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EDITORIAL

by **Paola Pittia** (President of the ISEKI-Food Association)



Dear readers,

Time is running too fast and as announced in Athens in 2014 at the 3rd ISEKI_Food conference organized under the support of the Erasmus TN ISEKI_FOOD-4 project we are pleased with this issue of the newsletter to announce the 4th ISEKI_Food Conference that will be held in Vienna, Austria, 6-8 July 2016.

http://www.isekiconferences.com/vienna2016/

Main aim of the ISEKI_Food conferences is the sustainability of the researchers, education scientists, technologists and industry representatives as well as food consumers within an "open" international forum to promote constructive dialogue and collaboration on topics relevant to Food Science and Technology, Industry and Education and to present and disseminate the results of the activities of the ISEKI_Food network.

In this edition, under the general framework "Bridging Training and Research for Industry and the wider community the leading theme will be "Responsible Research and Innovation in the Food Value Chain". It is well recognized that innovation and sustainability are key driving forces of modern food production chain. Actually, food security, food safety, food sovereignty, energy, water, nutritional and climate aspects are currently driving research and development of new knowledge in the food sector, that require the commitment of all the actors along the food value chain to tackle these main societal issues and to preserve the future of our society by a responsible management of science and innovation. Food scientists, educators and teachers, industry and professionals have to become mutually responsive to each other with a view to the ethical acceptability, sustainability and societal expectations of the innovation process and its marketable products.

The conference will be developed with oral and poster presentations under the three main areas of education, research and industry and will be complemented by networking sessions and round tables. A series of training and dissemination workshops on specific topics developed in collaboration of the Special Interest Groups of the Association will complement the main schedule of the conference. Main attention will be given to the PhD students on Food studies and a specific pre-conference workshop will be organized in collaboration with industry and professional representatives to contribute to a joint discussion on the impact of scientific researches and the current food production chain and its value.

So...mark this date in your calendar and...we look forward to seeing you all in Vienna next year!

All the best

Paola



NEWS FROM IFA



4th International ISEKI_Food Conference

ISEKI_Food 2016

6 - 8 July 2016, Vienna, Austria

www.isekiconferences.com/vienna2016

Responsible Research and Innovation in the Food Value Chain

Bridging training and research for industry and the wider community



1st Call for contributions





The general aims of the ISEKI_Food conference series are to contribute to the creation of an "open" international forum for researchers, education scientists, technologists and industry representatives as well as food consumers, to promote a constructive dialogue and collaboration between Industry and Education on topics relevant to Food Science and Technology.

Innovation and sustainability are key driving forces of modern food production chain that require an accelerated transfer of new knowledge generated by fundamental and applied research in food as well as other adjacent scientific domains. Food security, food safety, food sovereignty, energy, water, nutritional and climate aspects are vital topics, driving research and development in the agro-food sector, that require the commitment of all the actors along the food value chain to tackle these main societal issues and to preserve the future of our society by a responsible management of science and innovation.

Food scientists, teachers and trainers, industry representatives and professionals have to become mutually responsive to each other with a view to the ethical acceptability, sustainability and societal expectations of the innovation process and its marketable products.

In this framework, this conference is expected to favour a discussion on the main aspects of research and innovation as well as on ethical behaviour and responsibility that all actors of the food chain are expected to have towards our society and its future sustainable development. The role of education and training on responsible research and innovation in a lifelong learning perspective will be also discussed and case studies presented.

This international event will be preceded by various workshops on hot topics in the food sector and will include networking sessions organised in collaboration with the Special Interest Groups of the ISEKI-Food Association.

We look forward to meeting you in Vienna in July 2016!

Conference Topics:

- Education and Training in the Food sector: trends and developments
- Food Technology: process innovation and novel food functionalities
- Food Quality and Safety: new developments
- Food by-products: reduction and utilisation
- Nutrition: trends and impact of food technology
- Responsible Research and Innovation: challenges and practices in the food supply chain

submit your abstracts
presentations 2016
presentations

For more info visit: www.isekiconferences.com/vienna2016



FOOD SCIENCE AND TECHNOLOGY FOR A SUSTAINABLE BIOECONOMY - ISEKI_FOOD 2014

A special issue of the Journal of Food Engineering, focusing on "Food Science and Technology for a Sustainable Bioeconomy _ ISEKI_Food 2014" was just published: http://www.sciencedirect.com/science/journal/02608774/167/part%20/PA

The articles resulted from the selection of the best abstracts on the theme of Food Science and Engineering for a Sustainable Bioeconomy of the 3rd International Conference of the ISEKI network.

FOOD WASTE RECOVERY WORKSHOP, Tuesday, 5 July 2015, 08:45 – 18:00

Venue: BOKU - University of Natural Resources and Life Sciences, Vienna

Department of Food Sciences and Technology, Seminar room 2/28

A-1190 Vienna, Austria, Muthgasse 18

details and registration at: http://www.isekiconferences.com/vienna2016/

The workshop is organized by the Special Interest Group 5 (SIG5) of the ISEKI Food Association (IFA, https://www.iseki-food.net/) as pre-conference workshop to the 4th International ISEKI_Food Conference. The workshop is dedicated to the Recovery of Valuable Compounds (i.e. polyphenols, carotenoids, antioxidants, dietary fibers, proteins etc) from Food Processing By-products. Workshop will be chaired by Dr. Charis M. Galanakis, Galanakis Laboratories, Greece.

State of the art

As long as food processing exists, the non-consumed materials are considered as a substrate of treatment, minimization or prevention. However, nowadays, the prospect of recovering high added-value compounds from these materials and re-utilizing them in the food chain is the new trend in food science and technology field. Besides, the perpetual disposal of high nutritionally proteins, antioxidants or dietary fibers in the environment is a practice that could not be continued for a long time within the sustainability and bioeconomy frame of the modern food industry.

Who we are

IFA-SIG5 is the **biggest network worldwide in the field of food waste recovery**. It has more than 500 subscribers (from >60 countries) of its Webinar Series and more than 100 members in its Linkedin group entitled: "Food Waste Recovery & Innovation 2020".

The group operates over the last 3 years and has supported the development of numerous activities, such as a webinar series, e-learning course, Special Issue edition in Food Research International, book edition in Elsevier-Academic Press, expert evaluator database, several bilateral collaborations between academics, institutes, professionals and industries, consortiums for joint funding programs and other activities.

