



Juiceletter

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DECEMBER 2019

*The IFU
Career
centre is
now open*

17

**FOOD FRAUD
& INTERPOL/
EUROPOL**

34

**IFU University: Juice
Processing Summer School**

32

EVERY CHALLENGE IS AN OPPORTUNITY



The global production of all food and beverages accounts for 30% of all CO2 emission, so our industries' footprint and impact is huge.

Kees Cools

IFU VICE PRESIDENT

Dear IFU members, time flies. Some 12 months ago we were planning the annual IFU activity agenda for 2019, the year in which we are celebrating our 70th birthday and now it is almost history.

In 1949 we started, from a small group of founding members with a mainly European heritage to an association representing members in 66 countries. Voicing our members and industries' opinion and interests with global institutions such as Codex, WHO, FAO, WTO, WCO and many national or regional governments.

More than ever, the key issues that impact our industry and our consumers, are across border and global themes. It therefore makes us proud at IFU to see that on an increasing basis our commissions are joined by active members from across the world. Only in that way IFU can speak with authority and in name of the global juice community. The challenges we face are important.

The global production of all food and beverages accounts for 30% of all CO2 emission, so our industries' footprint and impact is huge. For decades our industries' raw material supply, coming from crops of all origins, has been exposed to extreme weather conditions from the climate change. This creates supply risk and high price volatility.

Obesity has become a major health problem and a big public cost. Therefore calories in consumer products are under attack. Public opinion does not differentiate on the source of the calories, nor do many popular scientific publications and consequently juices and juice containing beverages have come into focus and under attack.

On consumer packaging PET from being everyone's favorite, now all of a sudden plastic packaging seems in the middle of a "perfect storm".

On all this, the consumers' opinion and consumption behavior as well as the legislator and governments reactions are not universal, thus to ensure a level playfield and an as much as possible harmonized rules setting, all these challenges are on top of the agendas of our Legal, scientific-Technical and methods of analysis commissions.

The output of the IFU commissions assists the global juice industry to come up with authentic and pragmatic solutions that work, to differentiate and build on an added value modern product portfolio.

In 2020 we aim to continue our striving to broaden our membership base and further professionalize our service and organization. We are looking forward to see you at our Technical workshop in Vienna, our Annual juice conference this time in South Africa or on our upcoming roadshows with focus on Asia.

From all of us here at IFU we wish you a pleasant festive season and a healthy 2020.

EVENTS

Over 1,000 people have attended IFU events in our 70th Birthday year, here are some highlights.



Technical Workshop

This year we went to Athens for our annual technical workshop on the 6th March at the Electra Palace hotel close to the Parthenon. With over 120 guests coming from as far afield as South America we had a wonderfully interactive audience enjoying presentations on what is the most sustainable packaging, legislation, processing, analysis and quality. A networking Greek buffet took place in the evening in the Ageli Zappiou restaurant in the Zappeio Gardens and next to the Zappeion Megaron (the first building designed to serve the needs of the Olympic Games). Day 2 was the technical tour where the first stage was hosted by Aspis who gave us a very interesting guide of their manufacturing facilities followed by a wonderful lunch. The event was rounded off by a visit to ITAP (Institute of Technology of Agricultural Products) where we saw a pilot plant HPP machine in action.

A big thank you to our sponsors GfL, Biosystems and KSY Blends who enabled us to offer such a value for money event.





Juice Conference

IFU 70th birthday party celebrations were held on the Playa Del Carmen, near Cancun, Mexico at the marvellous Xcaret resort hotel.

The programme started on the afternoon of the 27th May for over 200 colleagues with presentations about the fruit and vegetable power house of Mexico and juice market reviews in Mexico, Russia and Europe. The first day was rounded off with information on what we could learn from the Mexico – The free trade champion.

Following a short break, we headed off to join a Mexican floating fiesta at Xoximilco. Boarding our Mexican gondolas, we floated in the Maja jungle amongst mangroves, inlets and chinampas. Guests ate and drank whilst being entertained by our captains and of course numerous Mariachi bands.

Sustainability was the topic of discussion at the start of day 2. The green packaging credentials of PET/plastic, cans, glass bottles and cartons were compared enabling the audience to make real comparisons on this complex issue. Our next session was all technical with a broad range of subjects covering new processing technologies, pesticides, microbiology and CSR. Health was the topic after lunch with an opinion on sugar taxes plus a comprehensive review of the incredible health benefits of juices by Prof. John Sievenpiper from the University of Toronto. Greening is of concern to the fruit growers and the juice industry, so it was valuable to hear about the steps being taken to control and combat the menace in Brazil, Florida and of course Mexico. The gala dinner followed in the evening at the Cuevas restaurant.

It wasn't quite all over as on the final day there were a selection of activities to experience at either a Chitchen Itza historical tour, Xplore or Xsenses. A large selection of photographs taken during the conference could be viewed on the large screen at the finale cocktail evening on the beach at the Xcaret.

All made possible with the help of our sponsors Almendra, Biomerieux, Bucher Uuipektin, Citrofrut, CFT, Doehler, Indumesa, IQ Citrus, Odyssey Food Trans.





Dirk Lansbergen (IFU President) gratefully receiving IFU birthday wishes from the Russian agricultural minister presented by Maxim Novikov (RSPS President) and Alla Andreeva, also from the RSPS.



Cibus Tec

Like the IFU, Cibus Tec has been serving the food and beverages industry for more than 70 years. It is among the most innovative food technology exhibitions and a complete showcase of the best solutions – from ingredients to processing technologies, from packaging to logistics – for all segments of the food and beverage industry. IFU participated by holding a Juice Seminar “The future of Juice”.

It was opened by Fabio Aliotta, CEO of Nutra Food (a member of the Doehler group) with his presentation on “Plant based nutrition”. Plant based foods in the diet is a fast-growing trend and a wide range of available liquid extracts was explained by Fabio with ideas how they might be blended with juices to produce a novel juice-based beverage with plant extracts.

David Berryman of DBL discussed the important topic of “Sustainability in the Juice Industry” by addressing 3 key questions; Is there enough fruit? What about the carbon footprint? and the role of packaging. Whilst there are certainly some challenges to address, we were re assured that scientific solutions can be made available.

Finally, non-thermal processing of juices has become an interesting development in the industry, but how does it compare to traditional processing techniques? Massimiliano Pelacci from the University of Parma provided us with the scientific principles behind these applications explaining the effectiveness of the processes for product stabilisation.

All the event presentations are available for members to download via the IFU website.



IFU SGF ROADSHOWS



In our fourth year travelling around the globe to get engaged with local juice producers and supporting companies we have held roadshows in Belgrade/Serbia, Lviv/Ukraine, Beirut/Lebanon, Istanbul/Turkey and Baku/Azerbaijan. This year we could fulfil a wish which we have often heard: participants always wanted to know more about AIJN and especially the Code of Practice, which was now covered by Milica Jevtic and Jan Hermans from AIJN and will as well be covered in the roadshows 2020.

At all events, after the opening the usual roadshow format was followed, giving introductions and functions of the organising associations, Aintzane Esturo (Head of Communications) for SGF and Dirk Lansbergen (President), David Berryman (Chair of the Marketing Commission) or John Collins (Executive Director) for 70-year-old IFU. Jan and Milica provided information on the AIJN Code of Practice for the evaluation of fruit and vegetable juices in the context of the regulatory framework. Based on the principles from the United Nations sustainable development goals the European juice corporate social responsibility (CSR) platform was presented, with 49 members they have 3 working groups; Orange Juice – Brazil, Apple Juice – Poland and Pineapple – Thailand. John or Dr. David Hammond (Vice-Chair of the Methods of Analysis Commission) provided an overview of the IFU methods of analysis, both chemical and microbiological that are the international benchmark methods used for the authenticity, safety and quality assessments for juices and related products, some of which have been made into e-learning videos and translated into different languages.

Our sponsors also sent some speakers to focus on sustainability within the industry: Miguel Sánchez, Mariusz Klosinski and Francisco Purroy of JBT presented Citrus



AZERBAIJAN



AZERBAIJAN



AZERBAIJAN

The production of orange juice has social and environmental impacts. Social inclusion, training and education projects were shown to deliver social engagement commitments. For environmental protection then renewable energy, biodiversity and waste management are important.



AZERBAIJAN

processing: By products. Options and sustainability improvements, explaining pulp & pulp wash, oils, cloudy peel extract and dry peel for cattle food. Michael Fuchs, Dr. Edgar Zimmer and Martin Frei of Bucher Unipektin gave a presentation on juice process design and energy efficiency in a holistic approach. Marcel Dumoulin and Dr. David Hammond of Eurofins presented advanced analytical methods to ensure fruit juice integrity. Ezgi Kiroglu, Kai Kaschubowski and Natália Petrilli Cortês of Citrusuco

explained How to be sustainable as an orange juice processor: The production of orange juice has social and environmental impacts. Social inclusion, training and education projects were shown to deliver social engagement commitments. For environmental protection then renewable energy, biodiversity and waste management are important.

Of course there were as well presentations about IFU methods, done by the IFU experts, and the fruit juice value chain, delivered by SGF.

Once again, the roadshows have attracted many people working not only in the juice industry, but also people from government, universities, laboratories and suppliers. We are happy that we could raise awareness to harmonize legislation, introduce the IFU methods and gain membership and are looking forward to start into a new round in 2020!

Please find here the highlights and specials of each roadshow in 2019:

Serbia: Thanks to the help of our member Marija Vujić Stefanović, who established the communication, the seminar was co-organized by the Chamber of Commerce and Industry in Serbia. They were a big help in advertising the event!

Ukraine: Also here we had help from local members: Thank you, Andrii Humenchuk! A presentation by Markus Klingler, Team Leader for Agriculture and SPS, European Commission Support Group for Ukraine, outlining



◀ LEBANON

▼ TURKEY



the cooperation between EU and Ukraine in the agriculture and food sector was added to the program, and the IFU SGF team, together with the sponsors, had the possibility to visit IFU member T.B. Fruit.

Lebanon: Extra excitement was added with the arrival of MTV cameras and crew to record the opening of the Roadshow by Tony Haddad (CEO of Technica International and ABA Vice Chairman). Click [here](#) to see the video. Read a report in [FJF issue 17!](#) We gained some local insights into the regional trends for juices and nectars from Dr Ammar Olabi from the American University of Beirut, continued with a local presentation: Bechara Nassar from Technica International showed us their systems for quality inspections in bottling factories such as empty and full bottles, crates and pallets highlighting the advantages that good inspection brings to the manufacturing process and product quality. We are very thankful that we had the help of Mounira Jazzar (ABA Secretary General) and our new member Tony Haddad in making the event happen. Read a report in [FJF issue 17!](#)

Turkey: The roadshow was held together with the 10th Juiceful Istanbul Summit, the yearly conference of our member MEYED. Therefore the program was quite different, as we had many other speakers – and also the event was special, as there were more than 100 participants not only at the conference, but also at the accompanying events! We really appreciated the invitation of MEYED to be part of the Summit! Click [here](#) to visit the conference website and read [here](#) a report in Turkish language.

Azerbaijan: Once again, we were lucky by having a helping hand in IFU member Elshad Farzaliyev from Coca Cola, who managed to bring us in touch with the American Chamber of Commerce (AmCham) and the United States Agency for International Development (USAID) in Azerbaijan, who co-organized the seminar. A special treatment was offered to our sponsors the day after the conference: We visited Coca Cola in Baku and AZ Granata in Agsu, where we were not only guided through the juice processing and the wine processing plant, but also had the possibility of tasting the different juice and wine products, which was a real experience! Read a report in [FJF issue 18](#) and find some media coverage and photos in [IFU's news section](#).

All presentations in all locations were very well adopted by the delegates, and contacts for further collaboration – especially with our sponsors - were exchanged. This showed, once again, how crucial not only the sponsorships are for the good conference experience, but also how important the contacts in the new markets are for the sponsoring companies. We want to take this opportunity to express our gratitude to the sponsors of the 2019 roadshow JBT, Bucher Unipektin, Citrosuco, Eurofins, Cibus Tec and Anuga FoodTec. [Contact us](#) if you are interested in becoming a sponsor of the APAC Roadshow 2020! We are looking forward to travel with you!

Impressions from the Juice Summit 2019 and the IFU meetings 2019







Visit the [Juice Summit website](http://www.juicesummit.org) for more info on the program and speakers (www.juicesummit.org) and find reports in [FJF issue 18](#) and [here](#).

You couldn't join us this year? Watch Dirk Lansbergen's opening speech [here!](#)

See you in 2020!



Following the IFU's successful 70th anniversary Juice Conference in Mexico earlier this year, we are now looking forward to the 2020 international conference which will take place in the famous Stellenbosch wine region of South Africa. This event will be held in conjunction with the South African Fruit Juice Association (SAFJA) and will be combined with their annual meetings. With an expected attendance of over 200 participants, the conference is a wonderful opportunity to meet and engage with other juice industry professionals from around the world – not to be missed!

It will be held at the Spier wine farm and conference hotel near Stellenbosch which is one of the oldest wine farms in the region, with a recorded history dating back to 1692. It is home to one of the largest collections of contemporary South African art and its wines are among the most awarded in the country.



The conference package includes access to the sessions on both days, lunches, all refreshment breaks, welcome dinner on day one and a networking drinks and canapés evening on day two. The presentations will cover topics relevant to the global juice industry as well as the African market.

Ticket prices are:

- Members: **€399**
- Non-members: **€799**

Delegates who are booked in the hotel on 18th May will have the opportunity to take part in an exclusive wine tasting event.

On the day after the conference, we are organising visits to some local factories and farms in the area.

(Pre-booking for both of the above activities is essential as places are limited - allocated on a first come first served basis).



We are currently working on a variety of informative and interesting programme topics including the following:

- Global Juice Market: Juice in Europe, the USA and Asia
- African Juice Market: Juice in the whole of Africa, South Africa, Nigeria and Kenya
- Supply Chain: An overview of essential oils/essences; Deciduous, citrus and tropicals in Africa; Global transportation issues
- Quality & Technology: Product innovation; Thermal and non-thermal processing; Supply chain QA
- Health & Nutrition: Juice PR; Plant based nutrition
- Sustainability: Use of by-products (holistic); Recycling and circular economy; Packaging: cost, new developments, moving away from plastic; Overview of sustainability certification

Sponsorship is crucial for keeping registration fees low, attracting excellent speakers and providing a good conference experience for everyone. This is a fantastic opportunity to promote your company whilst helping to make this event a success, so contact us for more information on sponsorship packages.

