Other Campden News . . .

CCFRA PUBLICATIONS

As part of its commitment to the transfer of information to industry, CCFRA pursues an active publishing programme. Many of the publications – especially the guidelines which advocate best practice – are developed with the close involvement of industry. They are written *with* industry, *for* industry.

CCFRA publications include:

- ***GUIDELINES AND TECHNICAL MANUALS***

Publications in the CCFRA guidelines series include a wide and expanding range of practical guidance documents. In defining and advocating best practice, each document provides clear practical guidance to assist the industry in day-to-day operations, particularly in relation to food safety and quality, process efficiency and product innovation.

- ***REVIEWS AND BULLETINS***

Produced by technical specialists, these documents provide summaries of the current state of knowledge on particular topics. Reviews combine information from sources as diverse as the scientific and trade press, government reports, trade association publications and web-pages, hereby saving clients time by not having to collate the information themselves.

- ***KEY TOPICS***

These are short introductory books which describe a particular aspect of food science and technology with a strong industrial slant. The books are widely used in food education, by companies for in-house training programmes, as well as by established industry personnel seeking an overview or refresher on aspects of food science and technology.

- ***CONFERENCE PROCEEDINGS AND SEMINAR NOTES***

These contain brief notes and/or copies of the speakers' visual aids from conferences and seminars held at CCFRA.

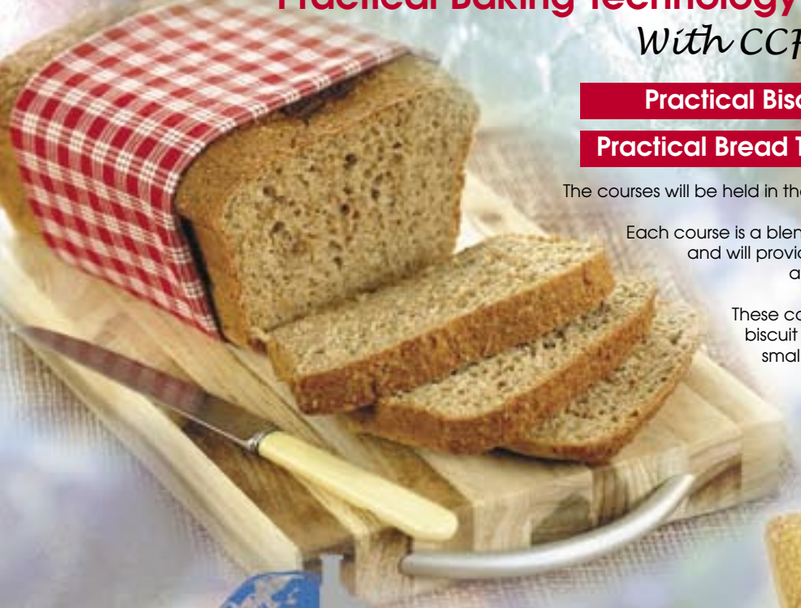
- ***VIDEOS AND SOFTWARE***

To provide practical help with day-to-day activities and training programmes, CCFRA has developed a range of software tools and videos. Demonstration versions or trial copies of software packages can be arranged.

More detailed information can be found in the "publications" section of the CCFRA web-site www.campden.co.uk, which is searchable and has an on-line shopping basket and ordering facility.

Practical Baking Technology Training in South Africa

With CCFRA and Anchor Yeast



Practical Biscuit Technology 23 - 27 May 2005

Practical Bread Technology 30 May - 3 June 2005

The courses will be held in the training bakery at Anchor Yeast in Johannesburg.

Each course is a blend of the practical and technical aspects of baking and will provide a better understanding of the role of ingredients and processes in creating a wide range of products.

These courses are ideal for all sectors of the Southern Africa biscuit and bread manufacturing industry, both large and small, as well as suppliers of ingredients and equipment, and retailers.

For more details please contact
***Brett Tessendorf at* Anchor Yeast**
Tel: 011 248 8252; Cell phone: 082 881 8633
e-mail: btessendorf@anchor.co.za

For further information contact:
Swift's marketing department or send an e-mail to info@swift.co.za.
Cape Town (021) 689 9344 • Pretoria (012) 349 2334 • www.swift.co.za

The most reliable, affordable solution for microbiological defence.

Bug News

SANAS ACCREDITED LABORATORY T0050

THE SWIFT MICRO LABORATORIES NEWSLETTER

www.swift.co.za March '05 / April '05

Part of the mission statement of Swift Micro Laboratories is to match innovative approaches in microbiology and quality management systems with the unique needs of our clients. Simply put: we are constantly on the look-out for ways to improve and expand our service to you, our client!

In addition to keeping up-to-date with the latest international trends, legislation and innovation, we as a company make a concerted effort to surround ourselves with a network of business associates and academics, whose knowledge and expertise compliment and enrich our own.