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Objective

The objective of the workshop is to provide state of the art knowledge and critical information in the field, by exploring potential sources and classifying target compounds, explaining in details the "Universal Recovery Strategy", as well as noting the advantages and disadvantages of dominant methodologies applied in downstream processing, from the initial source to the final product.

During the workshop, the following **major topics** will be addressed:

- What is the "Universal Recovery Strategy" and the "5-Stages Universal Recovery Process"
- Classification of target compounds, selection of solvents, conventional and emerging methodologies
- Safety and cost issues, scale up and practical aspects
- Current legislation issues and innovation opportunities
- Recent advantages on food by-products processing: olive mill wastewater, cheese whey, winery sludge, citrus peel, vegetable, cereal and coffee by-products
- Examples and success stories of real industrial and commercialized applications
- Round table discussion for consortiums' development, target Horizon 2020, EU and international funding opportunities, synergies, joint and open innovation actions between academia and industry

Special features include:

- Fees include coffee breaks and light lunch
- Presentations will be provided to the participants
- Free access to the teaching materials of webinar series
- e-learning course
- Privileged registration in the Expert Evaluator Database of SIG5

Programme

08:15-08:45	Registration
08:45-09:00	Opening Session & IFA's Introduction, Gerhard Schleining (Austria)
09:00-09:30	The Universal Recovery Strategy, Charis M. Galanakis (Greece)
09:30-10:00	Concepts to reduce waste in the processing of plant based products, Henry Jäger (Austria)
10:00-10:15	Coffee Break
10:15-11:45	Electrotechnologies: A useful tool in biorefinery, Franscisco Barba (Spain)
11:45-12:15	Ultrafiltration for the separation of functional macro- & micro-molecules, Charis M.
	Galanakis (Greece)
12:15-12:45	Mapping the potential of high pressure processing to recover antioxidant bioactive



	compounds, Franscisco Barba (Spain)
12:45-14:00	Lunch Break
14:00-14:20	Commercialized methodologies for the recovery of valuable compounds from food wastes,
	Charis M. Galanakis (Greece)
14:20-14:40	Invited Lecture tbc
14:40-15:00	Industrial recovery and utilization of valuable ingredients from vegetable by-products,
	Paulus Kosters (The Netherlands)
15:00-15:15	Coffee Break
15:15-16:00	Invited Lecture, tbc
16:00-17:00	Packaging affecting food losses and waste, Johannes Bergmair (Austria)
17:00-18:00	Roundtable - Discussion
18:00	End of Workshop

Registration at http://www.isekiconferences.com/vienna2016/:

- **EUR 125,00** (students)
- EUR 200,00 (Early Bird: payment done until March 31, IFA members)
- EUR 250,00 (Regular)
 conference delegates get a reduction of EUR 30

Cancellation has to be done by e-mail to the Conference secretariat.

until 6 May 2016 - full refund (less EUR 50.- handling fee). until 6 June 2016 - 50% refund. after 6 June 2016 no refund

CONFERENCE SECRETARIAT: ISEKI-Food Association

c/o Department of Food Sciences and Technology A-1190 Vienna, Austria, Muthgasse 18

Tel: +43-6991-9247527 Fax: +43-1-9909903 E-mail: office@iseki-food.net Web: https://www.iseki-food.net/

FOOD WASTE RECOVERY, PROCESSING TECHNOLOGIES AND INDUSTRIAL TECHNIQUES

by Charis Galanakis, Galanakis Laboratories, IFA Deputy National Representative Greece

Book Launch, 12th September 2015: "Food Waste Recovery, Processing Technologies and Industrial Techniques", edited by Charis M. Galanakis, Academic Press, London.

As long as food processing exists, the non-consumed materials are considered as a substrate of treatment, minimization or prevention. On the other hand, the prospect of particularly recovering high added-value compounds from these materials is a story started few decades ago. Besides, the perpetual disposal of high nutritionally proteins, antioxidants or dietary fibers in the environment is a practice that could not be continuing for a long time within the sustainability and bioeconomy frame of the food industry. Nowadays, many relevant projects progress around the world and across different disciplines, whereas the existence of numerous scientific articles, patents, congresses and commercialization efforts have emerged a wealth of literature in the field. Despite this plethora of information and the developed technologies that promise the recovery, recycling and sustainability of valuable

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compounds inside food chain, the respective shelf products remain rather limited. This is happening because the industrial implementation of recovery processes is a complex approach, needing careful consideration of different aspects.

This book aspires to approach the real full-scale applications and fill in the gap between academia and industry within the particular topic. The main aim is to emphasize the advantages and disadvantages of processing technologies and techniques, as well as to provide a holistic approach for the recovery of valuable components from food wastes. This is conducted by adapting the different applied technologies in a recovery strategy (the so-called "Universal Recovery Strategy"), which could be implemented independently of the nature of the food waste and the characteristics of the target compound in each case. The ultimate goal of the book is to provide a handbook for anyone who wants to develop a food waste recovery application. It is intended to support researchers, scientists, food technologists, engineers, professionals and students working or studying in the edge of food, by-products and environmental areas.

The edition of the book was supported by the Special Interest Group 5 of ISEKI-Food Association. The latest is today the biggest network worldwide in the field of food waste recovery. It has more than 500 subscribers (from >60 countries) of its Webinar Series and more than 1100 members in its Linkedin group entitled: "Food Waste Recovery & Innovation 2020". I would like to take this opportunity to thank all the members of the group that helped accomplishing this project by authoring particular chapters. Their fruitful collaboration and high quality work in bringing together different topics and technologies in an integral and comprehensive text, is highly appreciated.

THE NEW SIG (Special Interest Group) ON VIRTUALIZATION IN FOOD ENGINEERING

Chair: Francesco Marra (University of Salerno, Italy)

Deputies: *Ferruh Erdogdu* (University of Ankara, Turkey) and *Fabrizio Sarghini* (University of Naples "Federico II", Italy)

The Special Interest Group of IFA on Virtualization in Food Engineering has just started its activities. Among topics related to "virtualization in food engineering" one should include a list of activities (that could be purely intellectual and/or mathematical and/or computational) such as "data modeling", "statistical analysis", "fundamental modeling", "dynamic simulation", "optimization" when they are able to provide the researcher with a virtual machine/plant/process/product that has all the characteristics of the "real case" it was inspired to, without needing any physical hardware, so that it provides more process flexibility ("I can explore more phenomena, deeply, in the same time") and it increases the utilization rate of the underlying physical hardware (since with virtualization the final goal will be optimization and thus the increase of utilization of a given plant or process). Thus modelling, simulation, optimization and dynamic studies are a part of a wider scheme that is described as virtualization. While a number of manufacturing sectors (e.g., aerospace, defense, automotive) are benefiting for decades from modeling activities and virtualization



of processes, the food industry (that represents more than 5% of the global GDP and the first in Europe) is still lagging to utilize the wide spectrum potential offered by virtualization as an engineering design tool. Undoubtedly, the use of virtual tools reduces the overall time needed for developing, designing and validating processes and equipment, circumvents the tailored made production of un-efficient numerous prototypes, reduces development costs and consequently reduces the time to market. Thus, virtualization addresses and fulfills the needs of new and sophisticated strategic tools for innovation in the food industry reducing the time needed for developing, designing and validating processes and equipment.

