



# coldchain management

3<sup>rd</sup> International Workshop  
2-3 June 2008, Bonn, Germany

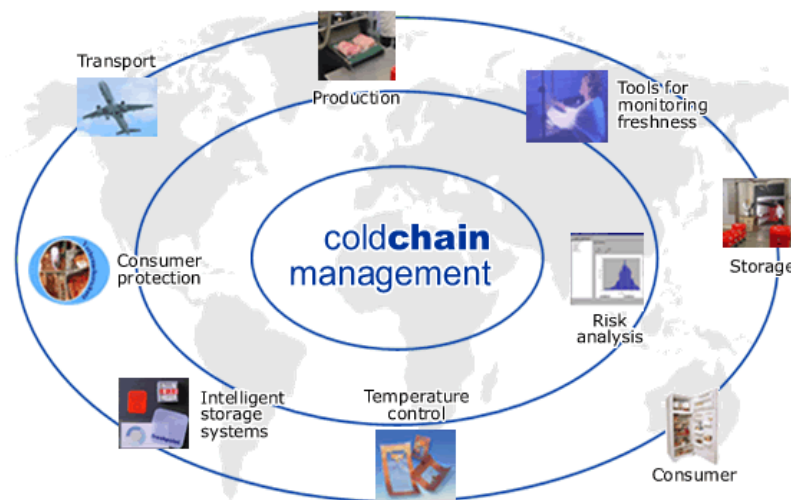
Cold chain logistic

Temperature  
monitoring

Modelling food  
quality and safety

Monitoring food  
freshness

Consumer  
protection



## Contact

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# Agenda

## Monday 2nd June 2008:

**08:30 Registration**

**09:30 Welcome and Introduction**

Prof. Dr. J. Léon, Prof. Dr. B. Petersen, *University of Bonn, Germany*

**09:45 Innovative tools for supporting cold chain management**

S. Bruckner, V. Raab, Dr. J. Kreyenschmidt, *University of Bonn, Germany*

### **Session 1: Innovative solutions for cold chain logistic** *Chairman: Prof. Dr. R. Stamminger (University of Bonn, Germany)*

**10:20 UHF-RFID in the food chain - from identification to Smart Labels**

R. Jedermann, *University of Bremen, Germany*

**10:40 Cold chain in the international flower trade. A life report.**

M. Kockelkoren, *Orbi Solutions, The Netherlands;*

**11:00 Technology improvements within temperature control measures**

A. Guillen, *Escort, New Zealand*

**11:20 Discussion**

**11:30 Coffee Break**

### **Session 2: Temperature monitoring** *Chairman: Prof. Dr. T. Labuza (University of Minnesota, USA)*

**12:00 LifeTrack® technology for smart active-label visual and RFID product lifetime monitoring**

Dr. S.E Zweig, *CliniSense, USA*

**12:20 Fully passive sensing concepts for integration in RFID**

Prof. Dr. Hoffmann, *TU Ilmenau, Germany;* <sup>2</sup>*NXP Semiconductors Germany GmbH, Germany;*

**12:40 RF-TTI technology – an efficient tool for online temperature monitoring**

Dr. T. Gueta-Neyroud, *FreshPoint Quality Assurance Ltd., Israel*

**13:00 Real time monitoring and control in the cold chain**

Dr. C. Gabay, *Motorola, Israel*

**13:20 Discussion**

**13.30 Lunch**

### **Session 3: Models for shelf life prediction and food safety** *Chairman: Prof. Dr. P. Taoukis ( National Technical University of Athens, Greece)*

**14:30 Time to detect for safety based shelf life dating of RTE foods**

Prof. Dr. T. Labuza, *University of Minnesota, USA*

**14:50 Seafood Spoilage and Safety Predictor (SSSP) version 3 from 2008**

Dr. P. Dalgaard, *Technical University of Denmark, Denmark*

**15:10 Predictive microbiology tools for cold chain management**

O. Couvert, *ADRIA, France*

**15:30 Food quality management in cold chains**

Dr. R. Akkerman., *Technical University of Denmark, Denmark*

**15:50 Discussion**

**16:00 Coffee Break**

# Agenda

## Monday 2nd June 2008:

### Session 4: Monitoring food freshness by time temperature indicators

Chairman: Prof. Dr. D. Haarer (University of Bayreuth, Germany)

