Nottingham Trent University student team scoops the gold prize at Ecotrophelia UK

The Från Början team from Nottingham Trent University has been awarded the gold prize at Ecotrophelia 2016 for their vegan, low fat luxury iced dessert. The name Från Början translates from Swedish to ‘from the beginning’, referring to the algal protein which has been used to replace dairy protein in the product.

Ecotrophelia gives students a taste of new product development. From idea generation through to the final packaged product, the teams get hands-on experience of what it takes to bring an eco-friendly food or drink product to market.

Along with a £2,000 cash prize, the team from Nottingham Trent University will be invited to become IFST Young Ambassadors. Both members of the team – Ryan Clifford and Dominic Urban – are apprentices at Unilever and are being sponsored by the company while studying for a BSc in Food Science and Technology at Nottingham Trent University.

The awards were introduced by the competition’s Chief Judge and Executive Director of Warburtons, Brett Warburton, and presented by Sue Bell, Head of Food Technology at M&S at Campden BRI’s annual open day for the food and drink industry.

The El Nacho team from the College of Agriculture, Food & Rural Enterprise was awarded the silver prize and £1,000 for their slow cooked pulled turkey in a hot enchilada sauce with chunky nachos. The bronze prize and £500 was awarded to the Hemptations team from Nottingham Trent University for their non-dairy flavoured hemp milkshakes. All the winning teams will also receive a one-year IFST membership and a number of Elsevier food science publications.

Judges from top names in the food and drink industry including Coca-Cola, M&S, Mondelez, PepsiCo, Sainsbury’s, Tesco and Warburtons, as well as BBSRC and Innovate UK listened to the teams’ pitches and tasted the products before carefully considering each entry for its industrial feasibility, taste, eco-innovation, originality, creativity and innovation and market credibility.

Andrew Gardner, Operations Director with IFST said, ‘we’re delighted to see interest in Ecotrophelia UK continuing to grow. We received a record nineteen entries from across the UK this year, with exceptionally high quality submissions again. We are also happy to have so many high-profile names supporting Ecotrophelia which continues to attract the brightest and the best young talent to the food and drink industry’.

The Från Början team will go on to compete against the gold-winning national teams from across the whole of Europe for the chance to win up to €6,000 in the Ecotrophelia Europe competition, which will be held in October at SIAL in Paris.

The UK heat of this Europe-wide competition was organised by the UK food and drink research organisation, Campden BRI, in conjunction with IFST, the independent qualifying body for food professionals in Europe.

www.ecotrophelia-uk.org #EcotropheliaUK

IFST considers the 2016 Membership Survey

IFST’s team and standing committees have begun to digest the wealth of feedback from those members who completed the membership survey in late spring.

A number of key themes are already emerging from the responses, including how to serve the needs of members who are not within easy reach of an active IFST group and how to enable members to get more involved with IFST without necessarily committing to daytime meetings, which can require lengthy journeys and eat into already busy working weeks. The survey confirmed that members come from a range of sectors and are at varying career stages, each with their own concerns and preferences, and that no one approach would meet the needs of all members.

IFST aims to identify and prioritise the main themes and address these in its programme of work in the coming months. Members will be able stay up-to-date with the analysis of the survey and the resulting work streams by visiting the Members’ Area of the website.

Members who would like make a comment or suggestion about IFST or who would like to get more involved in its work are welcome to email Erin Taylor, e.taylor@ifst.org.
Food crime regulation

On 28 September 2016, the Food Law Group will be hosting its latest half-day event for IFST members. These events provide expert perspectives on hot topics followed by a lively discussion where members are able to share knowledge and experiences. The focus for this event is ‘Food Crime and Better Regulation’ with presentations from Andy Morling, Head of FSA’s National Food Crime Unit, and Erica Sheward, Policy Manager & Head of Regulatory Education (Regulatory Delivery).

Andy Morling provides insight into his presentation: ‘At the start of 2013, we awoke to a new landscape in which serious acts of criminality appeared to have taken place in European food supply chains. The discovery of horse DNA in processed beef products three years ago changed everything. For a sector in which trust plays such a prominent role, the sense that this might somehow be misplaced hit consumers, industry and government hard. Everyone with a stake in safe and authentic food felt the pain - of the violation itself, but most acutely of the demonstration that food was not inviolate.’

If you would like to register to attend this event, please visit www.ifst.org/events.

