



# **Gums and Stabilisers for the Food Industry Conference**

June 3<sup>rd</sup>-6<sup>th</sup>  
Wageningen, the Netherlands

Organized by  
**The Food Hydrocolloids Trust**





### **Welcome words from the organizing committee**

Welcome to the Gums and Stabilisers for the Food Industry conference, organized by the Food Hydrocolloids trust. The trust was established in 1991 and is a UK charity. The objects of the Trust are the advancement of the education of the public in the field of hydrocolloids in particular through the organisation of educational conferences. The conferences are organized to stimulate interaction between researchers, academic institutions, producers and users of additives and ingredients in food products.

The program consists of 6 plenary speakers, 4 key-note speakers, 72 selected oral presentations, 19 flash presentations, and several poster presentations. In view of the high level of abstracts we received, we expect an excellent program, which we believe will lead to many fruitful discussions, exciting new insights, and hopefully also many new collaborations. We hope to broaden your network not only with our scientific program, but also with our social program. So please feel encouraged to talk to each other during a coffee break, lunches, dinners or on the dance floor. We would like to thank all our sponsors for their support and exhibition.

On behalf of the organizing committee, we wish you an exciting and inspiring conference with fruitful discussions.

#### **Sessions:**

- Enhancement of hydrocolloid functionality
- Human health, dietary fibre and digestibility
- Hydrocolloids to control structure
- Interfacial aspects
- Novel hydrocolloids
- Encapsulation technologies
- Hydrocolloid characterisation
- Coating films and packaging

The local organizing committee,

Elke Scholten, Professor Wageningen University

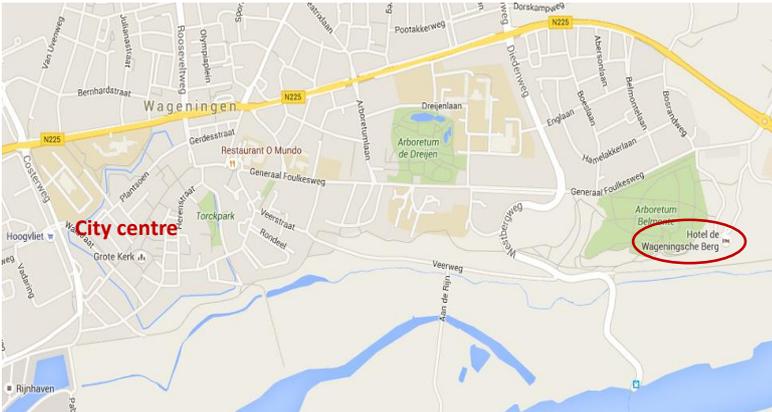
Markus Stieger, Professor Wageningen University

Costas Nikiforidis, Associate Professor, Wageningen University

## Important Information

### Conference Venue

The conference will be held at Hotel de ["Wageningsche Berg"](#)  
Generaal Foulkesweg 96, 6703 DS, Wageningen



### Registration desk and information

Registration for the conference will take place at the conference venue, Hotel de "Wageningsche Berg":

June 3<sup>rd</sup>, 2025 from 11.00 – 13.00

June 4<sup>th</sup> – June 6<sup>th</sup> from 8.30 – 9.00

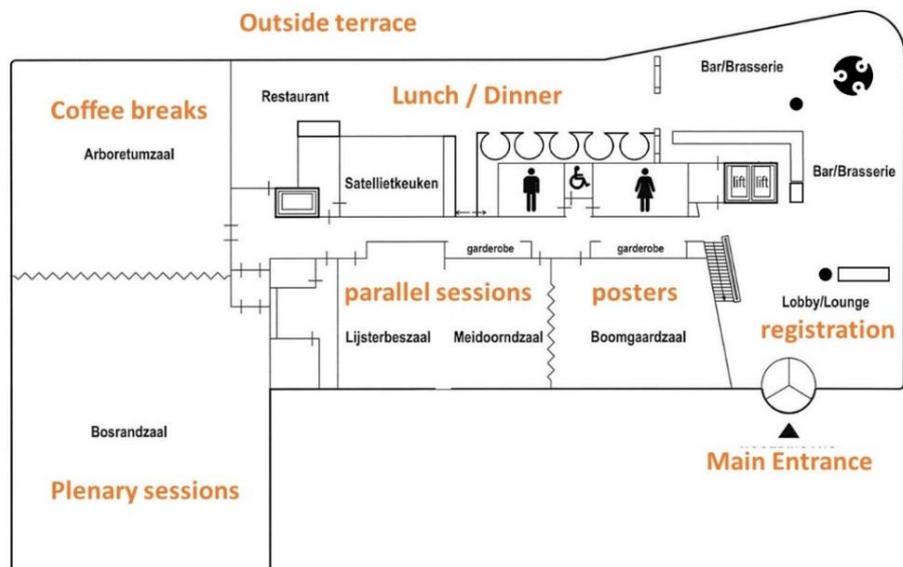
If you have any questions, please address anyone with a Gums & Stabilisers shirt.

### Coffee breaks / Lunch / Dinner

Coffee, lunches and dinners will be held at the conference venue.

Coffee will be served in the Arboretumzaal adjacent to the conference room.

Lunches/dinners will be served in the restaurant of the venue.



### Logistics

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#### Arriving by Air to the Netherlands

The closest major airports to Wageningen are:

- Amsterdam Schiphol Airport (AMS)
- Eindhoven Airport (EIN)
- Rotterdam The Hague Airport (RTM)

#### Option 1: Train + Bus/Taxi

- **Take a train to Ede-Wageningen Station**
  - From Schiphol: direct or 1-transfer trains via Utrecht (~1 h 15 min)
  - From Eindhoven or Rotterdam: via Utrecht or Arnhem (~1.5–2 h)
- **From Ede-Wageningen to Wageningen city centre**
  - Bus 86/103/303 to Wageningen city centre, to the main bus station (final station) (~25 min)
  - Or take a taxi (~20 min)
- **From bus station (city centre) to Hotel "de Wageningsche berg"**
  - Transfer to Bus 352/51 at the main bus station to bus stop "Wageningsche berg" (~4 min) walk into the forest for 5 min.
  - Alternatively, you can walk from the city centre to the venue (~30 min). (up the hill)

#### Option 2: Taxi from the Airport

You can also take a taxi directly from the airport to the venue: 1.5 h. Pre-booking is recommended for convenience and fixed pricing.

#### Tickets & Payment

Plan your trip via NS (Dutch Railways, [www.ns.nl/en](http://www.ns.nl/en))

- **Train travel:**
  - Purchase tickets at stations (machines, desks or NS app)
  - Or check in and out using your contactless Visa or Mastercard
- **Bus travel:**
  - Buy a ticket from the driver (card payment only)
  - Or check in and out with your contactless Visa or Mastercard

### Plenary presentations

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Plenary presentations are scheduled in the main conference room "Bosrandzaal". Plenary lectures are 35 minutes in total, including time for questions/discussions.

After the plenary lectures, the conference will continue with two parallel sessions; one in the main conference room, and one in the Lijsterbeszaal.

### Keynote / Oral and Flash presentations

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<b>Tuesday, June 3<sup>rd</sup>:</b>	Enhancement of hydrocolloids functionality Human health, dietary fibre and digestibility	Bosrandzaal Lijsterbeszaal
<b>Wednesday, June 4<sup>th</sup>:</b>	Hydrocolloids to control food structure Interfacial aspects	Bosrandzaal Lijsterbeszaal
<b>Thursday, June 5<sup>th</sup>:</b>	Hydrocolloids to control food structure Interfacial aspects Novel hydrocolloids	Bosrandzaal Lijsterbeszaal Bosrandzaal
<b>Friday, June 15<sup>th</sup>:</b>	Encapsulation technologies Hydrocolloid characterisation Coatings films and packaging	Lijsterbeszaal Bosrandzaal Lijsterbeszaal

Keynote lectures have a duration of 25 minutes including questions, and oral presentations (P) have a duration of 20 minutes including questions. All presenters are requested to bring their presentation file (on a USB stick) prior to the start of their session, preferably in the break before their session starts.

All presenters are required to keep within the time allocated for their presentation. In the case the duration of the presentation is too long, the chair may interrupt your presentation to keep to the time schedule.

Flash presentations (F) are 5 minute oral presentations. No question round is included for these presentations.

All presentation abstracts are provided on the website as the "presentation abstract booklet", or can be obtained by scanning the QR code.



### Poster presentations

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The posters will be presented in two poster sessions in the "Boomgaardzaal":

<b>Session I</b>	<b>Tuesday, June 3<sup>rd</sup>, 17.30-18.30</b>
<b>Session II</b>	<b>Thursday, June 5<sup>th</sup>, 17.30-18.30</b>

## Gums and Stabilisers for the Food Industry Conference

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Presenters of posters during session I can put up their posters on Tuesday and are requested to remove their posters on Wednesday around lunchtime. Presenters of posters during session II can put up their posters on Thursday morning, and are requested to remove them before the end of the conference. Posters should be presented in portrait size on A0 format.

The poster titles are provided at the end of this program booklet, and poster abstracts are available in the "poster abstract booklet" on the website, or by scanning the QR code.



Drinks are provided during the poster sessions.