The new SIG is aimed to:

- implement education and research that can exploit the use of virtualization in food engineering offering new opportunities for the food and agricultural industry;
- provide training activities on the several aspects of the virtualization (modeling, simulation, optimization, computer aided design and other similar activities) applied to food and biological systems;
- exchange ideas and methodologies;
- grow a reference group about virtualization in food engineering in view of preparation of projects and network proposals.

Deliverables and activities:

- A dedicated web-site, to be used as a platform for discussions and sharing of information
- Organization of seminars, webinars and summer schools: particularly, the proposed SIG is
 working about the organization of the first summer school in Modeling and Simulation in Food
 and Bio Processing (MSFS2016), to be held in Capri (Italy) in June 2016

Reference contacts: Francesco Marra (fmarra@unisa.it)

other contacts: Ferruh Erdogdu (ISEKI Food Association member, Ankara University), Fabrizio Sarghini (ISEKI Food member candidate, University of Naples "Federico II")

The SIG is open to all interested people that would like to **actively contribute and collaborate**.

For more information and/or expression of interest please send email to the contacts

Links:

www.virprofood.org (under construction)

www.virprofood.unisa.it

http://www.virprofood.unisa.it/thewhitepage

NEWS

The IFA SIG on Virtualization in Food Engineering announces the first International Summer



School on Modeling and Simulation in Food and Bio Processing (MSFS2016), to be held in Capri - Italy from the 5th to the 9th of June 2016.

MSFS2016 is an international-short-term school aimed to introduce modeling "from fundamental phenomena up to complex multiphysics environment and multiscale" to fellows involved in research, both in academy and industries, in the field of food and bio processes. The idea is to move the event every year all over the world to share knowledge with young fellows involved in food and bio processing.

The first edition will be completely focused in food processing, although fundamentals knowledge apply to other sectors too. A maximum number of 35 participants will be selected on the base of their CV and a motivation letter. Priority will be given to PhD students, Post-Doc and Researchers involved in industrial R&D.

www.msfs2016.org (under construction)

FOOD STRUCTURE DESIGN: INNOVATION IN FOOD STRUCTURE-PROPERTIES RELATIONSHIPS

by Cristina L.M. Silva (Catholic University of Portugal)

A special issue of the Journal of Food Engineering focusing on "Food Structure Design: Innovation in Food Structure-Properties Relationships" was just published: http://www.sciencedirect.com/science/journal/02608774/167/part%20/PB

The articles resulted from the selection of the best abstracts from 1st Congress On Food Structure Design (https://www.skyros-congressos.pt/foodstructure/), that was supported by the cost action FA1001, developed under IFA SIG1-Food Structure (https://www.iseki-food.net/general/sigs/sig1).





INTERNATIONAL JOURNAL OF FOOD STUDIES (IJFS) INDEXED IN ROMEO

by **Cristina L.M. Silva** (Catholic University of Portugal)

The International Journal of Food Studies (IJFS - http://www.iseki-food-ejournal.com) is now indexed in RoMEO, the searchable database of publishers' copyright and self-archiving policies on the web and in Open Access repositories.



Increasingly, universities are insisting authors to archive their research papers in institutional repositories. RoMEO assists the authors finding out the publisher's copyright rules and conditions about open access.





RoMEO - Rights Metadata for Open Archiving - is part of SHERPA Services based at the Centre for Research

<u>Communications</u>, University of Nottingham, UK. RoMEO has collaborative relationships with many international partners, who contribute time and effort to developing and maintaining the service. Past funders have included the <u>Wellcome Trust</u> and <u>RLUK</u> – Research Libraries UK. Current RoMEO development is funded by <u>JISC</u> - Joint Information Systems Committee and covers over 22,000 peer-reviewed journals and serials.

MEMBERS AND FRIENDS OF IFA AWARDED AT 12th ICEF

by **Paulo Sobral** (University of Sao Paulo, Brazil))

During the 12th International Congress on Engeneering and Food (ICEF 2015), held at Quebec city, Canada, from last June 14th to 18th, several members and friends of IFA community were awarded with the IAEF Life Achievement Awards. According to informations found on the website of the meeting (http://www.icef12.com/index.html), the purpose of this award was "to recognize long serving experts of our field for their life long contribution and International impact on the progress of Food Engineering". The Awards committee was formed by Dr. Michèle Marcotte, Dr. Hosahalli Ramaswamy and Dr. Cristina Ratti.

Our colleagues awarded were:

Gilles Trystram, AgroParisTech (France)
Andrée Voilley — ENSBANA (France)
Gustavo Barbosa-Canovas - Washington State University (USA)
Paulo Sobral - University of São Paulo (Brazil)
Sam Saguy - The Hebrew University of Jerusalem (Israel)



NEWS FROM IFA NATIONAL REPRESENTATIVES

CHANGES IN THE GREEK NATIONAL REPRESENTATIVES TEAM

by **Luis Mayor** (Chair of IFA National Representatives)

Prof. Harris Lazarides leaves his position as Greek National Representative due to personal reasons. He is heavily involved in the administration of the Municipality of Aristotle (where is his home town, Arnea), with the aim of protecting the environmental status of the region.



Prof. Harris Lazarides was active in the ISEKI network since the beginning in 1988 in the FOODNET project. He contributed to many working groups in different projects with his open minded critical thinking.

He was also the main driving force for creating the social network what we have today with so many friends in the food sector all over the world.

From IFA we wish him success in this new project.



Prof. Vasso Oreopolou (National Technical University of Athens), former Deputy, becomes new Greek National Representative.