Challenges for sensory and consumer researchers

The annual SSG Conference at the SCI in London set out to explore the challenges for sensory and consumer researchers brought about by globalisation of brands and ethical and safety considerations.

To open, Manuel Algarbe from the Kraft Heinz Company used two case studies to illustrate the issues that a global market brings to research design. We all know that legislation and tastes vary between countries (the Spanish apparently prefer their mayonnaise slightly rancid!) but Manuel reminded us that there are many other factors including history, media stories and attitude.

Manuel’s key message? When researching products for global markets it is essential to know your customer. It is unlikely that resource will allow research in all the countries in which you will launch, so pick countries carefully and design action standards accordingly.

The next two speakers explored the ethical and practical considerations around sensory testing of whisky and other high ABV alcoholic drinks and the palatability testing of pharmaceuticals. After a fascinating introduction to the work of the Scotch Whisky Research Institute, Frances Jack presented data showing how sensory adaptation and fatigue affect in-mouth perception of whisky, bourbon and aperitifs and how some attributes, such as the peat flavour of peated whisky, have lower thresholds in-mouth than by aroma. Interestingly Frances also pointed out that 5% of total alcohol is absorbed via the mouth when using a sip and spit procedure.

Catherine Tuleu of UCL explained that taste is the most common reason for refusal of medicines, particularly amongst children. Ethically, testing of medicines amongst children, particularly patients, poses challenges especially as testing will ideally take place in the very early stages of development to select product format. So the questions of how to collect data, how to extrapolate results from adults to children and how to define what is acceptable, become real challenges. Add to this global differences in flavour acceptability and GCP and Clinical Trial Guidelines and the problem is far from simple. Catherine also presented data on how sensitivity to quinine failed to predict perception of bitterness in active pharmaceuticals.

In the session on individual differences, Lisa Methwen of the University of Reading described how our knowledge of the genetic predictors of taste and aroma sensitivity is increasing and discussed whether we should incorporate genotype screening into sensory panel selection. Isobel Payne from the University of Nottingham presented her final year project work into how thermal taster status impacted liking of cola and reported that compared to non-Tasters, Thermal Tasters showed greater difference in liking between brands and a higher preference for chilled than ambient cola. This may be due to a reduction in sweetness perception at chill temperature. Carol Raithatha asked us to consider whether men or women make better sensory panelists!

In the afternoon workshops, Gemma Hodgson from QI Statistics reminded us that lack of differences does not mean that things are the same and that studies need to be designed to suit your objectives. Silvia Peteterio from Leatherhead Food Research highlighted the many factors to consider when selecting the portion size to serve sensory panelists and consumers.

Thank you to everyone who contributed to delivering an informative and thought-provoking conference.

IFST Lecture: ‘Science for the EU and EU for science’ October 20, 2016

The IFST Lecture is always an important date in the food science calendar. This year our guest speaker will be Dame Anne Glover, Vice-Principal External Affairs & Dean for Europe, University of Aberdeen. From 2012 to 2014, Dame Anne also served as Chief Scientific Adviser to the President of the European Commission – valuable experience which she will no doubt refer to during her lecture. Given the current uncertainty around the UK’s relationship with Europe and the need to ensure the UK’s continued high standing within the global scientific community, this lecture will to be a very timely and topical exploration of the scientific policy issues. Please note that this is an invitation only event.
Avenues and alleyways for consultants - post Brexit (Consultancy)

Earlier this year, a few IFST members met to discuss the future of the IFST Consultancy Group. We are delighted to announce that the Consultancy Group will be hosting the first in a series of ‘consultancy’ events, supported by the Midlands Branch on 4th October at 18.00 in Derby.

Margot Madin, FCA, will be addressing the issues around succession planning, selling a business and retiring or hedging your bets by being both employed and self-employed in a talk entitled ‘Should I stay or should I go now?’ Vince Craig FIFST will offer an insight into ‘Becoming an Expert Witness’ - opening your eyes to the pitfalls and opportunities for consultants. During this event, there will be an opportunity to network where your consultancy details will also be streamed on to the auditorium walls for all to see. Registration is now open for this event at www.ifst.org/events

Key Dates for your Diary

- 20 October 2016 – IFST Lecture (various locations)
- 14 March 2017 – IFST AGM & Volunteer Meeting (Birmingham)
- 07 April 2017 – IFST Spring Conference (London)

Remember to log into ‘MyIFST’ and visit the technical forums, where you can network with fellow consultants looking for IFST members to help with upcoming projects.