### Social Events

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#### Tuesday, June 3<sup>rd</sup>

#### Welcome reception / dinner

The welcome dinner will take place at the conference venue the "Wageningsche Berg" from 19.00 until 21.00. Drinks will be included.

After the welcome dinner, people can join our pub quiz, which will take place in the Arboretumzaal. Everyone is invited to join, and this is an excellent opportunity to get to know each other. Teams should contain no more than 6 people. We have a small surprise for the winning team.

#### Wednesday, June 4<sup>th</sup>

#### Dinner (BBQ)

Dinner/BBQ will be served from 19.00 to 21.00 in the restaurant of the venue. Drinks during dinner are included in the conference fee

#### Thursday, June 5<sup>th</sup>

#### Conference Banquet and social event

Dinner will be served at 19.00 at the conference venue. Drinks will be included until 21.00. During the conference banquet, the poster prizes will be presented.

After dinner, a dance floor with DJ will be present in the Arboretumzaal from 21.30 to 01.00. Please join us for a dance and some fun! (Drinks during that event are not included in the conference fee).

### Special Issue

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Participants of the Gums and Stabilisers conference are invited to submit full manuscript for consideration through a peer review process in the journal *Food Hydrocolloids*. ***Food Hydrocolloids*** is the premier international forum devoted to the publication of high-quality original and innovative research concerned with the characterisation, functional properties and applications of hydrocolloid materials used in food products.

**Final submission date:**

**October 1st, 2025**

### Plenary Speakers

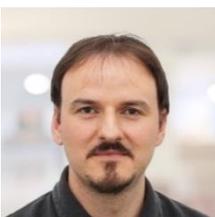
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**Tara Grauwet**  
KU Leuven, Belgium

*Why a food is more than the sum of its ingredients: the role of foods structure in starch digestion of pulse-based foods*

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**Christophe Schmitt**  
Nestle, Switzerland

*Tailoring plant protein aggregation to deliver functionality in complex food systems*

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**Maria José Fabra**  
Institute of Agrochemistry and Food Technology (IATA), Spain

*Valorisation strategies to obtain hydrocolloids of interest for food and food packaging*

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**Alexander Mathys**  
ETH Zurich, Switzerland

*Novel microalgae proteins and their structural, functional, nutritional and sustainability aspects*

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**Daniel Wefers**  
Martin Luther University, Germany

*Applications of partial hydrolysis for the structural analysis of polysaccharides*

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**Katsuyoshi Nishinari**  
Hubei University of Technology, China

*A hydrocolloid approach to food and health*

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### Keynote Speakers

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**Sushil Dhital**

Monash University, Australia

*Dietary Fibre and Starch Structures affects Gut Microbiota and Metabolites*

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**Mario Martinez**

University of Valladolid, Spain

*Crafting sustainable polysaccharide ingredients for precision nutrition*

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**Anweshha Sarkar**

University of Leeds, UK

*Mouthfeel challenges of plant proteins: Towards colloidal solutions informing future sustainable food development*

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**Cathrina Edwards**

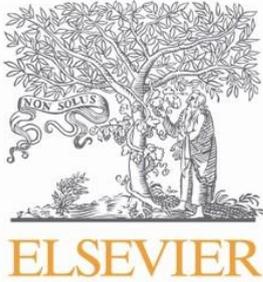
Quadram Institute Bioscience, Norwich, UK

*Legume cells: Exploiting their digestive breakdown for healthier food solutions*

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Sponsors

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## Gums and Stabilisers for the Food Industry Conference

### Participant list

	<b>Last Name</b>	<b>First Name</b>	<b>Affiliation</b>
1	Ahrne	Lilia	University of Copenhagen, Denmark
2	Andersen	Ulf	Arla Foods
3	Anderton	Cara	University of Birmingham, UK
4	Antilla	Liisa	Nouryon
5	Appeldoorn	Maaike	DSM-Firmenich
6	Apostolidis	Eftychios	Harokopio University of Athens, Greece
7	Ata	Ada	İzmir Institute of Technology, Turkey
8	Atma	Yoni	University of Leeds, UK
9	Baether	Sabrina	Technical University, Dresden, Germany
10	Baights-Allende	Diana	Czech University of Life Science, Prague
11	Bender	Denisse	University of Natural Resources, Austria
12	Bian	Xiaojia	WUR, Netherlands
13	Boisset	Gaëlle	WUR, Netherlands
14	Bole	Maxime	University of Bourgogne, France
15	Bonilla	Jose	University of Copenhagen, Denmark
16	Boonkor	Ployfon	WUR, Netherlands
17	Bot	Arjen	Unilever, the Netherlands
18	Bot	Francesca	University of Parma, Italy
19	Bruhan	Juliane	Technical University Berlin, Germany
20	Buckow	Roman	Latrobe University, Australia
21	Buyuk	Miray	Izmir Institute of Technology, Turkey
22	Calligaris	Sonia	University of Udine, Italy
23	Conley	Gora	LS Instruments, Switzerland
24	Cossettin Teixeira	Camila	Fondazione Edmund Mach, Italy
25	Coulier	Leon	Dsm-fermenich
26	Cowley	James	University of Adelaide, Australia
27	Dainton	Amanda	Freshpet, Colchester, UK
28	de Amarante	Marina	University of Birmingham, UK
29	de Groot	Anteun	WUR, Netherlands
30	Debeaufort	Frederic	University of Bourgogne, France
31	Debetrand	Agathe	
32	Denis	Silvi Bobadilla	IATA-CSIC
33	Dewi	Belinda	Boku University, Austria
34	Dhital	Sushil	Monash University, Australia
35	di Filippo	Guilia	University of Udine, Italy
36	Diaz	Patricia Cazon	
37	Dijkhuis	David	Anton Paar
38	Dijkhuizen	Lubbert	Carbexplore Research B.V., Netherlands
39	Doshi	Nirzar	WUR, Netherlands
40	Drusch	Stephan	Technical University Berlin, Germany
41	Duggan	Francesca	University of Parma, Italy
42	Dumoulin	Charlotte	Agroparistech, France
43	Dunnewind	Bertus	
44	Dybdal-Grasberger	Katherine	Aarhus University, Denmark
45	Edwards	Cathrina	Quadram Institute Bioscience, UK
46	Erten	Tayyibe	Bayburt University, Turkey
47	Essers	Maurice	WUR, Netherlands

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48	Fabra	Maria	IATA, CSIC, Valencia, Spain
49	Fernandes	Paulo	Nestle, France
50	Fortuin	Jennyfer	Luxembourg Institute of Technology
51	Frempong	Kwame	Southwest University of Technology
52	Fuhrmann	Philipp	Boku University, Austria
53	Furch	Alisa	Martin Luther University, Germany
54	Galczyńska	Kasia	Cargill, France
55	Gamonpilas	Chaiwutg	National Metal and Materials Technology Center, Thailand
56	Garcia	Afsane Kazerani	Perfat Technologies, Finland
57	Geldart	Karen	
58	Gennari	Lorenzo	Soremartec, Ferrero Group, Italy
59	Goff	Doug	University of Guelph, Canada
60	Gonzalez	Florence	University of Valladolid
61	Gotoh	Keiji	San Ei Gen FFI, Japan
62	Goycoolea	Francisco	University of Murcia, Spain
63	Grauwet	Tara	KU Leuven, Belgium
64	Grell	Maxine	ICI group
65	Groot Nibbelink	Dieke	WUR, Netherlands
66	Gueda	Agoda-Tandjawa	Cargill, France
67	Halevi	Oded	Meala Food
68	Hao	Junlian	LS Instruments, Switzerland
69	Harasym	Joanna	Wroclaw University of Economics and Business, Poland
70	Hecht	Lena	Givaudan
71	Heiden-Hecht	Theresia	Forschungszentrum Julich, Germany
72	Herz	Eva	ICI-group
73	Hodnas	Marie	Nouryon
74	Huc-Mathis	Delphine	AgroParisTech, Paris, France
75	Humayun	Sanjida	Tallinn University, Estonia
76	Janssen	Senna	WUR, Netherlands
77	Jaros	Doris	Technical University, Dresden, Germany
78	Jarzebski	Majciej	Poznan University, Poland
79	Kanata	Maria Christina	Harokopio University of Athens, Greece
80	Karbowiak	Thomas	University of Bourgogne, France
81	Kersten	Frederike	Martin Luther University, Germany
82	King	Jenna	University of Leeds, UK
83	Marton	Kiraly	WUR, Netherlands
84	Klojdova	Iveta	Czech University of Life Science in Prague
85	Knarreborg	Lisbeth	Dsm-firmenich, Denmark
86	Kollmann	Nienke	WUR, Netherlands
87	Konings	Gijs	WUR, Netherlands
88	Kontogiorgos	Vassilis	University of British Columbia, Canada
89	Kornet	Remco	Vivici
90	Kozlu	Ali	Czech University of Life Science in Prague
91	Krokosz	Danuta	REGIS, Poland
92	Le Garnec	Cindy	Cargill, France
93	Li	Lisa	Elsevier, China
94	Li	Nana	WUR, Netherlands
95	Li	Yuan	China Agricultural University, China
96	Li	Ting	WUR, Netherlands
97	Lingxin	You	Luxembourg Institute of Technology
98	Liu	Jingwei	WUR, Netherlands
99	Liu	Yi	WUR, Netherlands
100	Livney	Yoav	Technion, Israel Institute of Technology
101	Lopes	Marco	Alive Travel