Accommodation: rooms can be booked directly with the Spier Hotel - www.spier.co.za/hotel - at the special rate of R1965, quoting the following booking reference: South African Fruit Juice Association – BB ID 2266830

Don't miss the chance to be part of this exciting event and to experience South African hospitality!

All you need to do now is REGISTER. You will find more details on the conference by visiting the IFU website – www.ifu-fruitjuice.com/event/JuiceConference2020

IFU TECHNICAL WORKSHOP 2020

Join us for the fifth IFU Technical Workshop: For the Juice Industry. From the Industry Experts. Well-known speakers from the juice industry will give presentations and recommendations to laboratory workers, technicians and scientists. For the first time, the Technical Workshop will last one and a half days, as we will include a block on nutrition. In the afternoon of the 19th, we will hop on a bus for our technical tour.

The conference venue will be Parkhotel Schönbrunn on day 1 and the nearby Don Bosco House on day 2. Accommodation is available at both locations for each budget.

TICKETS:

The ticket for the IFU Technical Workshop (EUR 399 for non-members, EUR 279 for members) includes the workshop fee for 1,5 days, food and drinks during the workshop and the networking dinner after the workshop.

The ticket for the IFU Technical Workshop and the Technical Tour (EUR 448 for non-members, EUR 328 for members) includes the above plus the bus for the tour, no additional costs to be expected during the day. Please bring along a bottle of water.

ACCOMMODATION:

We have blocked rooms in both conference locations until Jan. 16, 2020:

Parkhotel Schönbrunn: Superior room: single **EUR 110** / double **129** - Executive room: single **EUR 140** / double **EUR 159**.

Book your room with this link: www.austria-trend.at/book/IFU_International

Don Bosco Haus: single room EUR 69. Book your room by contacting the hotel via [e-mail](mailto:info@donboscohouse.com), mentioning the IFU Technical Workshop

REGISTER HERE





In conjunction with AIJN and SGF:

For the Juice Industry. From the Industry Experts.



Day 1: Wednesday, March 18, 2020 – Austria Trend Parkhotel Schönbrunn, Ball room

Hietzinger Hauptstr. 10-14, 1130 Vienna

09:00	Opening	Mr. Dirk Lansbergen. IFU President
Processing		
09:15	Microbial safety and stability of fruit and vegetable low-acid products	Dr. Barbara Franceschini. SSICA
09:40	Equipment validation challenges for low acid foods	Wilfredo Ocasio. Eurofins USA
10:05	Water and steam quality used for processing	Davide Imperiale. SSICA
10:25	Raw material shelf life affected by processing and storage temperature	Antonio Aldini. John Bean Technologies
10:45	Q & A	
11:00	Juice Break	
Sustainability		
11:20	GM developments of fruits	Nigel Halford. Rothamstead research
11:50	Compostability of cartons	Tetra Pak
12:15	Infinia project - recycling PET bottles	Alessia Alberoni. BP
12:40	Q&A	
13:00	Lunch	
Quality		
13:50	The ingredients of blueberries	Karin Korntheuer. HBLA und Bundesamt für Wein- und Obstbau Klosterneuburg
14:15	Categorisation of processed foods and beverages	Johan de Ryker. Fruit Juice Matters
14:40	New analytical insights for lemons and limes	Markus Jungen. SGF
15:05	New techniques for the analysis of pineapple juice	Mikko Hofsommer. GfL
15:30	Q&A	
15:45	Juice Break	
Methods & Guidelines		
16:05	A new rapid stable isotope method to detect addition of sugar to fruit juice	Dr. Simon Kelly. International Atomic Agency
16:30	Quality and authenticity observations in the juice market	Dr Susanne Koswig. SGF
16:55	European legislative and AIJN COP updates	AIJN
17:15	Q&A	
17:30	Wrap up	Mr. Kees Cools. IFU Vice President
19:30	Networking Dinner at Brandauer`s Schlossbräu, Am Platz 5, 1130 Vienna	

Day 2: Thursday, March 19, 2020 – Don Bosco House, Don Bosco room

Sankt-Veit-Gasse 25, 1130 Vienna

Fruit Juice Matters Nutrition Workshop

09:00	An introduction to the Fruit Juice Matters (FJM) program	François Bauwens. FJM
09:30	European market survey results IPSOS and media sentiment	François Bauwens/Carrie Ruxton. FJM
10:00	Nutrition-science quiz for the audience	Carrie Ruxton. FJM
10:20	Elementary science-nutrition for 100% Orange Juice: obesity, type 2 diabetes, glucose control & nutritional composition	Carrie Ruxton. FJM
11:00	Juice Break	
11:15	Bioavailability and Hesperidin	Prof. Ralf Schweiggert. Uni Geisenheim
12:10	Future of science: cardiovascular evidence and horizon scan beyond cardio metabolic	speaker tba
12:45	Lunch	

Book your ticket for the workshop and the Technical Tour (optional) on Thursday afternoon on www.ifu-fruitjuice.com



- ✓ Ho-Chi Minh City (Vietnam) August/September 2020
- ✓ Manila (Philippines) August/September 2020
- ✓ Jakarta (Indonesia) August/September 2020
- ✓ Melbourne (Australia) July 8, 2020 (tbc)
- ✓ Auckland (New Zealand) July 10, 2020 (tbc)

ASIA PACIFIC
SGF | IFU Roadshow 2020



JUICE SUMMIT

powered by AIJN, IFU, SGF

JUICE SUMMIT 2020

14 & 15 OCTOBER

Antwerp, Belgium

www.juicesummit.org

The IFU Career centre is now open

This is a new free service for members. You can either post a CV, a job opening or search for both via your member profile homepage. Non-Members can pay €50 to post a job opening for 30 days.

Here is how to do it. Log onto your profile via the website. If you have difficulty logging in then please contact the IFU office. If you have forgotten your password then there is a password recovery function, see fig 1. If you have not changed your username then it was originally set as your e mail address

FIG 1

Member Login

Welcome to the online community. Because of the built-in security features, you must first register and be approved before accessing many site sections. If you are not a member of the site yet, please register - we'd love you to be part of our online community.

Sign in using your social profile

[Login with Facebook](#)

[Login with LinkedIn](#)

OR

Sign in using your credentials

Username

Password

Remember Me

[Sign In](#)

Forgot your password?
[Click here to reset your password.](#)

Haven't registered yet?
[Click here to Register](#)

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05/11/2019
Press articles related to the SGF IFU Radshow in Azerbaijan

25/07/2019
New IFU method #85 "The net volume determination of consumer packaged juices."

Events [More](#)

18/03/2020 - 19/03/2020
IFU Technical Workshop 2020 and Technical Tour

19/05/2020 - 20/05/2020
IFU Juice Conference 2020

Featured Members

Newest Members

E. MUTLU GÜLTEKİN, Treko Tarım Gıda İç ve Dis Tic. Ltd. Şti.

D. Dietz, Treko Tarım Gıda İç ve Dis Tic. Ltd. Şti.

SIGN IN TO THE COMMUNITY | ADMIN DASHBOARD | RETURN TO PREVIOUS ADMIN PAGE | SITE RESOURCE MANAGER | EDIT MODE [OFF]

After logging on if you are on the main IFU page then please select “My profile” at the top right hand corner, see fig 2

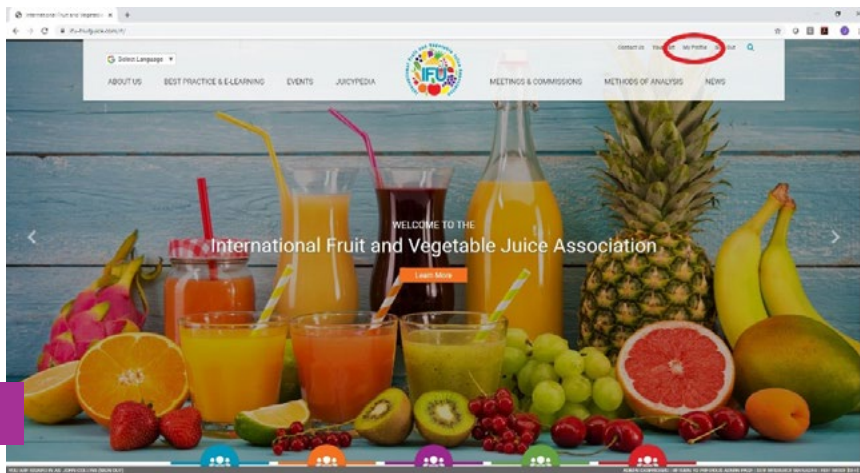


FIG 2

Or you may be taken directly to your profile page see fig 3

On your profile page please select your welcome tab, see the circle on fig 3 and a drop down menu will appear. The select “Accounts and Settings”.

FIG 3

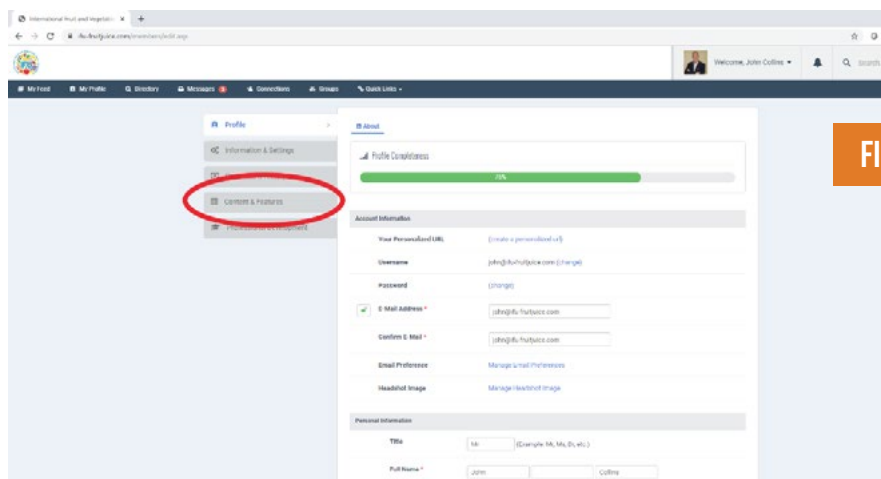
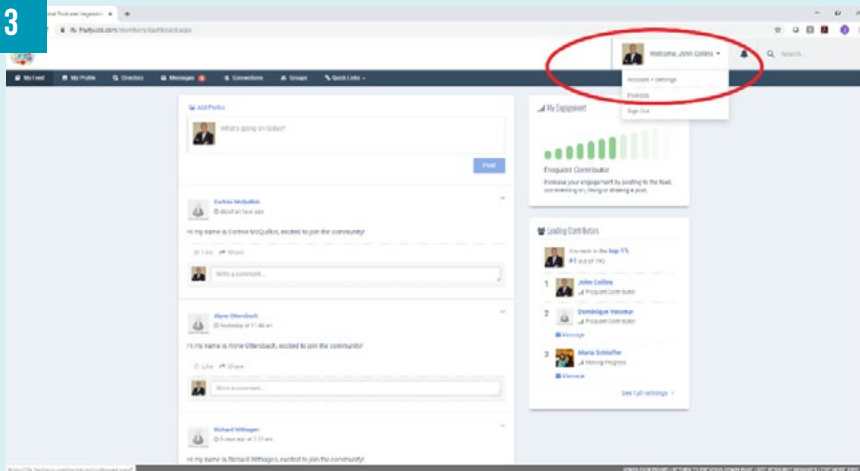


FIG 4

Form the Accounts and Settings menu, see fig 4 then select “Contents and Features”

Then select “Job postings” and a series of career centre options becomes available, see fig 5

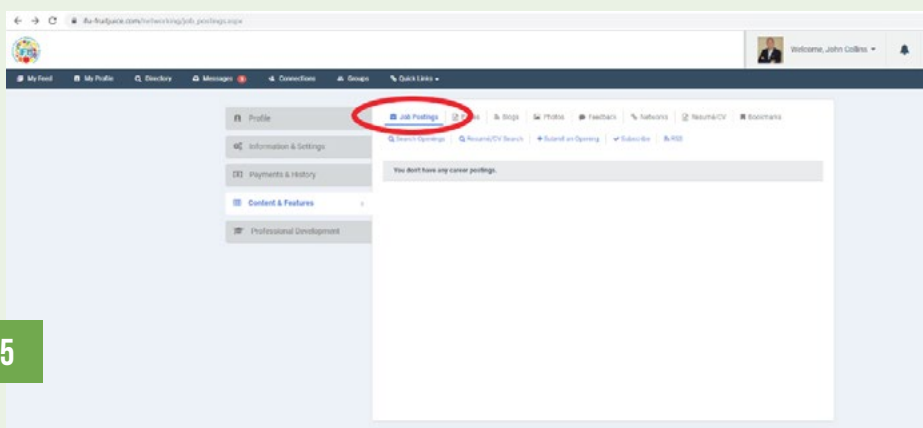
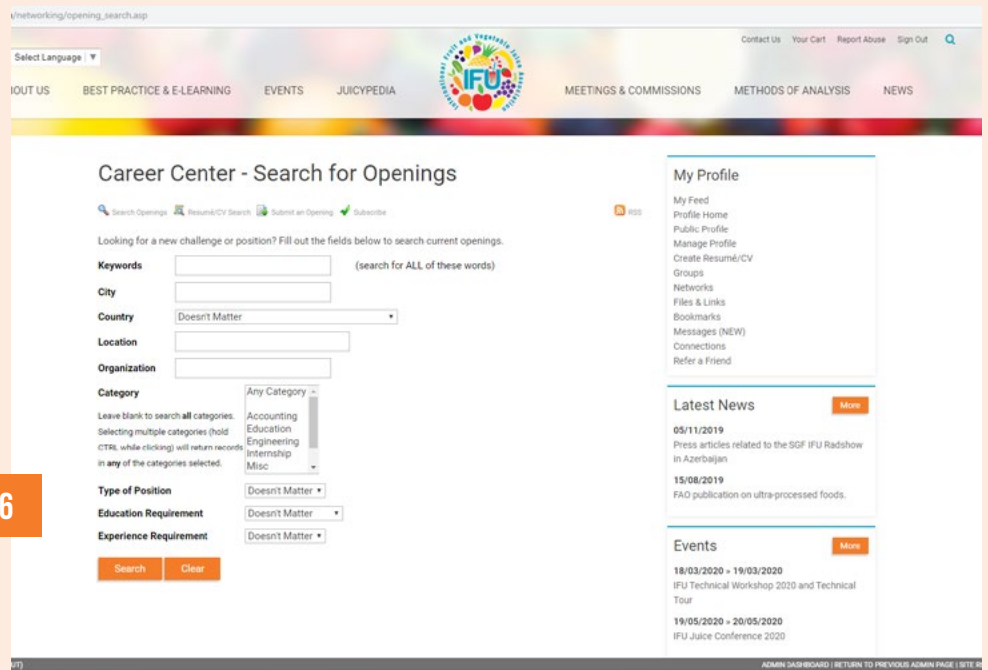


FIG 5

Search Openings (Job posting) tab.

