

Newsletter

April 2013



Cold plasma - a new technology with potential

The industrial need for timely, accurate and concise information on developments in manufacturing technologies is as great as ever. We have been disseminating information on novel technologies since 1990, as a blend of desk-based research to produce information bulletins, and practical 'proof of principle' evaluations of new technologies carried out with a view to identifying areas for more detailed research.

The desk-based research, in the form of our New Technologies Bulletins and Technology Updates, provides a 'snapshot' of current innovations in food manufacture. To complement this, one of the particular practical areas we will be evaluating is the use of cold atmospheric plasmas to disinfect foodborne pathogens on different surfaces such as steel and a conveyor belt material. We will also look at its use in treating fresh fruit and vegetables. The primary focus will be to assess the ability of cold plasma to control microorganisms under conditions closer to factory reality, in terms of soiling levels, contact times, material types, and food ingredient and product types. For the decontamination of food ingredients and products, instrumental quality assessment will also be conducted for colour and texture. Potential scale up to pilot plant level will also be considered.

danny.bayliss@campdenbri.co.uk +44(0)1386 842130

To hear Danny taking about cold plasma technology, go to www.campdenbri.co.uk/podcasts.php



Your partner for
processing technology





Free papers

Making health claims on products

Are you designing products with nutrition or health claims in mind, or thinking about retrospectively adding a claim to an existing product? It is important that you fully understand the legislation involved, and the effects this could have on how you formulate your product or how you phrase the claims that you are making about it. Legislation could persuade you that a small change is required to your ingredients, but this small change may in fact lead to the product becoming less stable or less appealing to the consumer. It may result in a complete reformulation being required to achieve the desired end-point.

As an overview of what is involved, we have written a short white paper, highlighting key aspects to consider when designing products for nutrition and health claims in Europe, which could save time and investment further along the development process.

For a free electronic copy of this paper, send an e-mail to auto@campdenbri.co.uk with the subject line: **send health**

sarah.kuczora@campdenbri.co.uk +44(0)1386 842482

Check out your carbon footprint

With environmental issues climbing up the agenda and increasing pressure from the public and the government, organisations are being forced to measure and manage their operations' impact on the environment. The task of collecting, standardising and analysing environmental impact data can be difficult. But we have a number of services that can help you to fulfill your obligations, and as an introduction to what is currently required we have produced a short fact sheet on the subject. For a free electronic copy, send an e-mail to auto@campdenbri.co.uk with the subject line: **send footprint**

anastassia.johnson@campdenbri.co.uk +44(0)1737 824236



What's new in the lab?

Once again, we are playing a major part in 'Lab Innovations' - the country's premier analytical and laboratory equipment exhibition, which takes place at the NEC, Birmingham on 6-7 November. Lab Innovations gives equipment companies the opportunity to meet and do business with end-users and senior decision makers from the UK's leading industry, education and research laboratories. Go to <http://bit.ly/labinnovations> for more information.

daphne.davies@campdenbri.co.uk +44(0)1386 842040

Events and training courses



A list of 2013 courses is available at www.campdenbri.co.uk/training.php

May 2013

- 14 Good hygiene practice in agriculture - understanding the requirements
- 14 HACCP - foundation
- 15 Malting and speciality malts - an introduction
- 15-16 BRC Global Standard for Food Safety - Understanding the Requirements
- 15-16 Sainsbury's TMA D Allergen
- 17 *Listeria* control measures seminar
- 20-24 HACCP - advanced
- 21 Calculating the carbon footprint of beer
- 21-24 Cake technology
- 21-24 Food Safety - intermediate (level 3)
- 22-23 Microbiology for non microbiologists

training@campdenbri.co.uk +44(0)1386 842104

Processing technology?

Lots more information at

www.campdenbri.co.uk/food-processing-technologies.php



Cold plasma technology Podcast by Danny Bayliss: www.campdenbri.co.uk/podcasts.php

Breadmaking quality of wheat Video of milling, baking and product testing with new wheat varieties: www.campdenbri.co.uk/videos/cereal-overview-video.php

High pressure processing of smoothies Case study with Heartwarmer Foods: www.campdenbri.co.uk/case/high-pressure-processing-food.php

Pivotal role of the pilot plant Blog by Emma Hanby: www.campdenbri.co.uk/blogs/pilot-plant-facilities.php



Revised food quality specifications

We have been involved in the production of food quality specifications for canned and quick frozen primary products for over 40 years. Written by manufacturers and retailers from the industry, these cover product colour, flavour, and texture, as well as tolerances for specific defects. Recent revisions include:

- Quick frozen whole onions (L19)
- Quick frozen sliced mushrooms (L92)
- Quick frozen whole mushrooms (L93)
- Canned whole carrots (L73)
- Canned processed peas (L85)
- Canned marrowfat processed peas (L98)
- Canned corned beef (L49)
- Canned peeled potatoes (L63)