- 16:30** **Chill chain management and shelf life optimization of MAP seabream fillets: a TTI based alternative to FIFO**  
*Prof. Dr. P. Taoukis, National Technical University of Athens, Greece*
- 16:50** **Application of "Fish Shelf Life Prediction (FSLP)" software for monitoring seafood quality in the cold chain**  
*Dr. B. Alfaro, AZTI-Tecnalia, Spain*
- 17:10** **Development of a biological TTI for monitoring temperature control during the cold chain**  
*M. Ellouze, Cryolog S.A., France*
- 17:30** **What it takes to make it work: the OnVu™ TTI**  
*Dr. A. Fuchs, CIBA, Switzerland*
- 17:50** Discussion

### 18:00 Poster Session & Stakeholder Forum

- 19:00** **Social programme „Akademisches Kunstmuseum“**  
*Welcome (Dr. C. Patermann, EU Commission)*  
*Guided Tour*  
*Dinner*

## Tuesday 3rd June 2008:

- 08:00** **Registration**
- 08:40** **Opening speech**  
*Prof. Dr. B. Petersen, University of Bonn, Germany*
- 08:45** **Food safety aspects linked to chemical contamination – the specific case of materials in contact with food (Migresives EU research program)**  
*Dr. A. Feigenbaum, European Food Safety Authority, Italy*

PARALLEL

### Session 5: Rapid methods for food freshness analysis and concepts to prolong shelf life

Chairman: Prof. Dr. B. Kunz (University of Bonn, Germany)

- 09:10** **Atmobox – The optimal atmosphere for your food**  
*H. Wollersheim, Delbrouck GmbH, Germany*
- 09:25** **Identification of times of freezing and freshness of fish using the SEQUID dielectric spectrometer**  
*Dr. B. Oberheitmann, Sequid GmbH, Germany*
- 09:40** **Potential of porpyhrin fluorescence signals to serve as matrix-related Time-Temperature-Indicators in fresh meat production**  
*J. Schneider, Leibniz Institute for Agricultural Engineering Potsdam-Bornim, Germany*
- 09:55** **Rapid and reliable new methods for the detection of bacteria**  
*Dr. N. Gollo, The Volcani Center - Agricultural research organization, Israel*
- 10:10** Discussion

# Agenda

PARALLEL

## Session 6: Optimisation of package and storage systems in private households (Chairman: Dr. A. Feigenbaum; European Food Safety Authority (Italy))

- 09:10**    **Operation conditions of refrigerator and freezer in private homes in Europe with relevance to food storage quality**  
*Prof. Dr. R. Stamminger, University of Bonn, Germany*
- 09:30**    **Innovative storage concepts in private home refrigeration**  
*Dr. A. Klingshirn, Bosch and Siemens Home Appliances Group, Germany*
- 09:50**    **Combined oxygen scavenger and oxygen indicator – a method for monitoring the integrity of packages and the functioning of oxygen absorbers**  
*S. Sangerlaub, Fraunhofer Institute for Process Engineering and Packaging, Germany*
- 10:10**    Discussion
- 10:20**    **Coffee Break**

PARALLEL

## Session 7: Risk assessment and modelling food safety (Chairman: Dr. J Kreyenschmidt, University of Bonn (Germany))

- 10:50**    **Modelling the impact of composition fluctuations and cold chain on the safe shelf-life of Hungarian meat products**  
*S. Percsi, Campden & Chorleywood, Hungary*
- 11:10**    **A new risk assessment tool for food safety and cold chain optimization which combines predictive modelling and heat transfer**  
*H. Ben Yaghlene Universite de Bretagne Occidentale, France*
- 11:30**    **Experimental determination and modelling of bacterial growth to support a risk assessment in ready-to-cook meals throughout the food chain.**  
*Dr. Z. S. Mejia, University of Wageningen, The Netherlands*
- 11:50**    **Predicting growth of Salmonella in fresh pork products**  
*C.O.A. Moller, University of Denmark, Denmark*
- 12:10**    **Producer incentives and plant investments for Salmonella control in pork supply chains**  
*Dr. G. B. C. Backus, University of Wageningen, The Netherlands*
- 12:30**    Discussion

Parallel

## Session 8: Another view on shelf life prediction (Chairman: Dr. P. Dalgaard, Technical University of Denmark (Denmark))