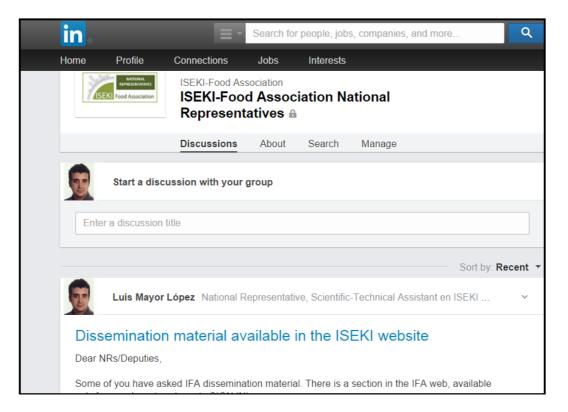
Dr. Charis Galanakis (Galanakis Laboratories) becomes new Deputy. We wish them very good luck in their new roles in IFA.



IFA NATIONAL REPRESENTATIVES (NRs) SUBGROUP IN LINKEDIN

We have been receiving comments from our national representatives, regarding the need of more networking activities and tools to support their tasks. In response to this demand we have created a forum discussion subgroup in LinkedIn for IFA National Representatives and deputies. The subgroup is a place where NRs and deputies can share their experiences, exchange ideas and views, and develop initiatives within the network.





We strongly recommend all NRs and Deputies to join the subgroup. To join this community it is necessary to be member of LinkedIn and of the ISEKI Group. After being accepted in the ISEKI group, you should join the National representatives subgroup. Since it is a private subgroup, only NRs and Deputies will be accepted as members.

For more detailed information about joining the group, please contact Luis Mayor (luis.mayor@iseki-food.net) or Anita Habershuber (office@iseki-food.net)

We look forward to welcoming you in the group soon!

The IFA National Representatives and Membership Team
Luis Mayor (chair), Anna McElhatton, Anita Habershuber, Helmut Glattes

LVA - LEBENSMITTELVERSUCHSANSTALT

by **Julian Drausinger** (IFA National Representative for Austria)



LVA is the national center of excellence for analysis and inspection of food and water in Austria. LVA acts as the contact point for research and industry for applied research projects and is engaged in process and product development. A comprehensive series of seminars and in-house trainings for the industry complete the services of LVA.



LVA takes the role of a motivator for collective R&D activities and acts as a technology transfer platform between science and industry. On European level LVA has a history as a strong research collaboration partner in diverse projects of FP7, especially in the schemes dedicated to SMEs.

In Austria LVA is market leader for training in the sector of water and food processing and offers seminars in the areas of quality management, science, law, hygiene and technology. In parallel a range of consulting services is established, which includes coaching programs (QM, HACCP) in addition to demand-driven consulting.





Christine Grabler & Julian Drausinger For more information see http://lva.at/

UCD INSTITUTE OF FOOD AND HEALTH

by **Dolores O'Riordan** (IFA National Representative for Ireland)



The UCD Institute of Food and Health http://www.ucd.ie/foodandhealth was established in 2008 bringing together UCD staff with active research programmes in the area of food and health into one centre of excellence. Led by Professor Dolores O'Riordan and hosting over 120 PhD and MSc students and almost 100 research and academic staff, the Institute is a multi-disciplinary, campus wide initiative, set up to develop food and health research with major projects spread across four research thematic areas: Food Quality and Processing; Food Safety; Personalised Nutrition and Health; and Food Chain Sustainability. To date the Institute has brought in over €50m in research funding and hosts two ERC recipients. It also ranks highly in international metrics, coming 1st globally in terms of citations per paper, and 5th on impact in the subject area of Food Science and Technology¹.

Along with its successful academic and research programmes, the Institute runs a highly regarded policy workshop series. Over the past seven years topics such as Malnutrition in the Elderly; Business Opportunities in Personalised Nutrition; and Food Waste; have been covered http://www.ucd.ie/foodandhealth/newsevents/outputs. The workshops have

¹ The tag *Food Science and Technology* was used, which includes all publications in the area of food and health. Analysis from Thomson Reuters InCites.

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attracted participation from stakeholders in industry, academia, public health and government departments and have contributed to discussions at a national level in areas such as, whether Ireland should adopt a sugar tax regimen or not.

Next year, 2016, will be an important year for Ireland as it marks the 100th anniversary of the Easter Rising and the first step in the nation becoming an independent sovereign state. It is also going to be a very busy year for staff within the Institute as we host no less than six international conferences both in UCD, and across Dublin. These events include Food Micro 2016 http://www.foodmicro2016.com/ being led by Professor Seamus Fanning; LCA Food 2016 http://www.foodmicro2016.com/ being led by Professor Seamus Fanning; LCA Food 2016 http://lcafood2016.org/ which Prof Nick Holden is coordinating. Prof Lorraine Brennan and colleagues within the nutrition group will host two events Metabolomics 2016 http://metabolomics2016.org/Metabolomics2016/Metabolomics2016.html, as well as the summer meeting of the Nutrition Society. Other events, which Institute staff are involved in are the IUFOST 2016 18th World Congress of Food Science and Technology http://www.iufost2016.com/; as well as hosting a school on PEF Processing http://electroporation.net/Events/School-on-PEF-for-Food-Processing-1 as part of COST action EP4Bio2Med, a consortium of researchers working in the field of electroporation.

If you would like to find out about any more of these events please contact our colleagues in the links above or contact us directly at mailto:foodandhealth@ucd.ie. We hope to see you in Dublin in 2016.

RESEARCH AT THE CHAIR FOR TECHNOLOGIES, NUTRITION AND WINE (TNW), ULBF, SLOVENIA

by **Janez Hribar**, **Tatjana Košmerl** and **Veronika Abram** (IFA National Representative from Slovenia)

The TNW carries out extensive pedagogical work especially for the students from the Department of Food Science and Technology, with courses covering technology for fruit and vegetables, nutrition, and wine production. At the same time, the TNW is strongly involved with the Slovenian food industry, and with other Departments of the Biotechnical Faculty, and with other Institutions in and around Slovenia. The many fruitful collaborations have resulted in several publications. The research interests of the TNW are divided into three main research areas.

The first research area relates to: postharvest physiological changes in fruit and vegetables during storage and processing; optimisation of controlled atmospheres; determination of anaerobic metabolites, bioactive components, and (*trans*)fatty-acids; and effects of natural antioxidants during thermal treatments for oxidative stability. An important part of these investigations is focused on: food packaging, stability and aroma; fruit mycotoxins; degradation of phytopharmaceutical residues in fruit and vegetables; and suitability of buckwheat for brewing gluten-free beer.

