

BIOTECH FOR BUSINESS

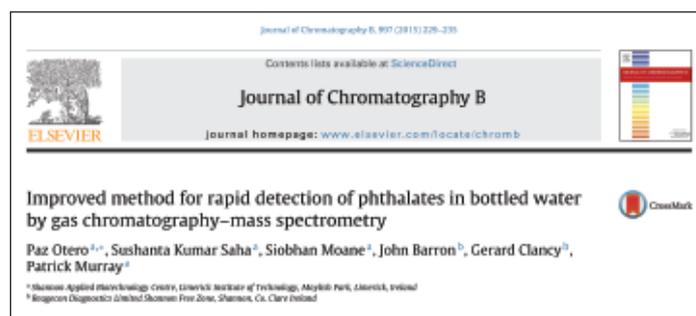


SHANNON ABC TECHNOLOGY TRANSFER TO REAGECON LTD

Shannon ABC collaborates with numerous industry partners from all over Ireland. One of these collaborations is an ongoing Enterprise Ireland funded Innovation Partnership between Shannon ABC and Reagecon Ltd. Reagecon Ltd are one of the largest producers of physical and chemical standards and reagents and this project aims to develop a range of reference materials and associated detection methods for compounds that have the potential to transfer from food contact materials, into food. This Innovation Partnership has provided a vehicle for Shannon ABC and Reagecon Ltd to establish a collaborative project to develop, and ultimately transfer, analytical Gas Chromatography (GC-MS) methods for the detection of chemical contaminants in food samples, and food contact materials. These methods also have implications beyond the food industry. Two postdoctoral scientists are currently employed at Limerick Institute of Technology to deliver this project, Dr Sushanta Saha and Dr Paz Otero; Dr Otero recently visited Reagecon Ltd to transfer an azo dye detection method developed at Limerick Institute of Technology (LIT) to Reagecon Ltd scientists. Recent methods to detect phthalates in the food industry, developed by LIT, in collaboration with Reagecon Ltd, have been published in the Journal of Chromatography. Reagecon Ltd recently announced the creation of 40 jobs in their Research and Development department in Shannon, Co. Clare.



Dr. Paz Otero (fourth from left) transferring GC-MS based technologies developed at Shannon ABC to Reagecon Ltd scientists.



DIARY DATES

Funding Opportunities to collaborate with Shannon ABC – Irish and European Funding Options

Enterprise Ireland Funding Deadlines: Innovation Voucher (€5,000)

Opening Date

Wednesday 20th January, 2016

Closing Date

Wednesday 3rd February, 2016 at 3pm

Co-funded Fast Track vouchers can be submitted at any time (50:50) (€10,000)*

Enterprise Ireland Innovation Partnership and Feasibility Study

Full Proposal Submission Deadline

7th October 2015

28th October 2015

IRCC Funding Decision Deadline

18th November 2015

9th December 2015

European Commission Funding Deadlines: Horizon 2020 Dedicated SME Instrument - 2015

Industrial Leadership (70%-100% SME Funding)

2015 Deadlines

17th September 2015

16th December 2015

*Limited to small and medium (limited registered) companies in Ireland.

Table 1: Enterprise Ireland and Horizon 2020 funding deadlines

SHANNON ABC OPEN INNOVATION CONFERENCE 2015



The fourth annual Shannon ABC Open Innovation Conference was held in the Institute of Technology, Tralee on the 1st and 2nd of April. The theme of this year's conference was "Regulations Driving Innovation" showcasing how academic and industry collaborations have driven innovation and added value to companies, specifically focusing on addressing regulatory challenges that companies may face. Professor David Wield, Director of the ESRC Innogen Centre and Professor of Innovation and Development at the Open University, opened the 2015 conference with a keynote presentation on the role of regulations in innovation. The 4th Shannon ABC Open Innovation Conference brought together leaders from industry and world class research and development scientist in Ireland. Other presenters included the Health Products Regulators Authority (HPRA) The Food Safety Authority of Ireland (FSAI), Bord na Mona, Oriflame

Cosmetics, Lifes2good, Food for Health Ireland and Crème Global. The presentations provided the attendees with an insight into the role and functions of the regulatory agencies, the impact of these regulations for industry, good and bad, how third level institutions can contribute and finally how data can provide a step change in how regulations and regulatory issues are addressed. Representatives from the cosmetics, food, health, pharmaceutical and nutraceutical sectors, industry, academic and state bodies, were also in attendance. At the close of the conference, the Shannon ABC Strategic Plan was officially launched by Mr Damien English, T.D. Minister for Skills, Research and Innovation. Minister English also presented Martin Hayes with the best Potential Technology Offering poster and pitch with a Google Nexus Tablet.