We are therefore *very excited* to announce the formalization of **TWO** such **collaborations** in this edition of our newsletter:

- On the **TRAINING** front we have, as a direct result of industry demand, been able to expand our portfolio of very popular **Campden & Chorleywood Food Research Association (CCFRA) training courses** by signing an agreement with CCFRA to exclusively present 9 of their courses in South Africa, Namibia, Botswana, Lesotho, Swaziland, Zimbabwe, Zambia, Malawi, Mozambique, Angola, Democratic Republic of Congo, and Tanzania. *For details on this agreement as well as a listing of the new CCFRA training courses offered by Swift, see our "In the Spotlight" article on page 3.*

- On the **MICROBIOLOGY** front we have formalized our collaboration with the **Department of Biotechnology at the University of the Western Cape (UWC)** by funding a research project to validate an innovative method for the detection of *Listeria monocytogenes*. Listeria is an important food-borne pathogen and one of our most frequently requested microbiological tests. *Read more about this collaboration, as well as the research project, in our "Focus on...." article on page 2.*

We would like to remind readers that current as well as past editions of our newsletter are posted on our web-site on the "NEWS" page. As always, we appreciate your comments and suggestions. Your input helps us to meet industry demand not only with the articles we publish in this newsletter, but more importantly also with the services we offer.

Newsflash . . . Swift's training department has been granted provisional ***ACCREDITATION BY THE FOODBEV SETA*** *as training service provider!*

Competition

With the Easter Weekend in mind, Swift and MEgga Candy are offering TWO lucky entrants the opportunity to win a hamper packed with *sweet treats*!

To enter, simply answer the question below and send it to us together with your name, company name, and telephone number. As usual, you can enter via our **web-site** or per **fax** at 021 689-6363. Entries close on 31 March 2005. Winners will be contacted and their names also posted on our web-site.

QUESTION:

What is the name of the U.K. based Research Association with whom Swift has signed an exclusive contract to present certain training courses in the SADC region?

Focus on...

Collaboration between UWC and Swift

Research project on Listeria monocytogenes PCR method

Professor Pieter Gouws

THE BACKGROUND

Contamination of food products with *Listeria monocytogenes* occurs sporadically in South Africa. Human listeriosis is predominantly a food-borne disease caused by *L. monocytogenes* and although rare, has a high mortality rate. The disease most often affects unborn babies, infants, pregnant women, and the immuno-compromised.

Swift Micro Laboratories offers 2 accredited (SANAS accredited according to ISO 17025) methods for Listeria:

- The detection of Listeria species based on ISO method 11290. (Swift test refer ence number SWJM 23).
- An alternative method for detecting *L. monocytogenes* utilising rapid L.mono medium (Swift test reference number SWJM 52).

Swift's R&D section is continually evaluating alternative methods and media in an ongoing quest to provide the fastest, most cost effective methods. During the course of some of these evaluations we have forged a firm working relationship with Professor Pieter Gouws and the Department of Biotechnology at the University of the Western Cape (UWC). The food microbiology research done by this department centers on food safety, food-borne pathogens, diagnostics and preservation.

They focus on the development and improvement of rapid DNA methods. (PCR/ Polymerase Chain Reaction methods).

THE PROBLEM

It is known that PCR technology, despite enormous diagnostic potential, has had difficulty making the transition between research and commercial laboratory. Part of the problem is of technical origin, but lack of method validation, training, and comparison with traditional bacteriological detection methods, also play major roles.

THE CHALLENGE

With this in mind, Swift is funding a research project at UWC which will focus on the removal of these barriers by validating and developing a PCR method for *L.monocytogenes* that is commercially viable. This project will include:

- Comparison of PCR and traditional methods.
- Different pre-PCR treatments will be developed to concentrate DNA or target cells.
- Methods will be developed to counter act PCR amplification inhibition.
- Assays will be developed in such a way that they would have potential applica tion in the food industry.

The goal is to get rid of all the "problems" which to date have hampered the use of PCR as a fast, cost effective routine testing method in a commercial laboratory.

THE RESEARCH PROJECT

The M.Sc student whose bursary and research Swift is funding, will focus specifically on the method for *Listeria monocytogenes*. According to Professor Gouws the PCR method is a highly sensitive, specific and rapid method for the detection of bacteria in *pure cultures*, but in complex food samples the scenario is slightly different. The low levels at which pathogens could be present in the food samples, as well as the presence of possible PCR inhibitors, will reduce the efficacy of the test (by reducing the amplification or even blocking the DNA synthesis). The approach used in this project will be to develop different pre-treatments in order to concentrate DNA or target cells, and to counteract the effect of the PCR inhibitors. Different DNA polymerase including *Taq* and *Tth* will be evaluated with different PCR buffers and different PCR facilitators.