- 10:50**    **Protocols for performing shelf life studies in cooling experiments**  
*M. Gudjonsdottir, MATIS, Iceland*
- 11:10**    **Temperature monitoring and CFD modelling of a cold storage**  
*B. Margeirsson, University of Iceland, Iceland*
- 11:30**    **Stochastic mathematical model for microbial growth in food under variable temperature conditions using the overlapping confidence intervals**  
*Dr. R. Gospavic, Wessex Institute of Technology, Great Britain*
- 11:50**    **Growth of *Pseudomonas* spp. and *Staphylococcus* spp in chicken breast under different temperature conditions**  
*Prof. Dr. C. Prentice, Federal University of Rio Grande, Brazil*
- 12:10**    **Modelling the shelf life of fruit depending on pre- harvest and post-harvest conditions**  
*Dr. M. Geyer, Leibniz-Institute for Agricultural Engineering Potsdam-Bornim, Germany*
- 12:30**    Discussion
- 12:40**    **Establishment of an international network Cold-Chain-Management**  
*Dr. J. Kreyenschmidt, University of Bonn, Germany*
- 12:50**    **Closure of the workshop**  
*Prof. Dr. B. Petersen, University of Bonn, Germany*
- 13:00**    **Lunch**

### Poster Session and CHILL-ON Stakeholder Forum Monday 2 June 2008, 18:00

#### **Presentation of the EU Project CHILL-ON**

M. Kück., M. Lohmann

*Technologie-Transfer-Zentrum Bremerhaven, Germany*

#### **A cost-benefit evaluation framework of an electronic-based traceability system**

G. Chrysochoidis.

*Agricultural University of Athens Laboratory of Agribusiness Management; Greece*

#### **Cold-Chain-Management in poultry supply chains**

V. Raab, J. Kreyenschmidt

*University Bonn; Germany*

#### **Comparison between different ice media for chilling fresh fish**

B. Margeirsson<sup>1</sup>, S. Arason<sup>2</sup>

<sup>1</sup> *University of Iceland, Department of Mechanical and Industrial Engineering, Iceland*

<sup>2</sup> *Matis – Icelandic Food Research, Iceland*

#### **Development of innovative tools to detect and enumerate contaminant micro-organisms in poultry food supply chain**

C. Agrimonti<sup>1</sup>, C. Consigli<sup>1</sup>, E. Maestri<sup>1</sup>, G. Palumbo<sup>1</sup>, A. Sanangelantoni<sup>1</sup>, A. Sebastianelli<sup>2</sup>, I. Bruce<sup>2</sup>, N. Marmiroli<sup>1</sup>,

<sup>1</sup> *Department of Environmental Sciences, University of Parma, Italy,* <sup>2</sup> *Department of Biosciences-University of Kent; Great Britain*

#### **How to control the three enemies of ice cream: temperature, time and threatment**

R. Doornbos., N. Herranz, V. Brito

*ITENE, Packaging, Transport and Logistics Research Center, Spain*

#### **Presentation of the EU Project Freshlabel**

Y. Hilz

*Technologie-Transfer-Zentrum Bremerhaven, Germany*

#### **Rapid molecular genetical detection for the identification of Enterobacteriaceae and coliform bacteria**

C. Cordes., K. Ahrensfeld, I. Klarholz, C. Harms

*Bremerhavener Institut of Biological Information Systems (BIBIS) ttz Bremerhaven, Germany*

#### **Rapid quantification of the specific spoilage organism Pseudomonas spp. in fish using real-time PCR**

E. Reynisson <sup>1,2</sup>, HL Lauzon <sup>1</sup>, H Magnusson <sup>1</sup>, G Hreggvidsson <sup>1,2</sup>, V Marteinnsson <sup>1</sup>,

<sup>1</sup> *Matís, Reykjavík, Iceland,* <sup>2</sup> *University of Iceland*

#### **Simulation of the chicken supply chain for microbiological growth prediction**

L. Galarz.; G. Fonseca, M. Salas-Mellado; C. Prentice

*Federal University of Rio Grande; Brazil*

#### **Temperature-monitoring of refrigerated display cabinets in supermarkets in time and space with thermocamera and RFID technology**

