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E+ Capacity Building in Higher Education

SEA-ABT: SOUTH EAST ASIA ACADEMY FOR BEVERAGE TECHNOLOGY

Project number: 561515-EPP-1-2015-1-AT-EPPKA2-CBHE-JP October 2015-September 2018

Deliverable D3.3

Report on improved CPD products

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Geisenheim)

Contributors: All teachers

Delivery date: M41

Dissemination Level						
PU	Public	Х				
PP	Restricted to other programme participants (including Commission services and projects reviewers)					
СО	Confidential, only for members of the consortium (including EACEA and Commission services and projects reviewers)					

Summary:

This deliverable D3.3 – Report on improved CPD products follows directly from D3.1 – Report on developed CPD products and provides programmes, announcements, links and the outcomes of the participant evaluations of each of the developed and implemented CPD products.





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Overview of implemented CPD modules

All CPD training activities — as listed in D1.4 and designed in detail in D3.1 with regard to learning outcomes, content, teaching and learning methods, language, available teaching materials, assessment method and evaluation, qualification and skill requirements for teachers, previous knowledge expected and workload for students — are after their implementation throughout the project duration described in this deliverable D3.1 - Report on improved CPD products detailed with regard to programme, announcements, links and the outcomes of the participant evaluations carried out by the participants of the training activities.

Below is a complete overview of all CPD modules implemented throughout the project duration in Table 1:



Table 1: List of implemented CPD modules

Subject	format					targe	t group	s	date					
	flash presentation {youtube}	webinars	demonstratons	e-learning course	workshop	teacher	students	food professionals		Language	Industry teaching involvement	comments	Institution	Name
Shelf-life of Beverages					х		х	Х	31. Okt 17	EN	х		UNITE	Paola Pittia
Sugars in food		х				Х	х	х	22. Aug 18	EN			UNITE	Paola Pittia
Sugars and Sweeteners in Beverages: Trends and Challenges					х	х	х	х	12. Sep 18	EN	-		UNITE	Paola Pittia
Regulations and Standards for Beverages					х	х	х	х	29-30 March 2018	EN/TH	х		KU	Kriskamol Na Jom
Hygienic Engineering					х	х	х	х	19-21 July 2017	EN/TH			KMITL	Gerhard Schiening / Navaphattra Nunak
Hygienic Engineering					х	х	х	х	18-20 July 2018	EN/TH			KMITL	Gerhard Schiening / Navaphattra Nunak



Case Study on Hygienic Value		х				х	X	8 March 2018	EN/TH	Х	BOKU/ KMITL	Gerhard Schiening / Navaphattra Nunak
New Product Development for the Beverage Industry				х	х	х	х	27-28 February 2019	EN/TH	х	KU	Kriskamol Na Jom
Innovative Processing Technologies for the Beverage Industry				х	х	х	х	27-28 February 2018	EN/TH	-	KU	Sasitorn Tongchitpakdee
Research Project Management				х	Х	х	x	6-7 September 2018	EN	-	BOKU	Rainer Svacinka
Fruits & Fuit-based Beverages				х	Х	х	х	24-25 April 2018	EN	-	HGU	Frank Will
Food Safety Management: A Practical Practice for the Beverage Industry				х	х	х	х	22 December 2017	EN/TH	-	KU	Warapa Mahakanjanakul
Lean Business Plan Development				х	Х	х	х	6-7 September 2018	EN	-	BOKU	Rainer Svacinka
Selected topics of food safety for less educated food professionals	Х		х				х	Available at https://www.sea-abt.eu/	EN	-	BOKU	Gerhard Schiening



1 Shelf-life of Beverages

The training activity "Shelf-life of beverages" was carried out as a workshop and held 31st October 2017 in Bangkok, Thailand, by Prof. Paola Pittia, University of Teramo, Italy.

An objective evaluation and the accurate validation of shelf-life of food beverages is a key factor to guarantee quality and safety along the distribution and commercialization and for the expected time. Date marking of product is mandatory and for some food categories the accomplishment of microbiological and safety criteria throughout product's shelf-life according to national and international laws is required. Understanding product's quality attributes and how they change over time is key to satisfying customers and consumers as well as maintaining the business.

Due to the utmost and growing importance of these topics in the beverage sector this workshop is aimed to enhance knowledge and industrial applications of objective tools to improve quality and shelf-life of processed products.

The sessions of this workshop will outline the general aspects of shelf-life of food and beverages, the analysis of main factors implied in product degradation and decrease of safety along with the available strategies to improve quality and the tools available to help estimate, set, verify and extend the shelf-life of beverages. Experts will also present specific case studies and aspects of shelf-life of beverages that will end with an open-floor Q&A session where participants will have the opportunity to discuss their own challenges regarding shelf-life concepts and their application to products.

1.1 Announcement

The workshop was announced on https://www.sea-abt.eu/SHELF-LIFE-OF-BEVERAGES and organised in collaboration with the ISEKI-Food Association (www.iseki-food.net) and GSICA (Italian Scientific Association on Food Packaging, www.gsica.net/en).

1.2 Programme

08:30 - 09:00	Registration
09:00 - 09:20	Opening and introduction — Gerhard Schleining, Paola Pittia, Sasitorn Tongchipakdee, SEA-
	ABT (South East Asia Academy for Beverage Technology)
09:20 – 10:00	Shelf-life: general aspects - Maria Cristina Nicoli, University of Udine - Italy
10:00 - 10:40	Design, development and innovations of high quality beverages - Paola Pittia, University of
	Teramo, Italy
10:40 - 11:00	Coffee break
11:00 – 11:40	Microbial stability and shelf-life of beverages - Warapa Mahakanjanakul, Kasetsart University,
	Thailand
11:40 – 12:20	Modern analytical tools for evaluation quality and safety - Dario Compagnone, University of
	Teramo, Italy
12:30 – 13:30	Lunch break
13:30 – 14:10	Rapid analytical tools for microbial detection in beverages — Krongkaew Ramwong , bioMerieux
14:10 – 14:50	Role of packaging on the prolongation of beverages shelf-life - Luciano Piergiovanni, University
	of Milan, GSICA, Italy

