

# Programme Max Rubner Conference

## Monday, October 6, 2014

13:00-14:00 Registration and Coffee

14:00-14:30 Welcome Address  
Gerhard Rechkemmer, President Max Rubner-Institut

### Session 1 *Current and Projected Food Application of Enzymes*

14:30-15:10 **Recent Development in Enzyme Biocatalysis for Food**  
Hans Peter Heldt-Hansen, Novozymes, Bagsvaerd, Denmark

15:10-15:50 **Enzymes in Dairy Technology**  
Lutz Fischer, Universität Hohenheim, Hohenheim, Germany

15:50-16:30 **Enzymes in Baking Technology**  
Klaus Lösche, ttz Bremerhaven, Bremerhafen, Germany

16:30-17:00 Coffee Break

17:00-17:40 **Use of Lipases in Inter and Trans Esterification of Lipids**  
Marek Adamczak, University of Warmia and Mazury, Olstyn, Poland

17:40-18:20 **Application of Transglutaminases in Food Processing**  
Arash Sadeghi-Mehr, Max Rubner-Institut, Kulmbach, Germany

19:00 Get-together

## Tuesday, October 7, 2014

09:00-09:40 **Enzymatic Modification of Polysaccharides**  
Sabine Flitsch, University of Manchester, Manchester, UK

09:40-10:20 **Applications of Cold-adapted Proteases in the Food Industry**  
Ágústa Gudmundsdóttir, University of Iceland, Reykjavík, Iceland

10:20-10:50 Coffee Break

10:50-11:30 **Potential Application of Phytases in Food Processing**  
Ralf Greiner, Max Rubner-Institut, Karlsruhe, Germany

### Session 2 *Screening, Improvement, Production, Downstream Processing*

11:30-12:10 **Enzymes from Basidiomycetes for Food Applications**  
Ralf Berger, Universität Hannover, Hannover, Germany

12:10-12:50 **Immobilised Enzyme Technology for Food Applications**  
Marie Walsh, Utah State University, Logan, USA

12:50-13:50 Lunch Break

13:50-14:30 **Improving Enzyme Performance in Food Applications**  
Pedro Fernandes, Technical University of Lisboa, Lisbon, Portugal

14:30-15:10 **Metagenomic Approach for New Enzymes for Food Applications**  
Wolfgang Aehle, Brain AG, Zwingenberg, Germany

15:10-15:40 Coffee Break

15:40-16:20 **Production of Industrial Enzymes for Food Application**  
Patrick Lorenz, AB Enzymes, Darmstadt, Germany

16:20-17:00 **Modern Downstream Processing for Protein Isolation and Fractionation**  
Sascha Beutel, Universität Hannover, Hannover, Germany

17:00 Departure for Dinner

## Wednesday, October 8, 2014

### Session 3 *Legal and Health Aspects*

09:00-09:40 **Risk Assessment of Food Enzymes by EFSA: First Experiences**  
Anne Theobald, EFSA, Parma, Italy

09:40-10:20 **Enzyme-induced Allergies and Strategies to Avoid Exposure in the Food Industry**  
Ingrid Sander, University of Bochum, Bochum, Germany

10:20-10:50 **Consumer Attitudes towards Enzyme Application in Food Processing**  
Lynn Frewer, Newcastle University, Newcastle, UK

10:50-11:30 Coffee Break

11:30-13:30 **Panel Discussion (in German)**  
Moderation: Gerhard Rechkemmer, Max Rubner-Institut  
Karlsruhe, Germany

# Registration Form

## Max Rubner Conference 2014

Title \_\_\_\_\_

Last Name \_\_\_\_\_

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

Organisation \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_

E-Mail \_\_\_\_\_

Fax \_\_\_\_\_

Vegetarian Meal for Lunch yes  no

Registration for Complimentary Dinner yes  no

Vegetarian Meal for Dinner yes  no

Privacy Statement: I hereby consent storage of my personal data for future information about MRI events. I can withdraw this consent any time to stop further mailings. yes

Signature \_\_\_\_\_

**Registration is complete upon receipt of payment.**

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## Enzymes in Food Processing

We are pleased to announce the Max Rubner Conference 2014 to be held from 6 to 8 October 2014, at the Max Rubner-Institut, the German Federal Research Institute of Nutrition and Food, in Karlsruhe, Germany.

Food processing through the use of biological agents is historically a well-established approach. The earliest applications go back to 6,000 BC or earlier, with the brewing of beer, baking of bread and producing cheese and wine. In those days the biological agents were unknowingly used. In more modern days, in the late 19th century the food industry started to produce enzymes for food processing.

Enzymes are useful biotechnological processing tools whose action can be controlled in the food matrix to produce higher quality food products. These include enzymes used in baking, beverages and brewing, dairy, dietary supplements, as well as fats and oils. Even if the integration of enzymes in food and feed processes is a well-established approach, evidence clearly shows that dedicated research efforts are consistently being made as to make this application of biological agents more effective and/or diversified. In recent years, significant advances in enzyme engineering and biocatalyst design have fastened the pace of such developments.

The conference aims to provide an updated overview on the applications of enzymes in the food sector, and of progresses made in respect to exploit more efficient biocatalysts, through screening, structural modification, and immobilization of enzymes. Targeted improvements aim at enzymes with enhanced thermal and operational stability, improved specific activity, modification of pH-activity profiles, and increased product specificity, among others. Besides technological aspects, legal and health issues are also addressed.

We invite you to participate in this inspiring conference, to meet colleagues from other institutions and countries, to discuss common problems, and to inform yourself about the latest developments in the area of enzymes in food processing. We are looking forward to meeting you in Karlsruhe!

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### Accommodation

A link to hotels in Karlsruhe: [www.karlsruhe-tourismus.de](http://www.karlsruhe-tourismus.de)

### Conference Language

All contributions will be in English.

### Conference Venue

The conference will be held at the Max Rubner-Institut, Federal Research Institute of Nutrition and Food, Haid-und-Neu-Straße 9, Karlsruhe, Germany.

### Evening Event – Dinner

There will be a complimentary dinner on October 8, 2013, for 60 guests. Separate registration is required (see registration form). Seats will be assigned to the first 60 participants (date of receipt of registration applies).

### Payment

All payments should be made in Euro by bank transfer. Sorry, no credit card payments. Please indicate your name!

#### International Bank Transfer

IBAN: DE08 7500 0000 0075 0010 07  
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1063 1001 7427 BEW 03037309

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### Registration Fee

The fee covers participation in the sessions of the conference, abstract book, meals and drinks at the get-together, at lunch, and during coffee breaks.

	Before Sept 7	After Sept 7
Academia	230 EUR	250 EUR
Industry	400 EUR	450 EUR
Students*	90 EUR	120 EUR

(\* Please fax or mail a copy of student ID)

### Cancellation Policy

Registration fees will be refunded, if written cancellation is received before September 7, 2013. No refunds will be made after this date.



## Programme

# Max Rubner Conference 2014

## Enzymes in Food Processing

October 6-8, 2014  
Karlsruhe, Germany

Max Rubner-Institut  
Federal Research Institute of Nutrition and Food