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102	Lu	Hanbong	WUR, Netherlands
103	Lyu	Fangxin	Technical University Berlin, Germany
104	Ma	Xingfa	WUR, Netherlands
105	Maede	Kazuhiro	San Ei Gen FFI, Japan
106	Mardanihosseinabadi	Moshen	Perfat Technologies, Finland
107	Martinez	Mario	University of Valladolid, Spain
108	Mathys	Alexander	ETH Zurich, Switzerland
109	Mazzocoto	Marcella	University college Dublin, Ireland
110	Medina	Rocio Morales	Technical University Berlin, Germany
111	Melchior	Sofia	San Raffaele University, Italy
112	Michel	Sarah	Nestle, Switzerland
113	Mills	Tom	University of Birmingham, UK
114	Moelants	Katlijn	Cargill, France
115	Morris	Gordon	University of Huddersfield, UK
116	Murugesan	Selvarkumar	IITT, India
117	Mussolini	Simone	Verona University, Italy
118	Nachtigall	Carsten	Technical University- Dresden, Germany
119	Nascimento	Luis Gustavo	Soredab
120	Nettesheim	Florian	IFF, Denmark
121	Nikiforidis	Costas	WUR, Netherlands
122	Nishinari	Katsuyoshi	Hubei University, Wuhan, China
123	Nujamee	Ngasakul	Czech University of Life Science in Prague
124	Padilla	Eduardo	Carl Müller GmbH & Co., Germany
125	Palla	Palla, Camila	Perfat Technologies, Finland
126	Parle	Florencia	University of Valladolid, Spain
127	Paron	Oliwia	
128	Pederson	Heidi Liva	Tate & Lyle, Denmark
129	Pereira	Correia	University of Minho, Portugal
130	Philipsen	Luuk	Unilever
131	Phung	Thi Thanh Truc	INRAe Dijon, France
132	Poulin	Clement	University of Bourgogne, France
133	Pramudito	Theodorus	WUR, Netherlands
134	Proto	M	Stable microsystems
135	Purrini	Jeta	WUR, Netherlands
136	Rawson	Gavin	University of Leeds, UK
137	Risse	Kerstin	Technical University Berlin, Germany
138	Roberts-Harry	Ieuan	Unilever
139	Rodrigues	Gloria Hernandez	University of Leeds, UK
140	Rodrigues	Rui	University of Minho, Portugal
141	Rohm	Harald	Technical University- Dresden, Germany
142	Ruijters	Haaike	Anton Paar
143	Rummel	Florian	Netzsch
144	Rychlick-Rybska	Joanna	REGIS, Poland
145	Sagis	Leonard	WUR, Netherlands
146	Salsano	Monica	Perfat Technologies, Finland
147	Salvati	Diogo	University of Valladolid, Spain
148	Sanchez	Patricia	Spanish National Research Council, Spain
149	Sanz	Teresa	IATA-CSIC
150	Sarkar	Anwasha	University of Leeds, UK
151	Saptu	Bas	Vivici
152	Scheermeijer	Roos	WUR, Netherlands
153	Schmitt	Christophe	Nestle Research, Switzerland
154	Schols	Henk	WUR, Netherlands
155	Scholten	Elke	WUR, Netherlands

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156	Schulte	Lennard	Unilever
157	Sedlmeyer	Felix	
158	Seibt	Jasper	Technical University, Dresden, Germany
159	Semwal	Jyoti	University of Leeds, UK
160	Shen	Penhui	WUR, Netherlands
161	Soukoulis	Christos	Luxembourg Institute of Science and Technology
162	Stieger	Markus	WUR, Netherlands
163	Sukop	Ulrich	University of Life Sciences, Austria
164	Sworn	Graham	IFF, France
165	Tagle Freire	Danny	WUR, Netherlands
166	Tait	Evelyn	University of Birmingham, UK
167	Tan	Kevin	Abbott
168	Thipchai	Parichat	Chiang Mai University, Thailand
169	Thorenz	Eric	Technical University of Berlin, Germany
170	Tinoco	Maria Benlloch	Northumbria University, UK
171	Tran	Minh Tuan	Aarhus University, Denmark
172	Trevisol	Francesca	University of Udine, Italy
173	Vahedifa	Amir	University of Alberta, Canada
174	Valoppi	Fabio	Perfat Technologies, Finland
175	van der Schaaf	Ulrike	Karlsruhe Institute of Technology, Germany
176	van Esbroeck	Thiemo	WUR, Netherlands
177	van Haastrecht	Bram	WUR, Netherlands
178	van Korlaar	Van Korlaar, Inez	Elsevier
179	van Leusden	Pauline	Yili Innovation
180	Vanzetti	Paolo	Soremartec, Ferrero Group, Italy
181	Veerman	Tim	Cosun, Netherlands
182	Verbruggen	Marian	Ruitenbergh, Netherlands
183	Verde	Giovanna	Copenhagen University, Denmark
184	Viera	Jorge	University of Minho, Portugal
185	Vincente	Antonio	University of Minho, Portugal
186	Vreeker	Rob	WUR, Netherlands
187	Wagemans	Anja Maria	Technical University Dresden, Germany
188	Wang	Qimeng	WUR, Netherlands
189	Wefers	Daniel	Martin Luther University, Germany
190	Williams	Peter	Wrexham University, UK
191	Wolf	Bettina	University of Birmingham, UK
192	Wouters	Arno	KU Leuven, Belgium
193	Wu	Cunhui	IATA-CSIC
194	Yakubov	Gleb	University of Leeds, UK
195	Yang	Jack	WUR, Netherlands
196	Yanni	Amalia	Harokopio University of Athens, Greece
197	Yin	Wanting	WUR, Netherlands
198	Yu	Xiaofei	WUR, Netherlands
199	Zhang	Yifan	WUR, Netherlands
200	Zhuang	Ziqi	WUR, Netherlands
201	Zinoviadou	Kyriaki	American Farm School, Greece
202	Zondervan	Sybren	WUR, Netherlands

# DAY ONE

## Gums and Stabilisers for the Food Industry

Tuesday, 3<sup>rd</sup> of June 2025

11.00 – 13.00 Registration

13.00 – 13.15 Opening Ceremony

13.15 – 13.50 Plenary lecture 1 **Why a food is more than the sum of its ingredients: the role of food structure in starch digestion of pulse-based foods**

T. Grauwet<sup>1</sup> & D Duijsens, Laboratory of Food Technology, KU Leuven, Belgium

Chair: Pete Williams

Session A		Session B	
Enhancement of hydrocolloid Functionality		Human health, dietary fibre and digestibility	
Chair: Pete Williams		Chair: Costas Nikiforidis	
13.50 – 14.15	<b>K1 Keynote 1</b> <b>Dietary Fibre and Starch Structures affects Gut Microbiota and Metabolites</b> Sushil Dhital, Monash University, Australia	13.50 – 14.15	<b>K2 Keynote 2</b> <b>Crafting sustainable polysaccharide ingredients for precision nutrition</b> Mario M. Martinez, University of Valladolid, Spain
14.15 – 14.35	<b>P1 Towards clean-label solutions for plant-based foods: combining commercial plant protein isolates and using enzymes to modify gel properties</b> <u>Senna W.P.M. Janssen</u> , Laurice Pouvreau, Renko J. de Vries, Wageningen University, the Netherlands	14.15 – 14.35	<b>P2 In vitro digestion and release of bioactive peptides from chitosan-alginate polyelectrolyte complexes</b> <u>Yoni Atma</u> , Amin Sadeghpour, Brent S. Murray, Francisco M. Goycoolea
14.35 – 14.55	<b>P3 Non-destructive Techniques for Hydrocolloid Characterization: from particle sizing to micro-rheology.</b> G.M. Conley, J. Medinger and A. Vaccaro, LS Instruments AG, Switzerland	14.35 – 14.55	<b>P4 Impact of individual wet and dry fractionation processing steps on pea protein composition and in vitro digestibility</b> <u>Hanhong Lu</u> , Markus Stieger, Edoardo Capuano, Maarten Schutyser and Ciarán Forde, Wageningen University & Research, The Netherlands
14.55 – 15.15	<b>P5 High temperature thermo-electric treatments as an innovative strategy to improve the techno-functional potential of vegetable proteins.</b> Ana Leite, Luis Loureiroab, Zita Avelara, Ricardo N. Pereireab and <u>Rui M. Rodrigues</u> University of Minho, Portugal	14.55 – 15.15	<b>P6 Rheological characterization of in vitro digested tube feed to minimize aspiration risk</b> F Rummel, Q Saleem, X Guo, C Strasser, F Herkenhoff, L Zhang, S Lipinski, S Küspert and A Aufderhorst-Roberts NETZSCH Germany

