International Fresenius Conference

NANOTECHNOLOGY IN FOOD

19 to 20 May 2014 in Mainz/Germany

HIGHLIGHTS:

Nanotechnology and the food market:
- Nano-related activities at EFSA
- French declaration on substances at nanoscale
- US regulatory statutes in nanotechnology

Medical issues and consumer safety:
- Nanoparticles of the gastrointestinal tract
- Clinical, safety and toxicological considerations

Analytical methods and scientific matters:
- Uptake of nanoparticles into plants, and implications on food quality
- Method development to analyse nanoparticles
- Migration potential of nanoparticles in food contact materials (FCM)

Regulatory aspects and industry practice:
- EU provisions on nanomaterials in food
- Actual aspects of risk assessment
- Measurement procedures and method validation
- European food industry perspectives

THE EXPERTS:


Info-Hotline: +49 231 75896-50
Monday, 19 May 2014

8.30 Registration & coffee

9.00 Welcoming speech by the organisers and the Chairs
Harald Krug, Federal Laboratories for Materials Science and Technology (EMPA), Switzerland and Jonathan Powell, MRC Human Nutrition Research, UK

Nanotechnology and the food market – an overview

9.10 Nano-related activities at EFSA
Reinhilde Schoonjans, European Food Safety Authority (EFSA), Italy

9.40 French declaration on substances at nanoscale and its first results
Member of the Ministry of Ecology, Sustainable Development and Energy, France (confirmed)

10.10 Panel discussion
10.40 Coffee break

11.10 Potential US regulatory statutes in nanotechnology
- US regulation
- Toxic Substances Control Act (TSCA)
- Food, Drug and Cosmetic Act (FDCA)
Maureen R. Gwinn, U.S. Environmental Protection Agency (EPA), USA

11.40 Nanotechnologies for food applications – a world of opportunities
- The possibilities of nanotechnologies for food
- Nanotechnologies and FCM
- Innovation in the food area
David Carlander, Nanotechnology Industries Association (NIA), Belgium

12.00 Panel discussion
12.30 Lunch

14.00 Aspects of nanomaterials in the area of food and food additives
Kristen M. Kulinowski, IDA-Science and Technology Policy Institute, USA

14.30 Nanoparticles of the gastrointestinal (GI) tract: uptake, utilisation and hijack by imposters
- The endogenous (natural) formation of two distinct nanoparticles that occur in the gastrointestinal tract
- Hijack of the natural route by “man-made” particles – evidence and implications
Jonathan Powell

15.00 Panel discussion
15.20 Coffee break

15.50 Clinical, safety and toxicological considerations for nanotechnology
- Route of exposure
- Physical/chemical considerations
- Internal defence systems
Martin A. Philbert, University of Michigan School of Public Health, USA

16.20 What does it mean for the consumer?
Erich J. Windhab, Swiss Federal Institute of Technology Zurich, Switzerland

Industry perspectives

16.50 European food industry perspectives
Michael E. Knowles, The Coca-Cola Company (retired)

17.10 Panel discussion
17.40 Concluding remarks by the Chairs

18.30 Departure time for the evening event

Medical issues and consumer safety

After the first conference day, Akademie Fresenius invites you to a leisurely evening at the vineyard of Joachim Flick. You have the opportunity of better getting to know other participants you met during the day over a relaxed meal and wine from the Rheingau region.
Tuesday, 20 May 2014

8.30 Welcoming address by the Chairs
Harald Krug and Jonathan Powell

Analytical methods and scientific matters

8.40 Uptake of nanoparticles into plants and implications on food quality
- Dissemination of nanomaterials in the environment, exposure of crop plants
- Transfer mechanisms and impacts for the plants
- Implications for crop production, food quality and safety
Géraldine Sarret, National Center for Scientific Research (CNRS), France

9.10 Method development to analyse nanoparticles in complex samples – food, environment, cosmetics
- The challenge of analysing particles
- How to distinguish manufactured from natural nanoparticles?
- About specificity and true quantitation
- Do we need to determine number based particle size distributions always?
Frank von der Kammer, University of Vienna, Austria

9.40 Migration potential of nanoparticles in food contact materials (FCM)
- Results of migration studies
- Migration modelling of nanoparticles
Angela Störmer, Fraunhofer Institute for Process Engineering and Packaging (IVV), Germany

