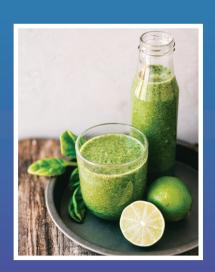


## JUICE PROCESSING SUMMER SCHOOL

Parma, 23/06/2025 – 26/06/2025















SCHOOL OF ADVANCED
STUDIES ON
FOOD AND NUTRITION

# PROGRAM IFU University Juice Processing Summer School

| DAY                   | SESSION              |   | TOPICS  | CONTENTS DESCRIPTION   | LECTURERS                               |  |
|-----------------------|----------------------|---|---|--|---|--|
| MON 23                | Evening              | Registration & Welcome cocktail evening. A chance to network with students & lecturers  |   |  |   |  |
| WED 25 JUN TUE 24 JUN | Morning<br>Session 1 | Raw materials processing  | Raw materials processing  | Clear & cloudy juice extraction & clarification  | Edgar Zimmer (Bucher<br>Unipektin)      |  |
|                       |                      |   | Citrus extraction   | Orange extraction processes  | Antonio Aldini (JBTC)                   |  |
|                       |                      |   | Raw materials extraction  | Pomaceous, stone fruits, berries and tropical fruits puree extraction  | Mario Gozzi (CFT)                       |  |
|                       | Morning<br>Session 2 | Thermal juice<br>stabilization  | Effects on microorganisms, enzymes and nutritional compounds                    | D, z and F <sub>0</sub> parameters (to be applied to juices)   | Antonio Aldini (JBT)                    |  |
|                       |                      |   |   | Ea and k parameters  |   |  |
|                       |                      |   |   | Inactivation kinetics  |   |  |
|                       |                      |   | Thermal fluid dynamics overview   | Conventional thermal   | Matteo Malavasi (SSICA)                 |  |
|                       |                      |   |   | Ohmic heating  |   |  |
|                       | Lunch                | Buffet Lunch on campus & networking with students and lecturers   |   |  |   |  |
|                       | Afternoon            | Subdivision into 3 groups (GROUP A, B and C) who will go to the various labs and companies in rotation.   |   |  |   |  |
|                       |                      | Lab and Pilot<br>line activity  | Chemistry   | Method of Analysis   | Emanuela Cocconi (SSICA)                |  |
|                       |                      |   | Thermal stabilization   | UH-MIX pilot-scale line  | Daniele Biancheri (CFT)                 |  |
|                       |                      | Pilot and<br>Industrial lines<br>activity   | Packing   | Aseptic packing  | (Parmalat)                              |  |
|                       |                      |   | Non-thermal processing  | НРР  | Chiara Cavazzini (HPP Italia)           |  |
|                       |                      | Lab and Pilot<br>line activity  | Microbiology  | Yeasts and Molds (HRM). ACB (alicyclobacillus) TVC (total viable count)  | Jasmine Hadj Saadoun<br>(UNIPR)         |  |
|                       |                      |   | Thermal stabilization   | Ohmic heating pilot line   | Antonio Aldini (JBTC)                   |  |
|                       | Morning<br>Session 1 | Non-<br>thermal juice<br>stabilization  | HPP   | Technology action mechanism & equipment description + mathematical models for inactivation kinetics (pressure resistance)                    | Pietro Rocculi<br>(UNIBO)               |  |
|                       |                      |   | PEF   | Technology action mechanism & equipment description + mathematical models for inactivation kinetics (electro resistance)                     | Sveva Cesari (Elea)                     |  |
|                       | Morning<br>Session 2 | Filling and<br>Packaging:<br>technologies<br>and materials  | Filling technologies inc validation   | Aseptic, ultra clean and hot fill technologies   | Prof. Giuseppe Vignali<br>(UNIPR)       |  |
|                       |                      |   | Packaging materials:<br>features, sustainability<br>and influence on shelf-life | Glass, cartons, cans, pouches and plastic containers   | Prof. Daniel Milanese (UNIPR)           |  |
|                       | Lunch                | Buffet Lunch  | on campus & networking  | with students and lecturers  |   |  |
|                       | Afternoon            | Subdivision into 3 groups (GROUP A, B and C) who will go to the various labs and companies in rotation.   |   |  |   |  |
| THU 26 JUN            | Morning<br>Session 1 | Natural<br>chemical<br>reactions,<br>testing, QA<br>and legislation   | Juice Chemistry   | Enzymatic browning. Maillard reaction. Oxidation. Ascorbic Acid Degradation. Type of analysis to apply for assessment                        | Prof. Chiara Dall'Asta<br>(UNIPR)       |  |
|                       |                      |   | Method of Analysis  | Reference methods, precision & trueness. QA of analysis.   | John Collins (IFU)                      |  |
|                       |                      |   | Authenticity  | Industry codes (AIJN), Types of adulteration. Testing scope,<br>Control systems  | _                                       |  |
|                       |                      |   | Legislation   | Pre-screening of allowed additives and processing aids in various legislation (CODEX, FDA, etc.)   |   |  |
|                       | Morning<br>Session 2 | Nutritional<br>aspects of<br>juices and<br>influence of<br>processing   | Nutritional quality of juices   | Variety of juices and their vitamins, minerals, and secondary compounds with proven biological activities like (poly)phenols and carotenoids | Prof. Letizia Bresciani<br>(UNIPR)      |  |
|                       |                      |   | Nutrient preservation in juice processing                                       | Effect of Processing on Bioactive Phytochemical Profile of Fruit Beverages   | Cristina García-Viguera<br>(CEBAS-CSIC) |  |
|                       | Lunch                | Buffet Lunch on campus & networking with students and lecturers   |   |  |   |  |
|                       | Afternoon            | Subdivision into 3 groups (GROUP A, B and C) who will go to the various labs and companies in rotation.   |   |  |   |  |
|                       | Evening              | Farewell buffet in an attractive local restaurant where students have the final opportunity to network with colleagues and exchange what they have experienced during the week. |   |  |   |  |
|                       |                      |   |   |  |   |  |