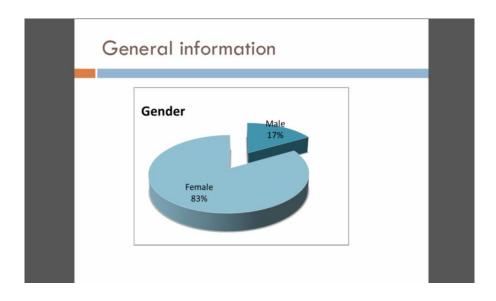


14:50 – 15:10	Coffee break
15:10 – 15:50	Application of functional ingredients for stabilization of beverage - Choi Yik Huey , Application Specialist, ASEAN, DuPont Nutrition & Health, Singapore
15:50 – 16:30	Innovative technologies to diversify shelf-life of beverages - Surapong Kobpraditkul , Sales Manager Tetra Pak, Thailand
16:30 – 16:50	Conclusion and evaluation session

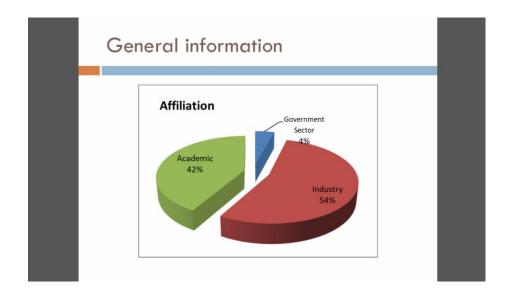
1.3 Results of participants' evaluation

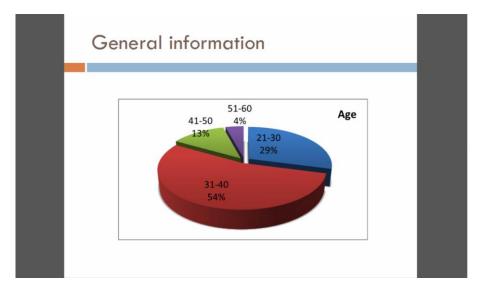
Aimed at food practitioners and operators, professionals, lecturers, teachers, students, the workshop attracted 38 participants of which 83% were female and 17% were male. As regards satisfaction with the contents of the workshop, a large majority of the participants indicated that the training inspired them to collect more information on the topic and that they very much agreed with the statement that the training will improve their chances of progressing professionally. As regards the materials and the instructor, the participants indicated that the necessary materials were sufficiently provided and that the manner of presentation was clear.

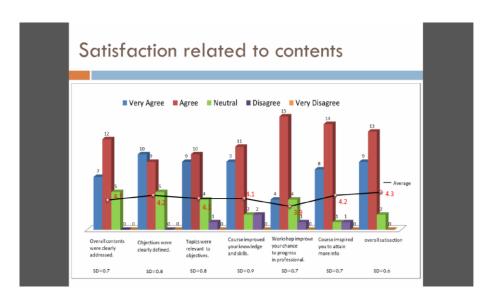




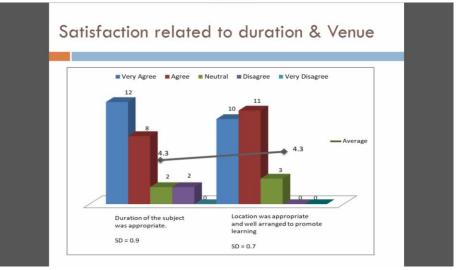














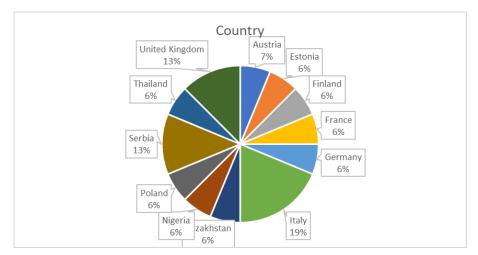
2 Sugars in foods

The webinar "Not only sweeteners: technological functionality of sugars in foods and beverages" (originally entitled "Sugars in foods" in D1.4), was carried out 22 August 2018. It was announced on https://www.sea-abt.eu/node/298

Aim of this webinar is to give an overview of the technological functionalities of sugars in foods underlying the related scientific basis and to provide some knowledge and information useful for the design and development of formulated, high quality and stable food products.

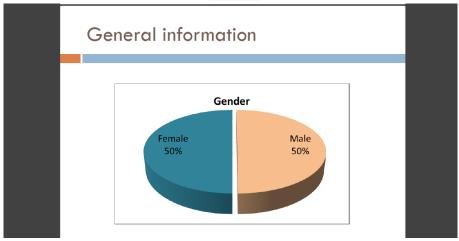
2.1 Results of participants' evaluation

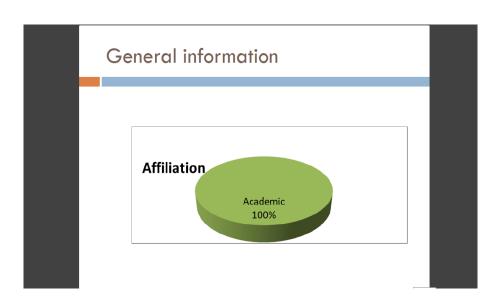
The webinar had 16 attendants from 12 different countries.

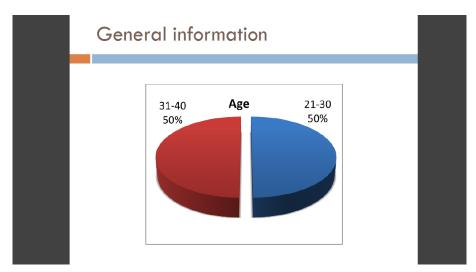




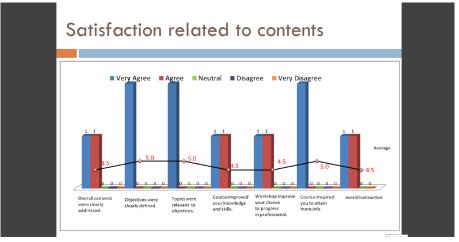




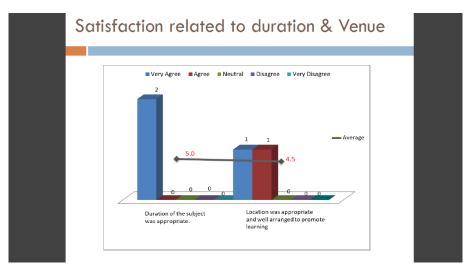














Comments

□ The topic was very interesting. It would be useful to have (more) examples for each subtitle of the presentation. The speaker highlighted all the important roles of sugar.



