Fekete

Application of morphometric image analysis system to evaluate the incidence of Fusarium head blight wheat infected kernels

Paolo Menesatti, Francesca Antonucci, Corrado Costa, Alberto Santori, Iliana Nicia-relli, Alessandro Infantino

Characterization of morphological properties of apricot stones by image processing

Joszeff Felföldi, F. Firtha, R. Hermán, A. Pedryc

Non aggressive orange acid and sugar indexes estimation system

Tomas J. Arnau, José M. Sotoca, Filiberto Pla

Hyperspectral reflectance imaging for detecting defects on fruits

Byoung-Kwan Cho, Moon S. Kim, Man-Soo Kim

Methods for head blight recognition: chlorophyll fluorescence and hyperspectral image analysis

Elke Bauriegel, Werner B. Herppich, Antje Giebel, Karl-Heinz Dammer, Horst Beuche, Joachim Intreß, Bernd Rodemann

Optical systems and moduls

Michael Rudolph, Ocean Optics

15:00 – 16:00

Chair: Enrique Molto

Discussion and conclusions

Announcement of next meeting