REWARD - REUSE OF WATER IN THE FOOD AND BIOPROCESSING INDUSTRIES
SPECC (Søren B Engelsen & Frans van den Berg) in the lead of a 25 mio DKr research project sponsored by the Strategic Research Council. The project partners include DTU, TUM, ARLA and Novozymes and the main aim of REWARD is to reduce overall water consumption in the food and bioprocessing industries by reducing water intake and recycling of water streams. The primary tools adapted is the development and implementation of new sensors for in-line water monitoring, and the application of Process Analytical Technology and Quality by Design methodologies.

BIOPRO - WORLD TALENT CAMPUS
SPECC (Frans van den Berg) major contributor to the BIOPRO world talent campus at the Mærsk Mc-Kinney Møller Science Center in Sorø. The participants have all gone through an application process before being selected for WTC course by the BIOPRO steering committee. The students have been awarded 3 ECTS-points.

Picture: The winning team with their LEGO prize: Hilde Larsson, Technical University of Denmark, Stephen Goldrick, Newcastle University, Adityia Kunjapur, Massachusetts Institute of Technology, Laura Jeffrey, University of Strathclyde and Tobias Ladner, Aachen University.
Peer reviewed publications Oct-Dec 2013:


Peer reviewed publications Oct-Dec 2013:


Peer reviewed publications Oct-Dec 2013:


JM Amigo. Emerging possibilities of near infrared spectroscopy and near infrared chemical imaging in the pharmaceutical manufacturing industry. The challenge of the process analytical technologies paradigm or just a research tool. *NIRnews*. 24 (8), 9-12, 2013.

Other publications Oct-Dec 2013:

Other publications Oct-Dec 2013:


Staff:
- Tine Ringsted, PhD student 1/10 2013 – 30/9 2016 (SB Engelsen)
- Ningchuan Wang, MSc student 11/11 2013 – 10/8 2014 (F van den Berg)
- Marie Wolsing, MSc student 1/12 2013 – 30/5 2014 (F van den Berg)
- Katharina Böckmann, MSc student 1/12 2013 – 30/5 2014 (F van den Berg)
- Anders Juul Lawaetz, post doc 1/12 2013 – 30/11 2014 (Å Rinnan)

Guest Researchers:
- Claudia Di Ciero (host F Savorani, 6/11 2013 – 28/2 2014)
- Bashar Amer (host T Skov, 2/12 2013 – 31/1 2014)

PhD defences:
- **Bekzod Khakimov** (supervisor SB Engelsen): Metabolomics and bioactive substances in plants. November 8th, 2013
- **Signe Hoff** (supervisor BM Jespersen): From Barley to Beer Oxidation throughout the brewing process. November 22nd, 2013
- **Lotte Bøge Lyndgaard** (supervisor F van den Berg): Applications of Raman Spectroscopy and Multivariate Data Analysis in Food and Pharmaceutical Sciences. December 16th, 2013

BSc & MSc defences:
Courses: (Oct-Dec)

Block 2:

- Advanced Chemometrics (MA Rasmussen, T Skov, R Bro, 20 students)
- Quantitative Bio-spectroscopy (N Viereck, SB Engelsen, FH Larsen, 19 students)
- Plant Polysaccharides: Biology, Structure and Applications (FH Larsen, SB Engelsen, 8 students)
- Brewing 1 (BM Jespersen, F van den Berg, 16 students)
- PhD: Quantitative Food Spectroscopy (N Viereck, SB Engelsen, FH Larsen, 1 student)
- ODIN: NIR Spectroscopy 10/10
- ODIN: Basic Chemometrics 21-22/10
- ODIN: Multiway Analysis 29-30/10
- ODIN: A day of 100 Methods 9/12

New granted projects:

- **REWARD** – REuse of WAteR in the food and bioprocessing inDustry. Søren Balling Engelsen and Frans van den Berg, The Danish council for strategic research
- **RenPåNy**. Frans van den Berg and Nanna Viereck, Grønt Udviklings- og Demonstrationsprogram (GUDP)