3 Sugars and Sweeteners in Beverages: Trends and Challenges

Complementary to the webinar, the workshop on "Sugars and sweeteners in beverages: trends and challenges" was held 12 September 2018, Windsor Hotel, Bangkok, Thailand, as part of the IFIFS2018 Conference International Conference on Innovations in Food Ingredients and Food Safety (https://ififs2018.meetinghand.com/en/).

3.1 Announcement





3.2 Programme

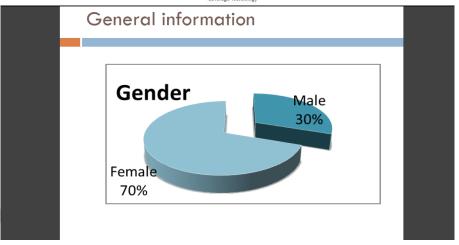
The detailed programme for the whole conference can be found at https://ififs2018.meetinghand.com/en/699-programme. Below the specific programme for the workshop on "Sugars and Sweeteners in Beverages: Trends and Challenges"

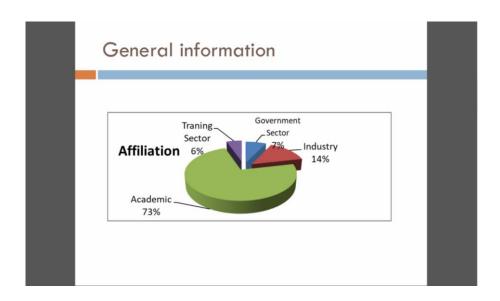
14:00-14:15	Opening and Introduction (Paola Pittia & Sasitorn Tongchitpakdee)
14.00-14.13	Opening and introduction (rabia rittia & Sasitorn Tongenitpakaee)
14:15-14:45	Sugar Tax Insight, Natthakorn Utensute, Director of Tax planning Bureau, Thailand
14:45-15:15	Technological role of sugars and saccharides in beverages
	Paola Pittia, University of Teramo, Italy
15:15-15:45	Coffee break
15:45-16:15	Modern analytical tools for evaluation sugars and sweeteners
	Dario Compagnone, University of Teramo, Italy
16:15-16:45	Update on sweetener applications for beverages, Virat Chatnithikul, Managing
	Director, Scent Cottage Co.,Ltd.
	Kanda Wanichkanjanakul, SEA Sales Manager, Mafco Worldwide
17:00-20:00	Welcome Cocktail in Hotel Windsor (Open for all participants and guests)

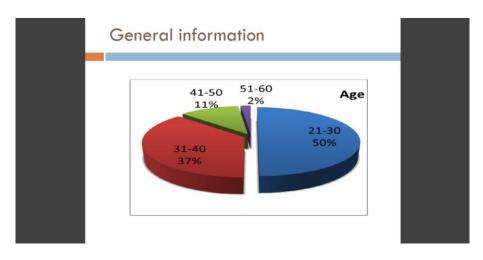
3.3 Results Participants' evaluation



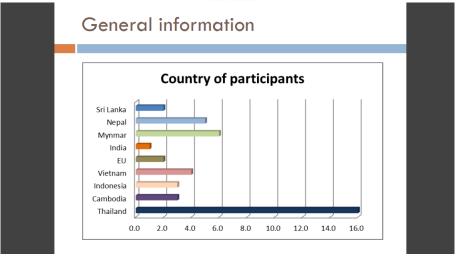


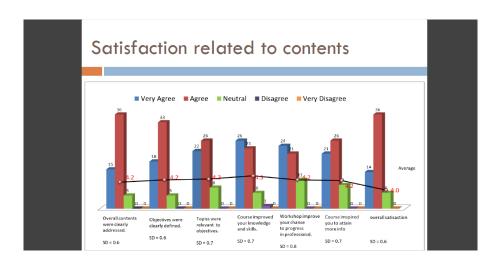


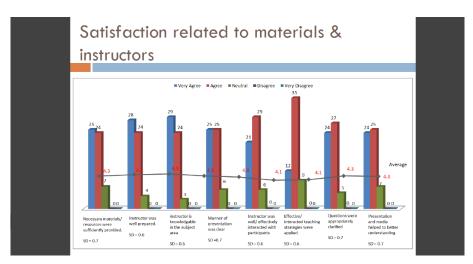




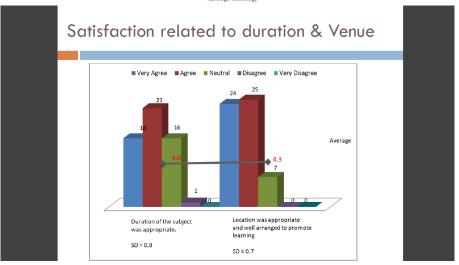














4 Regulations and Standards for Beverages

The workshop "Regulations and Standards for Beverages" was held 29-30 March 2018 at Kasetsart University.