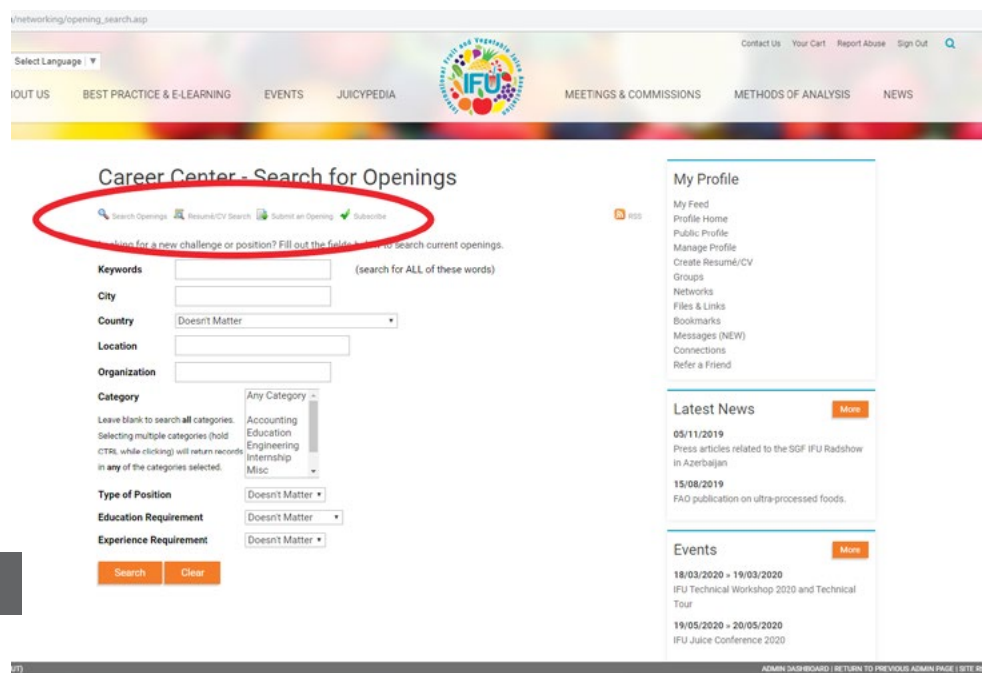
Select this tab and the search menu appears, see fig 6

FIG 6



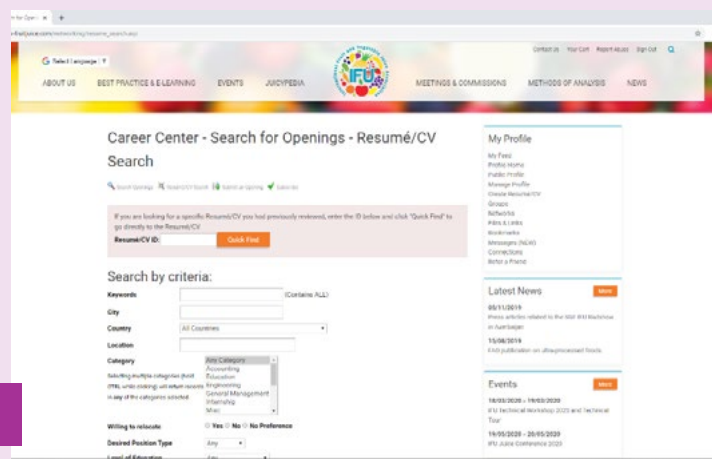
From the search page you can also select to search for CV's, submit an opening (job posting) or subscribe to alerts from the menu shown in fig 7

FIG 7



Resume/CV search see fig 8

FIG 8



To submit an opening (Job posting) then enter information as shown in figs 8 & 9

Career Center - Submit an Opening

To post a current opening in the Career & Volunteer Center, please fill out the form below. In order to attract the best candidate, please be as thorough as possible with the job description. Contact information posted through this form will be visible to all registered members.

* Indicates a required field.

Position *

Date Needed (Format date: 12/31/1999)

Post Opening *

Status Inactive Active

Link to your profile? Yes, link this opening to my profile No

Organization

City

Country

Location

Primary Category *

Additional Categories
 Hold CTRL (or open-apple on a MAC) while clicking to select multiple categories.
 Accounting Education Engineering Internship Misc

Type of Position

My Profile
 My Feed
 Profile Home
 Public Profile
 Manage Profile
 Create Resume/CV
 Groups
 Networks
 Files & Links
 Bookmarks
 Messages (NEW)
 Connections
 Refer a Friend

Latest News
 05/11/2019
 Press articles related to the SGF IFU Radshow in Azerbaijan
 15/08/2019
 FAO publication on ultra-processed foods.

Events
 18/03/2020 - 19/03/2020
 IFU Technical Workshop 2020 and Technical Tour
 19/05/2020 - 20/05/2020
 IFU Juice Conference 2020

FIG 8

Primary Category *

Additional Categories
 Hold CTRL (or open-apple on a MAC) while clicking to select multiple categories.
 Accounting Education Engineering Internship Misc

Type of Position

Education Requirement

Experience Requirement

Salary

Allow online applications? Yes No, I will tell them "How to Apply" below

How to Apply / Contact
 Please submit any additional information you will need from a candidate.

Advanced Editor
 Editor | Advanced Editor
 Home | Insert
 Bold, Italic, Underline, Text Color, Background Color, Bulleted List, Numbered List, Indent, Outdent, Link, Unlink, Undo, Redo, Font Size (13px), Paragraph Style (Normal)

Events
 18/03/2020 - 19/03/2020
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Featured Members

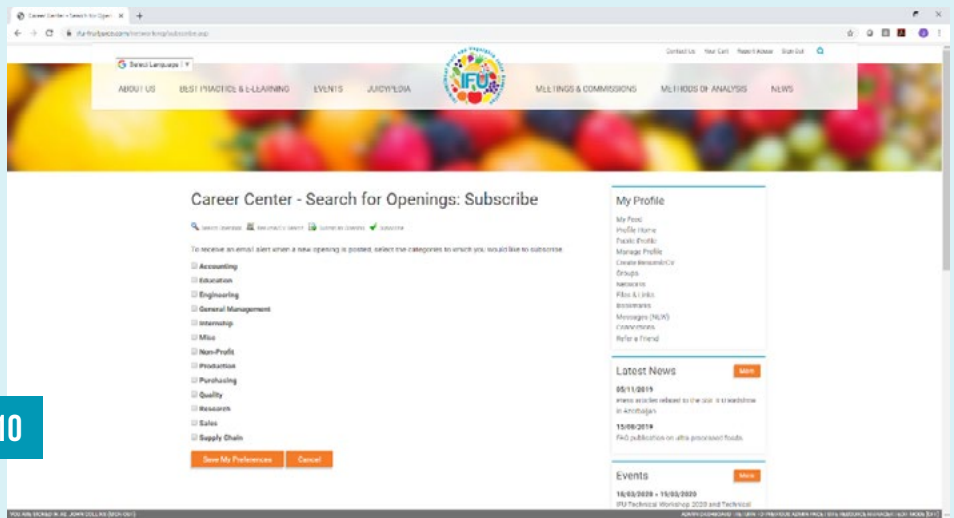
Newest Members
 International e.V.
 D. Gill, Novozymes
 R. Osae, SGS Institut
 Fresenius GmbH
 H. Werth, VOG Products
 Soc. Agricola coop
 F. Moresco
 C. Pizetta, Continental

Online Surveys

FIG 9

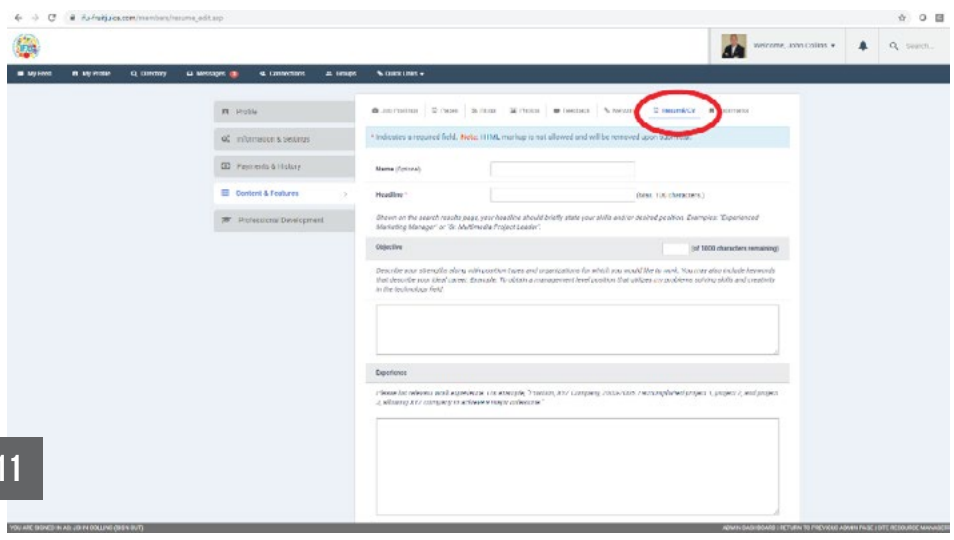
To subscribe to alerts then enter information as shown in fig 10

FIG 10



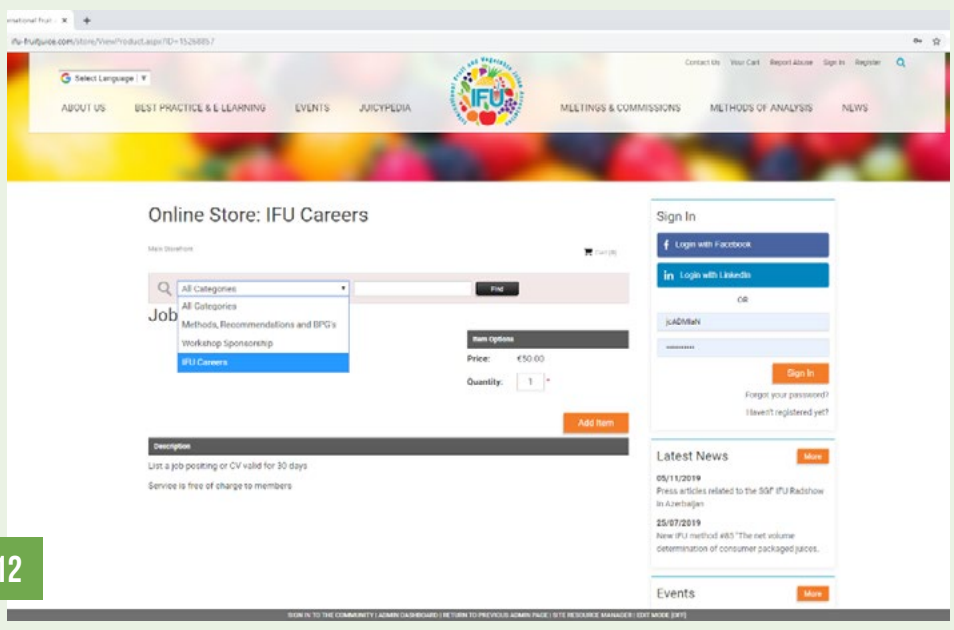
To submit a CV then from "Contents and Features" select "Resume/CV" see fig 11. Boxes will then appear for you to enter your CV information

FIG 11



Non-members can also post job openings for €50 for 30 days via the store, see fig 12

FIG 12



Social Link: IFU`S social media channel

This is a free service for members. Non-Members can use the basic version, once they have signed up on the website, but can not contact other users directly.

Here is how to do it. Log onto your profile via the website. If you have difficulty logging in then please contact the IFU office. If you have forgotten your password then there is a password recovery function, see fig 1. If you have not changed your username then it was originally set as your e mail address. Please make sure to log in before you register for an event, too, as this will automatically open the member discount for you!

Non-members: please register and choose „mailing list“ as member type, wait until you receive approval (check your junk mail file, too!) and then log in with your name and password and decide if you want to upgrade your membership to a regular membership with full access.



FIG 1

Member Login

Welcome to the online community. Because of the built-in security features, you must first register and be approved before accessing many site sections. If you are not a member of the site yet, please register - we'd love you to be part of our online community.

