

Day 1 S4H conference							
Wednesday 24 th of August				Wednesday 24 th of August parallel session			
Main auditorium University				Break out room			
CET	Session	Presenter	Presentation title	CET	Session	Presenter	Presentation title
09:00	Opening ceremony/welcome S4H 2021 (Chairs Stefan, Susan, Michela, Ditte)			09:00			
09:20	Key note 1 (Chair Stefan Kraan)	Prof. Wei Zhang, Research Director of Marine Bioproducts Cooperative Research Centre, Australia Inaugural President at Australia New Zealand Marine Biotechnology Society	TBA	09:20	see keynote		
09:50	Session 1 (Pharma and Drugs) (Chair Stefan Kraan)	Intro by chair (5 min) Monique Mulder, Netherlands	56. Brown seaweeds activating liver X receptors: potential role in the prevention of neurodegenerative- and cardiometabolic diseases.	09:50	Session 4 (Animal Health) (Chair -)	Move room/Intro by chair (5 min) Pi N. Colleen, France	77. The sulphated polysaccharides extract ulvans from Ulva sp activates chicken immune cells in vitro and in vivo
10:15		Michela Caprani, Ireland	27. The investigation of Antidiabetic Activity from Macroalgae Species	10:15		Vladana Grabež, Norway	75. Brown seaweed in finishing lamb diet provides new nutrient labeling opportunities and improves meat quality
10:35	Coffee			10:35	Coffee		
10:55	Session 2 (Composition) (Chair Michaela Caprini)	Intro by chair (5 min) Ditte B. Hermund, Denmark	87. Optimized drying for preservation of bioactive compounds in Ulva spp and Fucus vesiculosus – a comparison study of drying methods	10:55	Session 5 (Upscaling Aquaculture) (Chair -)	Intro by chair (5 min) Amir Neori, Israel	9. Algae are the main aquaculture crop and can match agriculture by 2100
11:20		Cecilie B. Wirrenfeldt, Denmark	95. Warm seawater rinsing of farmed kelp (Alaria and Saccharina)	11:20		Diane Purcell, Ireland	46. Aquaculture of Macrocystis pyrifera: Optimised hatchery-scale cultivation of sporophytes for bioproduct production
11:40		Marthe Blikra, Norway	96. Pulsed electric field: A greener technology for reducing the iodine content in sugar kelp	11:40		Madalena Mendes, Portugal	71. Farmed Atlantic seaweed as an important source of phytochemicals, cultivated in a land-based IMTA system, in Portugal
12:00	Coffee and snacks (20 min)			12:00	Coffee and snacks (20 min)		
12:20	Keynote 2 (Chair Susan L. Holdt)	Prof Nathalie Borgougnon, France	Conventional and sustainable bioprocesses for the extraction of antiviral sulfated polysaccharides from the red seaweeds	12:20	see keynote		
12:50	Session 3 (Extraction optimizations) (Chair Susan L. Holdt)	Intro by chair (5 min) Signe Hjerrild, Denmark	13. Biochemical composition and process-induced changes of green seaweed (Ulva sp.) upon different processing methods	12:50	Session 6 (Projects and future perspectives) (Chair -)	Move room/Intro by chair (5 min) Pierrick Stévant, Norway	66. SusKelpFood – Sustainable ingredients from cultivated kelp to the food industry
13:15		Javier Echave Alvarez	110. Algae source of bioactive compounds for nutraceuticals and functional foods	13:15		J.L. Banach, Netherlands	38. Safe Seaweed by Design: Guidance for the Seaweed Sector
13:35		Aurora Silva, Spain	108. Pigment Composition of Nine Brown Algae from the Iberian Northwestern Coastline: Influence of the Extraction Solvent	13:35		Heidi Meland, Norway	Status of Norwegian seaweed farmers – production, products and future
13:55	Bus to the Spa Laias Caldera			13:55	Bus to the Spa Laias Caldera		
14:30	Lunch			14:30	Lunch		
	Only one room in hotel			15:35	Session 7 (Cosmetics workshop)(Chair Felix Lopez)		
				16:50	Poster session 8	At the spa	
				18:00	Bus to town from where it possible to:	1) a guided tour in the downtown, 2) a visit to Allariz (a small village), 3) a visit to the thermal waters near the Mino river	