4.1 Announcement

The workshop was announced on the SEA-ABT website on https://www.sea-abt.eu/node/177





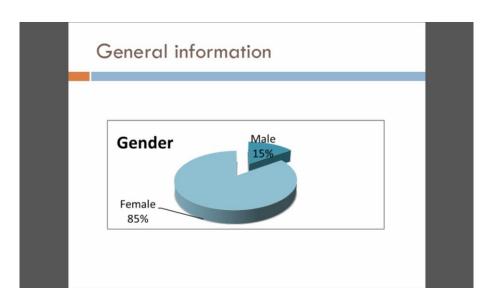
4.2 Programme

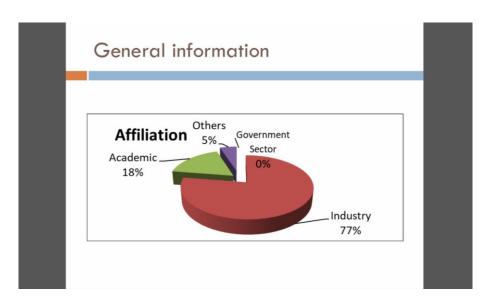




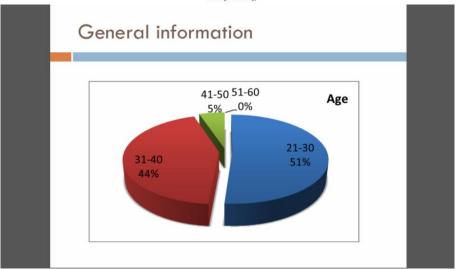
4.3 Results of participants' evaluation

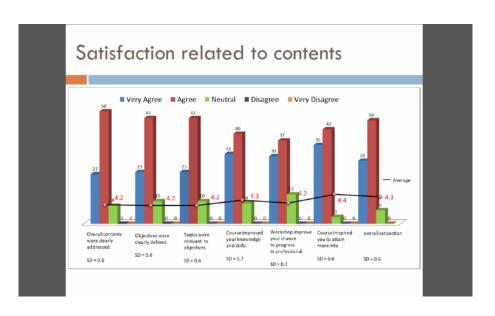


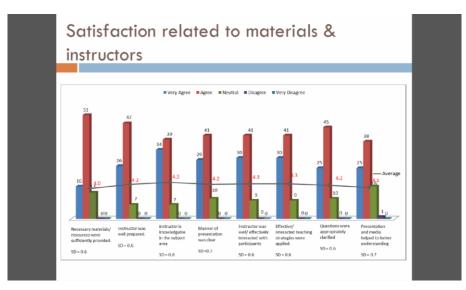




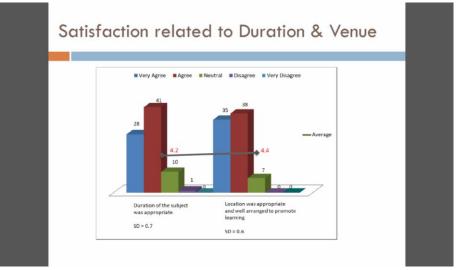














5 Hygienic design

The CPD module "Hygienic Design" was held twice during the project duration as workshops and as webinar:

5.1 SEA-ABT Training-Workshop EHEDG Advanced Course on Hygienic Engineering

The SEA-ABT Training-Workshop in collaboration with EHEDG Hygienic Engineering was held 19-21 July 2017, at KMITL, Bangkok, Thailand was announced on https://www.sea-abt.eu/node/104

Thirty participants from industry and university attended the course.

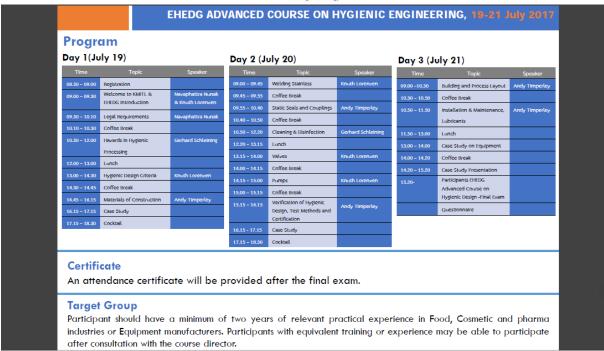
The training-workshop was started with Mr.Knuth LORENZEN to give a brief presentation about EHEDG introduction, then the participants and trainers were asked to introduce themselves. The participants were divided into three groups for performing the case study: Pumps, Valves, and Process lines. The cleaning test rig with the grant supported from the South-East Asia Academic Beverage Technology (SEA-ABT) project also was used to be an equipment for the workshop.

Day 2 began with opening speech from Assoc. Prof. Dr.Komsan Maleesee, Dean of faculty of Engineering at KMITL. Then the program of Day 2 continued. At the end of Day 1 and Day 2, three groups of participants with coaching by trainers were let to do their case studies.

On the half-day of Day 3 the representative of each group was asked to explain about their equipment in the view point of hygienic design (hygienic risk or good design) with the additional comments from trainers. Last session of the training was taking the final exam for an hour. During the process of checking the score, Dr.Gerhard SCHLEINING was invited to give an introduction about the SEA-ABT project and all participants were requested to do the evaluation form. Finally, we found that all participants passed.





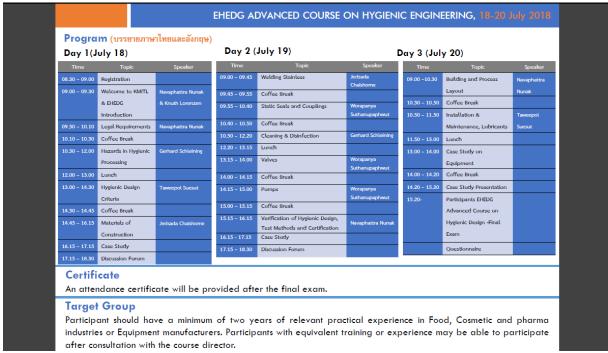


5.2 SEA-ABT Training Workshop EHEDG Advanced Course on Hygienic Engineering

The SEA-ABT Training-Workshop in collaboration with EHEDG Hygienic Engineering was 18-20 July 2018 at KMITL, Bangkok, Thailand, was announced on https://www.sea-abt.eu/node/219



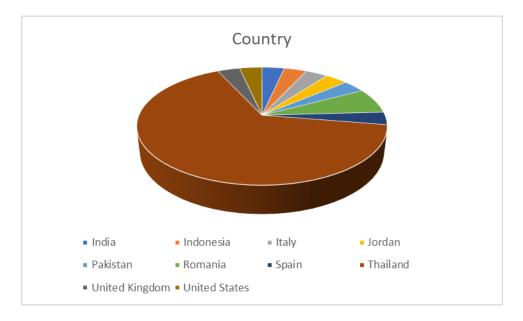




5.3 Webinar "Case study on hygienic value"

The webinar "Case study on hygienic value" held 8 March 2018, was announced on https://www.sea-abt.eu/Hygienicdesign where also the programme and the recording is available.