Sign in using your social profile

Login with Facebook

Login with LinkedIn

OR

Sign in using your credentials

Username

Password

Remember Me

Forgot your password?
[Click here to reset your password.](#)
Haven't registered yet?
[Click here to Register](#)

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18/03/2020 - 19/03/2020
IFU Technical Workshop 2020 and Technical Tour

19/05/2020 - 20/05/2020
IFU Juice Conference 2020

Featured Members

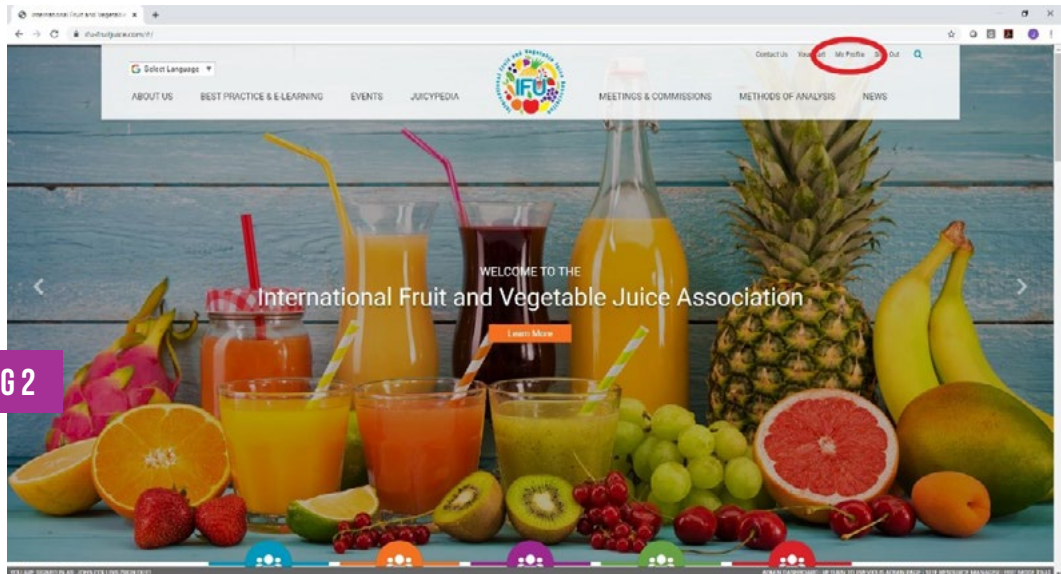
Newest Members

E. MUTLU GÜLTEKİN, Treko Tarım Gıda İc ve Dis Tic. Ltd. Sti.

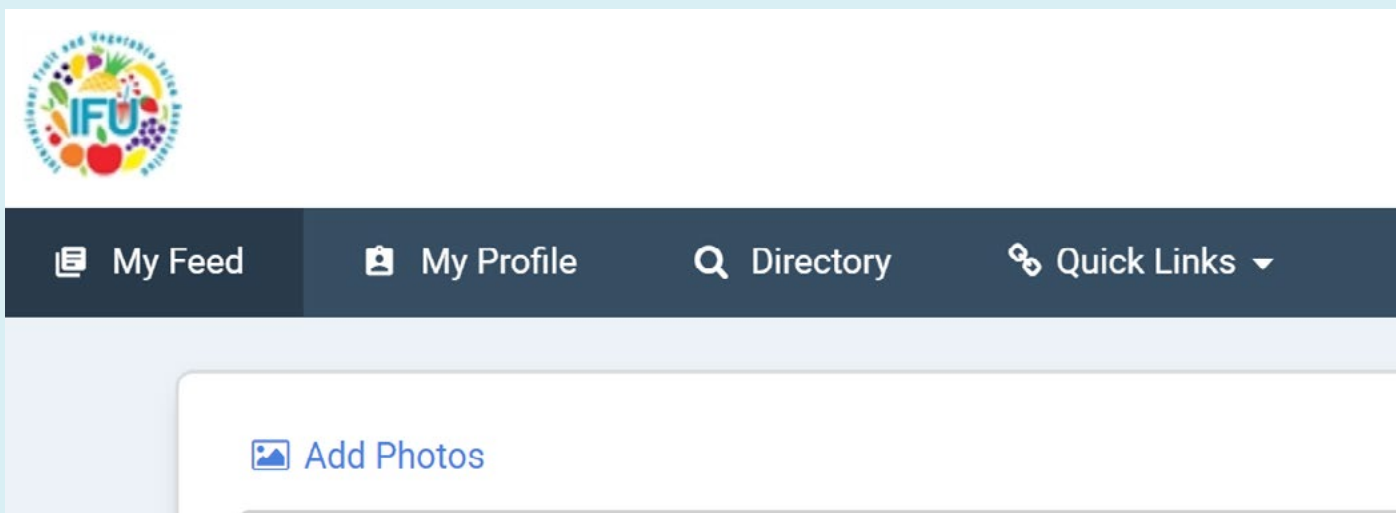
D. Dietz, Treko Tarım Gıda İc ve Dis Tic. Ltd. Sti.

After logging on if you are on the main IFU page then please select “My profile” at the top right hand corner, see fig 2

FIG 2



Or you may be taken directly to your profile page.



Now you can add more information to your profile, read/discuss on your „feed“, or work in groups!

You can access Social Link via IFU website on your desktop computer, laptop or as app on your mobile device: download the app in your app store and login with your chosen password.



The advantage for IFU-members is that they can access other profiles, connect with them and write personal messages.



IFU University MEMBERSHIP

This is a new membership category recommended by our Executive Committee and approved by members at the last General Assembly.

This type of membership is now available to an officially recognised University or Research Centre.

To be eligible the university will conduct studies and / or research on scientific topics that are relevant to the juice industry, for example, food science & technology, chemistry, microbiology, engineering, agriculture.

The university will nominate a Professor or department head who will be the main contact with the IFU and be willing to support the aims and objectives of the association through active participation in relevant commissions or working groups. This can be via e-working, conference calls and attending meetings in person. The organisation will keep the association up to date and make available their published research relevant to the interest of IFU members.

The main contact and 3 other nominated contacts will have access upon request to IFU materials normally available to corporate members such as Methods of Analysis, Recommendations and Best Practice Guidance. These materials may also be used to support the association's research and lecture programs.

The university will be able to use the IFU logo as part of their promotional material, including website. The IFU will list the organisation and their logo as a member on the IFU website.

This membership type is based on the relationship being mutually beneficial and is not subject to an annual fee. Membership will be reviewed annually by the IFU Executive Committee and is subject to the normal approval process outlined in the statutes. University members do not have any voting rights.

From our information about your organisation we think you would qualify for membership. If you would like to progress further, then please follow the link below to register.

[REGISTER HERE](#)

After registration we will then contact you directly to further establish how we can beneficially co-operate.

IFU STANDARDS



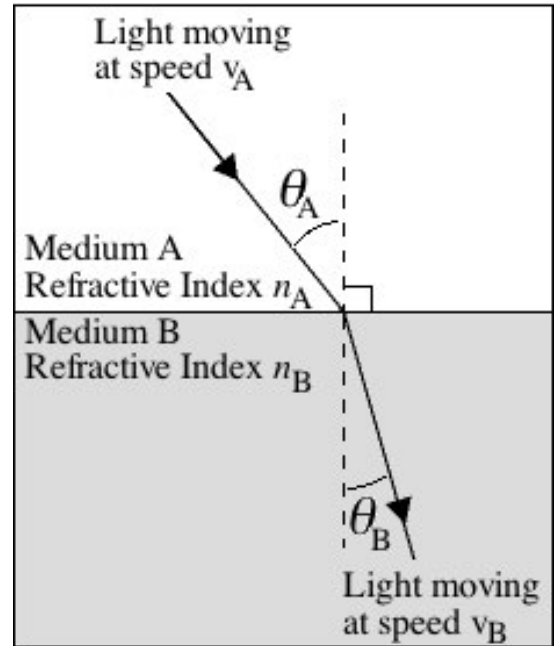
Are you up to date with the latest IFU standards?

IFU standards are developed by following IFU groups:

- Methods of Analysis Commission
- Science and Technology Commission
- Microbiological working group

IFU have published a lot of new or revised standards in the past few years, make sure you are up to date and access them via the website. Here is a table of the changes to help you.

IFU #	TYPE	TITLE	Year of issue or revision
03	Chemical	Titratable acidity	2017
07a	Chemical	Sulphur Dioxide	2018
08	Chemical	Soluble solids	2017
17	Chemical	Determination of the ascorbic acid content of juice products using titrimetric procedures (provisional)	2019
66	Chemical	Acetic Acid	2019
83	Chemical	Colour measurement in blood orange juice	2017
84	Chemical	Stability tests for clarified juices	2017
85	Chemical	The net volume determination of consumer packaged juices, nectars and related products	2019
MM12	Microbiological	Method on the Detection and Enumeration of Spore-forming Thermo-Acidophilic Spoilage bacteria Alicyclobacillus spp.)	2019



IFU #	TYPE	TITLE	Year of issue or revision
R02	Recommendation	Determination of Patulin	2019
R03	Recommendation	Use of Isotopic Procedures	2017
R12	Recommendation	Methods for Conformity for Country of Origin	2018
R13	Recommendation	The use of DNA methods in the analysis of fruit juices, purees and concentrates	2018
R14	Recommendation	Determination of Organic	2017
R15	Recommendation	Quality systems for juice labs	2017
R16	Recommendation	Methods for Pesticide residue	2019
e01a	e-learning video	Determination of relative density	2018
e03	e-learning video	Titratable acidity	2018
e07a	e-learning video	Sulphur Dioxide	2018
e08	e-learning video	Soluble solids	2018
BPG1	Best Practice Guidance	Fruit washing and sanitation	2018
BPG2	Best Practice Guidance	Cloudy apple juice: influence of raw materials, processing and storage	2019

WHAT'S GOING TO BE COMING UP?

Recommendations

- #11 Use of polyphenols in the analysis of fruit and vegetable juices and purées
- #18 methods to detect pulp wash and second extracts of fruit
- #19 Use of NMR to detect adulteration in juices
- #20 Detection of Velcorin

Best Practice Guidance (BPG).

Fruit washing and sanitation. Addition of a chapters on:

- Red fruit washing
- Control of chlorates

- Evaluation of different water sanitation methods

Cloud Juice stability. A new chapter on the use of pectin mash enzymes for cloud stable juice production.

Haze stability in clear juices.

Microbiological methods

- A recommendation on pathogens in juices
- A validation study on the method for total count IFU MM2
- A new method IFU MM 14 on Heat Resistant Moulds.
- The new method on clostridia spores in juices is being developed with the assistance of a research student.

LEGISLATION COMMISSION REPORT

This year, IFU has been celebrating its 70's jubilee. IFU was established in 1949, just one year after the WHO establishment in 1948. IFU has been representing the worldwide juice industry at the international government organisations ever since.

The Legislation Commission (LC) celebrated this special anniversary by rolling out its strategy “core and more” and bringing even more services to the IFU members. IFU LC physically met twice this year, in Mexico on the 27th May and in Antwerp on the 30th September.

During the May meeting, the strategic priorities for 2019-21 were rolled out into the specific projects & deliverables, the September meeting focused on the review of the main external priorities and deciding on the advocacy activities.

FIG 1 STRATEGIC PRIORITIES

IFU LC STRATEGY Q4 2018 – 2021

I/ CONTINUE POSITIVE TRENDS AND PRACTICES (rolled out in 2015):

- 1 Broad monitoring of the regulatory landscape
- 2 Effective prioritisation and execution of regulatory dossiers, as well as topics brought by members
- 3 External communication
- 4 Internal communication
- 5 Regulatory advisory service to members
- 6 Enlarging and further broadening the LC membership

II/ ADDITIONALLY, the IFU LC will focus on (from Q4 2018):

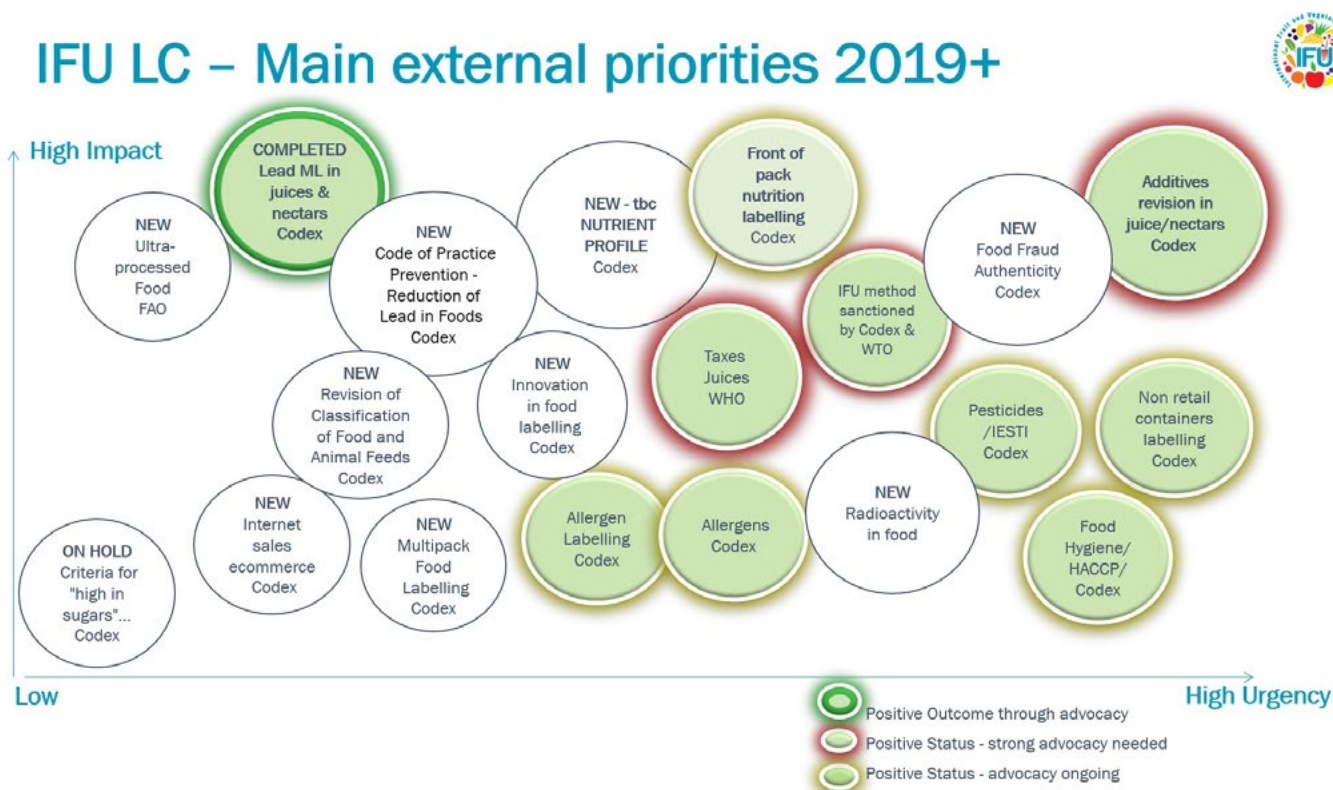
- 7 Proactive building the positive footprint of the Juice Sector, with focus on the Sustainable Development Goals
- 8 Broadening communication channels
- 9 Participating in IFU events and partnering with the STC and MAC on development/execution of capability building courses

CODEX
ALIMENTARIUS



From this review the main external priorities were positioned on the heat map shown in fig 2.

