

A nighttime photograph of a large, multi-story building with a central tower and spire, illuminated from within. The building is reflected in a body of water in the foreground. The sky is dark with some clouds, and bare tree branches are visible in the upper right corner.

Welcome in Bonn

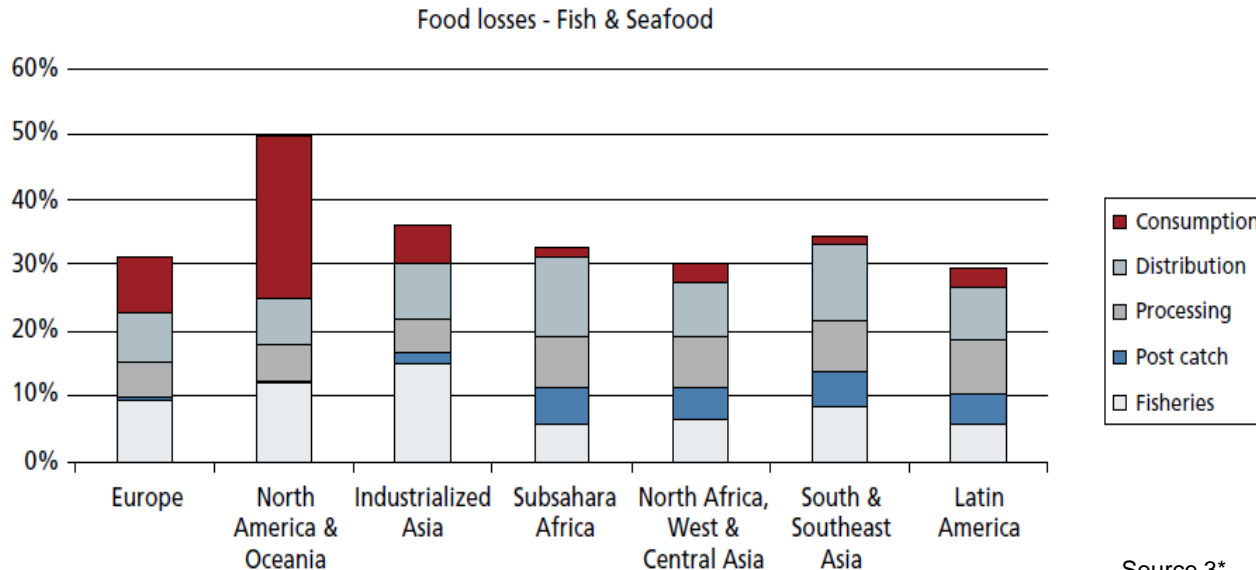
5th International Cold-Chain-Management Workshop
June 10 - 11 2013

Perishable food chains in the 19th Century



1. Long transport ways and complex food chains
2. Increasing energy costs
3. Food Waste in perishable food chains: 10% - 50%

Figure 8. Part of the initial catchings (fish and seafood harvested) discarded, lost and wasted in different regions and at different stages in the FSC



Source 3*

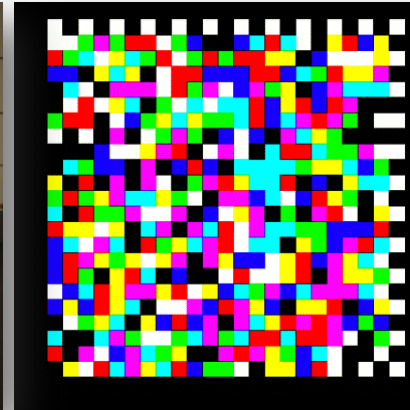
Source 1*



Developments in Cold-Chain-Management in the 21st Century



1. Several new technology to optimize and to control the temperature conditions in the chain
2. Several new developments in the field of monitoring food quality and safety, and optimizing shelf life
3. Huge progress in the field of data storage, -analysis and -exchange





Vision of Cold Chain Management

Producing and delivering high quality and safe products worldwide simultaneously reducing food waste and increasing the resource efficiency in perishable food chains by using new technologies, methods and approaches