Initial studies have already shown that using *Tth* DNA polymerase produced little or no inhibition of the PCR reaction. This method will therefore be further developed and optimized during this research project, and efficacy of the method will be compared to existing traditional methods.

M.Sc student, Diane Rip

THE STUDENT

Diane Rip is a first year M.Sc student in Biotechnology, who graduated from UWC with a B. SC Hons in 2004. During her honours year she excelled in her research project and has developed a quick and accurate molecular protocol for the detection and characterizing of pathogenic microorganisms. Her M.Sc entitled "The effect of PCR inhibitors in complex food samples" will assist in the development of DNA based methods to aid the food industry in the fast detection of pathogens.

Breaking News

Prof Pieter Gouws is the driving force behind the new **Institute of Food Safety and Hygiene (IFSH)** that will be established in 2005.

Says Prof Gouws: "We have realized the need for such an institute in South Africa. It will be situated in the Food Science Building of the University of Stellenbosch and form part of the Department of Food Science and the Department of Microbiology at the University of Stellenbosch (www.sun.ac.za), as well as the Department of Biotechnology at the University of the Western Cape (www.uwc.ac.za).

Our mission is to be a centre of excellence in food safety and hygiene that, by means of training and innovative research, provides the food industry with well trained human resources, cutting edge technology, expert knowledge, and innovative products and practices.

The IFSH aims to develop, in partnership with other role players in the South African food industry, novel methods and processes in order to improve the industry's international competitiveness".

The IFSH institute will initially be managed by Prof Pieter Gouws, Prof Leon Dicks and Dr Corli Witthuhn.

In the Spotlight...

Swift receives exclusive rights to present CCFRA courses in the Southern African Development Community (SADC) region.

Campden & Chorleywood Food Research Association (CCFRA) is the UK's largest independent membership-based organization, conducting research and development for the food and drinks industry worldwide. CCFRA is committed to providing industry with the research, technical and advisory services needed to ensure product safety and quality, process efficiency and product and process innovation. CCFRA maintains close working relationships with industry through frequent meetings with its 13 technical advisory panels and associated industrial working parties.

In addition to its R&D function, its purpose-built training centers and dedicated information services are central to CCFRA's pivotal role in technology transfer. A substantial and growing training programme forms the basis of worldwide training tailored to specific company/ industry requirements. *(Read more about CCFRA on their web-site:* www.campden.co.uk*)*

When Swift acquired the Council for Industrial & Scientific Research (CSIR)'s HACCP division and staff in April 2004, Swift also acquired the existing training courses from them. Two of these training courses, namely the 3-day HACCP workshop and the 2-day Supplier Quality Assurance (SQA) course, were "CCFRA courses". This means that Swift is licensed to use CCFRA course material, Swift's presenters are trained, evaluated and approved by CCFRA, and certificates are issued to successful delegates in association with CCFRA (CCFRA logo displayed on certificates).

Due to industry demand Swift has expanded its training portfolio and acquired the exclusive rights to present additional "CCFRA courses" as of 01 April 2005. The following CCFRA courses will in future be on offer:

- **3-day HACCP workshop (existing Swift/CCFRA course)**
- **2-day SQA course (existing Swift/CCFRA course)**
- **BRC/EFSIS evaluations – meeting the requirements (NEW)**
- **HACCP – the basics for agriculture (NEW)**
- **HACCP – the basics for fresh produce marketing (NEW)**
- **HACCP auditing – the basics (NEW)**
- **Internal auditing – principles and practices (NEW)**
- **Conducting factory inspections (NEW)**
- **Microbiology for Non-Microbiologists (NEW as CCFRA course)**

Campden & Chorleywood Food Research Association

Course outlines & costs will be extensively advertised soon, and will also be included in our monthly faxed training newsletter ("NEWSFLASH"). The frequency and venues for the individual courses will depend on industry demand. Currently Swift hosts *general courses at our training facilities* in Cape Town and Pretoria, but have also very successfully used external venues in Durban and Namibia. Training courses are also presented *in-house at customer premises.*

The *advantage* of Swift's agreement with CCFRA to you, the customer, is that you are able to *attend the CCFRA course locally instead of traveling to the UK.*

During the past year Swift has also twice hosted a CCFRA trainer from the UK to present the 5-day "Advanced HACCP" course locally. Successful candidates (attendance is limited to 12 delegates per course) receive the prestigious "Diploma in Applied HACCP Principles" from the Royal Institute of Public Health (RIPH). Bookings for the next course, which is planned for 11 – 15 July 2005, have already opened.

Swift's training section will continue to expand their portfolio of training courses to meet industry demand and international trends.

Best Performance • First in Service • Swift Results