FIG 2



IFU engages with many codex committees, working groups and other international organisations, see fig 3

FIG 3

Broad monitoring of the international regulatory landscape

2015 - 2018

IFU LC broadened its activities at Codex Alimentarius:

✓ **13 Codex Committees**

- Codex Alimentarius Commission
- Codex Committee on Processed Fruits and Vegetables
- Codex Committee on Fresh Fruits and Vegetables
- Codex Committee on Contaminants in Foods
- Codex Committee on Food Additives
- Codex Committee on Food Hygiene
- Codex Committee on Food Import and Export Inspection and Certification Systems
- Codex Committee on Food Labelling
- Codex Committee on General Principles
- Codex Committee on Methods of Analysis and Sampling
- Codex Committee on Nutrition and Foods for Special Dietary Uses
- Codex Committee on Pesticide Residues
- Executive Committee

✓ **21 EWG by Codex**

IFU has started cooperation with **WCO** and monitors **FAO, WHO...**

2019-2021

- Sustain the current Codex and WCO monitoring
- Focus on WHO and WTC
- More frequent regulatory updates by members on national/regional developments relevant for international trade



CODEX
ALIMENTARIUS



A full list of activities “core and more” and the status of the external advocacy per topic can be found in the minutes and presentation of the last Legislation Commission meeting via the IFU website under the “Meetings and commissions” top menu, here is the link



Future codex meetings.

IFU will either attend or monitor future codex committee meetings of relevance as set out in the table in Fig 4

FIG 4

COMMITTEE	DATES	LOCATION	PRIORITY	ACTION
CCFFV (Fresh fruit & veg)	7-11/10/19	Monterrey	Low	Monitor
CCNFSDU (Nutrition)	23-28/11/19	Dusseldorf	High	RVH Attended Report on IFU Website
CCGP (General on principles)	23 - 27/3/20	France	Low	Monitor
CCCF (contaminants in foods)	20/4 - 24/4/20	Utrecht	Medium	Participate
CCFA (Food additives)	2 - 6/3/20	China	High	Participate
CCPR (Pesticide residues)	30/3 - 4/4/20	China	Medium	Participate
CCFICS (Import & export inspection & certification)	27-4 - 1/5/20	Hobart	Medium	Participate
CCFL (Food labelling)	TBC	TBC	Medium	Participate
CAC (Commission)	6 - 11/7/20	Rome	Medium	Participate
CCFH (Hygiene)	4-8/11/20	TBC	Medium	Participate
CCNFSDU	23-27/11/20	TBC	High	Participate



IFU AWARDS 2019

The IFU Hall of Fame for 2019

Significant contribution

Dr. Jürgen Hofsommer

What made IFU globally recognized however was the development of the IFU Methods of Analysis.

Dr. Hofsommer played a vital role in designing and developing the Methods portfolio and its acceptance as the global standard for fruit juice analysis.

In the seventies he completed his food technology and his food chemistry studies at amongst others the technical university of Berlin. After that he assisted Professor Bielig at the famous institute of fruit and vegetable for seven years, before becoming the managing director of GFL also in Berlin.

From 1989 till 2003 he chaired the IFU commission for Methods of analysis with an ability to simplify complex matters, always going for the best result and the way forward, made his chair period a benchmark for later commission chairmen, which his son Mikko is now experiencing.

Innovation

Tetra Pak

Maria Norlin accepted the award on behalf of Tetra Pak and gave the world's first presentation on this technology combining UV and filtration at the IFU Technical Workshop in Athens earlier this year. The IFU Technical Workshop is the place to be to learn about ground breaking technology.

Maria Norlin has worked at Tetra Pak Processing Systems since 2008 across different areas of expertise, such as technical product management within Mixing, Blending, Dosing, as well as product management within Heating. Maria is currently leading a team of food technologists and product managers responsible for developing and managing the Tetra Pak JNSD Processing Portfolio and technology expertise. She has a Master of Science in Chemical Biology, with a focus on Bioprocess Engineering from Linköpings University, Institute of Technology in Sweden. Tetra Pak's technology utilises sterile filtration in conjunction with heat processing for juice, nectar and still drinks which reduces energy consumption by 2/3rds: A sustainable solution for the future.



Commissioner of the year

Dr David Hammond

Dr Hammond is the Vice Chair of the Methods of Analysis Commission with significant contribution towards to method and recommendation development but also representing IFU and the Legislation Commission on a number of Codex committees. He has 30 years-experience in the fruit juice and authenticity area and has been with Eurofins for 12 years, prior to that Cadbury Central research centre for 24 years. He attends a number of other industry committees such as the AIJN Code of Practice Expert Group and UK DEFRA authenticity and methodology working group.

Student excellence

Jack Fehlberg of Michigan State University

Jack's masters thesis project focused on utilising waste generated from the orange juice process (orange peels) to replace petroleum-based polymer materials used in food packaging to enhance it's sustainability. Jack successfully transformed orange peel waste into usable filler for the production of novel food packaging materials. He determined the effects of the orange peels filler's absence/presence of zest, particle size and amounts within a polymer matrix in order to provide industry with the best physical characteristics of orange peel waste for production of the material.

A presentation on the project can be found on the IFU website in Juice conference 2020 presentations under the events top menu.

Nominations for the 2020 Student Excellence award.

We are now seeking nominations for the 2020 award that will go to a student that has completed an outstanding thesis or project of interest and application to the juice industry. If you know of a suitable candidate, then please reply by e mail with the candidates details and brief overview of the project/thesis with some description why you think the student deserves the award. We are looking to receive nominations by the 28th February.

In 2020 the Juice Conference will be held at The Spier Hotel in Stellenbosch, South Africa and IFU will pay for the winner to attend the conference and receive the award, this will be a fantastic opportunity for the winner.



The Juice Processing Summer School will run from the 29/6/2020 to 2/7/2020, powered by the UNIPR. There are 3 days of lectures with 2 sessions per day held at the University of Parma. It includes practical hands on activities with pilot scale processing lines, involving process equipment manufacturers and the opportunity to use laboratory microbiological and chemical test equipment.

Theoretical Sessions

SESSION	TOPIC	CONTENT DESCRIPTION
Raw materials processing	Raw materials processing	Clear & cloudy juice extraction Clear juice clarification
	Citrus extraction	Orange extraction
	Raw materials extraction	Puree extraction
Thermal juice stabilization	Effects on microorganisms, enzymes and nutritional compounds	D, z and F ₀ parameters
		Ea and k parameters
		Inactivation kinetics
	Thermal fluid dynamics overview	Conventional thermal Ohmic heating
	PEF	Technology action mechanism & equipment description + mathematical models for inactivation kinetics (electro resistance)
Filling and Packaging: technologies and materials	Filling technologies	Aseptic
		Ultra clean
		Hot fill
	Packaging materials: features, sustainability and influence on shelf-life	Glass
		Cartons
		Cans
		Pouches
Plastic		
Raw materials extraction and Thermal stabilization	Zenith + UHT MIX pilot-scale line	

SESSION	TOPIC	CONTENT DESCRIPTION
Methods of Analysis and Various Legislations pre-screening (linked to juice processing)	Juice Chemistry	Enzymatic browning Maillard reaction Oxidation Ascorbic Acid Degradation
	Method of Analysis	Reference methods Precision & trueness QA of analysis
	Authenticity	Industry codes (AIJN) Types of adulteration Testing scope Control systems
	Legislation	Pre-screening of allowed additives and processing aids in various legislation (CODEX, FDA, etc)
Nutritional aspects linked to juice processing	Nutritional quality of juices	
	Nutrients preservation in juices processing	

Practical sessions

Lab and Pilot line activity	Chemistry	Method of Analysis
	Thermal processing	Ohmic heating pilot line
Pilot and Industrial lines activity	Non-Thermal processing	PEF
	Non-Thermal processing	HPP
Lab and Pilot line activity	Microbiology	Yeasts and Molds (HRM), ACB (alicyclobacillus), TVC (total viable count)
	Raw materials extraction and Thermal stabilization	Zenith + UHT MIX pilot-scale line

The full programme and booking site can be found on the following link

[CLICK HERE](#)

The cost for members is **€1,099** and non-members **€1,599**, excluding accommodation.

FOOD FRAUD AND INTERPOL/EUROPOL



For almost 10 years now Europol and Interpol have been running a program to reduce the trade in counterfeit goods. This project has gradually grown over the years to involve more and more local Governmental agencies. During the 2018 program some 78 countries and 22 private partners were involved to try and stop the production, transport and sale of counterfeit goods around the world.

The main products targeted in the 2018 project were: -
Alcoholic and non-alcoholic beverages, Organic produce, Milk products & Olive oils.

During the 2018 operation over 67,000 tests were carried out and over 3000 criminal actions and arrests were made. The largest single problem was noted in Italy where over 50,000 tonnes of counterfeit wine was seized with an estimated value of over 170 million Euros. Issues were also identified with counterfeit spirits. Globally this may present a major health issue as some of these products have been prepared using methanol! Consumption of these products has led to severe illness (including blindness) and death (due to liver failure) around the world over the last few years. Fortunately, over the years there have been no health issues with falsified fruit juices.

However, one major topic that they did identify as being an issue, which could have an impact on some products in our sector, were foods labelled as "organic". A major problem was identified with some 90,000 tonnes of commodities labelled as organic. Here the products were either clearly incorrectly labelled as "organic" or did not have the correct traceability to prove that they were prepared under suitable conditions to carry this descriptor. Some investigations have showed that there had been collusion between some registration organisations and the criminal groups to falsify records to give batches of conventional products an "organic" provenance.

This is a major issue as there are no hard and fast chemical methods available to prove the "organic" nature of a product. There are isotopic methods that have been proposed but these don't always give a definitive answer. The topic of methods to check on the "organic" status of a product has recently been reviewed by the IFU MAC in their recommendation # 14, which members can download from our website (www.ifu-fruitjuice.com).

This area shows the critical nature of the traceability of products especially if a special provenance such as "organic" or if a specific country of origin is being claimed on the label (e.g. Florida orange or grapefruit juice, British apple juice). All these claims rely on documentation to substantiate the relevant claim.

NON-THERMAL PULSED ELECTRIC FIELD JUICE PROCESSING

Fresher taste, better colour & longer shelf life with Elea PEF Advantage™ systems



Elea PEF Advantage Pipe system for juice, smoothies and other liquids



Improving juice quality with Elea PEF

Pulsed Electric Field (PEF) application is a non-thermal technique allowing the targeted permeabilization of biological cell membranes. This effect, termed electroporation, results in release of intracellular substances and subsequent cell death.

Using Elea PEF allows shelf life extension of fresh fruit and vegetable juices without compromising product freshness or overall quality. This means that juices and smoothies retain their natural nutritional value, including vitamins, antioxidants and pigments, to produce a healthier, fresher and more appetising final product.

A PEF treatment of a certain energy input results in a 5-log inactivation of relevant microorganisms in orange juice. A prewarming of 45°C has a synergetic effect on PEF efficacy. This enables a shelf life increase from 7 days for untreated juice to up to 21, 40 or even 60 days after PEF.

Comparing PEF with other processes

At present PEF and HPP (high pressure processing) are the most promising alternatives to conventional pasteurization. Making use of the effect of electroporation PEF results in a significantly lower heat load than a heat treatment. The total processing costs including investment and operation are in a range of 0.02 \$/l of product, making PEF a commercially viable alternative to other processing techniques.

PEF allows continuous operation at high processing capacity of up to 10.000 l/h, which in comparison to HPP allows an easier integration into existing processing lines. As PEF is applied pre-bottling it is suitable for all kind of packaging materials including pouches, PET or glass bottles with low personnel and maintenance requirements.

Elea Technology

With over 125 installed systems, we're the world's leading provider of Pulsed Electric Field systems (PEF) to the food, beverage & scientific sectors. www.elea-technology.com

SUGARY DRINKS WORLD REVIEW

Countries that implement sugar tax

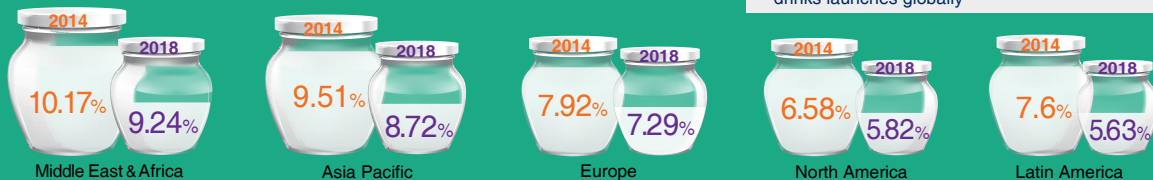
The growing awareness as part of global health trend of the bad effects of sugar in the food industry and in beverages in particular, brings not only consumers to prefer *NLR sugar drinks. But also brings the legislator to enact with related legislation.

* No / Low / Reduced

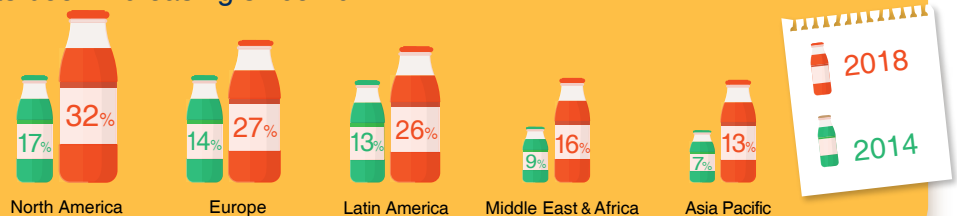


Average sugar content in sugary drinks is falling globally

In countries where sugar tax has been implemented like in Mexico, it led to a **5.5%** decline in the 1st year and **9.7%** in the 2nd year in sugar beverage consumption after the tax was implemented. We can see a decrease in average sugar content of sugary drinks launches globally



Low / No / Reduced sugar claims are most commonly used with juice drinks. In addition, the use of such claims on new product launches has been increasing since 2014.



*All data reference -
"Mintel sugar taxes and the soft drinks industry report 2019"

Prodalim Group

Juice Specialists

Visit us at - www.prodalim.com*



A WORLD REVIEW OF SUGAR TAXES ON DRINKS INFO GRAPHIC

BY PRODALIM

We can see a growing awareness as for the amount of sugar content in beverages. More and more consumers prefer Low/No/Reduce sugar drinks.