10.10 Panel discussion
10.40 Coffee break

Regulatory aspects and industry practice

11.10 EU provisions on nanomaterials in food
- Labelling requirements for nanomaterials
- Definition for nanomaterials
- Nanomaterials and Novel Food Regulation
Walther Quasigroch, Federal Ministry of Food, Agriculture and Consumer Protection (BMELV), Germany

11.40 Nanomaterials in the food sector: tiny particles, big effects
- Natural occurring nanomaterials in food, conventional food processing vs. nanotechnology
- Food additives and supplements, nano-carrier systems
- Food contact materials, sensors and indicators
- Market situation
Ralf Greiner, Max Rubner-Institut (MRI), Germany

12.10 Panel discussion
12.30 Lunch

13.30 Nanotechnology in food – oral uptake, digestion and molecular effects including actual aspects of risk assessment
Alfonso Lampen, Federal Institute for Risk Assessment (BfR), Germany

14.00 Regulatory aspects and method development for the detection of nanomaterials in food
- Regulatory context (definition, labelling requirements)
- Overview of measurement procedures
- Aspects of method validation
Hermann Stamm, EU Joint Research Centre, Italy

14.30 Managing ingredients with ‘nano’ implication
Neil Buck, on behalf of ILSI Europe and ILSI Research Foundation US

14.50 Panel discussion
15.30 Concluding remarks by the Chairs and end of the conference

Save the Date!

9th International Fresenius Conference
Contaminants and Residues in Food
7 to 8 April 2014 in Mainz/Germany
www.akademie-fresenius.com/2192
THE EXPERTS

Neil Buck is a registered Toxicologist with experience in the nutrition and finished product industry with focus on both safety and efficacy topics in regulatory and scientific affairs. He is member of ILSI Europe.

David Carlander is Director of Advocacy at the Nanotechnology Industries Association (NIA). He is covering the agricultural sector (food, feed, ag-chem), REACH and risk assessment of nanomaterials. Before joining NIA he worked for EFSA.

Ralf Greiner is Professor and has been Head of the Department of Food Technology and Bioprocess Engineering at the Max Rubner-Institut in Karlsruhe since 2010. Since 2013 he has been lecturer at the University of Hong Kong.

Maureen R. Gwinn is a Biologist at the National Center for Environmental Assessment (NCEA) in the Office of Research and Development (ORD) at the U.S. EPA. In this position, she works on human health hazard assessments for the Integrated Risk Information System (IRIS) programme.

Michael E. Knowles left the UK Ministry of Agriculture, Fisheries & Food to join the Coca-Cola Company as Director of Scientific & Regulatory Affairs (SRA) for Europe, Eurasia and Africa, then Managing Director of their Beverage Institute for Health & Wellness and eventually Vice President Global SRA until his retirement in early 2013.

Harald Krug is Professor and member of the Board of Directors and Head of the research focus area „Health & Performance“ at the EMPA in St. Gallen. His work is focused on applications and implications of new materials, especially nanomaterials.

Kristen M. Kulinowski is adjunct Assistant Professor in the Department of Chemistry at Rice University in the USA. She currently works in Washington DC at the IDA Science and Technology Policy Institute (STPI), a federally funded research and development center that provides analytical support to the White House Office of Science and Technology Policy and other Federal agencies.

Alfonso Lampen is Head of the Department Food Safety at the BfR in Berlin and Professor at the School of Veterinary Medicine Hannover.

Martin A. Philbert is Dean and Professor of Toxicology at the University of Michigan School of Public Health. He is a member of the Institute of Medicine of the National Academies of Science (USA), a Fellow of the Royal Society of Chemistry and of the Academy of Toxicological Sciences.

Jonathan Powell is Professor and Head of the Mineral Science & Technology Department at the MRC’s Human Nutrition unit in Cambridge, and a Fellow of Hughes Hall College, the University of Cambridge. He works at the interface between nutrition and gastroenterology on the metabolism of mineral based nano and microparticles.

Walther Quasigroch has been with the German BMELV since 2002. He is Administrator and currently working on special foods (e.g. novel food). In former years he was dealing with food contact materials and contaminants in food.

Géraldine Sarret has a permanent position as a National Center for Scientific Research (CNRS) Scientist at the University of Grenoble and is specialist of the fate of metallic contaminants and nanoparticles in soils and their transfer in plants.

Reinhilde Schoonjans is Molecular Biologist and has been Scientific Officer at EFSA since 2005. She provides scientific input to the work on nanomaterials in food/feed, cloning and overarching elements of environmental risk assessment at the level of the EFSA Scientific Committee.