Kristina Booker +44(0)1386 842048 pubs@campdenbri.co.uk

Washing to remove pathogens

Amongst the many items in our process hall is a pilot scale vegetable washer - a 250L, contained, fully sterilisable Jacuzzi washer which can be used to assess the efficacy of produce wash agents against pathogens such as *Escherichia coli*, *Salmonella* and *Listeria*.

linda.everis@campdenbri.co.uk +44(0)1386 842063

Test your processes in our pilot plants

We have a huge range of pilot plant facilities to help you develop new products, analyse existing processes, and evaluate ideas for the future. At our Campden site, we have a variety of equipment for heat processing (including domestic size cookers and microwaves), chilling and freezing, and ingredient mixing and processing, as well as specialist apparatus for milling and baking operations, soft drinks, packaging and 'novel' technologies such as high pressure, power ultrasound and pulsed light. At our Nutfield site, we have a full spectrum of malting and brewing facilities - helping you optimise many aspects of the brewing process, such as dissolved gas levels, beer filtration, and energy usage - as well as pilot scale bottling plant for sparkling wines.

Sarah Chapman, soft drinks specialist, comments:

"It is not just the equipment that we have that is impressive, but the way we can help you with different aspects of your business, whether you are a manufacturer, an ingredient supplier, or an equipment company. The pilot plant provides a link between small-scale (kitchen) and full-scale commercial production, so that new ideas can be tried out with less waste and cost than with a production run, and with no need to interrupt production. Our pilot equipment is flexible and allows 'what-if' scenarios to be investigated, giving you the opportunity to optimise a process or give you an indication of scale-up issues before a production run. Pilot production also allows you to make consumer samples at an early stage, or produce small batches for shelf life evaluation, which is useful when exploring new ideas. As well as using existing equipment for new products, we are also keen to hear from suppliers who would like to place their equipment on site for customer trials."

sarah.chapman@campdenbri.co.uk +44(0)1386 842212



Members



This page highlights the latest news and information for our members.

Visit Member Zone to access privileged member information and services www.campdenbri.co.uk/memberzone.php

Keep up to date with research ...

View all of our Research Summary Sheets for 2012 on our website at www.campdenbri.co.uk/research/sumweb2012.php. In addition, more R&D Reports have been published, giving extensive details of the results of member subscription-funded research.

Power ultrasound and its use for modification of food viscosity (RD340)*

Food safety risks associated with pathogens recently linked to foods (RD341)

Sensory techniques: sorting, sorted napping and napping (RD342)

Assessing the use of co-ordinated force and sound measurements in products with crispy properties to determine crispness (RD343)

Members can receive free electronic copies of these documents by sending an e-mail to auto@campden.co.uk with the subject line: **send RDxxx** where xxx is the number of the report. By sending an e-mail with the command **send index** you will receive a full list of the reports and other publications available.

*To see a video of power ultrasound equipment in action, go to www.campdenbri.co.uk/videos.php



Here to help

Our membership team is available to take queries or questions about your membership.

Contact Clare Brett on +44(0)1386 842125 membership@campdenbri.co.uk

Campden BRI

Station Road, Chipping Campden, Gloucestershire, GL55 6LD, UK
+44(0)1386 842000 Fax: +44(0)1386 842100 info@campdenbri.co.uk

Brewing Division, Campden BRI
Centenary Hall, Coopers Hill Road, Nutfield, Surrey, RH1 4HY, UK

+44(0)1737 822272 Fax: +44(0)1737 822747
info@campdenbri.co.uk

Welcome to new members

Campden BRI is delighted to welcome the following new members who joined recently:

Alert Packaging Ltd - printer, laminator and converter of packaging materials for the food industry

Atritor Ltd - manufacturer of equipment and plant for milling and drying powders

CAB International - information providers in agriculture and the environment

Fruitapeel Ltd - manufacturer of fruit juices, drinks and smoothies

Hatzopoulos Flexible Packaging - flexible packaging converter/printer

Hotel Chocolat Ltd - manufacturer of chocolate products

J Wild Confectioners Ltd - baker of biscuits and cookies

Snowdonia Cheese Company Ltd - manufacturer of wax coated blended cheese

Springfield Solutions Limited - design, digital printing and finishing of flexible films and self adhesive labels

Stonegate Farmers Ltd - packer and distributor of eggs

Visy - research centre dealing with customer and market insights into packaging

Clare Brett +44(0)1386 842125 membership@campdenbri.co.uk

Please notify the Membership Department of any name or address changes to allow us to keep our records up to date.

Campden BRI day 2013

Our annual open day and AGM will be held on 6 June 2013. This is an excellent opportunity for members to network, and listen to the annual lecture, which this year is entitled *Towards a Global Food Strategy...From Discourse to Dialogue* and will be delivered by Michael McCain, President and CEO, Maple Leaf Foods Inc., Canada.

Surgeries

Do you want to consult a Campden BRI expert on a specific issue? During the afternoon, a number of staff will be available for free short consultations with members.

Visit <http://bit.ly/campdenbri8> to register, and to look at the highlights, including a short video, from last year's event.

annalie.brown@campdenbri.co.uk
+44(0)1386 842270



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