15.15 – 15.40 Coffee break

<b>Session C</b>		<b>Enhancement of hydrocolloid functionality</b>		<b>Session D</b>		<b>Human health, dietary fibre and digestibility</b>	
Chair: Mario Martinez				Chair: Tara Grauwet			
15.40 – 16.00	<b>P7</b>	<b>Production of low viscous pectin-rich carrot dietary fibre by enzymatic hydrolysis and high-pressure homogenisation</b> <u>R. Morales-Medina</u> , R. Pérez-Gálvez, J. Steffan, R. Schmidt, M Bunzel and S. Drusch. Technische Universität Berlin, Germany		15.40 – 16.00	<b>P8</b>	<b>Unveiling the effect of whey protein hydrolysates on gut microbiota</b> <u>G Di Filippo</u> , S Calligaris, M Marino, A Rossi, N Renoldi, F Marroni and N Innocente University of Udine, Italy	
16.00 – 16.20	<b>P9</b>	<b>On the Possibility of Inter-Transglycosylation by the Branching Enzyme <i>Rhodothermus obamensis</i></b> <u>Maurice K.H. Essers</u> , Lambertus A.M van den Broek, Hans Leemhuis, Johannes H. Bitter Wageningen Food & Biobased Research, the Netherlands		16.00 – 16.20	<b>P10</b>	<b>Boosting Starch-Phenolic Interactions to Modulate the Multi-Scale Structure of Starch and Reduce Digestibility</b> Maria Benloch-Tinoco, Pedro Rivero-Ramos, Carlos E. Carranza-Gutierrez, Joel Giron-Hernandez, James Railton, Piergiorgio Gentile, Dolores Rodrigo Northumbria University, UK	
16.20 – 16.40	<b>P11</b>	<b>Subcritical Water Treatment of Cereal Brans for fiber solubilization and enhanced functional properties</b> <u>D Salvati</u> , FL Brochiero, E Menalla, J García-Sern2, D Cantero and L Román University of Valladolid, Spain		16.20 – 16.40	<b>P12</b>	<b>Modifying digestion in a dense wheat gluten network through the addition of cellular legume flour</b> <u>GAI Boisset</u> , CG Forde, M Stieger and E Capuano, Wageningen University, The Netherlands	
16.40 – 16.45	<b>FLASH 1</b>	<b>Modeling of extrusion process to reduce allergenicity in snack with greek nuts</b> <u>Evgenia N. Nikolaou</u> University of Athens, Greece		16.40 – 16.45	<b>FLASH 5</b>	<b>Production of sugar reduced ice cream by incorporation of inulin and low viscous carrot soluble dietary fibre</b> <u>E. Thorenz</u> Technische Universität Berlin	
16.45 – 16.50	<b>FLASH 2</b>	<b>Tuning functional properties by starch by a combination of enzymatic treatment and infrared processing</b> <u>Jyoti Semwal</u> Central Food Technological, Research Institute, India		16.45 – 16.50	<b>FLASH 6</b>	<b>Preparation of dietary fibre from soybean hulls and its application as fat replacer in low-fat ice cream</b> <u>Xiangyu Liu</u> China Agricultural University	
16.50 – 16.55	<b>FLASH 3</b>	<b>Impact of Heat Treatment on the Molecular Interactions of Pea Protein Fractions</b> <u>J.H. Seibt</u> Technical University Dresden					
16.55 – 17.00	<b>FLASH 4</b>	<b>Driving pea and whey protein hydrolysis towards the development of hybrid beverages with improved foamability</b> <u>G. Di Filippo</u> University of Udine					
<b>17.30 – 18.30</b>	<b>Poster Session I</b>						
<b>19.00 – 21.00</b>	<b>Welcome dinner</b>						
<b>21.30</b>	<b>Pub quiz</b>						

# DAY TWO

## Gums and Stabilisers for the Food Industry

Wednesday, 4<sup>th</sup> of June 2025

**09.00 – 09.35 Plenary lecture 2 Tailoring plant protein aggregation to deliver functionality in complex food systems**

Christophe Schmitt et. al., Nestlé, Switzerland

Chair: Francisco Goycoolea

<b>Session E</b>		<b>Hydrocolloids to control food structure</b>	<b>Session F</b>		<b>Interfacial aspects</b>
Chair: Francisco Goycoolea			Chair: Sushil Dhital		
09.35 – 10.00	<b>K3</b>	<b>Keynote 3</b> <b>Mouthfeel challenges of plant proteins: Towards colloidal solutions informing future sustainable food development</b> <u>Anweshia Sarkar</u> University of Leeds, UK	09.35 – 10.00	<b>K4</b>	<b>Keynote 4</b> <b>Legume cells: Exploiting their digestive breakdown for healthier food solutions</b> <u>Cathrina Edwards</u> Quadram Institute Bioscience, Norwich, UK
10.00 – 10.20	<b>P13</b>	<b>Hydrocolloid-Based Fat Analogues: Advancing the Texture and Taste of Plant-Based Meat Products</b> Roman Buckow, Deepa Agarwal, and Yakindra Timilsena, La Trobe University, Australia	10.00 – 10.20	<b>P14</b>	<b>Sulfonated Cottonseed Hydrolysates with Adjustable Amphiphilicity as Environmental - Stress Stable Emulsifiers</b> Kwame Eduam Baiden Frempong, Guiqiang He, Meng Kuang, Min Xue, Jie Wang, Yanxia Wei, Jian Zhou, Southwest University of Science and Technology, PR China
10.20 – 10.40	<b>P15</b>	<b>Linking physicochemical properties to sensory perception of plant-based meat analogues patties: Retained water and released serum enhance juiciness and boost flavour intensity</b> <u>Y Zhang</u> , G Sala, E Scholten and M Stieger, Wageningen University, the Netherlands	10.20 – 10.40	<b>P16</b>	<b>Multiphase systems – new challenges for the stability and stabilizers evaluation</b> Maciej Jarzębski, Poznań University of Life Sciences, Poland
10.40 – 11.00	<b>P17</b>	<b>Decoding meat analogues: insights into ingredient structure-function relationships</b> <u>T van Esbroeck</u> , G Sala, M Stieger and E Scholten, Wageningen University, The Netherlands			
<b>11.00 – 11.20</b>	<b>Coffee break</b>				

<b>Session G</b>		<b>Hydrocolloids to control food structure</b>	<b>Session H</b>		<b>Interfacial aspects</b>
Chair: Gordon Morris			Chair: Leonard Sagis		
11.20 – 11.40	<b>P18</b>	<b>Use of cellulose microfibrils and potato protein to form double network gels</b> <u>Ieuan Roberts-Harry</u> , Braulio A. Macias Rodriguez, Krassimir P. Velikov Unilever, University of Amsterdam, The Netherlands	11.20 – 11.40	<b>P19</b>	<b>Improvement of Amphipathic Properties with Molecular Structure Unfolding and Activation of Cottonseed Protein as Ultra Stable and Safe Emulsifier</b> Kwame Eduam Baiden Frempong, Guiqiang He, Meng Kuang, Peng Jun, Min Xue, Yanxia Wei, Jian Zhou Southwest University of Science and Technology, PR China
11.40 – 12.00	<b>P20</b>	<b>Tuning Cellulose Microfibril Containing Plant-Protein Gels by Shear</b> <u>L Schulte</u> , KP Velikov Unilever, University of Amsterdam, The Netherlands	11.40 – 12.00	<b>P21</b>	<b>Solubility influences the colloidal stability of lentil protein emulsions</b> N Malterre, <u>F Bot</u> , EK Arendt, E Zanini, and JA O'Mahony University of Parma, Italy
12.00 – 12.20	<b>P22</b>	<b>Impact of Protein Denaturation and Solubility on Structuring and Gelation of Plant Proteins</b> E R Koester, J H Seibt, <u>A M Wagemans</u> Technical University Dresden, Germany	12.00 – 12.20	<b>P23</b>	<b>Casein stabilized interfaces, the role of molecular structure</b> <u>Anteun de Groot</u> , Etske Bijl, Leonard Sagis, Wageningen University The Netherlands
12.20 – 12.40	<b>P24</b>	<b>Role of polysaccharides in ice cream texture and aroma release</b> <u>Camila Cossetin Teixeira</u> , Michele Pedrotti, Lorenzo Gennari, Sala Guido, Andrea Cavallero, Simone Asteggiano, Francesco Spataro, Iullia Khomenko, Flavia Gasper, Franco Biasioli, Fondazione Edmund Mach, Italy	12.20 – 12.40	<b>P25</b>	<b>Linking adsorption dynamics and interfacial viscoelasticity to droplet formation using microfluidics: Insights from faba and whey protein mixtures</b> <u>Katherine Dybal-Grasberger</u> , Dionysios D. Neofytos, Sandra B. Gregersen, and Milena Corredig, Aarhus University, Denmark
12.40 – 13.00	<b>P26</b>	<b>The development of agar fluid gels for fat reduction in high-sugar bakery fillings.</b> <u>Cara Anderton</u> , Bettina Wolf, Kristina Lodaitè, Fotis Spyropoulos University of Birmingham, UK	12.40 – 13.00	<b>P27</b>	<b>Common bean proteins: similar interfacial rheology, distinct interfacial structures and functionalities</b> <u>Wanting Yin</u> , Jasper Landman, Jack Yang, Leonard M.C. Sagis, Wageningen University, the Netherlands
<b>13.00 – 14.00</b>	<b>Lunch</b>				

**14.00 – 14.35 Plenary lecture 3 Valorisation strategies to obtain hydrocolloids of interest for food and food packaging**

María José Fabra et al Institute of Agrochemistry and Food Technology (IATA), Spain

