



# **Cookie, Cracker and Biscuit Manufacturing**

**July 16 – 27, 2012**

ZDS Seminar PEO-92

- in English language -

Venue:  
ZDS - The Academy of Sweets  
De-Leuw-Str. 3-9, D-42653 Solingen

**From:**

*Monday, July 16, 2012*  
9.00 am

**Until:**

*Friday, July 27, 2012*  
1.00 pm

The ZDS yearly offers an intensive theoretical and practical 2-weeks-course in cookie, cracker and biscuit manufacturing.

The modern equipment in the pilot plant offers the possibility to simulate a large range of manufacturing conditions and includes e.g. a band oven fed with a rotary moulding machine. The participants are kindly requested to bring samples of products from their companies for analysis and discussion.

Particular problems can be discussed with the co-ordinators.

**Course description:**

The objective of this yearly course is to familiarize the participants with the theoretical and practical principles used in the industry.

The course is held in seminar style to encourage discussions and involvement of all delegates. Practical demonstrations will be integrated into the programme to illustrate important processing criteria.

Part of the practice sessions is done in work groups with the collaboration of the co-ordinators. During these sessions the participants are invited to create and process initiative formulas based on the lectures presented and the trials for the evaluation of raw materials. Structured discussion sessions or presentations will be held by other speakers.

This course is designed for all executives, members of management, production staff and other related departments in the respective companies and supplying industry.

Participants with experience will have the opportunity to increase their technological knowledge. Personnel starting their career will receive a comprehensive training.

A certificate will be issued to delegates on completion of the course.

**Co-ordinators:**

**Jacques van WAKEREN**, Consultant, Zutphen / NL

**Martin STIENE**, Biscuit Technologist, ZDS, Solingen / D

☺ Please remember to bring a white coat for the practical part of the course.

## Programme

### Monday, July 16, 2012

- 09.00 Welcome / Introduction / Objectives
- 09.20 **Theory**
- Product classification
  - Evaluation, types and composition of products
  - Participants products presentation
- in between coffee break (about 10.15)*
- 10.45 **Theory**
- Sugars and Sugar replacers in baked goods
- 11.45 **Theory** (continuation)
- Flour and starches
  - Formulas, administration
- 13.00 *Lunch*
- 14.30 **Practice**
- Spread tests: Trials to observe the function of the raw materials in the final product
- in between coffee break (about 15.30)*
- 16.30 Review of the day, evaluation of the trials
- 18.00 *Cold dinner*

### Tuesday, July 17, 2012

- 08.30 **Theory**
- Sugars and syrups
  - Soft dough products
- 09.30 **Theory**
- pH, leavening agents
- 10.15 Coffee break
- 13.00 Lunch
- 14.30 **Practice**
- Spread tests: Trials to observe the function of raw materials in the final product (continuation)
- in between coffee break (about 15.30)*
- 16.30 Review of the day, evaluation of the trials
- 18.00 *Cold dinner*

### Wednesday, July 18, 2012

- 08.30 **Theory** -
- Oils, fats
  - Emulsifiers, fat reduction
  - Reprocessing
  - Rotary moulding
- in between coffee break (about 11.00)*

- 13.00 *Lunch*
- 14.00 Theory
- Lye articles / Heat transfer during baking
- 14.45 **Practice**
- Rotary moulding
- in between coffee break (about 15.30)*
- 16.45 Review of the day, evaluation of the trials
- 18.00 *Cold dinner*

### **Thursday, July 19, 2012**

- 08.30 **Theory**
- Wire cutting
  - Depositing
  - Extrusion
- in between coffee break (about 10.15)*
- 13.00 *Lunch*
- 14.30 **Practice**
- Rotary moulding
  - Wire cutting
- in between coffee break (about 15.30)*
- 16.30 Review of the day, evaluation of the trials
- 18.00 *Cold dinner*

### **Friday, July 20, 2012**

- 08.30 **Theory**
- Laminating, layering and cutting machine
  - Product cooling and handling
  - Ovens
  - Heat transfer
  - Baking
  - Flavours
- in between coffee break (about 10.15)*
- 13.00 *Lunch*
- 14.30 **Practice**
- Wire cutting
  - Extrusion
  - Depositing
  - Coconut macaroons
- in between coffee break (about 15.30)*
- 16.30 Review of the day, evaluation of the trials
- 18:00 *Cold dinner*

## Monday, July 23, 2012

- 08.30     **Theory**
- Spread and shrinkage
  - Mould and cutter design
- 09.30     **Theory**
- Enzymes
- 10.15     *Coffee break*
- 10.30     **Theory** (continuation)
- Hard sweet biscuits
  - Checking
- 13.00     *Lunch*
- 14.30     **Practice**
- Hard sweet biscuits
  - Marsh mallows
- in between coffee break (about 15.30)*
- 16.30     Review of the day, evaluation of the trials
- 18.00     *Cold dinner*