Hermann Stamm directs the Unit Nanobiosciences of the Institute for Health and Consumer Protection at the JRC of the EU Commission. The activities of the unit encompass research in the area of safety and risk assessment of nanomaterials.

Angela Störmer is working as Research Scientist, Food Regulatory Expert and Quality Manager at Fraunhofer IVV in Freising since 1997. Her main topics are research in the field of food packaging interactions, the food regulatory assessment and advice in the field of regulations for FCM.

Frank von der Kammer has been Senior Scientist and Lecturer for environmental pollution and site remediation at the Department for Environmental Geosciences at the University of Vienna since 2005. He is Vice Head of the Department and leads the NanoGeosciences Division and the Nanoparticle Analysis Laboratory.

Erich J. Windhab has been full Professor of Food Process Engineering at the Institute of Food Science at the ETH Zurich since 1991.

www.akademie-fresenius.com/2165
WHOM DO YOU MEET?
Groups that should take part:
- Managing directors, boards of directors, managers, consultants and scientist in the field of
  - Quality assurance & control
  - Analysis
  - Research & development
  - Registration and authorisation
  - Marketing & distribution
  - Product safety
  - Legal & regulatory affairs

Sectors that should take part:
- Food and beverage industry
- Food retail
- Packaging industry
- Regulatory authorities (e.g. food inspection offices)
- Contract laboratories
- Research institutes
- NGOs and public interest groups
- Medical institutes

THE ORGANISERS
AKADEMIE FRESENIUS is a joint venture of SGS Institut Fresenius and Cognos, one of the leading private educational institutes in Germany. Akademie Fresenius organises national and international conferences and congresses on current topics from the economic and scientific sectors for both specialists and the industry. You can find details on upcoming and new events at www.akademie-fresenius.com

Consumer protection is becoming increasingly important and the legal requirements in regard to quality assurance in the production and use of food have become much more stringent. As an accredited partner, SGS INSTITUT FRESENIUS offers fast and competent assistance in all analytical and hygiene-relevant issues concerning food. Vast experience in analytical sciences and most recent analytical equipment is used to develop and validate methods relevant for the quality assessment of food products and monitoring of residues and contaminants at trace levels. Customers also benefit from many years of experience in the assessment of legal issues in this field.

www.institut-fresenius.de

TRADE EXHIBITION

Our conference provides you with the opportunity of presenting your company in a trade display. Present your products and services and reach out to your specific target groups. We would be happy to provide you with information on all the various options available – from displaying product information to an exhibition stand – with no further obligation on your part. Use the attached fax reply sheet to request our information material. Or simply call us. We would be more than pleased to assist you personally.

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TERMS OF PARTICIPATION AND PURCHASE

The registration fee includes the conference participation, complete conference documentation, lunch, coffee breaks, conference beverages as well as the evening event on 19 May 2014.

You will receive written confirmation of your registration. Upon receiving our invoice, please transfer the amount due without further deductions before the conference begins.

The price of the conference documentation includes a hard copy of the documentation as well as an access code to the secure Akademie Fresenius download area where you can download the complete conference documentation, including any subsequent updates, in electronic form – subject to the approval of the respective speakers. Both the documents and the secure access code will be dispatched around two weeks after the event and as soon as advance payment has been received.

GROUP REDUCTIONS

For joint bookings received from one company we grant a 15 % discount from the third participant onwards.

TERMS OF CANCELLATION

Written cancellations or transfers will be accepted free of charge up to four weeks prior to the start of the event. After this date and up to a week prior to the start of the event we will reimburse 50 % of the registration fee. We cannot, unfortunately, provide refunds for later cancellations.

Please note that you can name a substitute free of charge at any time.

GENERAL TERMS AND CONDITIONS

By registering, you agree to our General Terms and Conditions as well as to our Privacy Policy. You can find our General Terms and Conditions on the internet (www.akademie-fresenius.com/general-terms) or receive them on request.

PERSONAL DATA

The Akademie Fresenius will keep your personal data for the purpose of organising this event. We will under no circumstances use your data for commercial trade purposes. In signing this form you consent to our occasionally contacting you by mail, email, fax or phone (please strike through if unwanted) in order to provide you with further information from our company. You can, of course, withdraw your consent whenever you wish. Further information can be found at: www.akademie-fresenius.com/dataprotection.

VENUE/CONFERENCE HOTEL

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We have reserved a limited number of rooms for our participants at reduced rates at the hotel. These rooms can be booked up to four weeks prior to the start of the event. Please book early and directly through the hotel quoting “Fresenius” as reference.