This infographic provided by Prodalim give a clear short overview on this topic.

About Prodalim

In Prodalim new design website you will be able to find a map that show the different fruits they processed, their origins and crop dates

<https://prodalim.com/products/>

in you will be able to find also more information about the company and industry all in a easy to use interface

IDENTIFICATION OF EQUIVALENT PROCESSING CONDITIONS FOR PASTEURIZATION OF STRAWBERRY JUICE BY HIGH PRESSURE, ULTRASOUND, AND PULSED ELECTRIC FIELDS PROCESSING

A summary written by Massimiliano Pelacci from the University of Parma

Semanur Yildiz, Prashant Raj Pokhrel, Sevcin Unluturk, Gustavo V. Barbosa-Canovas

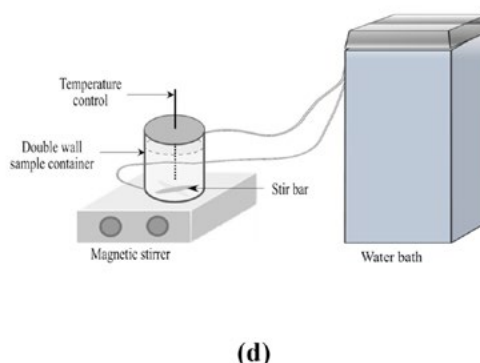
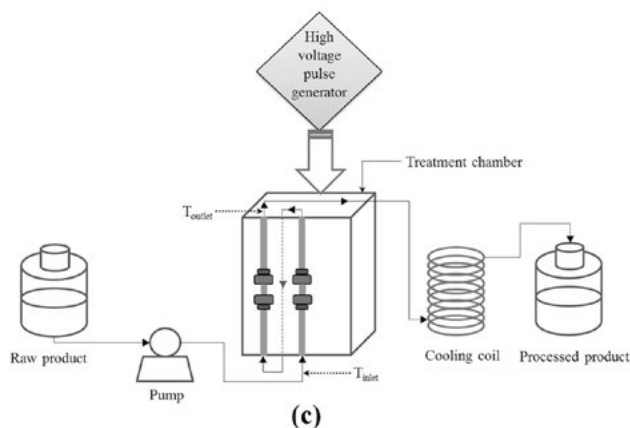
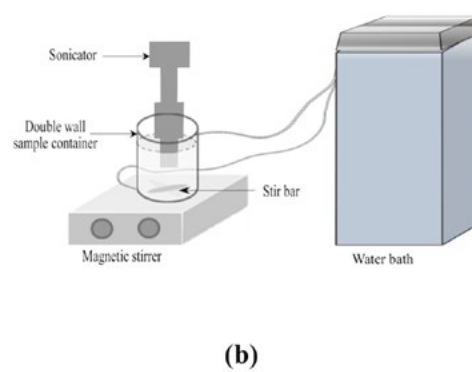
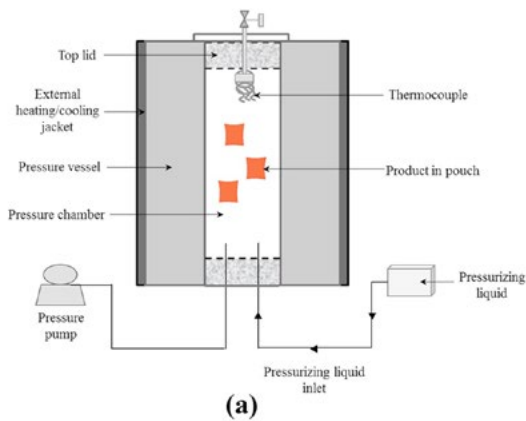
Innovative Food Science and Emerging Technologies 57 (2019) 102195

The objective of this study is to evaluate the effectiveness of high-pressure processing (HPP), ultrasound (US) and pulsed electric fields (PEF) for the pasteurization of strawberry juice (SJ). Acid-adapted *Escherichia coli* was used to inoculate SJ prior to treatment with HPP, US, and PEF.

HPP was applied at several pressures (200–400 MPa) up to 2 min while US (120 μm , 24 kHz) was conducted at 25, 40, and 55 $^{\circ}\text{C}$ up to 10 min in continuous pulsing mode.

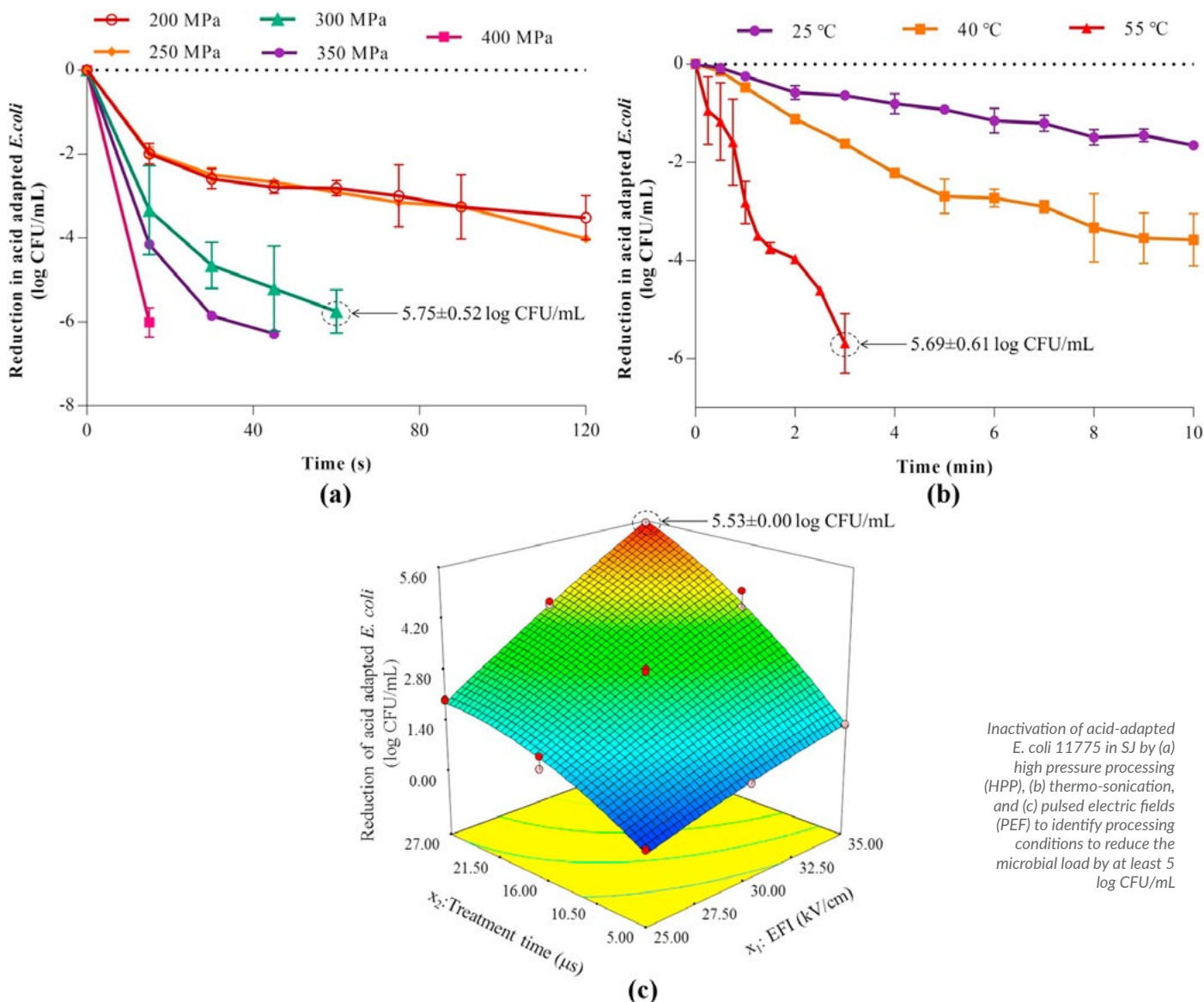
In order to avoid excessive use of SJ, PEF was performed using a model solution (MS) basically composed of citric acid (8 g/L), fructose (35 g/L), glucose (35 g/L), Na_2HPO_4 (0.2 M) and NaCl (5%) to simulate the SJ electrical conductivity, pH, and total soluble solid (TSS). A face-centered composite design was conducted for PEF processing at different electric field intensities (EFI) (25–35 kV/cm) and treatment times (5–27 μs).

Pasteurization tests of the SJ were also conducted with a laboratory-scale unit for conventional thermal treatment.



Schematics of the following systems: a) high pressure processing (HPP), b) ultrasound (US), c) pulsed electric fields (PEF), d) thermal processing.

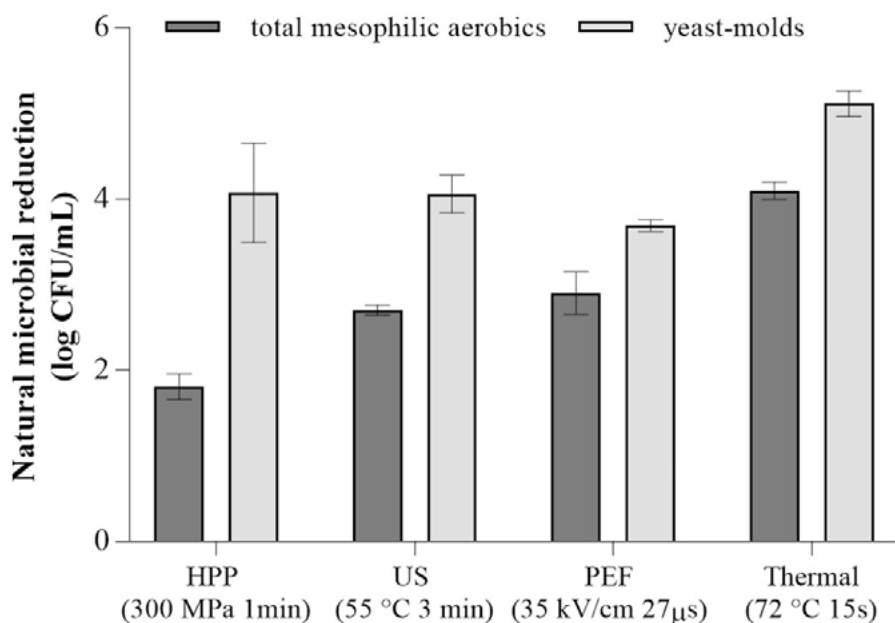
Processing conditions were selected that resulted in 5-log CFU/mL inactivation of *E. coli*. HPP at 300 MPa for 1 min, and US at 55 °C (thermo-sonication) for 3 min reduced *E. coli* in SJ by 5.75 ± 0.52 and 5.69 ± 0.61 log CFU/mL, respectively. PEF treatment at 35 kV/cm, 27 μ s treatment time, 350 mL/min flow rate, and 2 μ s pulse width in monopolar mode resulted in 5.53 ± 0.00 log reduction of *E. coli* in MS. Likewise, *E. coli* population in SJ was also reduced by 5.16 ± 0.15 log after applying the same PEF conditions to SJ. No *E. coli* was detected in SJ subjected to conventional thermal pasteurization at 72 °C for 15 s.



All technologies reduced the natural microbiota below 2 log CFU/mL in terms of the total aerobic bacteria and yeast-mold counts.

Thus, this study identified the equivalent conditions for the SJ pasteurization by three nonthermal processing technologies.

Strawberry juice natural microbiota after treatments with selected equivalent processes using high pressure processing (HPP), thermo-sonication (US), pulsed electric fields (PEF), and heat.



Industrial relevance:

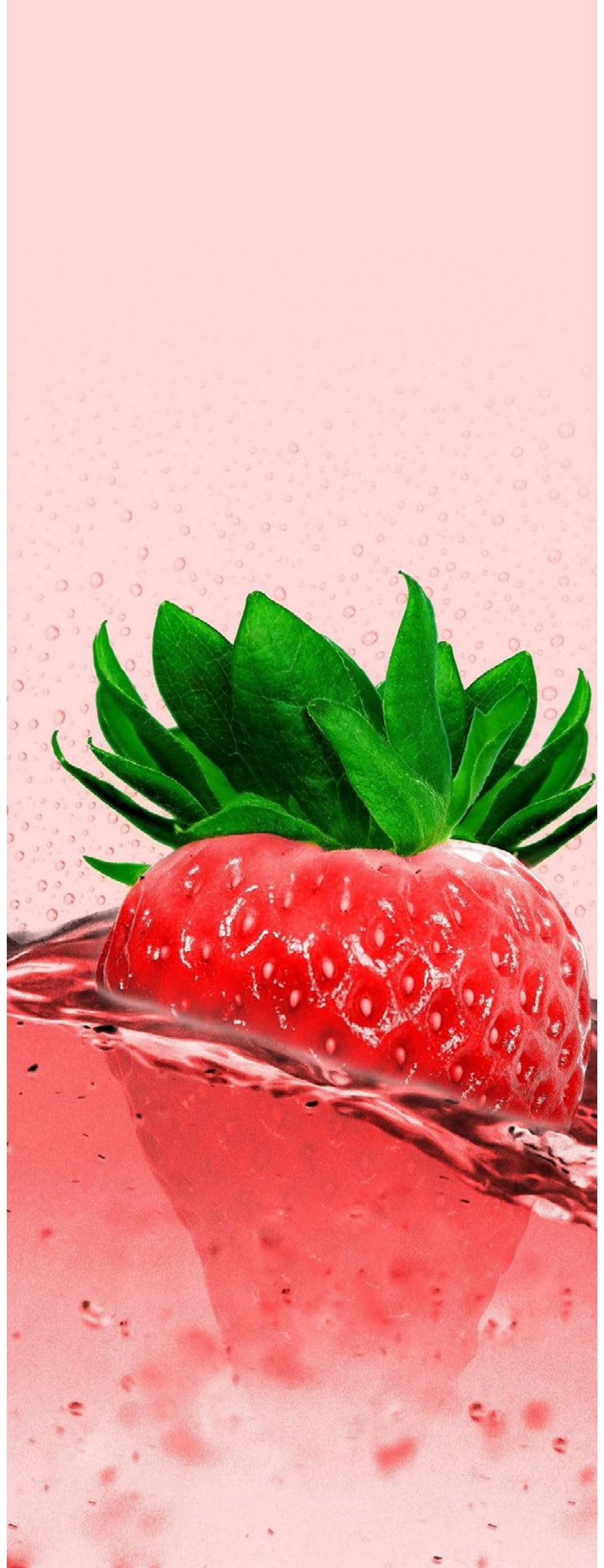
Consumers have an increasing interest towards fresh-like food products with desirable nutritional and sensorial attributes. High pressure, ultrasound and pulsed electric field are three relevant novel nonthermal technologies as alternatives to conventional thermal treatments. This study identified the processing conditions of these three nonthermal technologies for the pasteurization of strawberry juice based on equivalent inactivation of acid-adapted *E. coli*. From an industrial point of view, the established processing conditions are useful references for the development of novel berry juices. In addition to microbiological safety, this study on equivalent processing allows direct efficacy and quality comparisons of a given juice pasteurized by the three nonthermal technologies under consideration.