Launch of Shannon ABC's Strategic Plan. Left to Right; Dr Tim Yeomans, Centre Manager, Shannon ABC, Dr Fergal Barry, Vice President for Research, Enterprise and Development, Limerick Institute of Technology, Mr Damien English, T.D. Minister for Skills, Research and Innovation, Dr Oliver Murphy, President, Institute of Technology, Tralee and Dr Siobhán MacSweeney, External Services Manager, Institute of Technology, Tralee.



LEFT: Martin Hayes, Shannon ABC postgraduate researcher, wins best Potential Technology Offering Poster prize at the Open Innovation Conference. Left to Right; Mr Damien English, T.D. Minister for Skills, Research and Innovation, Mr Martin Hayes, Shannon ABC, Professor David Wield, Director of the ESRC Innogen Centre and Professor of Innovation and Development at the Open University and Dr Oliver Murphy, President, Institute of Technology, Tralee.



SHANNON ABC

INNOVATIVE RESEARCH AWARD FOR SHANNON ABC SCIENTISTS

The NutraMara "Harnessing Marine Bioresources for Innovations in the Food Industry" conference and expo took place in the Royal Dublin Society (RDS) on the 29th and 30th of June. The NutraMara conference showcased innovative technologies and research of each NutraMara consortium member.

Additionally the conference facilitated the exchange of new ideas and business opportunities from the marine bioresources sector for applications in the food industry. The theme of this year's NutraMara conference was science based innovations and related technological challenges associated with market take-up. Key topics addressed at the NutraMara conference included: marine based functional foods, macro and micro algae bioactives, value added by-products, novel applications of marine derived

bioactives and biomaterials, advances in seafood and seaweed processing, regulatory and funding information for the marine bioresource sector.

Additional Shannon ABC research showcased at the NutraMara event included:

"Marine based functional food ingredients: evaluation of marine toxins is a necessary evil" by Dr. Paz Otero and Dr. Patrick Murray.

"Pipeline platforms for fast reliable production, extraction and detection of bioactive carotenoid compounds in microalgae" by Jessica Quane, Dr. Siobhan Moane and Dr. Patrick Murray.

Additionally Shannon ABC also showcased their expertise in the marine biotechnology sector and their



Dr Sushanta Kumar Saha, Shannon ABC Postdoctoral Researcher, accepting the NutraMara most Innovative Research Award at the NutraMara Conference. Left to Right: Simon Coveney, TD and Minister for Agriculture, Food, the Marine and Defence, Dr Sushanta Kumar Saha, Shannon ABC, and Dr Declan Troy, Director of NutraMara, Teagasc.

collaboration with the FoodDS research group at Limerick IT. To receive further information on Shannon ABC's research capabilities, or to discuss potential collaborations, please contact Dr. Bridget Breen (bridget.breen@lit.ie), Scientific Coordinator at Shannon ABC.

TRADEIT SUMMER ACADEMY 2015

The TRADEIT project is a European Union funded Framework Programme 7 (FP7) project aimed at increasing the competitiveness of Agri-Food small and medium enterprises (SME's) in Ireland and Europe and is coordinated by Dr Helena McMahon at Shannon ABC, IT Tralee.

The second annual TRADEIT Entrepreneurial Summer Academy took place in Como, Italy from the 22nd to 25th of June. The TRADEIT Summer Academy is an applied, commercially focused, challenge based programme relevant to traditional food producing SME's and members of the TRADEIT network. The TRADEIT Entrepreneurial Summer Academy serves to equip food researchers with an entrepreneurial and innovative mind-set to facilitate the commercialisation of their research ultimately aimed at the progression of new products to the marketplace.