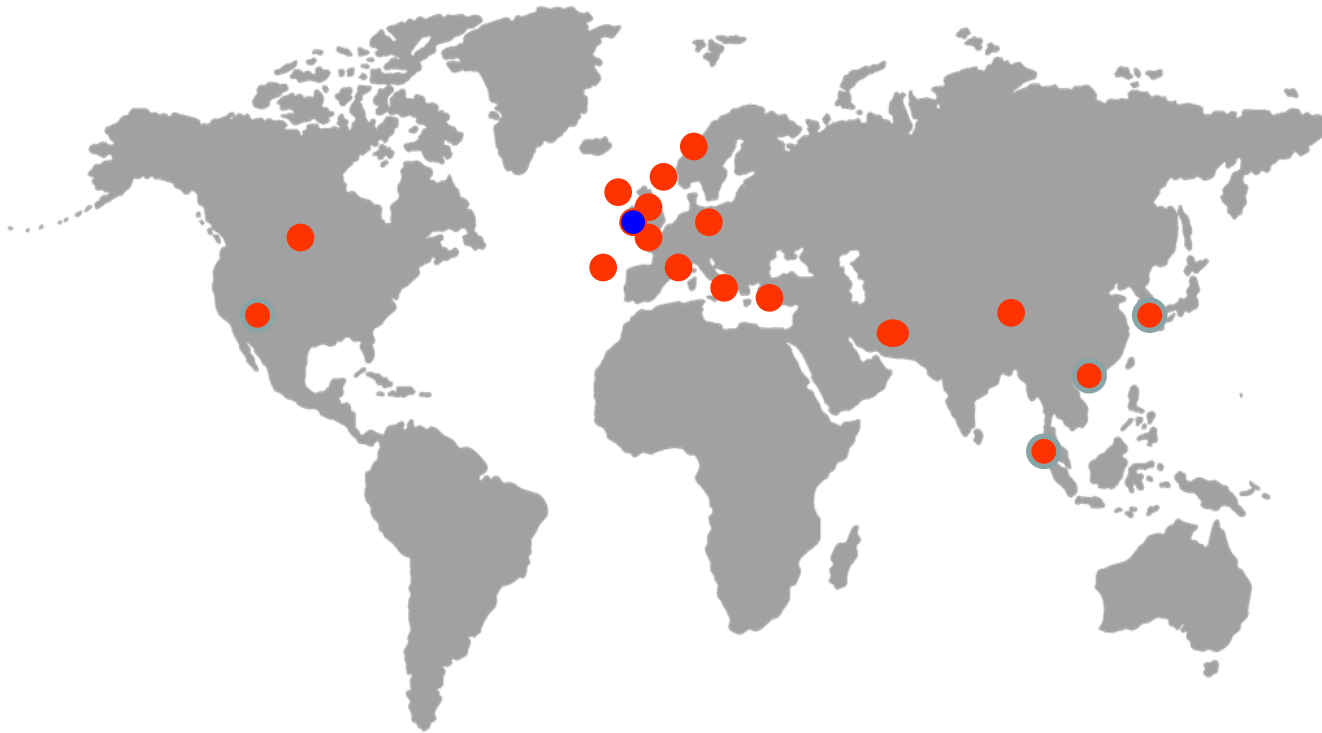
Mission of the workshop

Discussing new technologies and trends under consideration of sustainability aspects from production to consumption

Exchange our experience, identify special problems and discuss future trends

Promoting the progress of science in the field of Cold-Chain Management and supporting the implementation worldwide

- **95** participants (from research, industry sector and public organizations)
- **16** countries





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Monday, June 10th

9:30 – 18:00

09:45 – 10:55 - Optimisation of temperature monitoring in food supply chains (1)
Chairman Dr. P. Rönnow, Festsaal

11:15 – 12:30 - Cold chain management in different countries
Chairman Prof. Dr. F. Jaeger, Festsaal