Chair: Markus Stieger

<b>Session I</b>	<b>Hydrocolloids to control food structure</b>	<b>Session J</b>	<b>Interfacial aspects</b>
Chair: Katsuyoshi Nishinari		Chair: Anwasha Sarkar	
14.35 – 14.55	<b>P28 Utilizing capillary forces to structure protein oleogels</b> Dieke Groot Nibbelink, Annika Feichtinger, Elke Scholten Wageningen University, The Netherlands	14.35 – 14.55	<b>P29 Unrefined pistachio shell powder as multifunctional stabilizing agent for emulsions and foams</b> Roxane Grard, Marine Moussier, Cyprien Bouju, Florent Boissou, Julien Souquet-Grumey, David Blumenthal, Delphine Huc-Mathis, INRAE, AgroParisTech, France
14.55 – 15.15	<b>P30 Clean label oleogels from legumes as fat source in puff pastry</b> T Sanz, S Bobadilla, Q Wang, C Hu, M. Espert, and A Salvador Instituto de Agroquímica y Tecnología de Alimentos, Spain	14.55 – 15.15	<b>P31 Techno-functionality of pigeon pea proteins and their interfacial properties at the air-water interface</b> C Gamonpilas, J Buakaew, P Methacanon, P Boonkor and LMC Sagis, National Metal and Materials Technology Center, Thailand
15.15 – 15.35	<b>P32 Mimicking the melting profile of adipose tissue through a controlled coalescence in dense emulsions</b> Gijs Konings, Elke Scholten and Costas Nikiforidis Wageningen University, The Netherlands	14.15 – 15.35	<b>P33 Microbubble powders from freeze-dried Pickering emulsions</b> Q Wang, A Poortinga, C Cheng , N Harmelen, Y Li, E Scholten, and R de Vries, Wageningen University, the Netherlands

**15.35 – 16.00 Coffee break**

<b>Session K</b>		<b>Hydrocolloids to control food structure</b>	<b>Session L</b>		<b>Interfacial aspects</b>
Chair: Paulo Fernandes			Chair: Gleb Yakubov		
16.00 – 16.20	<b>P34</b>	<b>Stabilization of gluten-free starch-based model systems via arabinoxylan-protein networks</b> <u>Ulrich Sukop</u> , Denisse Bender, Stefano D'Amico, Mario Jekle, Regine Schönlechner, Konrad J. Domig, University of Natural Resources and Life Sciences, Austria	16.00 – 16.20	<b>P35</b>	<b>Predicting emulsion viscosity by encoding neural networks with physics; slowly removing the A from AI</b> Meinders, <u>Jack Yang</u> , Erik van der Linden Wageningen University, the Netherlands
16.20 – 16.40	<b>P36</b>	<b>Quantification of Anisotropic Microstructures in Gluten Network Formed by Addition of CMC</b> Jens Saalbrink, Francesca Serra, <u>José C. Bonilla</u> , University of Copenhagen, Denmark	16.20 – 16.40	<b>P37</b>	<b>Tribology and rheology of model water-in-water emulsions</b> C Wang, BS. Murray, M Bryant, S Lee, A Sarkar University of Leeds, UK
16.40 – 16.45	<b>FLASH 7</b>	<b>Development of Novel Bigels Fortified with Carrot Pomace</b> <u>Nujamee Ngasakul</u> , Michaela Freyová, Ali Kozlu, Diana K. Baigts Allende, and Iveta Klojdová, Czech University of Life Sciences, Czech Republic	16.40 – 16.45	<b>FLASH 11</b>	<b>Influence of molecular weight on the anti-adhesion bioactivity of exopolysaccharides from <i>Leuconostoc mesenteroides</i> against enterotoxigenic <i>Escherichia coli</i></b> TE Pramudito, C Klostermann, EJ Smid, HA Schols Wageningen University, the Netherlands
16.45 – 16.50	<b>FLASH 8</b>	<b>Fostering the protein transition by hybrid food structures: the case study of gels made by milk whey and pea proteins</b> Sofia Melchior, Giulia Di Filippo, Roberta Pratolino, Nadia Innocente, Sonia Calligaris San Raffaele University, Italy	16.45 – 16.50	<b>FLASH 12</b>	<b>Generic behavior of pulse proteins in making foam</b> <u>Penghui Shen</u> , Solange Ha, Jinfeng Peng, Jasper Landman, Leonard M.C. Sagis, Wageningen University, the Netherlands
16.50 – 16.55	<b>FLASH 9</b>	<b>Towards an understanding of the structuring mechanisms of 3D printed flour-based matrices</b> C <u>Dumoulin</u> , C Leverrier, S Berland, C Michon and G Almeida Université Paris-Saclay, INRAE, AgroParisTech, France	16.50 – 16.55	<b>FLASH 13</b>	<b>Exploitation of protein-pectin-polyphenol interactions for stabilization of reduced-oil white bean aquafaba vegan mayonnaise</b> <u>Ada Ata</u> Miray Büyük & Ahmet Yemenicioğlu*, İzmir Institute of Technology, Turkey
16.55 – 17.00	<b>FLASH 10</b>	<b>Interaction networks of ulvan-based mixed systems</b> CNS Darko, S Humayun, AD Premarathna, B Agyei-Tuffour NJ Goosen, R Tuvikene Tallinn University, Estonia			
<b>17.00 – 17.40</b>	<b>G.O. Phillips Young Scientist Award Lecture will be presented by Professor Arno Wouters, KU Leuven, Belgium</b>				
<b>17.40 – 18.40</b>	<b>The Food Hydrocolloids Trust Medal Lecture, sponsored by Elsevier, will be given by Professor Henk A. Schols, Wageningen University</b>				
<b>19.00</b>	<b>BBQ</b>				

# DAY THREE

## Gums and Stabilisers for the Food Industry

Thursday, 5<sup>th</sup> of June 2025

**09.00 – 09.35 Plenary lecture 4 Novel microalgae proteins and their structural, functional, nutritional and sustainability aspects**  
 Alexander Mathys, ETH Zurich, Switzerland  
 Chair: Gleb Yakubov

Session M	Hydrocolloids to control food structure	Session N	Interfacial aspects
Chair: Gleb Yakubov		Chair: Christophe Schmitt	
09.35 – 9.55	<b>P38 Revisiting Pectin in Food Applications</b> S.E. Michel, P. Segarra Calbert, L. Sandoz, J. Bascaran Reinking Nestlé, Switzerland	09.35 – 9.55	<b>P39 pH-induced conformational changes of lupin protein-pectin mixtures and their effect on air-water interfacial properties and foaming functionality</b> Xingfa Ma, Mehdi Habibi, Leonard M.C. Sagis Wageningen University, the Netherlands
9.55 – 10.15	<b>P40 Low methoxyl pectin-based milk gels: Understanding structuring mechanisms in neutral dairy environments</b> Guéba Agoda-Tandjawa, Pierre Daniel, Stéphane Mauduit, Anne-Laure Rouger, Cargill Starches Sweeteners & Texturizers, France	9.55 – 10.15	<b>P41 Decoding Gum Arabic: Unraveling the Connection Between Structure and Functionality.</b> F. Kersten, D Martin, US van der Schaaf and D Wefers, Martin Luther University, Germany
10.15 – 10.35	<b>P42 Phase separation in aqueous mixtures with multiple components.</b> Bot Arjen, van der Linden Erik and Venema Paul Wageningen University, The Netherlands	10.15 – 10.35	<b>P43 Improving the stability of pea protein emulsions by phospholipids: a structure-dependent approach.</b> Kerstin Risse, Fathinah I. Hasyiyati, Emma Hinderink, Karin Schröen, Stephan Drusch, Technische Universität Berlin, Germany

**10.35 – 11.10 Coffee break**

Session O	Novel hydrocolloids	Session P	Encapsulation technologies
Chair: Anja Wagemans		Chair: Maria Fabra	
11.10 – 11.30	<b>P44 Protein isolate from cryo-milled quinoa seeds: a strategy for the design of plant-based soft materials</b> MCA de Amarante, L Ong, F Spyropoulos, S Gras and B Wolf University of Birmingham, UK	11.10 – 11.30	<b>P45 Antioxidant-loaded electrostatic hydrogels with Hibiscus Sabdariffa extracts</b> Ali Kozlu, Nujamee Ngasakul, Iveta Klojdrová and Diana K. Baigts-Allende Czech University of Life Sciences, Czech Republic

11.30 – 11.50	<b>P46</b>	<b>Zooming in on structural properties of mealworm protein gels with and without added CaCl<sub>2</sub> – a study combining rheology and SAXS</b> M. Klost, S. Gleisenberg, S. Drusch, B. Wu, O. Holderer, S. Förster, T. Heiden-Hecht Technische Universität Berlin	11.30 – 11.50	<b>P47</b>	<b>Sodium alginate – a promising material for the encapsulation of next-generation probiotics</b> Thị-Thanh-Trúc PHÙNG, Hải Ngân ĐINH, Bonastre OLIETE, Thomas KARBOWIAK Université de Bourgogne, France
11.50 – 12.10	<b>P48</b>	<b>Protein-dense droplets to colloidal ingredients: Developing colloidal plant protein powders</b> Nirzar Doshi, Jeta Purrini, Paul Venema, Erik van der Linden, Renko de Vries Wageningen University, The Netherlands	11.50 – 12.10	<b>P49</b>	<b>Next-generation prebiotics: Oligosaccharides-protein Maillard-conjugates for selective targeting of proteins to probiotic bacteria in the colon</b> Stav Peled, Shay Freilich, Hila Hanani, May Cohen-Hakmon <sup>b</sup> , Yechezkel Kashi, <u>Yoav D. Livney</u> , Israel Institute of Technology, Israel
12.10 – 12.30	<b>P50</b>	<b>Nonlinear rheological behaviour of mixed plant-dairy matrices: the influence of protein solubility</b> <u>F Duggan</u> , F Valoppi, P Lassila, JA O'Mahony and F Bot University of Parma, Italy	12.10 – 12.30	<b>P51</b>	<b><math>\alpha</math>-Lactalbumin Nanotube as a Novel Delivery System for Food Bioactive Compounds</b> Jipeng Zhang, Xin Li, Yu Yuan, Zekun Li, Xing Li, Xiangyu Liu, Bin Liu, <u>Yuan Li</u> China Agricultural University, China.

