

Water Determination in Food

A Challenge for the Analysts

1st International Workshop

6 - 7 April 2000

Ispra, Italy

Second Circular

Preliminary Programme



Institute for Reference
Materials and Measurements
Geel - Belgium



EUROPEAN COMMISSION

JOINT
RESEARCH
CENTRE



Institute for Health and
Consumer Protection
Ispra - Italy

Second Circular

Preliminary Programme

Organising Committee

Chair: E.Anklam EC
K.H.Grobecker EC
S.Rückold D

Scientific Committee

Chair: H.D.Isengard D
E.Anklam EC
A.Cedergren S
K.H.Grobecker EC
W.Mertens B
M.Mathlouthi F
D.N.Rutledge F
K.Schöffski D

Objectives

This workshop intends to focus on the state-of-the art, problems and progress of water determination in food. It foresees the presentation of lectures as well as posters with appropriate time for discussion on topics of particular importance

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Topics

- **Methodology**
Drying-methods, Karl Fischer titration, NMR, NIR-spectroscopy, electrical measurements, micro-wave techniques, conductivity, P₂O₅ sensor
- **Water activity**
- **Role and importance of water content and water activity in food**
- **Analytical problems**

Language

English, no translation provided

Abstracts and final programme

The book of abstracts and the final programme will be available at the beginning of the workshop

Social Programme

Get-together, reception, dinner etc.

1. Day

Introduction- Chair: E. Anklam

9.00 – 9.20	Introduction	E. Anklam
9.20 – 9.40	Water content, one of the most important properties of food	H. D. Isengard
9.40 – 10.00	Water in food – a consumer overview	S. Musgrove
10.00 – 10.20	Need for standardised methods	R. Cantrill

10.20 – 11.00 COFFEEBREAK

General - Chair: K.H. Grobecker

11.00 – 11.20	Drying of biological material and its effects for the use of reference materials	S. Rückold
11.20 – 11.40	Water content, water activity, water structure and the stability of foodstuffs	M. Mathlouthi
11.40 – 12.00	Water sorption of wheat fibres	S. Lander
12.00 – 12.20	Title?	W. Mertens

12.20 – 14.00 LUNCHBREAK

Karl-Fischer Titration - Chair: H. D. Isengard

14.00 – 14.20	Main and side reaction in the Karl-Fischer solution	S. Grünke
14.20 – 14.40	New Karl Fischer reagents for water determination in food	K. Schöffski
14.40 – 15.00	Efficient, precise and fast determination of water in food by KFT	C. De Caro
15.00 – 15.20	Optimum conditions for coulometric KFT in diaphragm-free cells	U. Nordmark

15.20 – 15.50 COFFEEBREAK

Oven methods – Chair: D. N. Rutledge

15.50 – 16.10	Infrared drying for fast determination of moisture content	N. Bucci
16.10 – 16.30	Microwave oven drying of dairy products	M. Walter
16.30 – 16.50	Determination of water content in milk powder	A. Klein
16.50 – 17.10	Improvements for the detection of moisture in milk powder	H. van Valenberg

17.30 End of the first day session – transport to the hotel

20.00 DINNER (Invitation by JRC)

2. Day

9.00 – 9.20	<i>Spectroscopic methods – Chair: M. Mathlouthi</i> Characterisation of water in agro-food products by time domain-NMR	D.N. Rutledge
9.20 – 9.40	New developments of NIR spectroscopy for online measurements in food industry	H. Federle
9.40 – 10.00	High Speed Moisture Measurements by Microwave Resonator Technique	S. Zaage
10.00 – 10.20	Resonant microwave sensors for instantaneous determination of moisture in foodstuffs	R. Knoechel
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10.20 – 11.00	COFFEEBREAK	
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11.00 – 11.20	<i>Comparison of methods – Chair: K. Schöffski</i> The determination of water in milk powder- A collaborative study	K.H. Grobecker
11.20 – 11.40	Do we measure the water content in honey still up-to-date	D. Schultheiß
11.40 – 12.00	Moisture determination in dairy products - assessment of available instrumentation	C.T. Reh
12.00 – 12.20	Composition of foods including added water using microwave dielectric spectra	M. Kent
12.20 – 12.40	Determination of the water content in different sugar syrups by halogen drying	P. Heinze
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12.40 – 14.00	LUNCHBREAK	
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14.00 – 16.00	Final Discussions	
16.00	End of the workshop – Transport to the airport/hotel	

Second Circular Preliminary Programme

Venue and Accommodation

For reservation and shuttle service please contact:

Tel.: ++39.....

Fax: ++39.....

to be sent to E. Anklam before 17.03.2000

Name(s) _____

Full address _____

Phone, Fax, E-mail _____

I intend to participate

Date/Signature

Final Programme

will be available at the workshop



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