The webinar was attended by 21 attendees from 10 different countries from HE institutions as well as professionals and students.





6 New Product Development for the Beverage Industry

The workshop on "New product development for the beverage industry" was held 27-28 February 2019 at Kasetsart University, Bangkok, Thailand. The workshop was announced on https://www.sea-abt.eu/node/343

6.1 Announcement





6.2 Programme

กำหนดการอบรม "New Product Development for Beverage Industry" โครงการ South East Asia Academy for Beverage Technology (SEA-ABT) 27-28 February 2019 เวลา 08.30am – 4.30pm

Room 5419 Agro-Industry 5 building, Faculty of Agro-industry, KU, Thailand

27 February, 2019	
08.30 - 09.00	Registration
09.00 - 09.10	Opening & Introduction of South East Asia Academy for
	Beverage Technology (SEA-ABT)
09.10 - 10.10	Introduction to innovation of new product
10.10 - 10.30	Coffee break
10.30 - 12.00	Steps in Product Development
12.00 - 13.00	Lunch
13.00 - 14.00	Food Regulations and Product Development
14.00 - 14.20	Coffee break
14.30 - 16.30	Workshop for idea screening (Group activity)
28 February, 2019	
09.00 - 10.30	Industrial Experience sharing: NPDs in real world
10.30 - 10.50	Coffee break
10.50 - 12.00	Data Resource and practice (Group activity)
12.00 - 13.00	Lunch
13.00 - 16.30	Workshop of concept development & Presentation (Group activity)

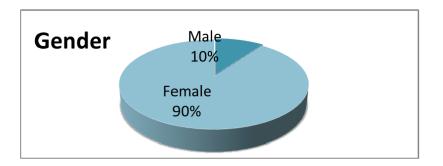
^{*}Workshop will be presented in Thai language



6.3 Results participant evaluation

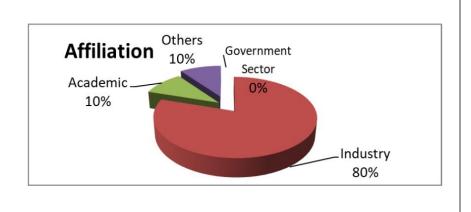


General information

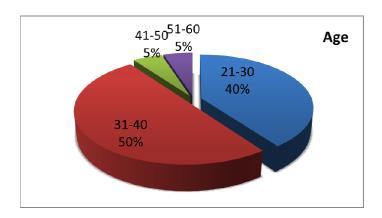




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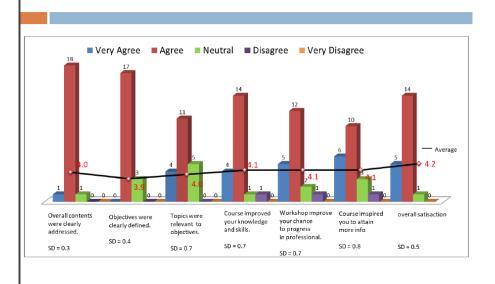


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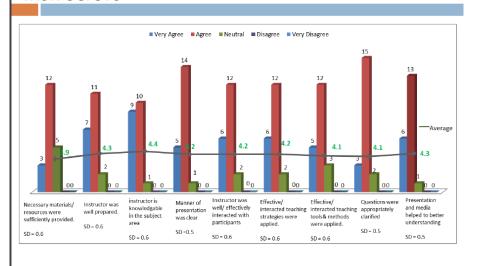




Satisfaction related to contents

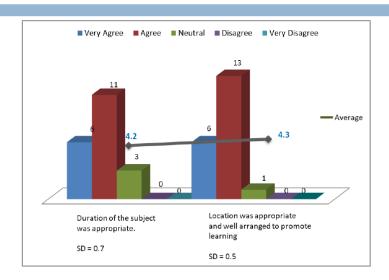


Satisfaction related to materials & instructors





Satisfaction related to duration & Venue



Comments

- □ More experience sharing from industry will be appreciated.
- □ More theory based on New Product Development technique is needed.
- □ Group discussion shall be run through from the beginning to the conclusion.



7 Innovative Processing Technologies for the Beverage Industry

The workshop on "Innovative Technologies for the Beverage Industry" was held 27-18 February 2018, at Kasetsart University, Bangkok, Thailand. The workshop was announced on https://www.sea-abt.eu/node/162.

7.1 Announcement





7.2 Programme













27-28 February, 2018

Innovative Processing Technologies for Beverage Industry

Free Registration

Room 2204, Agro-Industry 2, Faculty of Agro-Industry, Kasetsart University, Bangkok, Thailand

Day 1

8:30-9:00 Registration

9:00-9:15 Welcome

Assistant Prof. Dr. Sasitorn Tongchitpakdee,KU (Thailand SEA-ABT Co-Ordinator)

9:15-10:00 Overview of Innovative Processing Technology for Beverage industry

Dr. Pitiya Kamolpattna, Department of Food Science and Technology, KU

10:00-10:15 Coffee break

10:15-11:20 Membrane system for Beverage Applications

Dr. Aporn Laorko, Technical Sale & Service Manager , Liquid Purification Engineering International Co., Ltd.

11:20-12:30 Pulse-Electric Field Technology

Dr. Pitiya Kamolpattna, Department of Food Science and Technology, KU

12:30-13:30 Lunch

13:30-14:40 Ohmic heating

Dr. Pitiya Kamolpattna, Department of Food Science and Technology, KU

14:40-15:00 Coffee break

15:00-16:00 Microwave processing

Associatet Prof. Dr. Nantawan Therdthai, Department of Product Development, KU Day 2

9:00-10:15 High pressure processing (HPP)

Dr. Pitiya Kamolpattna, Department of Food Science and Technology, KU

10:15-10:30 Coffee break

10:30-11:30 Microbiological aspects of high pressure processing

Assistant Prof. Dr. Wannasawat Ratphitagsant, Department of Product Development, KU

11:30–12:30 High Pressure Homogenization for Beverage Applications

Ms. Phatcharin Rungthavon, F&B Key Account Sales Manager, SPX FLOW, Inc.