**12.30 – 14.00**      **Lunch**

**14.00 – 14.35**    **Plenary lecture 6**      **A hydrocolloid approach to food and health**  
Katsuyoshi Nishinari, Glyn O. Phillips Hydrocolloids Research Centre, Hubei University of Technology, China  
Chair: Doug Goff

<b>Session Q</b>		<b>Novel hydrocolloids</b>	<b>Session R</b>		<b>Encapsulation technologies</b>
Chair: Doug Goff			Chair: Costas Nikiforidis		
14.35 – 14.55	<b>P52</b>	<b>Structuring Ability of Seaweed Soft Particle Suspensions Driven by Polysaccharide Diversity</b> A Souto-Prieto, A Cobos, T Ferreiro, M Martinez-Sanz and P Lopez-Sanchez, Universidade de Santiago de Compostela, Spain	14.35 – 14.55	<b>P53</b>	<b>Microfluidic fabrication of thiolated hyaluronic acid-alginate microsphere with dual adhesion function for colon-targeted co-delivery probiotics and postbiotics</b> Shuxin Wang, Pu Wang, XuJi Yin, Xinyu Zhu, Minghang Zhao, Hao Chen Shandong University, China
14.55 – 15.15	<b>P54</b>	<b>Algal protein-based 3D-printed fish-analogs as a new approach for sustainable seafood</b> Samaa Alasibi, Meital Kazir, Álvaro Israel and <u>Yoav D. Livney</u> Israel Institute of Technology, Israel	14.55 – 15.15	<b>P55</b>	<b>Chickpea Aquafaba as a Novel Stabiliser for Chili Oleoresin Encapsulation: A Study on Optimisation, Rheological Behaviour and Microstructure</b> Selvi Secil Sahin, Alan J. Hernández-Álvarez, Lijing Ke, Peter Ho, Francisco M. Goycoolea University of Leeds, UK

**15.15 – 15.45**      **Coffee break**

<b>Session S</b>		<b>Novel hydrocolloids</b>	<b>Session T</b>		<b>Encapsulation technologies</b>
Chair: Elke Scholten			Chair: Jack Yang		
15.45 - 16.05	<b>P56</b>	<b>Synthesis and Characterization of Bacterial Cellulose–Alginate Composites: Influence of Mannuronic and Guluronic Acid Ratios on Hydrogel Structure.</b> <u>P. Cazón</u> , M. Martínez-Sanz, M. Vallet-Vila, and P. Lopez-Sanchez University of Santiago de Compostela, Spain	15.45 - 16.05	<b>P57</b>	<b>Insights into the ability of microalgal proteins to promote the survivability of <i>Lactocaseibacillus rhamnosus GG</i> during processing, storage and in vitro digestion</b> <u>J. Fortuin</u> , A S Shaplov, M Iken, V Fogliano and C Soukoulis Luxembourg Institute of Science and Technology, Luxembourg
16.05 - 16.25	<b>P58</b>	<b>Oat Protein Concentrate Produced via Dry Fractionation as a Potential Food Ingredient</b> <u>D. Tagle-Freire</u> , M Stieger, C Forde and M Schutyser Wageningen University, The Netherlands	16.05 - 16.25	<b>P59</b>	<b>WavePure®, a label-friendly seaweed powder for food, feed, and cosmetic applications: Challenges and Opportunities.</b> C Le Garnec and G Mangiante Cargill Starches, Sweeteners and Texturizers, France.
16.25–16.30	<b>FLASH 14</b>	<b>Valorizing agricultural waste: Utilizing corn plant leftover to grow yeast biomass, as a potential source of sustainable protein</b> <u>Shachar Heppner</u> and <u>Yoav D. Livney</u> Technion, Israel Institute of Technology, Israel	16.25–16.30	<b>FLASH 18</b>	<b>Chitosan-Genipin Immobilisation System for <i>Alcalase</i>: Targeted Modifications in Sodium Caseinate Hydrolysate</b> <u>M.C. Mazzocato</u> , J.C. Jacquier, University College Dublin, Ireland
16.30 - 16.35	<b>FLASH 15</b>	<b>Microstructural and Diffusive Characterization of Calcium Alginate Hydrogels</b> Yi Liu, Meinou Corstens, Edoardo Capuano, Karin Schroën Wageningen University, the Netherlands	16.30 - 16.35	<b>FLASH 19</b>	<b>Consumer Acceptance of Resveratrol-Loaded Crackers and Cookies Aiming at Functional Food Development.</b> Pedro. M. Silva, Miguel A. Cerqueira , Lorenzo Pastrana, Manuel A. Coimbra , Antonio A. Vicente, Filip Van Bockstaele, Daylan Tzompa-Sosa, Koen Dewettinck University of Minho, Portugal
16.35 - 16.40	<b>FLASH 16</b>	<b>Utilisation of pectin from fermented cabbage waste in jam production</b> F Cebeci and T Erten Bayburt University, Türkiye			
16.40 - 16.45	<b>FLASH 17</b>	<b>Hydrocolloids for enhanced gelation and colloidal stability of precision fermentation-derived <math>\beta</math>-lactoglobulin</b> Bas Sapthu, Kiran Subbarayadu, Silke Rinsma, Marcel Wubbolts, <u>Remco Kornet</u> Vivici BV, The Netherlands			
<b>17.30 - 18.30</b>	<b>Poster Session II</b>				
<b>19.00 - 21.00</b>	<b>Conference Banquet</b>				
<b>21.30 - 01.00</b>	<b>Music program (arboretumzaal)</b>				

# DAY FOUR Gums and Stabilisers for the Food Industry

Friday, 6<sup>th</sup> of June 2025

**09.30 – 10.05 Plenary lecture 5 Applications of partial hydrolysis for the structural analysis of polysaccharides**  
 Daniel Wefers, Martin Luther University, Germany  
 Chair: Graham Sworn

<b>Session U Hydrocolloids characterisation</b>		<b>Session V Coatings, films and packaging</b>	
Chair: Graham Sworn		Chair: Markus Stieger	
10.05 – 10.25	<b>P60 Influence of pH on freeze-structured plant proteins</b> Evelyn Tait, Bettina Wolf, Mark Simmons, Isabel Fernández University of Birmingham, UK	10.05 – 10.25	<b>P61 The effect of polyvinyl alcohol (PVA) on swelling behaviour of chitosan (CS) aerogel</b> Ziqi Zhuang, Edoardo Capuano, Lu Zhang Wageningen University, the Netherlands
10.25 – 10.45	<b>P62 Intrinsic viscosity of exopolysaccharides: determination methods and functionality estimation</b> C Nachtigall, C Noack, A Furch, L Ernst, A M Wagemans, D Wefers, H Rohm and D Jaros Technische Universität, Germany	10.25 – 10.45	<b>P63 Influence of annealing and crosslinking of PVA films on gallic acid release kinetics and antioxidant properties.</b> K. Amouzou, M. Bôle, Z. Jamal, V. Gaucher, S. Degoutin, N. Benbettaieb and F. Debeaufort University of Burgundy, France
10.45 – 11.05	<b>P64 Understanding pea protein-polysaccharide interactions under acidic conditions</b> Minh Tuan Tran, Akihiro Nakamura and Milena Corredig Aarhus University, Denmark	10.45 – 11.05	<b>P65 Water dispersible edible films based on cellulose microfibrils</b> <a href="#">LJ Philipsen</a> , AP Mathew, KP Velikov Unilever Innovation Centre, The Netherlands