POSTERS Session 8

Extraction technologies

- 15 Juliette André, France
- 18 Ronan O'Brien, Ireland
- 23 Jong-il CHOI, South Korea
- 50 Milena Álvarez Viñas, Spain
- 69 Noelia Flórez-Fernández, Spain
- 70 Noelia Flórez-Fernández, Spain
- 104 Antia G. Pereira, Spain
- 15 Ulva lactuca green seaweed as source of bioactive compounds extracted using microwave assisted extraction
- 18. Extraction of proteins from the red seaweed *Porphyra* sp. using enzymes and assessment of potential health benefits of resultant hydrolysates
- 23. Effect of extraction method on antioxidant activities of fucoidan
- 50. Study of ultrasonic technology on *Chondrus crispus* extract with potential for bioactive properties
- 69. Microwave assisted extraction to recovery high value compounds from an invasive brown seaweed, *Rugulopteryx okamurae*
- 70. Membrane fractions from *Sargassum muticum* fucoidan extract obtained by subcritical water extraction to formulate polymeric nanoparticles with biomedical potential
- 104. Fucus vesiculosus Extracts Obtained by Accelerated Solvent Extraction as Candidate for the Nutraceutical Industry.

Antioxidants

- 22 Jong-il CHOI, South Korea
- 24 L. López-Hortas, Spain
- 31 Valentina Figueroa, Chile
- 42 Alba Pérez-Pérez, Spain
- 101 Marta Barral-Martínez, Spain
- 22. Melanogenesis inhibitory effect of polysaccharides from *Undaria pinnatifida*
- 24. Personal care products formulated with extracts from red macroalgae *Chondrus crispus* by environmental friendly technologies
- 31. Influence of cooking methods on antioxidants content of three species of Chilean seaweeds
- 42. Extraction of antioxidant compounds from invasive seaweed *Sargassum muticum* using deep eutectic solvents (DES)
- 101. Evaluation of the antioxidant potential of *Undaria pinnatifida* and *Saccharina latissima* algae extracts

Drugs and nutraceuticals

- 26 Noelia González Ballesteros, Spain
- 47 Emer Shannon, Ireland
- 60 Ana Valado, Portugal
- 82 Ana Valado, Portugal
- 98 Hirotaka Kakita, Japan
- 107 Javier Echave Alvarez, Spain
- 26. *Codium tomentosum* gold nanoparticles as a potential chemotherapeutic adjuvant in hepatocellular carcinoma
- 47. Peptides, polysaccharides and polyphenols from *Phyllospora comosa*, *Ulva ohnoi* and *Ecklonia radiata* as potential nutraceuticals for the management of disease associated with metabolic syndrome
- 60. Carrageenans: bioactive properties and therapeutic uses
- 82. Bioactivity of carrageenan in metabolic syndrome and cardiovascular diseases
- 98. Hyaluronidase inhibitory activities derived from two brown algae, *Ecklonia kurome* and *Sargassum macrocarpum*, in Japan
- 107. Nutritional composition analysis of some common seaweeds found in Galicia

Control of compounds

- 55 Vanesa Sanz, Spain
- 57 Madalena Mendes, Portugal
- 65 Harriet Fletcher, Leeds
- 97 Hirotaka Kakita, Japan
- 55. Seasonal variation of the carrageenan content of the macroalga *Mastocarpus stellatus* from northern Portugal and its rheological capacities as a gelling agent
- 57. Food additive potential source: a comparative study of estuarine seaweed *Gracilaria* sp. agar content using different cultivation methods
- 65. The Seasonal Variation in Chemical Content of Prevalent Fucoids Common to the UK
- 97. Effects of light intensity on the biological components of the green alga, *Ulva prolifera*

