

June 21, 2011 (Tuesday) 55th EOQ Congress

CONCURRENT SESSIONS KEMPINSKI HOTEL CORVINUS

Tuesday 13:30 – 17:30 Erzsébet tér 7-8, Budapest V.

SALON BANDINI/MARZIO

9.2. EDUCATION OF QUALITY – QUALITY OF EDUCATION II. 15:30 – 17:30

Co-Organizer: Óbuda University

Session Chair: Eric Janssens, European Organization for Quality, Brussels, Belgium

16.20 QUARISMA – Adoption of the QM Qualification "Quality Systems Manager Junior" in Meat Chains

Susanne Lehnert and Pieternel Luning, Wageningen University, The Netherlands

Lehnert, Susanne (The Netherlands)

She learned Agricultural Science at the University of Göttingen and in 1998 earned PhD at the University of Bonn with the thesis: Establishing quality management systems on farms in the meat production sector. Since 1995 she is an EOQ Quality Auditor and Quality Systems Manager in the field of Standard ISO 9001. Since 1995 she carries out auditing and consultant activities in the area of quality management in agriculture according to branch oriented standards such as GMP, QS and REDCert. She is host lecturer at the University of Bonn in the DGQ-certified training course "Quality Manager Junior". She also makes research activities in the area of European-wide qualification in quality management systems and methods within the framework of the QUARISMA project, Wageningen University, the Netherlands.

QUARISMA – Adoption of the QM qualification "Quality Systems Manager Junior" in Meat Chains

Dr. Susanne Lehnert and Dr. Pieternel Luning (University of Wageningen), Dr. Stefanie Bruckner (AGRI-Q Service GmbH) and Prof. Dr. Brigitte Petersen (University of Bonn)

Currently, QUARISMA is the largest project in the segment of personnel exchange, funded with 2.5 million € from the European Union. The element IAPP (Industry-Academia Partnerships and Pathways), the Marie Curie actions of the 7th Research Framework Program of the EU aims to support the needs of the European scientific community in terms of training, mobility and career development of junior staff. It aims at creating dynamic solutions for the exchange of personnel between public research institutions and private enterprises, especially SMEs, including traditional manufacturing industries. Knowledge exchange and mutual understanding of the different settings and skill requirements in science and industry are the basis for staff development.

The exchange of researchers and staff in enterprises and academic organizations is unique, thus supporting the interdisciplinary, intersectoral, and international approach of the project at the same time.

During the four-year project period a total of 22 graduate students, experienced practitioners and experts have to learn about each other. QUARISMA offers young scientists the possibility of practical training. Experienced researchers will get the opportunity to review and get feedback from companies and organizations in the meat industry. The scientists working at the establishments in turn can become familiar with innovative trends at the universities and so learn valuable knowledge.

The content of QUARISMA comprises three related research areas.

The research objective **"chain management**" focuses on economic issues. How can e.g. measures for ensuring quality and health of animals be standardized and economically optimized? Within this first research focus a project guideline for innovation in the meat industry, including a cost / benefit analysis, will be developed.

The research focus "**quality and information management**" deals, amongst others things, with the question `How to certify the health of animals`. Is "health" only defined as the mere absence of dangerous diseases? The international exchange of knowledge in these areas as well as the development of cross-border strategies in the area of animal disease prevention complete the second research area.

The third research area "**food safety and risk management**" is about the development of concepts for the prevention of food-borne hazards. For example, carelessness in industrial hygiene can lead to the contamination with Listeria, which is a harmful bacteria especially for

pregnant women. The avoidance of further significant zoonotic diseases - from humans to animals and vice versa communicable diseases – will be examined here.

The transfer of knowledge from the various research areas between experts in science and industry is organized in three different horizontal work packages:

- Assessing and validation in pilot chains
- Training, education and dissemination
- Transfer of knowledge, networking and innovation management

Figure 1 shows the qualification path of DGQ and the University of Bonn.



In the context of the Bologna process of restructuring and modernization European universities (Bachelor and Master System), the University of Bonn has revised its course-related training for young graduates in the area of quality management. Since 2002 more than 200 graduates followed this special program called "Quality systems manager Junior" as a first step towards a practical orientation.

Work package 5 "Training, education and dissemination", of the QUARISMA project is about the development of a European wide course-related training for prospective nutritionists, food technologists and agricultural scientists on the basis of the Quality Systems Manager Junior program (QMJ) which is already established at the university of Bonn. Therefore, quality management programs in the EU for example in the Netherlands were examined and the requirements to establish such a program at European universities were estimated. Based on the results a harmonized catalogue of requirements for the training of quality managers and auditors will be developed in alignment with the gualification criteria of the European Organization for Quality (EOQ). Thereby, the already existing components of the german program Quality Systems Manager Junior at University of Bonn and the master program "Food Safety Management at the Wageningen University (NL) will be adjusted to the EOQ requirements in a practice-oriented way. Herewith, a framework for the establishment of an European-wide program Quality Systems Manager Junior can be initiated and integrated into existing master programs in life sciences at the University of Bonn and the University of Wageningen to enhance the career perspectives of graduates in business and science. A recognition of an EOQ certificate for young Quality Systems Manager Junior which is EUwide valid should be sought.

The following methodological focal points will be presumably included into the EOQ Quality Systems Manager Junior program:

- Food quality management functions (quality design, control, -improvement, assurance, policy & strategy)
- International quality standards and standards
- Hazard Analysis and Critical Control Points (HACCP)
- Supplier assessment and evaluation
- Food logistics management
- Seven Elementary Quality Techniques (Q7)
- Seven Management Techniques (M7)
- Quality Function Deployment (QFD)
- Failure Mode and Effect Analysis (FMEA)
- Hazard Analysis and Critical Control Points (HACCP)
- Six Sigma (6σ)
- Statistic Process Planning (SPP)
- Statistic Process Control (SPC)
- Quality standards and norms

In a second step QUARISMA aims to develop training courses and seminars that are open to graduates from business. Here, the business partners will ensure that training priorities are precisely aligned to the content requirements of the industry. Experiences of the EOQ Quality Systems Manager Junior program established at universities will be integrated and used to develop course modules covering the following topics:

- Internal and external audit management (CB-1)
- Technical tools and methods for use in quality control and risk management (CB-2)
- Customer-supplier relationships and strategic alliances in meat products chains (CB-3)

- Preventive quality management tools (HACCP, FMEA and forecasting models) (CB-4)
- Management of safety and quality improvement processes (CB-5)

You can find further general information about QUARISMA in the Short Paper of Lang/Brinkmann/Petersen.