**11.05 – 11.30 Coffee break**

<b>Session W</b>		<b>Hydrocolloid characterisation</b>		<b>Session X</b>		<b>Coatings, films and packaging</b>	
Chair: Pete Williams				Chair: Elke Scholten			
11.30 - 11.50	<b>P66</b>	<b>Functional and physicochemical properties of chia seed mucilage extracted using an innovative extraction method</b>	Divyang Solanki, Bhesh Bhandari, Jatindra K. Sahu, Sangeeta Prakash The University of Queensland, Australia	11.30 - 11.50	<b>P67</b>	<b>Comparison of the impact of various natural cross-linkers for gelatin coatings on their functional properties.</b>	C. Poulain, L. El Rassamni, N. Benbettaieb and F. Debeaufort, University of Burgundy, France
11.50 – 12.10	<b>P68</b>	<b>Formation and characterisation of pectin microgels</b>	Chenghao Li, John M. Frostad, Vassilis Kontogiorgos University of British Columbia, Canada	11.50 – 12.10	<b>P69</b>	<b>Development of plant-based multilayer antimicrobial films for sustainable food packaging</b>	<u>Ting Li</u> , Leonard Sagis Wageningen University, the Netherlands
12.10– 12.30	<b>P70</b>	<b>Physicochemical and Rheological Characteristics of Hybrid Carrageenans Derived from <i>Betaphycus gelatinus</i></b>	<u>Sanjida Humayun</u> , Amal D. Premarathna, Vitalijs Rjabovs, Alan T. Critchley, Michael Y. Roleda and Rando Tuvikene, Tallinn University, Estonia	12.10– 12.30	<b>P71</b>	<b>Extraction of Cellulose Nanocrystals from Various Bamboo Species for Advancing Packaging Material in Cassava Starch-Based Films</b>	Parichat Thipchai, Kittisak Jantanasakulwong, Winita Punyodom, Pensak Jantrawut, Thomas Karbowiak, Pornchai Rachtanapun Chiang Mai University, Thailand,
12.30 – 12.50	<b>P72</b>	<b>Thicker than water: exploring the diverse relatives of <i>Plantago ovata</i> to address the narrow hydrocolloid functionality of psyllium in food and the gut</b>	<u>JM Cowley</u> , L Strkalj, GE Yakubov, TJ Foster and RA Burton University of Adelaide, Australia				
<b>12.50 – 13.15</b>	<b>Closing ceremony</b>						

# POSTER SESSION 1

## Gums and Stabilisers for the Food Industry

Tuesday, June 3<sup>rd</sup> :

17.30 – 18.30: Boomgaardzaal

Presenter	Title
1 J Purrini, J Yang and E van der Linden	Molecular predictors of macroscopic foam functionality of soy proteins
2 C. Küchenmeister-Lehrheuer, Gabriela I. Saavedra Isusi, U.S. van der Schaaf	Same as Meat? – Rheology as a Tool for Simulating the Digestion of Meat and Meat Substitutes in the Gastrointestinal Tract
3 Kevin Tan and Qi Lin	Improving the Functional Properties of Soy Protein Isolate via Enzymatic Deamidation with Protein Glutaminase
4 Juliane Brühan, Henrike Höber, Klara Gabriele Barduhn and Stephan Drusch	Optimisation of plant-based milk alternatives through the use of specific pea protein fractions
5 Wenjie Xia, Mario Barra, Lilia Ahrné	Functionalization of commercial pea and fava bean protein ingredients intended for acid gelation by preheating
6 <u>Lingxin You</u> , Benoît Marcolini, Jérôme Bour, Yves Fleming, Peter Fische, Christos Soukoulis	Transformation of Microcrystalline Cellulose into Functional Pickering Particles via Deep Eutectic Solvent and Ultra-High-Pressure Homogenization
7 <u>Fangxin Lyu</u> , Jennifer Rauhöft, Martina Klost and Stephan Drusch	Properties of heat-induced gels from binary mixture of pea, soy and rapeseed proteins
8 P. Pišonić, F. Debeaufort, D. Klepac, V. Stulić, M. Ščetar, N. Benbettaieb and M. Kurek	Impact of chlorogenic acid or essential oils of carrageenan-alginate edible films on structural, functional and release properties
9 C. Muñoz-Shugulí, F. Rodríguez Mercado, M.J. Galotto, N. Benbettaieb, F. Debeaufort	Release of allyl isothiocyanate from antifungal hydrogels based on sodium alginate and $\beta$ -cyclodextrin inclusion complexes
10 <u>J Fortuin</u> , P Grysan, M Iken and C Soukoulis	Adhesion properties of Lacticaseibacillus rhamnosus GG to microalgal proteins
11 Mahdiyeh Ghaffari, Arjen Bot, Rogier Brussee, Gerjen H. Tinnevelt, Jeroen J. Jansen	Success and failure in mayonnaise preparation in the kitchen
12 C. Offei, C. Poulain, N. Benbettaieb and F. Debeaufort	Influence of the Corona surface treatment on antioxidant-PLA films coated with gelatine-based layer incorporating different phenolic compounds
13 Arthur Baak, Costas Nikiforidis, Jack Yang	Exploring germination-induced changes in the composition, protein properties, functionality, and oleosome behaviour of soybeans
14 <u>A Furch</u> , C Nachtigall, A M Wagemans, H Rohm, D Jaros and D Wefers	Development of a chromatographic profiling method for the analysis of heteroexopolysaccharides in yoghurt
15 <u>Jingwei Liu</u> , Xin Jin, Jack Yang, Jinfeng Bi and Erik van der Linden	Sustainable Pectin Extraction from Wet Apple Pomace: Physicochemical and Structural Characterization, Water Holding Capacity
16 <u>O. Paroń</u> , J. Harasym	The Use of Agarose as a Gelator in Oil Solidification Processes: A Review
17 <u>O. Paroń</u> , J. Harasym	The process of solidifying different types of oil (rapeseed, pumpkin, hemp) using agarose as a single oleogelator
18 <u>S Bobadilla</u> , J A Castillo, M Espert, A Salvador and T Sanz	Effect of hydrostatic pressure in the thickening and emulsifying properties of citrus pomace
19 <u>Ana Catarina Leite</u> , Ricardo N. Pereira, Rui M. Rodrigues	Developing Strategies for the Production of Potato Protein Aerogels

20	<u>Denisse Bender</u> , Clemens Mazelle, Stefano D'Amico, Vera Fraberger, Konrad Domig	Effect of exopolysaccharides on the processing properties of Einkorn wheat
21	Xiaojia Bian, Ning Tang, Yongqiang Cheng, Jasper Landman	Evaluation of thickening effect of <i>sesbania</i> gum and carboxymethyl <i>sesbania</i> gum
22	<u>Kazuhiro Maeda</u> , Keiji Goto, Makoto Nakauma and Takahiro Funami	Development of protein-polysaccharide complex-based emulsions and emulsion-gels for food applications
23	Davide Odelli, Lingxin You, Jennyfer Fortuin and Christos Soukoulis	Effect of pH and heating on the physicochemical, interfacial and emulsifying properties of hemp seed protein isolates
24	<u>A Souto-Prieto</u> , A Cobos, T Ferreiro, Rivas M, Abuin-Arias L, P Lopez-Sanchez	Solubilisation of galactans from the red seaweed <i>Pyropia columbina</i> during processing and their impact on the rheological properties of suspensions
25	H Khalesi, K Nishinari, R Kadkhodae and Y Fang	The impact of pH-induced electrostatic interactions on the properties of lysozyme amyloid fibrils-WPI composite gel
26	<u>Gloria Hernandez</u> , Brent S. Murray, David Harbottle, Anwesha Sarkar	Enzymatic degradation of Pickering protein-based microgels – a strategy to induce demulsification
27	<u>Pallab Kumar Borah</u> , Johannes Hunger, Daniela Russo <sup>4</sup> , Christopher Garvey, Gleb Yakubov	Origins of polysaccharide conformation and viscoelasticity in miscible heterogeneous solvent
28	Eftychios Apostolidis, Evgenia N. Nikolaou, Evangelia D. Karvela, Athina Stergiou, Eirini K. Nikolidaki, Vaios T. Karathanos	3D Printing for Nutrient-Enriched Gluten-Free bio-inks
29	<u>R Leal</u> , RM Rodrigues and RN Pereira	The impact of Moderate Electric Fields on amyloid fibril aggregate formation
30	<u>J. Rychlicka-Rybska</u> , <u>D.Krokosz</u> , A. Pudło , W. Kopeć	Research on the texture and antioxidant properties of model protein-hydrocolloid-salt emulsions
31	Theodora Gigga, Antheia Chalkia, Marina Kontogiorgou, Athina Theoharidou, Kiki Zinoviadou, Christos Ritzoulis	Exploring the rheological properties of hydrocolloid-mucin binary systems
32	<u>Nienke Köllmann</u> , Lu Zhang, Atze Jan van der Goot	Understanding the structuring behaviour of plant-based proteins during extrusion using high-temperature shear cell and near-infrared spectroscopy
33	JM Cowley, L Strkalj, Y Song, KM Sumbly, GE Yakubov, TJ Foster and RA Burton	Thicker than water: exploring the diverse relatives of <i>Plantago ovata</i> to address the narrow hydrocolloid functionality of psyllium in food and the gut

	<b>Presenter</b>	<b>Title</b>
FLASH 1	Evgenia N. Nikolaou, Evangelia D. Karvela, Eftychios Apostolidis, Vaios T. Karathanos	Modeling of extrusion process to reduce allergenicity in snack with greek nuts
FLASH 2	Semwal, Jyoti, Meera, M.S.	Tuning functional properties by starch by a combination of enzymatic treatment and infrared processing
FLASH 3	<u>J.H Seibt</u> , M A Schulz, C S Hundschell, A M Wagemans	Impact of Heat Treatment on the Molecular Interactions of Pea Protein Fractions
FLASH 4	<u>G Di Filippo</u> , N Innocente, S Melchior and S Calligaris	Driving pea and whey protein hydrolysis towards the development of hybrid beverages with improved foamability
FLASH 5	<u>E.Thorenz</u> , B. Bürgel, R. Morales-Medina, L. J. Wagner, M. Bunzel, S. Drusch	Production of sugar reduced ice cream by incorporation of inulin and low viscous carrot soluble dietary fibre
FLASH 6	Huiling Yan, <u>Xiangyu Liu</u> , Wenjing Zhang, Zhaoxiang Ma, Shan Chen, Hui Zhang, Jie Xiao, Elke Scholten, Yuan Li	Preparation of dietary fibre from soybean hulls and its application as fat replacer in low-fat ice cream