12:30-13:30 Lunch

13:30-14:30 UV Technology

Assistant Prof. Dr. Chitsiri Rachtanapun (Thongson), Department of Food Science and Technology, KU

14:30-14:50 Coffee break

14:50-15:50 Cold Plasma Technology

Mr. Krit Lajaroj, Febix, Inc.

15:50-16:15 Wrap up & Evaluation

Contact: Ms. Sansanee Pethwong Tel: +66 63 593 5944 beveragetechnology.thailand@gmail.com

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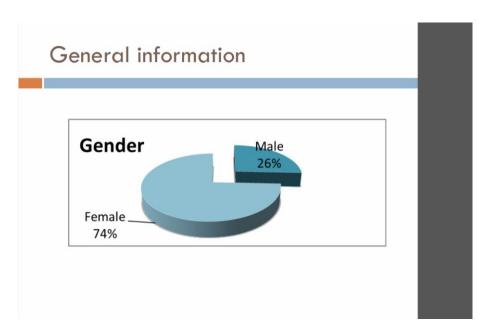


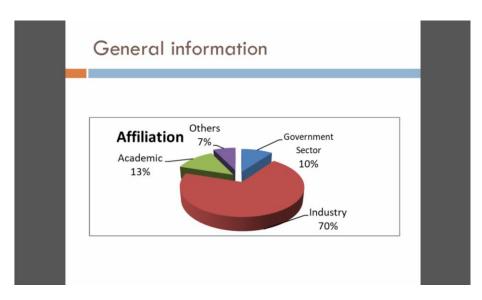
More information & Agenda: www.sea-abt.eu/



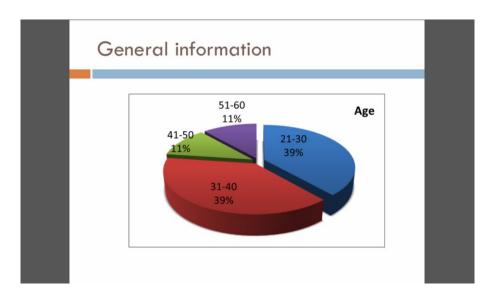
7.3 Results of participants' evaluation

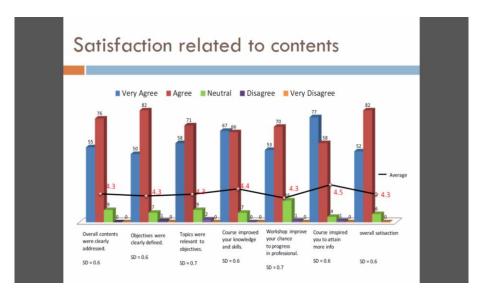


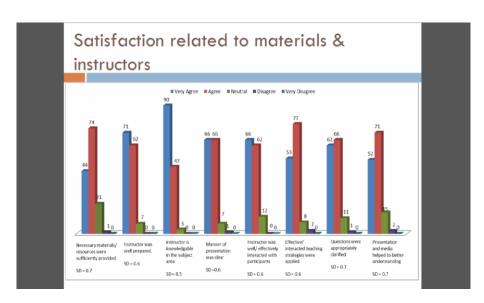




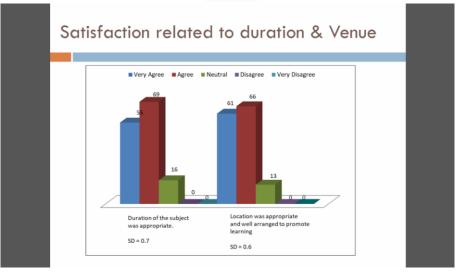












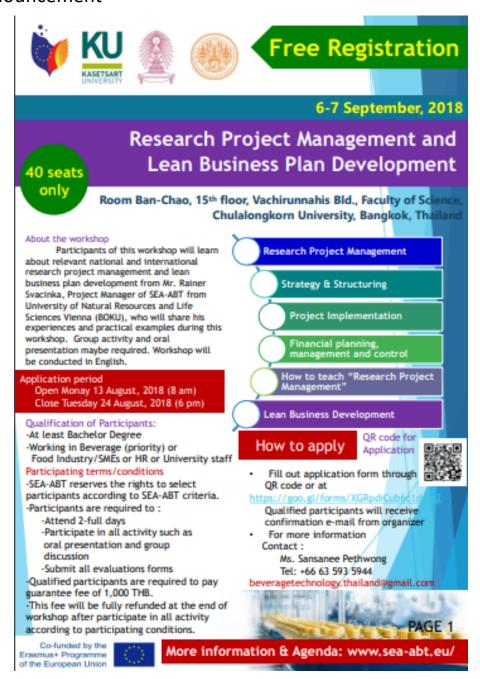


8 Research Project Management

The workshop on "Project management" together with the workshop on "Lean Business Plan Development" (see point 11) was held 6-7 September 2018 at Chulalongkorn University, Bangkok, Thailand for 16 participants. The workshop was announced on https://www.sea-abt.eu/node/302

These two workshops are described in terms of contents and with self-evaluation reports by the trainer in D3.2.

8.1 Announcement





8.2 Programme

Thursday, 6th September, 9:30-16:30

Research Project Management

Morning:

Session 1: Strategy

- Publicly funded research projects: advantages, disadvantages, golden rules
- Organisational strategy vs Project strategy: how to align, what to avoid

Session 2: Structuring a research project

- Basics of project management methodologies
- Description of Work, objectives, deliverables and milestones
- WP Design

Afternoon:

Session 3: Project implementation

- Consortium building
- Management of the project start, work packages and project results
- Overview: Financial planning, management and control
- Overview: Project management structure, procedures and tools
- Management of the Project close down

Friday, 7th September, 9:30-11:30

How to teach Research Project Management

- Audiences and expectations
- Presentations, Exercises and more
- Practical examples