13:30 – 14:40 - Shelf life optimisation
Chairman Prof. Dr. P. Taoukis, Festsaal

15:00 – 16:10 - Consumer's handling of perishable products
Chairman Prof. Dr. R. Stamminger, Festsaal

16:30 – 18:00 Workshops (parallel)

Predictive Microbiology for Food Safety
Dr. V. K. Juneja, Festsaal

Energy-efficient Refrigeration
Dipl.-Ing. F. Amold, HS III



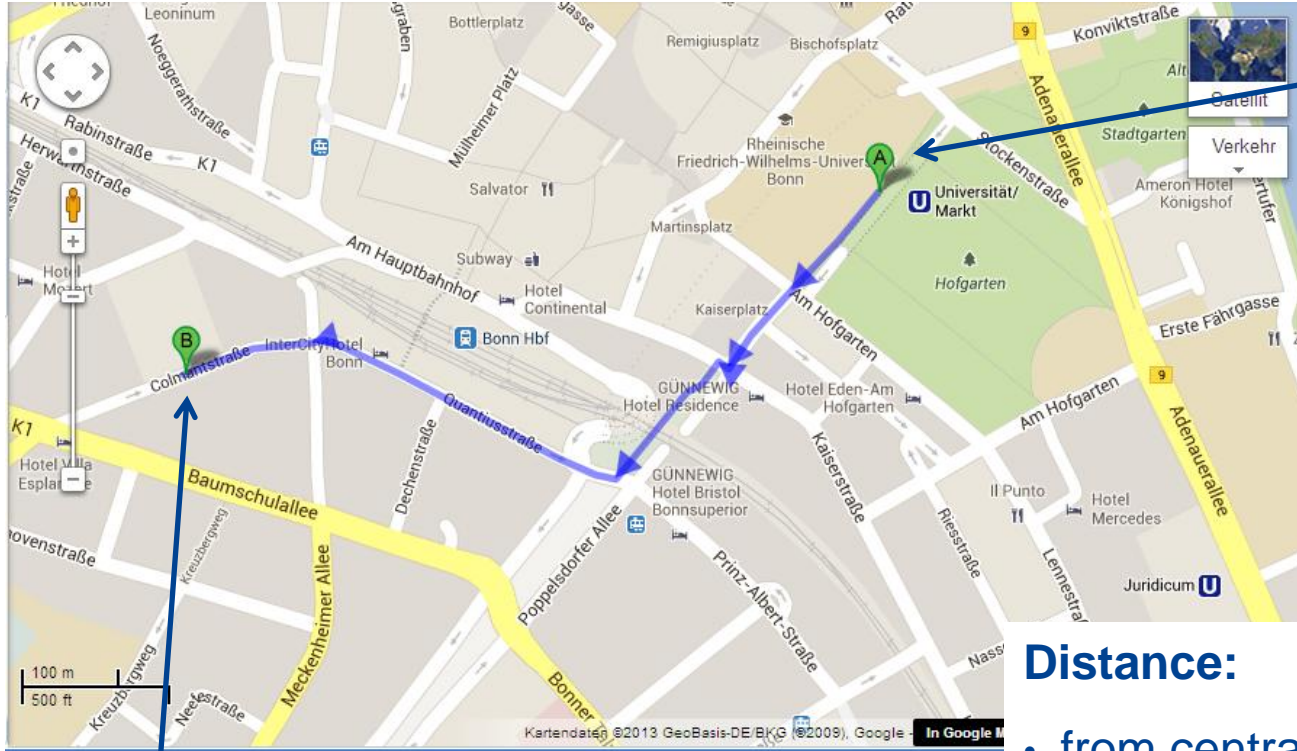
19:00 LVR-Landesmuseum
Guided tour “Dangerous Place – crime in the Roman Empire”



19:45 Dinner “DelikArt”



How to find the LVR-Landesmuseum



University of Bonn
Workshop Location



LVR-Landesmuseum
Location Guided Tour & Dinner



Distance:

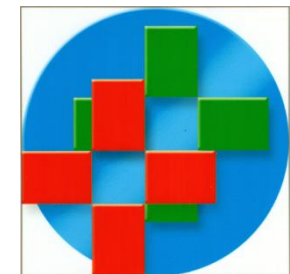
- from central station to LVR-Landesmuseum: 300 m walking distance
- from main building to LVR-Landesmuseum: 900 m walking distance



Thanks to the whole organizing team, the reviewer and the companies

Reviewer

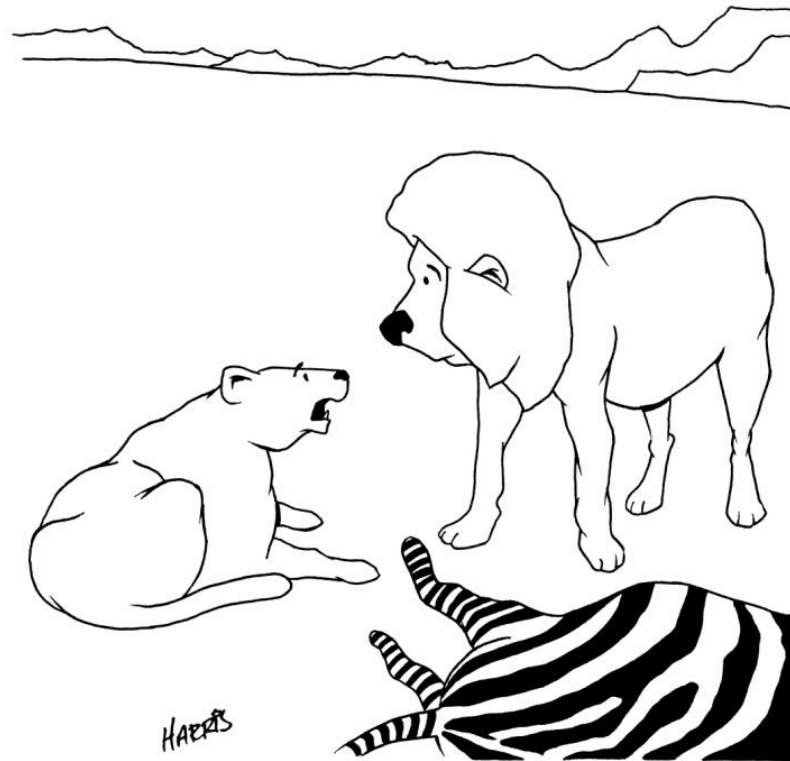
- Dr. S. Aabo, Technical University Denmark, DK
- Prof. Dr. D. Haarer, University Bayreuth, GER
- Dr. V. K. Juneja, USDA, US
- Prof. Dr. P. Kaul, Bonn-Rhein-Sieg University of Applied Science, GER
- Prof. Dr. T. Labuza, University Minnesota, US
- Prof. Dr. T. McMeekin, University Tasmania, AUS
- Prof. Dr. V. Popov, Wessex Institute of Technology, GB
- Prof. Dr. P. Taoukis, National Technical University Athens, GR
- Prof. Dr. P. Van Beek, Wageningen University, NL





We wish a successful workshop!

The Cold-Chain-Management Group, www.ccm.uni-bonn.de



*“Honey, the ‘best before’ date on this zebra
was over two weeks ago.”*

Next session: Optimisation of temperature monitoring in food supply chains

Chairman:

Dr. P. Rönnow
Managing Director at Visual Indicator Tag
System AB (VITSAB®), SE



09:45
Cold chain evaluation and management using FRISBEE project prediction tools
Petros Taoukis, National Technical University Athens, GR

10:05
Verdict ChainView offers transparency in the Supply Chain
Michel Kockelkoren, Verdict Syytems BV, NL

10:25
Food Chain Sustainability & Dynamics
Erik Smit, NIZO food research, NL