The second research area covers several aspects of nutrition. These include: nutrient intake; assessment of nutritional status; use of traditional and newer methods for nutrient intake (using food frequency questionnaires, videos, internet applications); use of anthropometric



methods; determination of nutritional markers and determinants of selection and levels of food intake; nutrition in correlation to obesity and chronic diseases; and markers of oxidative stress.

The third research area relates to wine production. Here, the studies include: qualitative parameters of grapes, must and wine; phenolic compounds, nutritional value, and sensory analyses of wine; effects of grape quality and processing on different categories of wine production; influence of oenological additives, grape growth conditions, and wine aging to physicochemical parameters, microbiological stability, and sensory quality of wines; new technologies in wine production, including additives for safer wines; and characterisation, identification and determination of wine components.

The TNW collaborates with many universities around the world, including Wageningen in The Netherlands, Bologna, Udine and Padova in Italy, Vienna in Austria, Zagreb and Osijek in Croatia, Banja Luka in Bosnia and Herzegovina, Beograd and Novi Sad in Serbia, Limassol in Cyprus and with Nibio Institute in Lofthus in Norway. The TNW also works with different SMEs and retail chains from Slovenia, and performs chemical and sensory analyses for them, along with providing an advisory role. An important part of these collaborations is the more than 100 projects for processing and storage buildings for fruit and vegetables, both in Slovenia and abroad. The TNW activities also include organisation of annual lectures and/or seminars for wine inspectors and farming advisers, and of workshops for sensory wine tasting.







NEWS ABOUT PROJECTS

2 ERASMUS+ Capacity Building projects, where ISEKI-Food Association is involved

by **Gerhard Schleining**, BOKU - University of Natural Resources and Life Sciences, Vienna, Austria, Gerhard.Schleining@boku.ac.at, http://www.dlwt.boku.ac.at/

The ISEKI-Food Association (IFA) is involved in the following 2 projects with in terms of curriculum development, accreditation of food study programmes on an international subject specific level, certification of trained persons and training courses.

Project SEA-ABT (South East Asia Academy for Beverage Technology)

Currently Thailand and South East Asia lack in capacities to supply the beverage industry with adequately trained students and qualified non-academic staff. A structured and sustainable collaborative concept between Universities and the beverage Industry for high quality continuing professional development (CPD) training is not established.

To overcome these gaps, a consortium of Thai and EU universities and companies in the beverage industry, coordinated by BOKU (University of Natural Resources and Life Sciences, Vienna, Austria), will systematically establish an independent JOINT EU-SEA-ACADEMY, with hubs in Thailand and EU, to enable a new sustainable collaboration between the partners for a continuing needs analysis, for developing new demand driven educational products using innovative pedagogical approaches and teaching tools to be used in CPD and HE. Special emphasis will be given to hygiene and environmental aspects (energy saving, waste reduction) and soft skills like teamwork, critical thinking and English language skills.

The proposed educational products will be qualified according to international standards. They will be implemented in a postgraduate Diploma for beverage technology, and in existing curricula with an optional focus on beverage technology with the possibility for double/joint degrees with EU universities.

The "Joint EU-SEA Beverage Academy" will be established as training center with mainly independently working local hubs in Bangkok (Kasetsart University using the structures of KU-FIRST) and in Vienna (at BOKU using the structures of IFA — ISEKI-Food Association) to deliver courses, to certify qualifications, to transfer knowledge and to support cooperations. Members of the academy will be European and Thai universities and companies (food processors, equipment supplier, training provider).

The postgraduate education programme and the CPD training are expected to produce results in relatively short time. In the long term, the adjusted curricula is expected to produce qualified staff for the beverage industry in Thailand and SEA. The project is expected to start in January 2016. To find out more about this project please contact the Coordinator Gerhard Schleining.

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Project ASIFOOD

Food safety issues have reached a dramatic level in most Asian Countries. It is abundantly documented that most of food safety problems are due to both qualitative and quantitative limitations in food safety management, mainly due to inadequate skills of workers, who often do not operate in compliance with the good practices for food safety and quality, and to a poor official control system. This lack at the level of human resources is strongly related to the lacks in the higher education system, the improvement of which is object of our proposal by:

- a) increasing the capacity of Asian partner'university's staff in the area of food safety and quality, by sharing experiences and organising training courses.
- b) training them in "training engineering" (TE) methodology, encompassing 2 wide surveys, first on the relationships between the education system and professionals (public & private) and second on their skill's needs;
- c) developing 3 training modules in food safety & quality, adapted to the professional needs, to be included into master programs, with credit transfer between partners. This has also to be seen as a "practical exercise" of TE for the project team.
- d) Increasing the teacher's capacities (a) and helping them building adapted training modules (b and c) will consequently make the graduates more proficient when starting their professional lives.
- e) enhancing the links between partner universities and professionals, in order to build sustainable relationships between these 2 "worlds", essential requisite to better training and research. It is also planned to involved university's top management, on necessary changes towards professionalization and feasible adaptation in their management strategy
- f) Finally, the project's results will be disseminated in the ASEAN countries, notably through short technical training modules and E-Learning modules for teachers & professionals.

To find out more about this project please contact the **Coordinator Frédéric Mens**, CENTRE INTERNATIONAL D'ETUDES SUPERIEURES EN SCIENCES AGRONOMI, Montpellier, France, frederic.mens@supagro.fr, www.supagro.fr

INSECT BIOREFINERY IN EUROPE: PROJECT DESIRABLE (DESIgning the insect bioRefinery to contribute to a more sustainABLE agro-food industry)

by **Samir MEZDOUR**, Researcher in Food Science and Processing - UMR 1145 - Ingénierie Procédés Aliments, F 91300 Massy, France - <u>samir.mezdour@agroparistech.fr</u>

Samir MEZDOUR, responsible of the team working on insects in Agroparistech gave an interesting interview in Milan Expo which can be seen at https://www.youtube.com/watch?v=--CP0im2XaM. As this interview is in French, please find the following summary in English.