Friday: 13:00-15:30

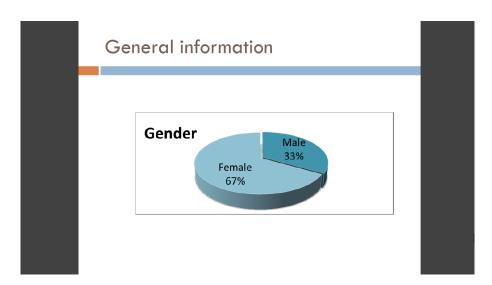
Lean Business Plan Development

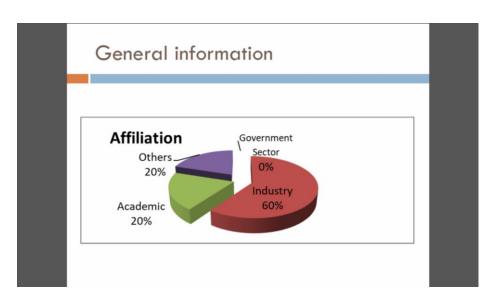
- Introduction to lean business plan development approach
- Business model canvas
- Value proposition canvas



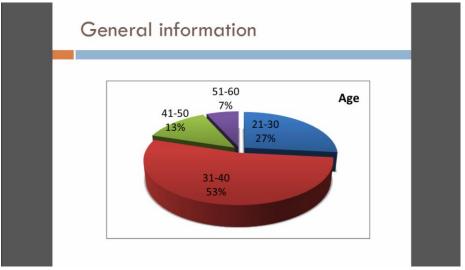
8.3 Results Participants' evaluation

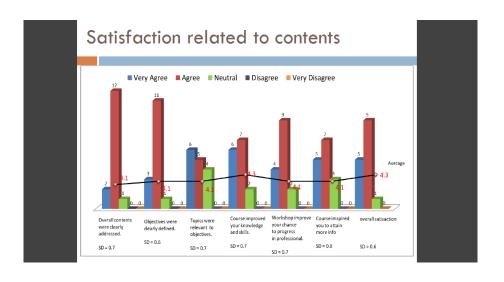


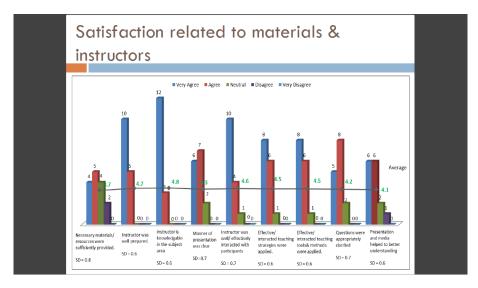




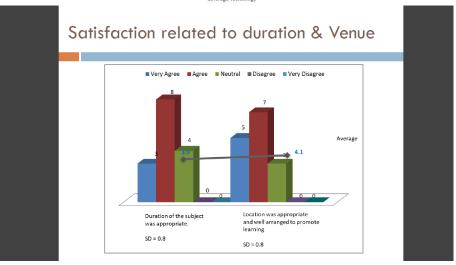














9 Fruits and Fruit-based Beverages

The workshop on "Fruits and Fruit-based Beverages" was held 24-25 April 2018 at Kasetsart University, Bangkok, Thailand, for 46 participants. The workshop was announced on https://www.sea-abt.eu/node/199

9.1 Announcement and programme















24-25 April, 2018

Free Registration



Fruit juice and fruit-based beverages

Scan to apply

Tuesday 24th April 2018

8:30-9:00 Registration

9:00-9:10 Welcome

9:10-9.40 Trends in Fruit juice and fruit-based beverages

Asst.Prof. Pisit Dhamvithee, Kasetsart University

9:40-10:10 EU Law and regulations for fruit juice industry

Prof. Dr. Frank Will, HGU, Germany 10:10-10:25 Coffee break

10:25-12:00 EU Practices for traditional fruit juice processing: postharvest storage, washing and sorting, fruit comminution,

mash treatment, juice extraction Prof. Dr. Frank Will, HGU, Germany

12:00-13:00 Lunch

13:00-14:30 EU Practices for traditional fruit juice processing: pasteurization, sterilization, evaporation, storage, puree

Prof. Dr. Frank Will, HGU, Germany

14:30-14:45 Coffee break

14:45-16:00 EU Practices Traditional fruit uice processing: enzyme and membrane technology

Wednesday 25th April 2018

9:00-10:30 Food Safety and Quality assurance for fruit juice Asst. Prof. Warapa Mahakamchanakul, Kasetsart University

10:30-10:45 Coffee break

10:45-12:00 Innovative ingredient for fruit based beverage

Ms. Narissara Devakul Na Ayudhya, Brenntag Ingredients (Thailand)

12:00-13:00 Lunch

13:00-14:30 High pressure processing for fruit juice production

Dr. Pitiya Kamolpattna, Kasetsart University

14:30-14:45 Coffee break

14:45-16:00 Waste Utilization for fruit juice industry Prof. Dr. Frank Will, HGU, Germany

How to apply

· Scan QR Code or Fill out application form through QR code or at

https://goo.gl/forms/LsmkkDfqSzFstykk1

- Qualified participants will receive confirmation e-mail from organizer
- For more information

