



Central College of the German Confectionery Industry, Solingen (Germany)

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# Practical Course in Chocolate Confectionery



– from cocoa to finished products –

**February 9 - 13, 2009**

**Practical Course PEO-19**

**in English language**

Begin:  
Monday, February 9, 2009, 10.00

End:  
Friday, February 13, 2009, 13.00

### Course Description

This course will cover - in theory and practice - the raw material which are used, how they are processed and the technology of producing the following chocolate products:

- dark, milk and white chocolate and couverture
- dark, milk and white coatings
- chocolate hollow figures
- moulded and enrobed products

The practical work will include cocoa bean processing, chocolate manufacture, tempering, moulding, enrobing and manufacture of centres and fillings. The recipes and modern production techniques will be discussed in detail, together with the specifications and quality control requirements.

### Participants

This course is intended for:

**Food technologists** from the chocolate confectionery industry, who are starting their career in the industry, or who need further training in the field of chocolate.

**Technical service and supportive staff** of the raw material and machinery industries.

**Members of the marketing and sales department** of the chocolate confectionery industry who require a technical introduction to their industry.

### Course staff

**Herr Klaus KNIEL** Consultant to the Cocoa and Chocolate Industry, Aachen/ D  
**Susanne LUND** Danisco A/S, Brabrand / DK  
**Normann WAGNER** Chocolate Technologist, ZDS

and lecturers from the Industry

☺ **Please remember to bring a white coat with you  
for the practical part of the course**

## Programme

### Monday, February 9, 2009



- 10.00     **Welcome**  
          ZDS
- 10.10     **Theory: Chocolate & Cocoa processing (1)**                     **K. Kniel**
- Specifications
    - ⇒ Dark, milk and white chocolate
    - ⇒ Dark, milk and white couverture
    - ⇒ Dark, milk and white coatings
  - Key raw materials
    - ⇒ Cocoa beans - sources and their quality
    - ⇒ Cocoa butter and replacement fats
    - ⇒ Sugar
    - ⇒ Milk products - milk powder, „crumb“
- 12.15     **Theory: Emulsifiers**   **S. Lund**
- 13.00     Lunch
- 14.00     **Theory: Chocolate & Cocoa processing (2)**                     **K. Kniel**
- Cocoa bean processing
    - ⇒ Cleaning
    - ⇒ Roasting (bean, nib, liquor)
    - ⇒ Breaking, winnowing
    - ⇒ Grinding to liquor
    - ⇒ Cocoa treating
    - ⇒ Cocoa butter manufacture
    - ⇒ Cocoa powder manufacture
- 18.00     End of the first day - cold dinner

### Tuesday, February 10, 2009

- 08.30     **Practice: Cocoa bean evaluation and processing**                     **N. Wagner**
- Evaluation of different cocoa beans
  - Pre-heat treatment
  - Breaking and winnowing
  - Nib roasting
  - Liquor grinding
  - Liquor pressing to produce cocoa butter
- 10.30     Coffee break

- 11.00 **Theory : Manufacture of dark, milk and white chocolate and coatings** **K. Kniel**
- Recipes
  - Manufacture of chocolate
    - ⇒ mixing process
    - ⇒ refining process
    - ⇒ conching process
    - ⇒ other manufacture technologies
  - Manufacture of compound coatings
- 13.00 Lunch
- 14.00 **Practice: Chocolate manufacture (dark and milk)** **N. Wagner**
- Mixing, refining, conching  
Production of dark and milk chocolate
  - Explanation of the McIntyre process
  - Chocolate tempering
    - ⇒ Hand tempering
    - ⇒ Use of Sollich Turbotemper
    - ⇒ Evaluation of temper with a modern tempermeter
- 18.00 End of the second day – cold dinner

**Wednesday, February 11, 2009**

- 08.30 **Theory: Chocolate tempering** **K. Kniel**
- ⇒ Characteristics of cocoa butter
  - ⇒ Principles of tempering
  - ⇒ Commercial tempering equipments
  - ⇒ Evaluation of temper
- 09.30 **Theory: Chocolate processing** **K. Kniel**
- Enrobing technologies
  - Moulding technologies
    - ⇒ Solid products, hollow products, filled products  
(modern shell moulding techniques and „one shot“ technology)
- 10.30 Coffee break
- 11.00 **Practice: Chocolate moulding** **N. Wagner**
- ⇒ Solid products
  - ⇒ Hollow products
  - ⇒ Shell moulding

