#### Travel Info:

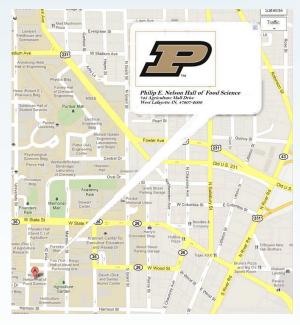
www.ag.purdue.edu/foodsci/Pages/visit\_us.aspx

#### From Indianapolis:

I-65 N > IN26 W > South University Street

#### From Chicago:

I-65 S > U.S. 231 S > U.S. 52 E. > Northwestern Ave. > Stadium Ave > Russell Street > South University Street



## **Accommodations:**

- •Purdue University Union Club Hotel 800-320-6291
- •Hilton Garden Inn West Lafayette 745-743-2100

## Center for Integrated Food Manufacturing

Purdue University Philip E. Nelson Hall of Food Science, 745 Agriculture Mall Drive West Lafayette, IN 47907-2009

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May 22<sup>nd</sup>- 24<sup>th</sup> / 2012



# EHEDG advanced course on hygienic design



<u>Center For Integrated Food Manufacturing: "Improving productivity, quality, and safety in food manufacturing through food science, process engineering, and advanced technology"</u>

# EA/EOU



#### 1. introduction

Hygienic design of equipment and facilities is one of the main tools that food, pharmaceutical and cosmetics companies have in order to achieve their final aim of guaranteeing the safety of the products they manufacture. These industries and food equipment manufacturers should be aware of the importance of hygienic aspects in the activities they carry out. EHEDG (European Hygienic Engineering and Design Group) provides practical guidance on hygienic engineering for manufacturing safe and wholesome food. Founded in 1989, it is a consortium of equipment manufacturers, food companies, research and educational institutes as well as public health authorities whose common aim is to promote hygiene during the processing and packaging of food products.

**Purdue University** has been a member of EHEDG since 2004 and is the only EHEDG Test/Certification Institute in North America.

#### 2. aim

The course gives knowledge and insight into the hygienic design of equipment and processes for the food industry, benefits of hygienic design to better to satisfy the needs of equipment manufacturers and food processors. These include minimal down time, maintenance, cleaning costs, environmental impact and efficient cleaning, optimal product safety and constant product quality.

## 3. methodology

This is a practical applications course. The fundamentals of the various topics are briefly presented and related to practice by means of examples. Participants will apply and test their knowledge with case studies in the pilot plant. The course provides tools to solve hygienic problems within your own organization. Because of the small groups the course is very interactive.



□I require auxiliary aids/services due to a disability. Please contact me at the above address.	E-mail	PhoneFax	State ZIP	City	Address	Organization	Title	Name	EHEDG advanced course on hygienic design May 22-24 / 2012
128 Memorial Mall West Lafayette, IN 47907-2034 Fax: (765) 494-0567 Please photocopy this form for additional registrants.	Purdue University Stewart Center, Room 110	Please mail or fax your registration to: CEC Business Services	Authorized Signature	Expiration Date	Card Number	□Please charge to my: □VISA □American Express □Discover □MasterCard	quired) PO Number	for \$1495. □I will be using a company purchase order. (Hard copy re-	Register Online—www.conf.purdue.edu/ehedg  Payment is required upon submission of registration.  □Enclosed is a check made payable to Purdue University

## program

Module	Day 1	Topic
1	8:30 - 9:00	Welcome; Introduction speakers panel; participants; program
2	9:00 - 10:15	Legal Requirements
	10:15 - 10:30	Coffee break
3	10:30 - 12:00	Hazards in hygienic processing
	12:00 - 13:00	Lunch-Sagamore Room
4	13:00 - 14:30	Hygienic design criteria
5	14:30 - 16:00	Material of construction
	16:00 - 16:15	Coffee break
6	16:15 - 17:00	Case Study-Open Equipment
Dinner	18:30	Toscana (Bus leaves Food Science @ 18:00)

Module	Day 2	Topic
7	8:30 - 9:15	Welding stainless steel
8	9:15 - 10:00	Static seals and couplings
	10:00 - 10:15	Coffee break
9	10:15 - 11:45	Cleaning and disinfection
	11:45 - 12:45	Lunch-
10	12:45 - 13:45	Designing For Food Safety
11	13:45 - 14:30	Valves
12	14:30-15:15	Pumps (dynamic seals)
	15:15 - 15:30	Coffee break
13	15:30 -17:00	Case study-Valves, Pumps, Couplings
Dinner	18:30	Mcgraw's (Bus leaves Food Science @ 18:00)

Module	Day 3	Topic
14	8:30 - 10:00	Building and process layout
	10:00 - 10:15	Coffee break
15	10:15 - 11:00	Installation and maintenance. Lubricants
16	11:00 - 12:15	Verification of hygienic design. Test methods. Certification
	12:15-13:15	Lunch
17	13:15 - 14:45	Case study. Cleanability Demonstrations
	14:45 - 15:15	Student course evaluation—Final Exam

## 4. why attend

Attendees will:

- -gain practical and theoretical understanding of hygienic design and the benefits for manufacturers and users of food processing equipment
- be able to identify non-hygienic features, improve equipment designs, and make better informed decisions about equipment purchases.

## 5. previous training and working experience

The participants should have a minimum of two years of relevant practical experience.

## 6. course data and location

The course will be held in the facilities of **Purdue University's Department of Food Science o**n May 22-24, 2012. Lunches and two dinners are included.

## 7. instructors

Mark T. Morgan - Purdue University, CIFM Director

Andrew Timperley - Timperley Consulting, Chair, Test Methods

Subgroup

Knuth Lorenzen - EHEDG President

Gabe Miller - Sani-Matic, 3-A Certified Conformance

Evaluator

### 8. certificate

An attendance certificate will be provided at the end of the course.

### 9. costs

The cost for the course is \$1495 including hand-outs, hands-on exercises, and meals. Members of EHEDG will get a 10% discount on the course price.

#### 10.3-A Standards

3-A standards and EHEDG guidelines will be compared. Advanced hygienic design principles of food processing equipment to improve safety and minimize down time, maintenance, and cleaning costs will be covered.