# POSTER SESSION 2

## Gums and Stabilisers for the Food Industry

Thursday, June 5<sup>th</sup> :

17.30 – 18.30: Boomgaardzaal

Presenter	Title
34 MC Kanata, <a href="#">E Karvela</a> , Athanasios Ampeliatis, AE Yanni and VT Karathanos	Evaluation of physicochemical and rheological properties of bread containing beta-glycans from different sources
35 <a href="#">MC Kanata</a> , S Koroyannaki, N Tentolouris, VT Karathanos and AE Yanni	Effects of Flour Particle Size and Botanical Origin on the Physicochemical Properties of Bread and the Glycemic, Insulinemic and Appetite Responses of Healthy Adults
36 KM Makriyanni, S Koroyannaki, MC Kanata, E Athanasopoulou, VT Karathanos, A Kokkinos and <a href="#">AE Yanni</a>	Effects of oat beta-glucans enriched white wheat bread on mildly hypercholesterolemic subjects with overweight/obesity following a hypocaloric dietary plan
37 S Gezgin, J Bauer, M Sonntag, B Brem, C Langkraer, J Martin, G Kaiser, L de Souza, L Szántó, E Moukhina, M Baunach, T Kurz, S Küspert and F Rummel	Brewing yeast disintegration for protein release by horizontal disk milling.
38 G Redpath, S Marsh, F Rummel and S Küspert	Tribological model system testing of glycerol-water solutions as additives for consumer products
39 Vieira, J.M., Martins, J.T, Lüdtke, F.L., Coelho, M.S., Correia, J., Almeida, B., Teixeira, J.A., Vicente, A.A.	Impact of production technology of bio-based coating emulsion and its application on kraft paper for food-contact packaging
40 <a href="#">Sybren J.M. Zondervan</a> , Johannes H. Bitter, Atze Jan van der Goot, Julia K. Keppler, Constantinos V. Nikiforidis	On the impact of rapeseed phenolic compounds on the rapeseed protein gelation
41 Buse N. Gürbüz, Lorenzo M. Pastrana, Ricardo N. Pereira, Miguel A. Cerqueira	Food derived protein amyloid-like fibrils and their characterization
42 M. Fadhel, C.Poulain, CH. Brachais, F.Debeaufort, A.Torres-Mediano, F.Rodríguez-Mercado, and N.Benbettaieb	Chitosan active coatings incorporating cloisite for improved PLA packaging film
43 M Dimopoulou, C-K Mouzakitis, CG Biliaderis and V Kontogiorgos	Tannia starch: functional and structural characterisation
44 RS Pereira, R Leal and RN Pereira	Induction of whey protein fibrillar structures through high-temperature ohmic heating
45 <a href="#">F Parle</a> , S Berguices, M Corredig and L Román	Plant Proteins and Their Non-Protein Components: Understanding Their Interplay with Different Starch Types during Hydrothermal Processing
46 Florencia Parle, Diogo Salvati, Enkeledo Menalla, Juan García-Serna, Danilo Cantero, Laura Román	Enhancing Technological and Nutritional Value of Pea Protein Concentrate through Subcritical Water Hydrolysis
47 <a href="#">Francesca Trevisiol</a> , Niccolò Renoldi, Asja Brovedani <sup>1</sup> , Marilena Marino, Clara Comuzzi, Hana Maleej, Nadia Innocente, Sonia Calligaris	Hemicellulose and xylooligosaccharides from olive stones: an innovative source for food applications
48 <a href="#">M Buyuk</a> , A Yemenicioglu	Discovering novel emulsion-based functional foods: Use of black fig pectic compounds with grape seed polyphenols
49 L. You, J. Fortuin, D. Odelli, <a href="#">C. Soukoulis</a>	Leguminous forages as sustainable bioresources of industrially relevant galactomannans: The case of red clover ( <i>Trifolium pratense L.</i> ) seed gum
50 <a href="#">Giovanna Verde</a> , Norbert Raak	Enhancing the aqueous extraction of sunflower seed proteins by addition of NaCl or ultrasound treatment
51 S Bäther, JH Seibt, CS Hundschell, AM Wagemans	Molecular Interactions and Gelation Dynamics in Alginate-Protein Bioinks: Towards Plant-Based Alternatives
52 <a href="#">Kerstin Risse</a> , Jean-Luc Bridot, Sabrina Bäther, Leonard Sagis, Stephan Drusch	Towards tailoring the viscoelasticity of liquid-liquid interfaces in emulsions: understanding phospholipid-protein interactions at the oil-water interface

53	Pengcheng Du, Xing Li, Xiangyu Liu, Zhaoxiang Ma, Yuan Li	The formation mechanism and applications of $\alpha$ -La@cAMP hydrogel
54	<u>Ana Isabel Bourbon</u> , Antía Lestido-Cardama, Miguel Cerqueira, Ana Gabriela Azevedo, Eugenia Núñez and Lorenzo Pastrana	The impact of deposition architecture in enhancing the barrier properties of polylactic acid films
55	Amir Vahedifar, Jianping Wu	Heat-Induced Pressed Gels from Canola Press Cakes: Influence of Starting Materials, Stirring Conditions, and Carbohydrase Pretreatment
56	F Drudi, J King, S Leong, I Oey, U Tylewicz	Opportunity of pulsed electric fields technology (PEF) to fabricate dysphagia friendly chickpea flour-based gels
57	<u>S Musollini</u> , F Favati, R Tolve and C Soukoulis	Insights into the impact of rice husk microfibrillar cellulose on the viscoelastic and thermomechanical properties of model ice cream mixes
58	Thị-Thanh-Trúc Phung, María Urena, Aurélie Lagorce, Thomas Karbowski	The use of polysaccharides in food applications: unveiling the potentials and limitations
59	Thị-Thanh-Trúc Phùng, Emmanuelle Gastaldi, Felipe Buendia, Sandra Domenek, Jean Mario Julien, Louis Coroller, Valérie Stahl, Yvan Chalamet, Alain Guinault, Yvan Le Marc, Benjamin Duqué, Thomas Karbowski	NextFoodPack project: Integrated design and evaluation of new-generation packaging to protect perishable food products

	Presenter	Title
FLASH 7	<u>Nujamee Ngasakul</u> , Michaela Freyová, Ali Kozlu, Diana K. Baigts Allende, and Iveta Klojdová	Development of Novel Bigels Fortified with Carrot Pomace
FLASH 8	Sofia Melchior, Giulia Di Filippo, Roberta Pratolino, Nadia Innocente, Sonia Calligaris	Fostering the protein transition by hybrid food structures: the case study of gels made by milk whey and pea proteins
FLASH 9	<u>C Dumoulin</u> , C Leverrier, S Berland, C Michon and G Almeida	Towards an understanding of the structuring mechanisms of 3D printed flour-based matrices
FLASH 10	CNS Darko, S Humayun, AD Premarathna, B Agyei-Tuffour NJ Goosen, R Tuvikene	Interaction networks of ulvan-based mixed systems
FLASH 11	TE Pramudito, C Klostermann, EJ Smid, HA Schols	Influence of molecular weight on the anti-adhesion bioactivity of exopolysaccharides from <i>Leuconostoc mesenteroides</i> against enterotoxigenic <i>Escherichia coli</i>
FLASH 12	<u>Penghui Shen</u> , Solange Ha, Jinfeng Peng, Jasper Landman, Leonard M.C. Sagis	Generic behavior of pulse proteins in making foam
FLASH 13	<u>Ada Ata</u> Miray Büyüç& Ahmet Yemenicioğlu	Exploitation of protein-pectin-polyphenol interactions for stabilization of reduced-oil white bean aquafaba vegan mayonnaise
FLASH 14	Shachar Heppner and <u>Yoav D. Livney</u>	Valorizing agricultural waste: Utilizing corn plant leftover to grow yeast biomass, as a potential source of sustainable protein
FLASH 15	Yi Liu, Meinou Corstens, Edoardo Capuano, Karin Schroën	Microstructural and Diffusive Characterization of Calcium Alginate Hydrogels
FLASH 16	F Cebeci and <u>T Erten</u>	Utilisation of pectin from fermented cabbage waste in jam production
FLASH 17	Jipeng Zhang, Xin Li, Yu Yuan, Zekun Li, Xing Li, Xiangyu Liu, Bin Liu, <u>Yuan Li</u>	$\alpha$ -Lactalbumin Nanotube as a Novel Delivery System for Food Bioactive Compounds
FLASH 18	<u>M.C. Mazzocato</u> , J.C. Jacquier	Chitosan-Genipin Immobilisation System for <i>Alcalase</i> : Targeted Modifications in Sodium Caseinate Hydrolysate
FLASH 19	Pedro. M. Silva, Miguel A. Cerqueira, Lorenzo Pastrana, Manuel A. Coimbra, Antonio A. Vicente, Filip Van Bockstaele, Daylan Tzompa-Sosa, Koen Dewettinck	Consumer Acceptance of Resveratrol-Loaded Crackers and Cookies Aiming at Functional Food Development