- 13.00 Lunch
- 14.00 **Alternative fats and filling fats for chocolates** **N.N.**
- 14.40 **Practice:**  
Use of vegetable fats  
Chocolate moulding (continuation)
- 16.30 **Theory: Centres and fillings for chocolates** **K. Kniel**
- Praliné
    - ⇒ Recipes
    - ⇒ Stability considerations
    - ⇒ Manufacturing processes
  - Truffles
    - ⇒ Recipes (short and long shelf life truffles)
    - ⇒ Stability considerations
    - ⇒ Manufacturing processes
- 18.00 End of the third day – cold dinner

**Thursday, February 12, 2009**

- 08.30 **Theory: Centres and fillings for chocolates** **K. Kniel**
- Fondant and cream fondant
    - ⇒ Recipes
    - ⇒ Stability considerations
    - ⇒ Manufacturing process
- 09.15 **Practice: Manufacture of fillings and centres** **N. Wagner**  
**Group work**
- Praliné
  - Fondant and fondant cream
  - Truffles
- 13.00 Lunch
- 14.00 **Practice: Production of chocolates with following fillings** **N. Wagner**
- Praliné
  - Fondant and fondant cream
  - Truffles
- 18.00 End of the fourth day - dinner



**Friday, February 13, 2009**

08.30	<b>Practice – continuation</b>	<b>N. Wagner</b>
	<ul style="list-style-type: none"><li>• Praliné</li><li>• Truffles</li><li>• Fondant and fondant cream</li><li>• Enrobing of products</li></ul>	
13.00	End of the course - Lunch	

*- subject to change -*

<b>Date / Venue</b>	February 9, 2009 10.00 until February 13, 2009 13.00	
	ZDS Zentralfachschule der Deutschen Süßwarenwirtschaft De-Leuw-Straße 3-9 42653 Solingen - Germany	
<b>Registration &amp; Hotel Reservation</b>	ZDS - Seminar-Service Phone +49 / 212 / 59 61-32 Fax +49 / 212 / 59 61-33 <a href="http://www.zds-solingen.de">http://www.zds-solingen.de</a> E-mail: <a href="mailto:schmidt@zds-solingen.de">schmidt@zds-solingen.de</a>	
<b>Fee</b>	Members of the ZDS-Association	€ 1.430,-
	Non-members	€ 1.910,-
<b>Seminar-Number</b>	<b>PEO-19</b>	

# REGISTRATION / PEO-19

Practical Course in Chocolate Confectionery (February 9 – 13, 2009)

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

Mr     Ms

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

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

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

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

\_\_\_\_\_

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

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

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

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

**Hotel reservation:**     **yes**     **no**

From ..... to .....

By paying the seminar fees with credit-cards please fill in:

VISA     Euro-/MasterCard     Diners Club

No. of credit-card: .....

Valid dates: .....

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

\_\_\_\_\_  
Date

# Terms of Participation

## Registration

The number of participants in our seminars is sometimes limited. We therefore kindly request that you register in writing with the ZDS as soon as possible. Registration is binding as soon as it is confirmed by ZDS in writing.

## Fees for participation

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. Payment should be made prior to the commencement date, latest on the day of arrival at ZDS. Participation only after receipt of payment. Credit-cards (VISA/Euro-/MasterCard/Diners Club) are accepted. If two or more participants are registered by the same company, each participant receives a deduction of 5% on the respective fee.

## Travel / Accommodation

Travel information and directions will be sent out with the registration confirmation. Costs incurred for possible overnight accommodations are not included in the seminar fee. If requested we will be glad to help with hotel reservations.

## Organisation

ZDS reserves the right to change speakers and/or shift or change the programme schedule. The number of participants is limited, and in case of overbooking, ZDS will give information on a repeat seminar as soon as possible. If there is insufficient participation, ZDS reserves the right to cancel or postpone a seminar. ZDS can not guarantee for the attendance of competitors at demonstration events held outside its premises. If presentations are given in another language than German, the presentation's title will be listed in the programme in the respective language. If conference proceedings are distributed, they will be written in the language in which they were presented.

## 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.

## Liability

In the event that seminars are 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.

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For information



**Zentralfachschule der Deutschen Süßwarenwirtschaft e.V.**  
De-Leuw-Straße 3-9 ♦ 42653 Solingen / Germany  
Phone: +49 / 212 / 59 61 12  
Fax: +49 / 212 / 59 61 61  
<http://www.zds-solingen.de>  
[info@zds-solingen.de](mailto:info@zds-solingen.de)