If you would like to get involved with the Consultancy Steering Group, please contact Erin Taylor at e.taylor@ifst.org

Eastern Region – to infinity and beyond!

Steve Timms was recently elected as Chair of the Eastern Branch. His vision for IFST in the Eastern region is a diverse, vibrant network of members who are connected by geography, a passion for food and drink and a love of science. With the help of Carol Raithatha (Secretary), Jane Robertshaw (Events Co-ordinator), Elliott Chadley (Website & New Professionals Representative) and the volunteers who form their wider steering group, they are working on a programme of events which will include technical visits and invited speakers as well as mini symposia at venues across the region and at various times of the day.

They intend to reach out to those in education at different stages of their careers - perhaps between careers or in retirement - who would like to give something back to help foster a healthy pipeline of talent that will take care of our food supply chain for the future. Whether in manufacturing, research, regulatory or academic roles, they feel members will find IFST locally relevant and personally supportive.

In addition to the exciting programme of events, they are also intending to host the IFST Young Scientist competition in the Eastern Region as well as establish a Graduate Support Group for graduates in the early years of their career.

With the help of IFST members in the region, the Committee believes it can regenerate a vibrant group.

To get more involved with the Eastern Branch rejuvenation, contact Erin Taylor at e.taylor@ifst.org.

Helping recent graduates and early career development

We recognise that it can often be a daunting time for those of you who have just graduated and are about to enter the food industry. On top of that, a number of graduates will be relocating for placement schemes or returning home to start a job. That’s why we’ve been working with a group of recent IFST graduates, who have been working in industry for up to three years, to find out how we can help you in your early career development. We are coordinating a number of regional meet ups, where you can meet other new professionals, create contacts and ultimately share and build on experiences. They are typically meet ups of no more than 5-7 members set up with the help of our co-ordinator, who will communicate with you directly.

For more information about these events and how to set up a meet up in your area, please contact Erin Taylor at e.taylor@ifst.org

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New Student Representatives coming to your university

Over the last few months, the Student Group has been working hard to recruit IFST Student Representatives at every university throughout the UK that offers a food science or related course. Over 20 student members applied for this role and we are pleased to announce that the first IFST Student Representatives have been selected. They will be promoting IFST and membership throughout the year through events, presentations and much more.

We will be asking for new applications in November and so if you would like to get more involved and represent IFST at your university, get in touch! You can find the current university Student Representatives online at http://www.ifst.org/communities-students/find-your-local-ifst-university-representative.

For more information about becoming a university Student Representative, please contact Erin Taylor at e.taylor@ifst.org
Impact of processing on nutrient bioaccessibility in almonds

Almond kernels contain phytochemicals and nutrients that potentially have positive health benefits in relation to heart disease, diabetes and obesity. In the almond kernel, depending on its structure and degree of processing, the amount of lipid released from the almond tissue matrix and the fatty acids produced from lipolysis have been found to vary substantially. This review discusses the commercial methods of almond processing and the different almond forms produced for human consumption, with respect to their impact on nutrient composition, digestion and metabolism. (Grundy et al., 2016, doi: 10.1111/ijfs.13192)

Byproducts from olive mill wastewater

A two-step reverse osmosis membrane filtration process carried out on olive mill wastewaters generated a retentate rich in phenolic compounds and a near-pure water permeate. Powders obtained by spray drying the retentate were analysed for physicochemical properties, including identification and quantification of phenolic compounds. Protocatechuic acid, 3-hydroxytyrosol, tyrosol, vanillic acid and p-coumaric acid were quantified in both powders, showing the potential for obtaining a phenolic-rich powder from the wastewater. (Sedej et al., 2016, doi: 10.1111/ijfs.13163)

Extending shelf life using modified atmosphere packaging

This study investigated the role of film permeability in modified atmosphere packaging of longan fruits. Fruits were stored at 2°C in polyethylene (PE) bags with different gas transmission rates (PE-3000, PE-6000 and PE-10000), compared to commercial polypropylene (PP, PP-1000). PE-3000 and PE-6000 maintained the longest shelf life of 46 days. Fruits in the PE-10000 had a shelf life of 39 days, limited by pericarp browning and decay. The shortest shelf life of 27 days was observed in the PP-1000 due to fermentative metabolism under anaerobic conditions. These retail ready packages can potentially be used as an alternative to or with reduction in use of SO₂ fumigation for longan. (Kahn et al., 2016, doi: 10.1111/ijfs.13169)