Scientific relevance:

- The identified processing conditions can be used for pasteurization of strawberry juice since at least 5 log CFU/mL reduction was achieved for the acid-adapted *E. coli*.
- Microbiological quality of strawberry juice was improved under the identified equivalent conditions due to the reduction of the natural microbiota (total mesophilic aerobic and yeast-mold counts) below 2 log CFU/mL regardless of treatment type. It can be strongly suggested that the natural microbiota should also be taken into consideration while establishing the pasteurization conditions due to their high survival characteristics in the fruit juices.
- The use of a model system simulating strawberry juice was very successful for the selection of proper PEF conditions since it prevented wasting both time and large amount of juice.

A link to the original paper can be found on the IFU website

[CLICK HERE](#)



1. Fully Collapsible (2 Pieces)
 - For ease of storage
2. Steel Lid for Tie Raps
3. 4-Way Entry
 - Easy loading & unloading
4. Locking Latch
5. Drop Door
 - For easy access
6. Container Number
 - 2D
 - Barcode
 - RF Ready
7. Bottom Filling / Discharge Cavity & Flap for Tie Raps



*Welcoming MB6
Bottom Discharge (BD)
to our fleet of
Goodpack containers!*

MB6

FOOD & LIQUID CONTAINER

The new generation MB6 has innovative design features that promote sustainable cost advantages, efficiency improvements and waste reduction. The Smarter way to make fruit and beverage flow.

The MB6 (BD) is specially designed for our food and liquid vertical customers which require to fill up / discharge liquid products through bottom drain.

FEATURES & BENEFITS

Standard Features

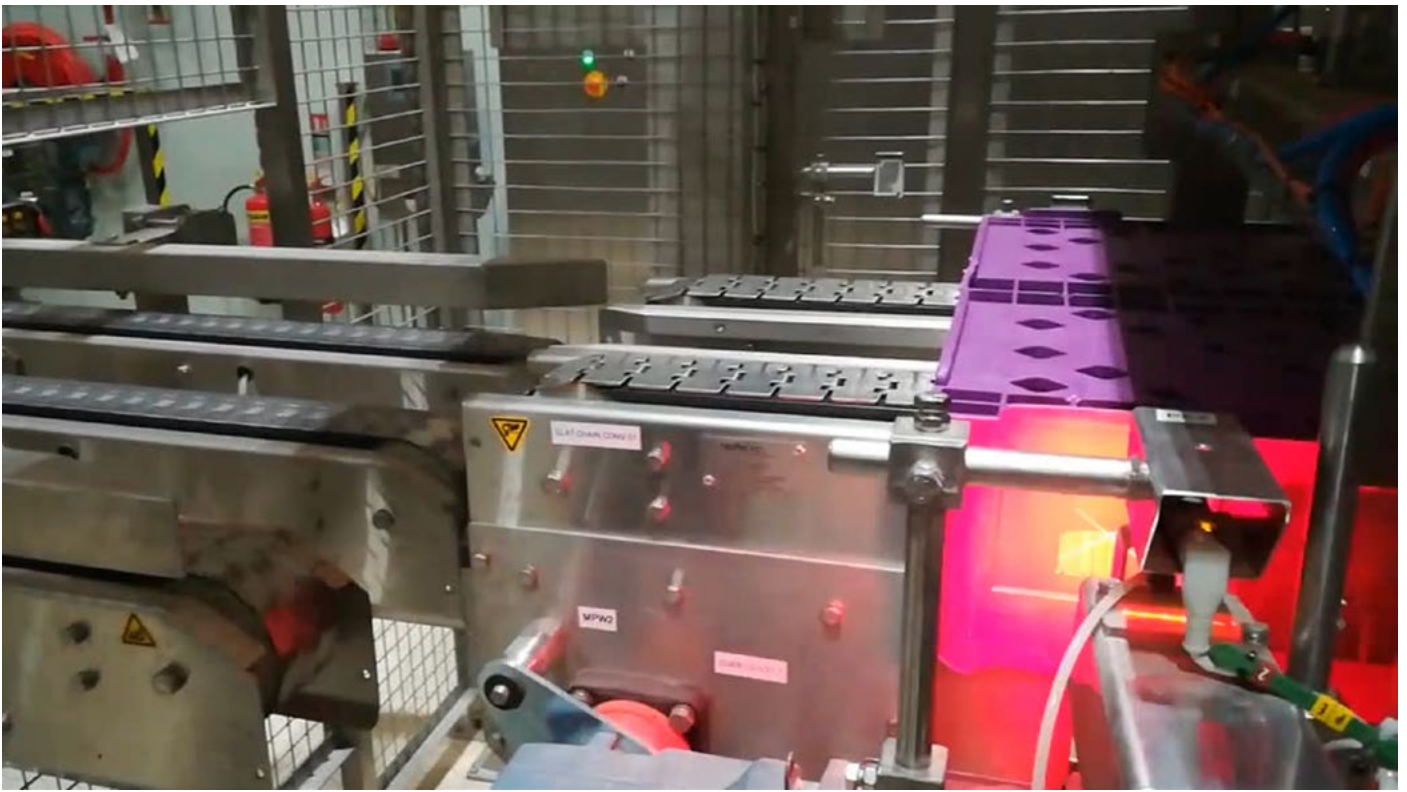
- Fully Knock Down
- Four Way Forklift Entry
- Container ID: 2D / 1D / RF Tag
- SKU Marking
- Lashing Loop
- Laden Stacking – 5 High
- Finishing – Hot Dipped Galvanised

Target Market

- Food and Liquid

What is New?

- Comes with a Steel Lid
- Locking Latch – Bolt System
- Drop Door
- Bottom Filling / Discharge Cavity for Aseptic and Non Aseptic Liner Bags
- Runners on All Sides
- All Sidewalls are Removable
- 16 Units fits into a Standard 20' Reefer Containers



3 SIGNS DAMAGED PALLET ARE KILLING YOUR PRODUCTION

Your production and shipping problems feel like a part of the routine. Damaged Products, fallen pallets, production stoppages... All seem to be small fires that you have to extinguish on a daily basis. But if you take a closer look, you start to see a pattern. Put all these problems side by side, and you might find out that they all come from the same cause.

But how can you diagnose this cause?

If the following 3 signs look familiar, you might have a damaged pallet problem!

Frequent downtime on your pallet line

This one seems obvious! If my pallet line keeps stopping, something must be wrong with the pallets. But most maintenance technicians tend to overlook the pallets themselves.

Your pallets are getting stuck between the conveyor guides. So you readjust the guides. Until you find yourself readjusting them at an alarming rate. This is a sign of bad dimensional tolerances between your pallets.

Pallets keep falling over on your conveyor line! The maintenance team goes through the usual checklist. They adjust the conveyor speeds; they check the integrity of the pallet load. They even make sure the palletizer is loading with the correct tolerances.

Yet none of these measures are solving the problem. It is time to check for broken runners, legs or top planks, or even protruding nails.

Bad stability during transport

Production is going smoothly with no stoppages to speak of, but pallets are falling during transport.

Your logistics team is doing their best to handle the pallets with care, but they keep falling. Their reports mention many broken top planks in these fallen pallets. How did your production go so well while using broken pallets?

Because the pallets were not broken... yet! A weak pallet is not detected with a simple eye inspection. These pallets go unnoticed during production. Once you place a load on these pallets, they will break under the pressure, **literally**.

Damaged goods

Your products reached the market without problems. But your distributors are filing complaints! Your products have signs of damage: tears in the packaging, holes in boxes, and leaks from bottles.

These incidents are too frequent to ignore. Protruding nails and broken splinters are the usual suspects, but not the only ones.

Pallets do not need to break to cause damage! the pallet top planks can flex or the whole pallet can lean. This can apply unwanted pressure from the neighboring pallets or the truck walls.

How to manually inspect your pallets

These problems can be avoided by inspecting your pallets before use and discarding the damaged pallets.

Follow these steps to ensure a thorough inspection:

1. Inspect the top surface of the pallet for debris.
2. Inspect the integrity of the pallet (no broken runners, legs, top planks)
3. Scan for protruding nails and flatten them.
4. Measure the dimensions of the pallet and ensure dimensional tolerances are acceptable.
5. Test the load carrying capacity of the pallet

While these steps seem resource intensive and prone to human error, they are essential to the efficient operation of your production

Need an automatic solution?

If you want to inspect your pallets, without wasting valuable resources and risking human error, Technica can do it for you.

We combined simple mechanical devices with advanced vision cameras and laser scanners to guarantee accurate results.

Some of our customers have reached a payback period as low as one year. Our solution has saved their high volume production a ton of operational costs.

If you are interested in a detailed specifications sheet or want to receive a quote, make sure to send your inquiry to technica@technicaintl.com or visit our website at Technicaintl.com

technicaTM



One of the major elements which impacts the good operation of an automated plant is the quality of its pallets.

Defective pallets present several problems:

- Stop the line due to fallen product or due to jamming of the conveyors.
- Represent safety hazards during transport and storage.
- Generate waste and quality defects.
- Decrease the OEE of the plant.

So it is becoming imperative to inspect the quality of the pallets before using them on the lines.

The pallets used in factories are either wooden pallets or plastic.

Technica designed a pallet inspection system to inspect both types for the major and common defects against preset quality criteria:

- Clean pallet top surface.
- Structurally solid bottom runners, legs and top planks.
- Removal of protruding nails.
- Dimensional tolerances.
- Load carrying capacity.

Guaranteed results are achieved by using a combination of cameras and laser scanners to check dimensions, and broken parts, and mechanical devices to clean the pallet, remove protruding nails and test the load carrying capacity.

The system can be installed in line for a specific line, or offline, to receive, inspect and sort the pallets of the whole factor.

Rejected pallets are sorted out, stacked and sent out for scrap or maintenance.

Cost-saving calculations have shown a payback period as low as one year, depending on the volumes produced and the quality of the used pallets.

MARKET TRENDS:

THE 'ZERO RESIDUE' CONCEPT & CLEAN EATING, A MILLENNIAL THING



About three years ago, the concept of “Clean Eating” began to multiply on all kinds of websites, blogs and was quickly embraced by food gurus who have been responsible for chiselling their principles and guidelines. You may not have heard of this trend yet, but it’s already reshaping the agri-food and retail landscape as we continue shopping and filling our fridge.



Finding the origins of this trend doesn't seem easy, searching the internet is the first relevant author who opened a food and fitness website in 2015 and dedicates all her work to this concept of "healthy life" or "clean life", her name is Tosca Reno and is one of the most successful personal brands in the US but there are many more, we all know how to become a guru on the internet is a combination of talent, insight and good luck. Even on the National Geographic website they already dedicate an entry to the concept and its main features <http://bit.ly/2oFJrKX>

The concept of "Clean Eating" is gradually being defined as a philosophy that groups the binomial 'Lifestyle' + 'Purchase Decision', it started being a concept that encouraged consumers to consume unprocessed food, to buy fresh quality products and prepare them at home to remove excess fat, sugar, starches, preservatives, etc., its evolution has been expanding and based on a combination of principles of nutrition and environmentalism. The "Clean Eaters" no longer only eat fresh and healthy, but are avid readers and interpreters of food labels, their environmental statements and nutritional attributes.

Basically a "Clean Eater" has two concerns, health and environment. It is a consumer who wants products that guarantee on one hand that they will not harm their health and on the other that they will be accountable for the environment and society. To buy fresh products, they prefer organic products, products "free from pesticide residues", local products, those with quality labels like designation of origin and in general, products that have some type of environmental declaration. To buy processed products they look for labels that have abundant and clear nutritional information, often functional or nutraceutical

products, with certificates of authenticity, no added sugar, low / no trans-fat, low salt, no preservatives, handmade, obviously also organic and with quality labels and in general with attributes such as 'Fair Trade', proximity products, 'Friends of the Sea', 'Rain Forest Alliance', etc. This type of consumer interacts with producers and manufacturers on social networks and informs about their environmental and CSR policies, appreciates producers and manufacturers who communicate their initiatives to protect the environment, improve workers' standards or local communities. It is a consumer who can stop buying any product that contradicts its principles or disappoints them.

The "Clean Eating" philosophy is creating conditions for diverse networks of consumers to process a greater amount of information and feedback each other. No doubt this trend will have a deep consequence in the sector, since communication between producer and consumer will reach levels never seen before. Consumers of "Clean Eating" like to use mobile apps, answer surveys, use social networks, like to express their preferences and feel considered. They are aware that their purchase decision can strongly influence the policy of a company, the success or failure of a product in the market and they want to find shelves with products optimal for their health and with controlled and measured environmental & social impacts. It is an umbrella trend that is grouping and ordering many concepts that until now had been loose and a bit ungoverned but that now thanks to their synergies they will begin to share category. ZERYA is engaged with many suppliers of fresh and transformed food products exploring this category with the "Free from pesticide residues" certification. More info on www.zerya.org

FRUIT JUICE FOCUS MAGAZINE REACHES 35 000 READERS!

In the three years since Fruit Juice Focus has been published it has been read by over 35 000 individual people – all involved with our juice industry! So, thanks to all of our readers and advertisers from around the globe and particularly to the IFU for their support. From the beginning, we've endeavoured to let everyone know what's happening in our business – trade data, association events, crop reports, industry news, with features on production, processing and packaging to new science and innovation – and we will continue to do so.