C. Balla. L. Friedrich, I. Zeke 1- Corvinus, K. Horváth, C. Farkas, R. Ágoston

*Corvinus University of Budapest, Hungary*

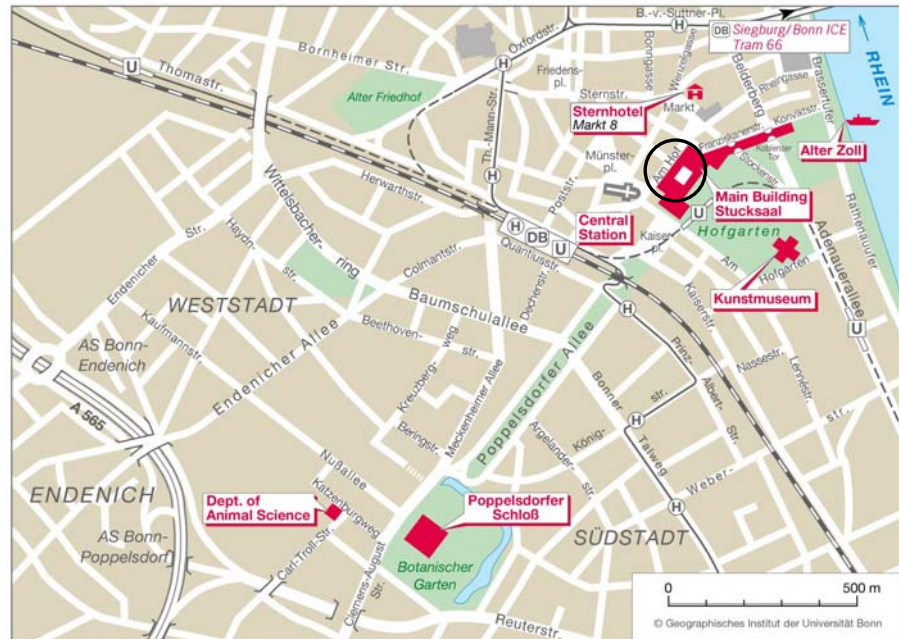
#### **The use of Crytec Bubble Slurry Ice Technology for Chilling Fresh Tilapia (fresh water fish) Fillets**

R. Alon.

*Crytec; Israel*

## General View

## City of Bonn



## Location & Accommodation



## Social Activities



## Registration

## Organisation

## Costs

The workshop will be held at the "University of Bonn" (Main Building, Stucksaal), Regina-Pacis-Weg 3, 53115 Bonn, Germany. Rooms will be available in city hotels close to this location: <http://www.bonn-region.de>. Please find also a list of hotels which are close to the city at [www.ccm.uni-bonn.de](http://www.ccm.uni-bonn.de) and please use the keyword "CCM" for your reservation.

The dinner will take place at the "Akademisches Kunstmuseum", Am Hofgarten 21, 53113 Bonn. The "Akademisches Kunstmuseum" is the oldest museum in Bonn. It houses the collection of antiques of the University of Bonn with over 500 samples of antique statues and reliefs of over 2000 originals.

The 2-days workshop will last from morning 2 June 2008 until noon 3 June 2008. You can register online on the following webpage: [www.ccm.uni-bonn.de](http://www.ccm.uni-bonn.de)  
Deadline for the registration: **08 May 2008**

The workshop will be organized by the University of Bonn, Cold-Chain-Management Group ([www.ccm.uni-bonn.de](http://www.ccm.uni-bonn.de))  
Prof. Dr. B. Petersen, University Bonn; D  
Prof. Dr. B. Kunz, University Bonn; D  
Prof. Dr. R. Stamminger, University Bonn; D  
Dr. J. Kreyenschmidt, University Bonn; D

The registration fees for the seminar are 60 € for students, 160 € for institutes and 280 € for industry members. For one day it is half of the price.  
(The price covers refreshments, lunch, social program, dinner, the proceeding volume but not accommodation).

### Payment from Germany:

**Reason for Payment:** PN 312-7-009/61116 + name of the participant and organization  
**Bank code:** 370 501 98 - Sparkasse KölnBonn, **Account no:** 57695

### Payment from foreign countries:

**Reason for Payment:** PN 312-7-009/61116 +name of the participant and organization  
**IBAN:** DE08 3705 0198 0000 0576 95, **BIC:** colsde33  
Name of the bank: Sparkasse KölnBonn, Friedensplatz 1-3, 53111 Bonn