### Our sold out 2024 event

It was very nice that we also had some "free time" to connect.



The session had great content. It was well organized by IFU and University of Parma







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CENTRO CONGRESSI

The quality, experience and willingness to pass on the knowledge of all the

lecturers was brilliant.

Overall, I was very satisfied with IFU University and would recommend it to others.

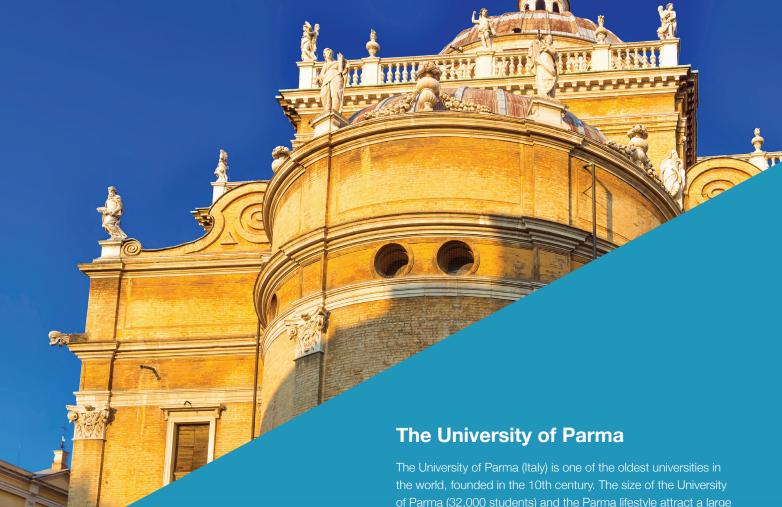
Thank you very much for the wonderful days in Parma and the interesting topics.

It was really something different and I think everyone was able to take something away and learn something.



ith little prior knowledge

Very positive that people with little prior knowledge can also take part and understand. Many thanks to the great professors and speakers.



#### Course fees:

Early Bird fee (valid until 31st March):

€1,299 excluding VAT for IFU members €1,799 excluding VAT for non-members

Standard fee: €1,599 excluding VAT for IFU members €2,099 excluding VAT for non-members

### **International Fruit & Vegetable** Juice Association – IFU

#### Represents the Global **Fruit Industry**

Almost 300 members in 80 countries

- Corporate
- Supporters
- University

Registered NGO at Codex Alimentarius

#### **Events**

- Juice Summit (with AIJN & SGF)
- IFU Juice Conference
- IFU Technical Workshop
- Global Juice Roadshows (with SGF)

#### Commissions

- Legislation
- Science & Technology
- Methods of Analysis
- Sustainability
- Nutrition

#### **Publications**

- Methods of Analysis (Chemical & Micro)
- Recommendations
- Juice & nutrition news
- e-learning videos
- Best Practice Guidance



number of students from all over Italy.

In Parma, scientific, technological, economic and cultural skills Advanced Studies on Food and Nutrition of the University of Parma gathers these local competences and adds proactive links with international organisations and universities. It is a dynamic and efficient institution that boasts close ties with all areas of research into food: product and process innovation, safety and quality, human nutrition, education and communication, sustainability, socio-economic aspects, legislation, etc.

The School offers high-level, multidisciplinary training opportunities to develop professional expertise able to tackle emerging issues and problems of the food sector.

#### **Hotel details:**

We have reserved rooms at the Starhotels Du Parc Hotel in Parma for €140 per night. Please use the hotel booking link on the IFU website.

> **Contact Us:** email: aintzane@ifu-fruitjuice.com

Visit the IFU University page on the IFU website www.ifu-fruitjuice.com for further information