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In a context of resource scarcity, population growth, environment destruction and food supply dependency, new solutions to produce food resources need to be explored. One of these solutions is the insects which seem to be a credible solution for human food as well as animal feed. However, the development of production and use of insect-based ingredient for the food and feed industry is faced with numerous problems. Thus, ongoing research projects across Europe will notably explore the insects for underexploited waste streams, and for local supply of protein rich materials, as the industry highly relies on importations of products that contribute to natural resources depletion. Such solutions, however, need to be considered with regard to their social acceptance, environmental sustainability, economic profitability and technological feasibility.

After a short a review of the state of the art, this presentation will focus on the insect biorefinery concept used in the strategies and visions of several research projects in Europe, especially a French program "Desirable: DESIgning the Insect bioRefinery to contribute to a more sustainABLE agro-food industry", and its capacities of production and abilities to valorise biomass through the bioconversion of insects, which are reared according to specific and efficient technologies, and their transformation into valuable ingredients. Even though insects seem a pertinent source of food for humans, the study will focus on the potential incorporation of insect proteins in animal diet, mainly fish and poultry diet, as a substitute for fish-based and soybean-based meals.

You can read more at: Azagoh C., Hubert A. and Mezdour S. (2015). Insect Biorefinery in Europe: "DESigning the Insect bioRefinery to contribute to a more sustainABLE agro-food industry", Journal of Insects as Food and Feed, 1(2), 159-168

SAFEMEAT_EU DEVELOPS TRAINING TOOLS FOR IMPROVING FOOD SAFETY PRACTICE IN MEAT SECTOR

by Julian Drausinger, LVA, Austria

The SAFEMEAT_EU project was launched as an initiative to develop an innovative and integrated online training programme for food safety training in the red meat and poultry sectors. The aim is to contribute to the promotion of food safety, support high quality production in meat and poultry factories, and to further consumer protection.

In the consortium of the SAFEMEAT_EU project seven partners from four different countries are associated, whose joint objective is the provision of comprehensive training material that covers the topics of food safety from legal background and scientific knowledge to practical work.

The SAFEMEAT_EU consortium is about to design an e-learning course applying innovative methodologies for training, accompanied by material for autonomous learning and on-the-job-training. The partners' experience with vocational training is brought together with the technical possibilities of online tools for a novel approach in food safety training.

The content of the e-learning course has been developed by the project team of SAFEMEAT_EU during the first year. In a next step the technical basis of the e-learning tool



has been built and the content gradually migrated. The material has been translated in order to be available in English and the four national languages (German, Portuguese, Spanish, and Turkish) of the consortium members.

The ongoing tasks in the SAFEMEAT_EU project include checking the e-learning module, tests in practical applications and trials with trainees. The participants aim to make smart use of e-learning tools in order to develop optimal material for the target group of workers in the meat sector.

For more details visit: http://safe-meat.eu/



NEWS ABOUT EDUCATION AND TRAINING

BOARD OF DEANS/DIRECTORS OF SCHOOLS OFFERING THE FOOD SCIENCE AND TECHNOLOGY DEGREE IN SPAIN

by **Luis Mayor** (IFA National Representative of Spain) and **Teresa Maria López Díaz** (University of León)



The Board is composed of all the Deans/Directors of Faculties/Schools that offer the Food Science and Technology Degree in Spain.

The aims of the conference are, among others, to promote the development of foods and food industry (scientific, technological, social, sanitary, industrial and cultural development); to encourage the proper training in Food Science and Technology In the Spanish universities; to analyze and think over the methods, programs and lines of development of the education in foods in Spain (undergraduate, graduate and continuing education); to participate and

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discuss at the regional, national and international levels, around criteria for organizing, training resources, student admission, curriculum development, relations with the health system, exchange programs, research and, in general, all any issues considered relevant to the training of food scientists and food technologists; to establish linkages or relationships with associations of similar purposes.

The Board was established in Vitoria in 1996 as an association, since the current Bachelor Degree in Food Science and Technology comes from the same name second cycle degree, which is now under extinction. At present, 20 universities are part of the Board as that is the number of public universities in which the degree is taught (in Faculties of Veterinary Medicine, Pharmacy, Sciences/Chemical and Technical Schools of Agricultural Engineering and Sciences, mainly). Nowadays, more than 1000 students begin the Food Science and Technology Degree in our country each academic year, with about 600 graduates since its inception.

The Food Science and Technology Degree lasts four years (240 ECTS) and is structured in a series of training modules: basic sciences, food science, food technology, food safety and quality management in the food industry, nutrition and health. Furthermore, the student has the possibility of internships in companies. The Degree ends with a mandatory Final Project.

In order to publicize the Degree in Food Science and Technology, the Board has created a website that includes various information about this teaching.

For more information: http://www.ccyta.es/

TASTE OF SCIENCE

by Mariëlle Ramaekers and Jeroen Knol, EEFoST

www.tasteofscience.com

Are you a professional or researcher in food technology, food science or other food-related areas? Excellent! We are the free online magazine that translates scientific knowledge to easy-to-read articles for small and medium-sized food producing enterprises.

We keep readers posted on trends, new scientific knowledge and technological developments. Our magazine enables researchers and entrepreneurs to meet each other on the same page. Your contribution is most welcome! Contact us via info@tasteofscience.com

On top of tasty and safe foods, consumers want foods that tell a story, have natural ingredients and be prepared in a transparent and sustainable way. We present solutions that enable food producers to meet these demands. Our easy-to-read-articles bridge the gap between research and food production. The magazine provides insight, inspires, facilitates decision-making on innovation and involves its readers in EU projects. Our articles focus on developments in for example technology, health, food safety, traceability, sustainability and marketing. All topics that can help food entrepreneurs to survive in the increasingly competitive European food market are welcome in Taste of Science.



Taste of Science is an initiative by EFFoST (<u>www.effost.org</u>) and the TRADEIT project (<u>www.tradeitnetwork.eu</u>)

Increase your impact

Do you want to have more impact on society with your research? You are invited to write an article for Taste of Science about your own expertise, research or give and outspoken message concerning traditional food production, sustainability or developments in the food industry. There are many reasons to write an article for Taste of Science. Taste of Science is free for authors and readers. Researchers do not profit from scientific publications alone. Also articles for a bigger audience with an impact on society are becoming more and more important, as is social media citing.

Grow your network

We are also looking for people who want to get more engaged in Taste of Science. As an official ambassador you can help us to discover new topics and authors by using your own network. At the same time your own network grows too. You can also assist us in our ambition to establish Taste of Science in your own language, gain feedback from readers or support our Facebook page. You may even be willing to promote Taste of Science on food conferences or meetings.