## Tuesday, July 24, 2012

- 08.30     **Theory**
- Chocolate, cocoa powder and compounds
  - Ginger bread
  - Crackers fermented
  - Secondary processing, decoration
  - Sandwiching
  - Preparation cracker dough
- in between coffee break (about 11.00)*
- 13.00     *Lunch*
- 14.30     **Practice**
- Crackers, fermented
  - Ginger bread
  - Jaffa cakes Sponge fingers
  - Pectin jelly
- in between coffee break (about 15.30)*
- 16.30     Review of the day, evaluation of the trials
- 18.00     *Cold dinner*

## Wednesday, July 25, 2012

- 08.30     **Theory**
- Crackers enzyme modified
  - Snack, (savoury) crackers
  - Crackers modified starch
  - Crackers whole meal, sweet and non sweet
  - Preparation formulas, wafer production
- in between coffee break (about 10.15)*

- 13.00 *Lunch*
- 14.30 **Practice**
- Crackers fermented
  - Crackers enzyme modified
  - Cracker modified starch
  - Snack (savoury) crackers
- in between coffee break (about 15.30)*
- 16.30 Review of the day, evaluation of the trials
- 18.00 *Cold dinner*

### **Thursday, July 26, 2012**

- 08.30 **Theory**
- Wafer baking
  - Cream fillings
- 10.15 *Coffee break*
- 10.30 **Practice**
- Wafer baking, flat wafers and sugar cones
  - Wafer-cream fillings
  - Cream spreading and cutting
  - Chocolate tempering
  - Enrobing
  - Cooling
- 13.00 *Lunch*
- 14.30 **Practice**
- Chocolate
  - Chocolate tempering
  - Enrobing
  - Cooling
- in between coffee break (about 15.30)*
- 16.30 Review of the day, evaluation of the trials
- 18.00 *Cold dinner*

### **Friday, July 27, 2012**

- 08.30 **Visit to the company**  
**Rheon Automatic Machinery GmbH, Düsseldorf**  
(to be confirmed)
- 13.00 End of the course / Return to ZDS, Solingen  
Optional / departure from Düsseldorf airport

## ACCOMODATION - FEES - APPLICATION

### **Fees:**

Members of the ZDS Association      € 4.175,-  
Non-members                              € 5.215,-

The course fee includes full board (breakfast, lunch and dinner in the school refectory), accommodation and seminar documents.

### **Note:**

In order to give the most beneficial tuition, particularly in practical work, student numbers will be limited up to 20.

### **Payment:**

Fees in full are due upon receipt of invoice. Money transfers to the ZDS are to be made free of charge for ZDS. Please send money only after having been invoiced. Participation is only possible after receipt of advance payment. Credit-cards (VISA/Euro-/MasterCard/Diners Club) are accepted. If two or more participants are registered by the same company, a deduction of 5% on the fee is given from the second participant.

### **Registration:**

Seminar Service    phone: +49-212-59 61 32  
                          fax: +49-212-59 61 33  
                          e-mail: [s.steinmetz@zds-solingen.de](mailto:s.steinmetz@zds-solingen.de)

### **Cancellation:**

Please understand that we have to charge 10% of the seminar fee for cancellations up to two weeks and 50% for cancellations up to one week prior to the seminar for administrative expenses. Later cancellations will be invoiced with 100% of the seminar fee. We will certainly accept a substitute participant without additional costs. If the event is cancelled by the organiser, the fee will be reimbursed totally. In the event that the seminar is cancelled for reasons for which ZDS is responsible, reimbursement is limited to refunding already paid seminar fees. Any further claims are excluded.

### **Protection of Personal Data:**

In compliance with the stipulations of the German Federal Law on Protection of Personal Data we hereby inform you that addresses of interested persons and seminar participants will be electronically stored with the intention to forward programmes and seminar information of ZDS.

**REGISTRATION / PEO-92**  
**Cookie, Cracker and Biscuit Manufacturing**  
**July 16 - 27, 2012**

**FAX: +49 - 212 - 59 61 33**

**Mr**       **Ms**

**Surname** \_\_\_\_\_

**First Name** \_\_\_\_\_

**Company** \_\_\_\_\_

**Position in the company** \_\_\_\_\_

**Address of company** \_\_\_\_\_

\_\_\_\_\_

**Country** \_\_\_\_\_

**Phone no. (with country code)** \_\_\_\_\_

**Fax no.** \_\_\_\_\_

**E-mail address** \_\_\_\_\_

**Room reservation:**

**Date of arrival** \_\_\_\_\_

**Date of departure** \_\_\_\_\_

If you prefer to pay the seminar fees with credit-card, please fill in:

VISA     Euro-/MasterCard     Diners Club

Number of credit-card: .....

Valid dates: .....

\_\_\_\_\_  
Signature incl. company stamp

\_\_\_\_\_  
Date