Contact: Ms. Sansanee Pethwong Tel: +66 63 593 5944

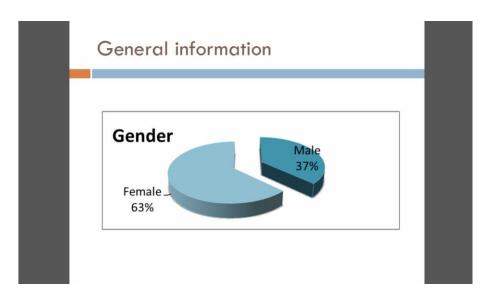
beveragetechnology.thailand@gmail.com

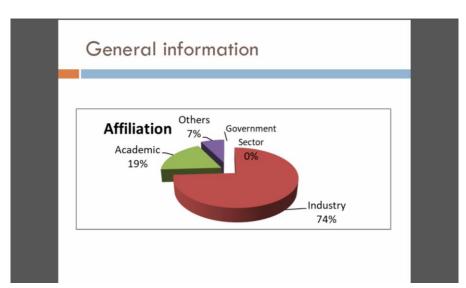




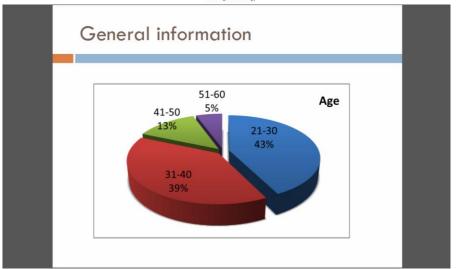
9.2 Results of participants' evaluation

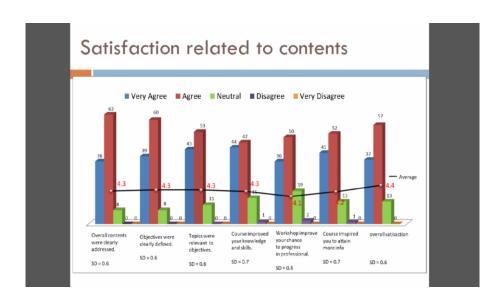


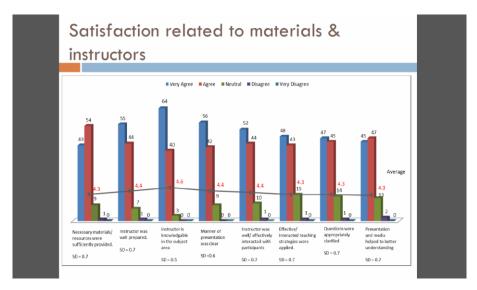




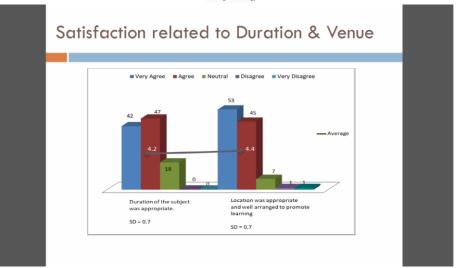
















10 Food Safety Management: a Practical Practice for the Beverage Industry

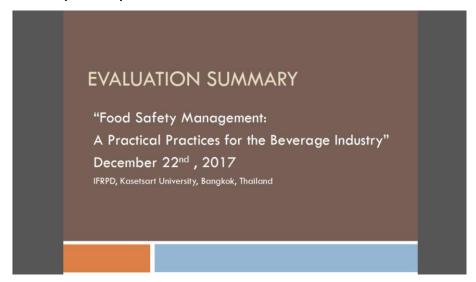
The workshop "Food Safety Management: a practical practice for the beverage industry" took place 22 December 2017 at Kasetsart University, Bangkok, Thailand with 57 participants. The workshop was announced on https://www.sea-abt.eu/th/node/142.

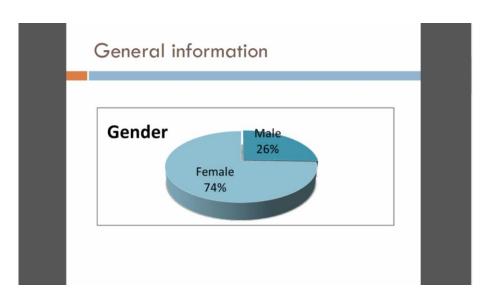
10.1 Announcement and programme

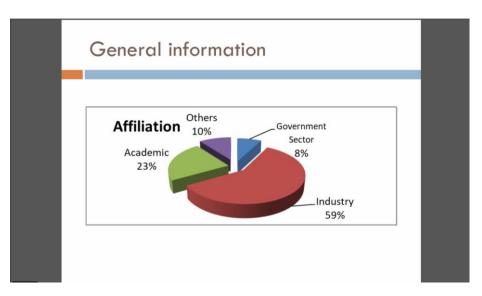




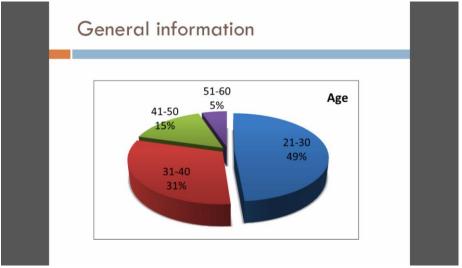
10.2 Results of participants' evaluation

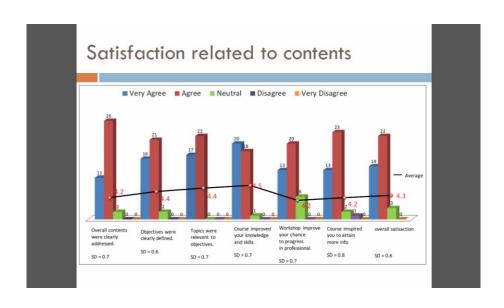


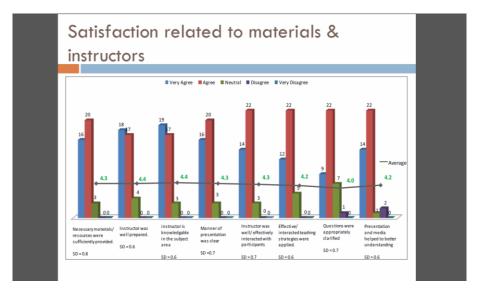




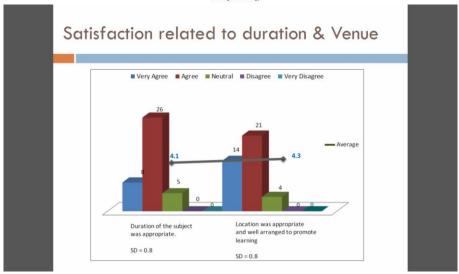














11 Lean Business Plan Development

The workshop "Lean Business Plan Development" was held together with the workshop on "Research Project Management" (see point 8) was held 6-7 September 2018 at Chulalongkorn University, Bangkok, Thailand for 16 participants. The workshop was announced on https://www.sea-abt.eu/node/302

These two workshops are described in terms of contents and with self-evaluation reports by the trainer in D3.2.



12 Selected topics of food safety for less educated food professionals

The flash presentation "Selected topics of food safety for less education food professionals" can be found on https://www.sea-abt.eu/ and https://www.youtube.com/channel/UC-zYsCKACSKx-HfGOfy77YQ/videos