Share your knowledge

If ambassador is too much engagement, perhaps you are willing to inform us occasionally or on a regular basis about research results or other scientific knowledge that you hear about that is relevant to our readers? This takes little time, but would be very valuable to us.

Stay informed

Do you want to be kept up to date of our articles and events effortlessly? Subscribe to our quarterly newsletter on www.tasteofscience.com

Interested? Contact Mariëlle Ramaekers and Jeroen Knol via info@tasteofscience.com



NEWS ABOUT IFA SUPPORTED EVENTS

The IFA supported events appear in chronological order!



The 29th EFFoST International Conference will be held in Athens Greece from the 10th to the 12th of November 2015 under the theme: Food Science research and innovation: Delivering sustainable solutions to the global economy and society. The Conference is organized by the National Technical University of Athens (NTUA) on behalf of the European Federation of Food Science and Technology (EFFoST).

The Organizing Committee wishes to thank colleagues for contributing to the Conference excellence. The response from the International scientific community was exceptional with submissions reaching almost 800 abstracts of original research.

We are very excited to announce that the Provisional Programme for the 29th EFFoST International Conference is now available: http://www.effostconference.com/conference-programme.asp comprising 32 parallel Oral sessions and respective Poster sessions.

The 29th EFFoST International Conference is going to be a forum for the broader spectrum of food science research and innovation and serve as a meeting point for European and International audience of researchers, scientists, engineers, policy makers, professionals and students. The conference topics target to bring out the scientific excellence in the core and new food related scientific disciplines.

We are looking forward to welcoming colleagues in this exciting meeting.

On behalf of the Organizing Committee,

Petros Taoukis, Conference Chair National Technical University of Athens tel. +30-210-7723171, +30-6977870961, FAX +30-210-7723163

e-mail: taoukis@chemeng.ntua.gr



TIB 2016 – 12TH INTERNATIONAL TRENDS IN BREWING SYMPOSIUM IN GHENT

On behalf of the scientific and organizing committees, we invite you to join us for the 12th International Trends in Brewing Symposium (TIB 2016) being held at the KU Leuven Technology Campus in Ghent, Belgium, April 3-7, 2016.

The emphasis of Trends in Brewing has always been on the applications of novel technologies and on the evaluation of highly promising tendencies in malting and brewing, aiming at improvement of malt and beer quality in a practically feasible way. TIB 2016 will continue this trend and be a unique platform for sharing worldwide ideas as well as recent developments in the production of specialty beers. At present, more than ever, we are confronted with a global decrease in beer consumption. Currently, especially Pilsner beers undergo this downward trend. On the other hand there is a growing interest in the specialty beers market and we can only be happy with this ongoing evolution. Therefore, the central theme of this 4-days conference focuses on "Celebrating Diversity of Beers and Beer Styles". In particular, TIB 2016 will promote and disseminate the state of the art concerning the diversity of beer styles. If you are currently a researcher, scientist, technologist and expert from companies, universities, institutions active in malting and brewing, then this is a symposium you will not want to miss!

Diverse session topics include:

- Beer Styles
- Sources of Fermentable Extract
- Sources of Flavour Diversity (Hops/Botanicals)
- Microbial (Fermentation) Diversity
- Diversity in Maturation
- Final Product Evaluation

We invite you to visit our website at www.trendsinbrewing.org to determine which session is most suited for the presentation of your work. Abstract submissions are open with a deadline set of November 15, 2015 for oral presentations and December 31, 2015 for poster contributions. The TIB symposium encourages exchange of novel findings and technologies on recently accepted/unpublished original research. The program will be built from invited lectures, peerreviewed lectures and posters, in combination with an extensive technical exhibition. In addition, we will organise on the last day of the symposium round tables to discuss on sensory evaluation of different beers and beer styles and on the future of the brewing industry. The venue, which is situated near the renowned historical center of Ghent city in Flanders, offers ample occasions to discover the richness of the Belgian beer culture.

On behalf on the local organizing and scientific committees for TIB 2016, we look forward to hosting a memorable conference and welcoming you in Ghent next spring!

Sincerely

Guido Aerts (KU Leuven) Conference chairman and Luc De Cooman (KU Leuven)

TIB 2016 is jointly organised by:











8th Central European Congress on Food

Food Science for Well-being 23-26 May 2016, Kyiv, Ukraine

The Organizing Committee has the honor to invite you on board of the 8th Central European Congress on Food 2016 – "Food Science for Well-being" scheduled to start on **May 23, 2016** and last till **May 26, 2016** in Kyiv, Ukraine. National University of Food Technologies hospitably opens its halls and auditoria to accommodate a variety of scientific congress sections, working groups and poster sessions. An outstanding cultural programme has been prepared by the Congress hosts to satisfy the most exquisite demands of our guests. Your leisure time will be filled with a variety of excursions to the local food producers, sightseeing, performance given by the students, and corporate dinner.

This Congress is organized by the National University of Food Technologies (NUFT) and the European Federation of Food Science and Technology (EFFoST).

All interested scientists, professionals, companies, governmental officials, professional associations, consultants and individuals working in the fields of food production, food processing, food quality and safety, nutrition, hygienic engineering and design, innovative technologies, new trends in food safety, from Europe and all around the world are invited to attend this event.

Congress topics:

- 1. Food Expertise, Safety and Technologies
- 2. Energy Systems for Food Chain
- 3. Energy Efficiency
- 4. Machine Building for Food Chain
- 5. Intelligent Control Systems
- 6. Natural Bioactive Compounds, Functional and Local Food Products
- 7. Packaging, Storing and Processing
- 8. Food Processing
- 9. Modern Challenges and Competitiveness
- 10. Young Food Scientists Our Horizon

CEFood Congress participants are welcome to submit:

- 1. Abstracts
- 2. Posters
- 3. Full papers.