Completion of the academy provided participants with an entrepreneurial insight into:

- Innovative approaches to product and service design,
- Problem based learning (PBL),
- Critical thinking solutions and evaluation,
- Executive professional practice development,
- Networking strategies of applied engagement,
- Effective and applied mentoring,
- Go to market templates and techniques,

- Cross discipline business model stress testing,
- Global sales strategies,
- Funding models (local, national and European),
- Pitching for funding,
- Negotiation strategies.



The TRADEIT Entrepreneurial Summer Academy is an annual event with an award for the best commercial pitch by a food researcher. This year's award winner was Jiangyan Fu from University College Dublin (UCD) for her research on the exploitation of Irish Dairy Produce within the Chinese Market. The annual TRADEIT Entrepreneurial Summer Academy's provide a three day intensive training programme for industry or academic researchers in the Dairy, Meat or Bakery sectors.

For further information about the TRADEIT network please contact Dr. Helena McMahon (info@tradeitnetwork.eu) or visit the TRADEIT website (www.tradeitnetwork.eu).

Industry Partners



Case Studies



THE COMPANY

Purus Cleanroom Solutions Ltd

FUNDING SOURCE &

VALUE: Co-funded Innovation Voucher €8,500

PROJECT TITLE: Project Title: Validation of efficacy of microbial removal by adhesive flooring

PROFILE OF COMPANY:

The Purus Cleanroom Solutions (PCS) team has 30+ years of experience in the adhesive mat manufacturing business, and as such, adhesive mats are the product that they are best known for around the world. Purus Cleanroom Solutions Ltd are based in Limerick, Ireland. Purus Mats are the newest and most advanced adhesive mat to be introduced to the market. The multi-layered adhesive mat, which also contains an antimicrobial additive, removes dirt and dust from foot traffic and equipment wheels prior to their entry into a clean or controlled environment. Purus mats are available in 30 or 60 layer versions. Each numbered layer is fully coated with a particle grabbing adhesive. When a layer becomes loaded with contamination, it is peeled off, exposing a new clean layer for use.

PROBLEM TO BE SOLVED:

The primary market to date for PCS Ltd is in the cleanroom sector, using adhesive mats for the removal of dirt and particulate matter from footwear. The company saw an opportunity to market their product more as a microbial removal tool and potentially to then target the healthcare sector. In order to do so, they needed to generate hard scientific data to prove that their adhesive flooring could remove micro-organisms from the soles of footwear. While some manufacturers do claim microbial removal capacity, their data is limited and in some cases not provided at all; proof that PCS's product could physically remove micro-organisms would provide PCS with both a way to engage the healthcare sector and also act as a significant advantage over competitor products.

HOW GATEWAY DELIVERED SOLUTION FOR

INDUSTRY: Shannon ABC assigned a research team to this project and designed a test method, based where possible on validated ISO methods, for the application of micro-organisms onto test soles in a carrier medium, subsequent testing against PCS's adhesive flooring product and enumeration. Shannon ABC advised PCS on the selection of appropriate micro-organisms in addition to data interpretation. Due to the developmental nature of the project, trouble shooting was required during the course of the project. In addition to the expertise at Shannon ABC, the research team, and PCS, were able to access the capabilities of the CREST Technology Gateway team at DIT (Centre for Research in Engineering Surface Coatings) who provided cutting edge advice regarding surface coatings and the mechanics of microbial adherence. The capability at Shannon ABC, and network available to it through the Technology Gateway Program, provided PCS with a bespoke, robust test method that has delivered key data for the company.

IMPACT FOR THE COMPANY: The availability of these test results allows PCS to engage with potential distributors, who currently work with customers in healthcare industries and hospital sectors, which were previously unavailable due to the absence of the scientific data necessary for their industry sectors. Test data, validated as closely as possible to ISO standards has not previously been available in this industry sector and it is expected will generate significant interest and sales into the future.

TESTIMONIAL: "Shannon ABC are a very focussed and professional organisation who really delivered for us, results were on time and exactly what was on the brief. Great people to work with".

Pat O'Mahony,

Managing Director, Purus Cleanroom Solutions.



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