Day 2 S4H conference

Thursday 25 th of August			Thursday 25 th of August parallel session				
Main auditorium University			Break out room				
CET	Session	Presenter	Presentation title	CET	Session	Presenter	Presentation title
08:30	Session 9 (Gastronomy and Nutrition) (Chair -)	Intro by chair (5 min) Mendes Goncalves, Portugal	78. Exquisite cuisine: development of novel pudding and mousse recipes based on red macroalgae	08:30	Session 13 (Control of compounds)(Chair Loly Torres)	Intro by chair (5 min) Florentina Piña, Chile	73. Effects of abiotic factors on xanthophyll synthesis in <i>Porphyra/Pyropia</i> species.
08:55		Wilson Fernandes, Portugal	61. Seaweeds as Nutritional Ingredient in Vegan Burgers	08:55		Jorge Rivas, Chile	92. The effects of nutrients by means of different culture media for indoor scaling of <i>Gracilaria chilensis</i> as nutraceutical source
09:15		Mendes Goncalves, Portugal	76. Characterization of the nutritional composition of four macroalgae species from the Western Portuguese coast to food diet alternatives	09:15		Maryam Maccorquodale, United Kingdom	114. Red or white which colour is right ? Exploring biochemical composition, bioactivity, and iron-mediated fertility in the kelp <i>Saccharina latissima</i> gametophyte using a transcriptome approach
09:35				09:35	Move to other room for keynote see keynote		
09:40	Keynote 3: Chair Herminia Dominquez	Rósa Jónsdóttir, Matis Iceland	Innovative application of seaweed and its unique bioactive compounds				
10:10		Coffee		10:10		Coffee	
10:30	Session 10 (Valorization) (Chair -)	Intro by chair (5 min)		10:30	Session 14 (Other) (chair -)	Intro by chair (5 min)	
		Noelia G. Ballesteros	28. Valorisation of the invasive macroalgae <i>Undaria pinnatifida</i> for the development of new nanomaterial as antibiotic and antifungal agents			Madalena Mendes, Portugal	45. Biobanking and genetic validation of farmed Atlantic Nori
10:55		Aurora Silva, Spain	106. Valorization of edible red seaweeds of <i>Chondrus crispus</i> , <i>Mastocarpus stellatus</i> and <i>Gigartina pistillata</i> by the recovery of bioactive compounds optimized in traditional and novel extraction techniques	10:55		tba	
11:15		João Rui Tanoeiro, Portugal	62. Is a <i>Chondrus crispus</i> aquaculture/biorefinery system viable?	11:15		Angela Willard, Canada	94. Seaweed Monographs
11:35		Coffee and snacks (20 min)		11:35		Coffee and snacks (20 min)	
11:55	Keynote 4 (Chair Susan L. Holdt)	Prof. Luis M Botana, Farmatox Research Group, Facultad de Veterinaria, Lugo, Spain.	An update on the need to review toxicological data for marine toxins	11:55	see keynote		
12:25	Session 11 (Legislation, risk and safety) (Chair Arne Duinker)	Intro by chair (5 min) Frederik Eberth, Denmark	80. How to use seaweed in cosmetics and be regulatory compliant	12:25	Session 15 (Mineral, Microstructure, Cosmetic and Control of compounds) (Chair -)	Moving room/Intro by chair (5 min)	
		J.L. Banach, Netherlands	39. Discovering the safe use of seaweed across the food value-chain	12:50		Marta V. Freitas, Portugal	43. The Identity of a Lab-Grown Seaweed: Nutritional Profile of <i>Gracilaria gracilis</i> Grown in Controlled Conditions
13:10		Sophie Koch, Netherlands	63. Pilot case study of the Safe Seaweed by Design Project	13:10		Felix L. Figueroa, Spain	100. The use of the invasive alien species <i>Rugulopteryx okamurae</i> (Ochrophyta) as source of cosmeceutical compounds
13:30		Jennifer Mildner, Norway	12. Antioxidative activities, phenolic compounds and marine food allergens in the macroalgae <i>Saccharina latissima</i> produced in integrated multi-trophic aquaculture systems	13:30		Dr Lopez-Sanchez, Patricia, Lugo	36. Effect of thermal and mechanical treatments on the microstructure and rheological properties of <i>Laminaria digitata</i> suspensions
13:50	to the bus to Spa Laías Caldera			13:50			
14:30	Lunch			14:30			
15:35	Session 12 (Animal Health, The Seaweed Company) (Chair Stefan Kraan)	Intro by chair (5 min) paper32	tba	15:35			
16:00		paper 33	tba	16:00			
16:20		paper34	tba	16:20			
16:40		Paper 35	tba	16:40			
17:00	Cooking Demo On terrace outside			17:00			
18:00				18:00			
19:00	Bar			19:00			
20:00	Conference banquet till party time			20:00			
until 00:00							