The publication is solely funded by advertising, so if you like this magazine then please reserve some space for your company in 2019. The media pack is available at www.fruitjuicefocus.com/advertising/

The magazine reaches 3000+ 'juice' readers every issue in more than 150 countries.

Keep on reading, stay in touch and here's to a prosperous 2020 for everyone.

Stef, Caroline, Kate and David

JUICE MARKET MAGAZINE IS 15 YEARS OLD

In February 2020 Juice Market will celebrate its 15th birthday. It has been a long journey, but thanks to both our contributors and subscribers we have been able to supply the market with up-to-date and impartial information on the trade of bulk fruit juices – and will continue to do so!

If you'd like a sample copy of the magazine please let me know – Happy Christmas and New Year!

Stef Worsley

www.juicemarket.info



GOGLIO ASEPTIC BAGS: PACKAGING GETS SMART



Founded in 1850, Goglio is today a leading innovator focusing on sustainable and customized flexible packaging solutions for liquid and dry applications in the beverage, food and non-food markets.

With core competencies in high-acid and low-acid aseptic, the company produces a whole range of bag in box and pouches in sizes up to 1500 l with fitments and spouts, suitable for aseptically processed liquid and pumpable products which are today the state of the art of the industry. As a system supplier, Goglio also manufactures high-performance flexible packaging systems, covering a wide range of processing environments, providing customers with seamless integration as well as comprehensive service and support.

Goglio is very aware of the necessity for food companies worldwide to implement technologies to assure that their process and products are fully traceable, efficiently sharing data comprising production, process and distribution, to guarantee effective food chain control and consumer safety.

Digital transformation is a great innovation drive to support the exchange of information, and is adopted in all industrial processes: to this purpose Goglio has introduced the progressive QR coding of its bulk aseptic packaging range (220l/55gal bags and over).

Thanks to progressive QR Coding, each single pack, and its content, acquires a dedicated identity. All data associated to it are reliable, short and unique, and therefore very valuable. They can tell the product life, from the field to the table, going through production, processing and distribution. At the same time they guarantee that the product is genuine and fully traceable, to the benefit of the production chain and of the consumer.

Goglio progressive QR coding enables storage and access to real-time edited metadata: a new tool for all food companies wishing to adopt measures to keep a track on their product, it's packaging and storage also with blockchain approach.

Goglio QR code is digitally printed on the bag neckband bag: this technology does not imply the use of plates or dies, and does not require special set-ups, enabling to print bags which are always different from one another in text, design, color, graphic style or unique coding, also for anti-counterfeiting applications.

Goglio Aseptic Bag with progressive QR code: the smart choice for leading specialty brands worldwide.

Learn more at www.goglio.it.

[LEARN MORE HERE](#)

EVALUATION OF THE SOLERIS® YEAST AND MOULD DETECTION SYSTEM COMPARED WITH ISO METHOD 21527-1 AND TO BAM 18 IN FRUIT JUICE MATRICES.

Fungal contamination of food is a major problem, particularly in terms of fruit juice spoilage. The Soleris system from Neogen® has been validated and certified according to AOAC PTM in 2013 (Mozola et al.: Journal of AOAC International Vol. 96, No. 2, 2013) with an extension in 2015 (Alles et al.: Journal of AOAC International Vol. 98, No. 5, 2015).

More recently a validation according to ISO 16140-2 protocol has been conducted by Heriot Watt University in 2016 (Yiping Chen et al.: New Food Magazine, 2017). In these studies, the automated Soleris system was evaluated for its ability to detect yeast and moulds on various food matrices including fruit juice matrices.

It detects carbon dioxide which is produced by fungal microbes growing in the Soleris system's Direct Yeast and Mould selective media provided in the sample vial (DYM-109C), by measuring colour changes in an agar plug at the base of the vial. The vial is supplemented with

Chlortetracycline (YI-110C), to prevent bacterial growth. Only gases, such as carbon dioxide, can connect with the agar through a gas-permeable (and liquid impermeable) membrane at the base of the vial (Alles et al, 2009).

The Soleris detection system's vials (DYM-109C) and anti-bacterial supplement (YI-110C) which had been incubated for 48h were compared to the corresponding standards, BAM 18 and ISO 21527-1 using DRBC agar plates (Acumedia 7591A) with results in 5 days.

1 mL of the diluted sample was tested in the Soleris vial and 0.1mL was spread on the surface of the DRBC agar plates.

The objective of the Relative Limit Of Detection (RLOD) in the ISO 16140-2 study and the Probability of Detection (POD) in the AOAC study is to determine the level of contamination for which less than 50% of the samples are positive (between 50% and 75%).

The Soleris system was more sensitive than the ISO standard method with a RLOD<1 and passed all the POD tests at the 3 threshold levels which showed that Soleris can detect 1 CFU/mL in 48h.

The inclusivity and exclusivity studies were conducted by Heriot Watt University and Neogen. 100% of the 25 target yeasts and moulds gave expected results and 100% of the non-target samples were not detected. (see the following tables)

INCLUSIVITY	ATCC
Candida albicans	10231
Candida albicans	24433
Candida krusei	14243
Galactomyces candidus	34614
Rhodotorula mucilaginosa	66034
Saccharomyces cerevisiae	9763
Zygosaccharomyces bisporus	34890
Kloeckera apiculata var. apis	32857
Candida tropicalis	750
Saccharomyces cerevisiae	38555
Candida kefyr	8553
Saccharomyces cerevisiae	MYA-658
Candida tropicalis	10610
Aspergillus brasiliensis	16404
Aspergillus oryzae	10124
Penicillium venetum	16025
Bysochlamus fulva	24474
Penicillium roqueforti	10110
Penicillium citrinum	34375
Cladosporium cladosporioides	16022
Mold A	-
Penicillium variabile	32333
Aspergillus terreus	1012
Aspergillus tamarii	26950
Pencillium chrysogenum	10106

EXCLUSIVITY	ATCC
Bacillus cereus	11778
Bacillus subtilis	6633
Citrobacter freundii	43864
Escherichia coli	8739
Escherichia coli	2103
Escherichia coli	35218
Cronobacter sakazakii	12868
Enterobacter aerogenes	2046
Enterobacter cloacae	23355
Enterococcus faecalis	19433
Klebsiella pneumoniae	13883
Klebsiella oxytoca	2170
Listeria grayi	25400
Proteus mirabilis	25933
Proteus vulgaris	13315
Pseudomonas aeruginosa	27853
Pseudomonas putida	49128
Salmonella enteritidis	13076
Salmonella heidelberg	8326
Staphylococcus aureus	6538
Staphylococcus epidermidis	12228
Staphylococcus haemolyticus	2034
Yersinia enterocolitica	9610
Halfnia alvei	13337
Serratia marcescens	8100

In addition Heriot Watt University tested 103 to 104 cfu of *P. aeruginosa*, *P. fermentens*, *K. pneumoniae*, *E. coli*, *E. faecalis* and *L. brevis* with no detection using Soleris



AZERBAIJAN'S POMEGRANATE-BREEDING TRADITION AND EXPORT POTENTIAL



One of the plants that have a fertile condition for cultivation in the Republic of Azerbaijan is Pomegranate. The country has a great history of pomegranate breeding. The term “home without a pomegranate attracts a doctor,” refers to the attitude of the people living in this geography to pomegranates since ancient times.

Pomegranates are grown in almost every region of Azerbaijan. However, pomegranate farms are predominantly located in Goychay, Kurdamir, Hajigabul, Sabirabad and Salyan districts. The main reason why Goychay pomegranate remains in excellent taste and unchanged quality is that the district has a unique microclimate and soil composition.

Azerbaijan ranks first in the world in terms of pomegranate varieties and the number of pomegranate species. Pomegranate species differ from each other by both their morphological-biological features, the quality of fruits and the ripening times. Pomegranate sorts grown in Azerbaijan such as Red and Pink Guloysha, Girmizi gabig, Nazik gabig, Shah nar, Girmizi valas, Kayum and etc. are also appreciated in local and foreign markets. These species are also distinguished from the products of other countries due to their cultivation in a cleaner environment from ecological perspective and its non-use of organic fertilizers.

Azerbaijan pomegranate is one of the most promising agricultural products that have export potential. Pomegranates grown in the country are exported to more than 30 countries including Russia, Belarus, Canada, New Zealand, Georgia, UAE, South Korea. Currently, Azerbaijan pomegranate is also presented in the matter of processing in the world markets. Juice, sauce and concentrate products are obtained as a result of processing of pomegranate, the most popular one among these products is the Narsharab sauce. Narsharab is widely used in fish and kebab dishes.



As a result of the support provided by APS, dozens of farmers have been able to export their products to foreign countries so far.

Pomegranate juice is used both as a drink and as a medicine. It increases appetite, regulates the activity of the stomach, prevents atherosclerosis and prostate cancer. Pomegranate juice has an analgesic effect. Drinking a glass of fresh pomegranate juice every day has a good effect on the heart and veins.

Today, the development of pomegranate farms in Azerbaijan is supported by various projects implemented by the Ministry of Agriculture, Pomegranate Producers and Exporters Association of Azerbaijan and other public and private entities. "Agro Procurement and Supply" OJSC under the Ministry of Agriculture of the Republic of Azerbaijan constantly supports farmers engaged in pomegranate-breeding farm. As a result of the support provided by APS, dozens of farmers have been able to export their products to foreign countries so far.

One of the biggest events in the field of pomegranate breeding in Azerbaijan is the "Pomegranate Festival" arranged in Goychay. Since 2006, the festival, which is held every year, features various types of pomegranates and the products made from them. Every year, ten thousands of people attend the events organized within the festival.

Azerbaijani pomegranate breeding traditions are always of interest to foreign tourists and visitors. Large plantations were built with the help of yearlings brought from Goychay in the 20s of the twentieth century in California, USA. In 2017, Maria Angela Olgin, the Minister of Foreign Affairs of the Republic of Colombia visited the pomegranate farms during her visit to Azerbaijan. She also visited Kurdamir region to study the experience of Azerbaijan in order to create such farms in her country.



In addition, in 2019, Agro-eco tour to Pomegranate farm located in Hajiqabul district was arranged within the “From City to Village” project implemented by “Agro Procurement and Supply” OJSC with the support of the United Nations Development Program, and The Ministry of Agriculture of the Republic of Azerbaijan. Executives of diplomatic missions accredited to Azerbaijan, representatives of international organizations, relevant government agencies and other sides attended the tour.

Projects related to pomegranate breeding implemented by state bodies and private organizations in Azerbaijan are being executed for the purpose: to preserve, develop and popularize the Azerbaijani pomegranate breeding tradition. The country has a policy of informing pomegranate enterprises and entrepreneurs, increasing their access to foreign markets, as well as supporting them in the international requirements and standards in the production and export of pomegranate products.

BEST OF JUICY 5 POSTS FROM THE MEYED JUICEFUL SUMMIT AND SGF/IFU ROADSHOW



Şeyma Elibol
QSE Specialist

Coca-Cola Mersubat Paz. Dan. Ve Tic A.S.



Aysenur Akkaya
Assistant Export Sales Specialist

TUNAY GIDA Fruit Processing Industry

Congratulations
TO YOU BOTH

SAVE THE DATE

We can offer free tickets for IFU members for all listed fairs (except Sial in Paris and Anuga fair in Cologne) – send an email with the names of the visitors to [Maria](#) and she will make sure you`ll get your ticket!

2020

Date	Event	Location	Link
9 th – 11 th March	Anufood Brazil	Brazil – Sao Paulo	Link
15 th – 19 th March	14 th World Processing Tomato Congress and 16 th ISHS Symposium on the Processing Tomato	Argentina – San Juan City	Link
17 th March	IFU Commission meetings Science & Technology Methods of Analysis Micro Working Group Executive Committee (tbc)	Klosterneuburg, HBLA wine farming school (a bus will depart and return from/to Parkhotel Schönbrunn	Link
18 th – 19 th March	IFU Technical workshop	Vienna, Parkhotel Schönbrunn and Don Bosco House	hLink
19 th March, afternoon	IFU Technical Tour	Esarom and Klosterneuburg	Link
15 th – 17 th April	Wine & Gourmet Japan	Japan - Tokyo	Link
15 th – 17 th April	Anufood China	China – Shenzhen	Link
22 nd – 25 th April	JPA Annual Meeting	USA – Nashville, Tennessee	Link
19 th – 20 th May	IFU Juice Conference	South Africa – Stellenbosch (near Cape Town)	Link
26 th – 28 th May	AnugaTec Brazil	Brazil - Curitiba	Link

Date	Event	Location	Link
26th – 27th May	VdF Jahrestagung	Germany - Baden-Baden	
26 th – 30 th May	Thaifex World of Food Asia	Thailand - Bangkok	Link
9 th – 12 th June	Alimentec	Colombia -Bogotá	Link
8 th July (tbc)	IFU SGF Roadshow	Australia	Link
10 th July (tbc)	IFU SGF Roadshow	New Zealand	Link
16 th – 18 th July	Guangzhou International Fruit Expo	China - Guangzhou	Link
August/September	IFU SGF Roadshow	Vietnam, Philippines and Indonesia	Link
15 th -18 th September	ICBC	Clearwater, Florida	Link
23 rd – 25 th September	Annapoorna – Anufood India and AnuTec India	India - Mumbai	Link
12 th October	IFU Executive Committee	Belgium - Antwerp	
13 th October	IFU Commission meetings & IFU General Assembly	Belgium - Antwerp	
14 th – 15 th October	IFU AIJN SGF Juice Summit	Belgium - Antwerp, Hilton Hotel	Link
18 th – 22 nd October	Sial	France - Paris	Link
19 th – 22 nd November	Andina Pack	Colombia - Bogota	Link

2021

Date	Event	Location	Link
22 nd March	IFU Technical Workshop	Germany – Cologne	
23 rd March	IFU Commission meetings	Germany – Cologne	
23 rd – 26 th March	Anuga FoodTec	Germany – Cologne	Link
26 th – 28 th March	Pro Food Tech	USA - Chicago	Link
6 th – 7 th October (tbc)	IFU AIJN SGF Juice Summit		
9 th – 13 th October	Anuga	Germany – Cologne	Link