| PROGRAM — CONFERE   | NCES (Morning)  |  |   |  |  |  | biology session p  | rocess session industry session   | applications session sponsor talk  |
|---|---|--|---|--|--|--|--|---|--|
|   | NDAY  |  | SDAY  | WEDNESDAY  |  | THURS  |  | FRII  |  |
| Auditorium 450  | Room 200  | Auditorium 450   | Room 200  |  | 0.00   | Auditorium 450   | Room 200   | Auditorium 450  | Room 200   |
| <b>8:30 Opening, Presidents of:</b> University of Nantes, Greentech, ISAP, Chairmen   |   | <b>8:30 Keynote Verdelho Vitor</b> Contributions for the nomenclature of microlagae production systems                             |   | ACTIVITIES Facilities visits   | <b>tana</b> func   | <b>O Keynote Makoto M. Wa-<br/>labe</b> Next-generation health<br>ctions of microalgae.                        |  | <b>8:30 Keynote Gachon Claire</b><br>Novel strategies for preventing<br>diseases in cultivated seaweeds   |  |
| Welcoming speach  |   | 9:00 Keynote Hurtado Anicia<br>Seaweed Extracts as Bio-stimulant in<br>Kappaphycus Cultivation                                     |   | Algosolis R&D Facility and GEPEA L:<br>Departure at 7:45 am on bus<br>from la Cité Nantes Events Center<br>Innovation platform<br>Ifremer<br>Departure at 8:00 am on bus | 9:00<br>lia i<br>ring                                      | O Keynote Henriquez Vita-<br>Microalgae genetic enginee-<br>g tools for the production of<br>h-value compounds |  | 9:00 Keynote Grewe Claudia Industrial application of microalgae in food, feed and cosmetics – current status and perspectives                             |  |
| 9:15 Opening by Chris Bowler<br>Tara Oceans: Eco-Systems Biolo-<br>gy at Planetary Scale  |   | mass composition and operational<br>data from large-scale algae farm on<br>Kauai, Hawaii   | 9:30 <b>Mugnai Gianmarco</b> Algaliza-<br>tion using the cyanobacterium Lepto-<br>lyngbya ohadii: a biotechnological ap-<br>proach for arid soil rehabilitation       | from la Cité Nantes Events Center  Biotechnology laboratory  Ifremer  Departure at 8:00 am on bus  from la Cité Nantes Events Center                                     | use<br>valu  | e and axenic production of high<br>ue cosmetic active ingredient   | of the oleaginous yeast Lipomy-<br>cesstarkeyi and the micro-alga<br>Chlamydomonas reinhardtii for<br>microbial oil production                       | ·   | cule extraction from macro-algae<br>using highly specific enzymes is<br>a source of innovative ingredients<br>for feed and food              |
| 9:50 Keynote Grossman<br>Arthur The Discovery of Novel<br>Proteins Required for Photosyn-<br>thetic Function Using the Mo-<br>del Green Alga Chlamydomonas<br>reinhardtii |   | large scale production of Chlorella vul-   | 9:50 Mzibra Abir Polysaccharides extracted from Moroccan seaweed a promising source of plant growth promoters   | Mer Molécule Santé Laboratory<br>Departure at 8:30 on tramway<br>from la Cité Nantes Events Center<br>Centre d'Étude et de Valorisation de<br>CEVA                       | Opti<br>nufa<br>Mole                                       | timized Microalgae for Bioma-<br>facturing of High Added-Value   | ry of the novel major lipid droplet  | 09:50 Brébion Jérémy A new<br>method to determine M/G ra-<br>tio of alginates in seaweed and<br>seaweed extracts  | velopment programming of the   |
|   |   | 10:10 Subitec, Hyttinen Heikki<br>Conception and Construction of In-<br>dustrial Scale PBR-Cultivation Sys-<br>tems for Microalgae | 10:10 <b>Nedbal Ladislav</b> Chlorella vulgaris fertilizer to grow wheat on nutrient poor soils   | Departure friday at 17:00 pm<br>on bus from La Cité (3:30 car ride)<br>CEVA visit on saturday from<br>9:00 to 13:30 after lunch<br><b>Touristic tours</b>                | Integ<br>cultu   | egrated Multi-Trophic Aqua-<br>ture (IMTA) from pilot-scale to<br>rofitable industry                           | gating the chemical and biolo-<br>gical landscape of Nannochlo-  | 10:10 Craggs Rupert Performance of hectare-scale was-<br>tewater treatment high rate algal<br>ponds in New Zealand's tempe-<br>rate climate               | dic saccharide microanalysis by<br>high performance liquid chro-<br>matography with postcolumn<br>fluorescence derivatization                |
|   | C   | OFFEE BREAK  |   | Nantes historic center<br>Departure from La Cité: 9:30<br>Return to La Cité: 12:30<br>Nantes vineyard  |  | COFFEE E   | BREAK  | 10:30 Cuello Maria Culture of<br>Microalgae in Mixed Wastewa-<br>ter Streams  |  |
| 11:00 Keynote Barbosa Maria<br>Towards industrial products from<br>microalgae   |   |  | 11:00 Lacour Thomas Growth and photoacclimation of a cryptophyte in response to Nitrogen and light limitation   | Departure from La Cité: 9:30<br>Return to La Cité: 12:30<br>Cruise on the Erdre River<br>Departure from La Cité: 9:30<br>Boarding at "Le quai de la Motte Roug           | insig<br>cond<br>deve                                      | ights on Microalgae biorefinery:<br>ncepts and necessary process<br>relopments                                 | 11:00 Aflalo Claude Data ac-<br>quisition and control system<br>for microalgal culture in a dual<br>LED-illuminated flat-panel airlift<br>bioreactor |   | 10:50 Queguineur Benoit Evia-  |