More information under: http://cefood2016.in.ua



EVENT LIST – UPCOMING FOOD RELATED EVENTS

October 2015

7-9 October 2015 **INNOVA 2015**

More information: http://www.innova-uy.info/eng/index.html

LATU, Montevideo, Uruguay

NEW! 8-9 October 2015

4th International Conference on Foodomics

More information: http://www.foodomics.eu/

Teatro Verdi, Cesena, Italy

NEW! 12-13 October 2015

INNOVATION FOOD CONFERENCE – iFood 2015

More information: https://www.ifoodconference.com/

Anuga, Cologne, Germany

NEW! 16-17 October 2015

Year Conference FOOD AND NUTRITION FOR HEALTH

More information: http://www.fvz.upr.si/en/year-conference-food-and-nutrition-health-0

LiFEClassHotels, Portorož, Slovenia

18-21 October 2015

100th AACC International Annual Meeting

More information:

http://www.aaccnet.org/meetings/annual/Pages/default.aspxhttp://www.aaccnet.org/meetings/ future/pages/default.aspx

Minneapolis, USA

NEW! 26-27 October 2015

COST 1st Scientific Workshop

More information: http://www.icph2015.com/

Vinci Congress Center, Tours, France

NEW! 27-30 October 2015

7th International Conference on Polyphenols and Health

More information: http://www6.inra.fr/cost-positive/Home/News/1st-Scientific-Workshop Vinci Congress Center, Tours, France

28-30 October 2015

3rd International Conference on Food Structures, Digestion and Health

More information: http://www.fsdh2015.org/home InterContinental Wellington, Wellington, New Zealand



NEW! 28-29 October 2015

Process Modeling, Cost of Goods Analysis, Production Planning, Scheduling and Debottlenecking, Netherlands

More information: http://www.intelligen.com/training.html

TU Delft, Delft, Netherlands

NEW! 29-30 October 2015

8th International Congress Flour-Bread '15 and 10th Croatian Congress of Cereal Technologists Brašno-Kruh '15

More information: http://www.ptfos.unios.hr/flour-bread/

Grand Hotel Adriatic, Opatija, Croatia

November 2015

02-04 November 2015

3rd Conference of Cereal Biotechnology and Breeding

More information: http://www.cbbconferences.com

Berlin, Germany

03-06 November 2015

7th International Symposium on RECENT ADVANCES IN FOOD ANALYSIS

More information: http://www.rafa2015.eu/

Clarion Congress Hotel Prague, Prague, Czech Republic

10-12 November 2015

29th EFFoST International Conference

More information: www.effostconference.com

Divani Caravel Hotel, Athens, Greece

12-13 November 2015

2015 International Nonthermal Processing Workshop

More information: http://www.npdworkshop2015.org/

Divani Caravel Hotel, Athens, Greece

NEW! 16-18 November 2015

Novel Methods for Integrated Exploitation of Agricultural by-Products

More information: http://www.agri-byproducts.certh.gr/

Centre for Research and Technology Hellas, Thessaloniki, Greece

NEW! 16-20 November 2015

The 9th CIGR Section VI International Technical Symposium

More information: http://www.cigrvi.com/ Massey University, Auckland, New Zealand



NEW! 17 November 2015

Delivering on EU Food Safety: Promoting a Safe and Sustainable Agri-Food Chain

More information: http://www.publicpolicyexchange.co.uk/events/FK17-PPE2

NH Brussels Carrefour de l'Europe, Brussels, Belgium

NEW! 19-20 November 2015

Nutricon

More information: http://www.keyevent.org/

Museum of the Macedonian Struggle, Skopje, Macedonia

NEW! 24-27 November 2015

XIV WORKSHOP on RAPID METHODS AND AUTOMATION IN FOOD MICROBIOLOGY (MRAMA)

More information: http://jornades.uab.cat/workshopmrama/en
Universitat Autònoma de Barcelona, Cerdanyola del Vallès, Spain

December 2015

NEW! 02 December 2015

Hi Europe & Ni 2015, Natural Ingredients 2015

More information: http://us8.campaign-

archive2.com/?u=cec1b766d6851c4d3692ec288&id=d367f0e294&e=b52b9651a3

Institut National des Jeunes Aveugles, Paris, France

02-04 December 2015

Hi Europe & Ni 2015, Natural Ingredients 2015

More information: http://www.ingredientsnetwork.com

Paris, France

NEW! 10-11 December 2015

3rd International Conference on Advances in Bio-Informatics and Environmental Engineering - ICABEE 2015

More information: http://www.icabee.theired.org/

Novotel Roma La Rustica, Rome, Italy

January 2016

NEW! 13-14 January

Process Modeling, Cost of Goods Analysis, Production Planning, Scheduling and Debottlenecking, California

More information: http://www.intelligen.com/training.html

San Jose State University, San Jose, United States



February 2016

28 February - 02 March 2016

2nd Food Structure and Functionality Forum Symposium - From Molecules to Functionality

More information: http://www.foodstructuresymposium.com/

Singex, Singapore, Singapore

March 2016

NEW! 06-09 March 2016

World Processing Tomato Congress 2016

More information: http://www.worldtomatocongress.cl/

Hotel W Santiago, Santiago, Chile

NEW! 16-17 March 2016

Process Modeling, Cost of Goods Analysis, Production Planning, Scheduling and Debottlenecking, New Jersey

More information: http://www.intelligen.com/training.html

Rutgers University, Piscataway, United States

NEW! 17-19 March 2016

Mediterranean Diet: Health, Wellbeing and Tourism

More information: http://cieo15.wix.com/mediterranean-diet

University of Algarve, Faro, Portugal

April 2016

NEW! 03-07 April 2016

12th International Trends in Brewing Symposium (TIB 2016)

More information: http://www.trendsinbrewing.org/ KU Leuven Technology Campus, Ghent, Belgium

NEW! 04-06 April 2016

2nd Euro-Mediterranean Symposium on Fruit and Vegetable Processing

More information: https://colloque.inra.fr/fruitvegprocessing2016 University of Avignon, Avignon, France

NEW! 17-21 April 2016

15th International Cereal and Bread Congress

More information: http://icbc2016.org/en/

Military Museum, Istanbul, Turkey

NEW! 19-21 April 2016

PARTEC 2016

More information: https://www.partec.info/default.ashx Nürnberg Convention Centre, Nuremberg, Germany



May 2016

June 2016

26-29 June 2016 ISOPOW13

More information: http://www.isopow.org/ **Olympic Museum. Lausanne**, Switzerland

July 2016

6-8 July 2016

4th ISEKI_Food Conference

More information: http://www.isekiconferences.com/vienna2016/

Vienna, Austria

October 2016

NEW! 25-28 October 2016

CIBUS TEC

More information: http://www.cibustec.it/

Fiere di Parma, Parma, Italy

November 2016

NEW! 16-18 November 2016

6th International Symposium on Food Packaging

More information: http://www.ilsi.org/Europe/Pages/Packaging-Materials-Symposium-2016-

General-Information.aspx

Barcelona, Spain

ISEKI-Food Association

Think before you print

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