| Xavier 10 years of research and development concentrated in a   | selection and cultivation up scaling<br>of microalgae strains from the west<br>of Ireland with promising antioxi-<br>dant potentials and lipid signatures       | mical characterization and in vitro di-<br>gestibility of microalgal and cyanobac-<br>terial biomasses as novel ingredients        | 11:20 Soudant Philippe Effects of harvesting stage and nitrogen limitation on biochemical composition of two strains of Tisochrysis lutea                             | (10 min walk from La Cité): 10:00<br>Return to "Le quai de la Motte Rouge":<br>Return to La Cité: 12:30  | :12:00 the sum   | resource Ascophyllum nodo-<br>n in Ireland: implications for its   | 11:20 Schulze Peter Flashing<br>light for microalgal production:<br>current opportunities, limitations<br>and future perspectives                    |   | BREAK  |
| 11:40 Corat Amance Cultivating cellulosic green seaweed for bioethanol production   |   | vated Chondrus crispus in the functio-   | 11:40 Masojidek Jiri Physiological shift from heterotrophic to phototrophic growth in a small-antenna-size strain of Chlorella  |  | duct   | ction of biodiesel from wet mi-<br>algal biomass. Process options  | toperiod tuning for cost-effec-  | 11:40 Witkowski Andrzej Stalk-<br>ed, marine benthic diatoms as a<br>reproducible source of chitosan  | timation of microalgae growth in   |
|   | biofilm cultivation? Experimental testing and model prediction  | Response of Strawberry Roots to a  | 12:00 Cuaresma María Benefits of<br>the usage of commercial fertilizers in<br>the cultivation of Botryococcus brau-<br>nii strains                                    |  | tract  | ctionfor the production of active  |  |   |  |
| tance of light transfer for microal-<br>gae growth kinetics and metabo-<br>lite production  | 12:20 Schroeder Declan Molecu-<br>lar and phylogenetic analysis re-<br>solves and reveals new diversity of<br>Dunaliella sp. from hypersaline en-<br>vironments |  | 12:20 Schmid-Staiger Ulrike Influence of different light intensities on biomass productivity and light yield of Chlorella sorokiniana in flat panel air-lift reactors |  | brov<br>neur<br>func<br>tical                              | wn seaweeds: prebiotic and<br>proprotective potentials for<br>ctional foods and nutraceu-<br>als               | climation of the diatom Phaeo-<br>dactylum tricornutum to diffe-<br>rent light transition: a physiology<br>and molecular study                       | 12:20 Goncalves Olivier The<br>GCMS characterization of the<br>central carbon metabolism of Ar-<br>throspira platensis brings insights<br>to its original | of rheological properties of va-<br>rious microalgae species towar-<br>ds their application in processed<br>food products                    |
| 12:40 Sui Yixing Exploring Duna-<br>liella salina as single cell protein:<br>the influence of light/dark re-<br>gime on the growth and protein<br>synthesis               | · ·   | 12:40 Round Table  | 12:40 Kirke Dara Single and interactive effects of PAR and UV on low molecular weight phlorotannin profiles in Fucus vesiculosus using mass spectrometry              |  | Mac  | 40 Vidon group, Vidon Patrice  | 12:40 Perkins Rupert Photoac-<br>climation to optimise productivity  | 12:40 Laroche Céline A new exo-<br>polysaccharide from Flintiella san-<br>guinaria: production and structu-<br>ral characterization                       | <b>12:40 Lieutaud Christopher</b> Online monitoring by Raman spectroscopy of lipids accumulation produced by microalgae in photobioreactors. |
|   |   |  | LUNCH BREAK   |  |  |  |  | 13:00 De Philippis Roberto The exopolysaccharidic matrix of biocrusts: role and characteristics   | farming in the Philippines:  |
| ACTIVITIES SUNDAY   | Y, JUNE 18 MONDAY, JUN  |  |   | TUESDAY, JUNE 20   | THURSDAY, JUNE 22,   |  |  | 13:20 Conclusion  |  |
| The Ice   | Breaking Cocktail 19:00 – 20:3<br>– 21:00 General Asse<br>Auditorium 4  | embly of the ISAP General Assembly of t  | he Atlantic Microalgae Program (in french)  | Gala dinner at "les Machines de l'Ile"<br>20:00 – 23:00  | Conférence Grand Public<br>Auditorium 450<br>20:00 – 22:00 |  |  | LUNCH   | BREAK  |
|   | / Mattorium 4   | 10011200   |   |  |  |  |  |   |  |

| PROGRAM - | <b>CONFERENCES</b> | (Afternoon) |
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| PROGRAM — CONFERENCES (Afternoon) applications session application session applications session applications sessi |   |   |   |   |  |                                       |  |  |
|--|---|---|---|---|--|---------------------------------------|--|--|
| MOI  | NDAY  |   | TUESDAY   |   | WEDNESDAY  |                                       |  | THURSDAY   |
| and validation of strategies for the opti-   |   | Olivier Phycocyanin: the first  | CO <sub>2</sub> fixation in High Rates Algal Ponds under different pH using marine natural  | tier Séverine Sustainable Bio-ma-   | in lipid enrichment in algal cultures  |                                       | <b>14:00 –16:00</b> e collaboration  | Auditorium 450  14:00 Algenuity, Spicer Andrew Alge- 14:00 Algenuity, Spicer Andrew Alge- nious Process - Engineering micro-algae sunshine, converting seaweed to fu- ranic biofuels  14:10 Algaia, Hennequart Franck Al- gaia "Algaia your natural partner in al- gal valorisation Between Research, De- velopment and Markets"   |
| of Amphidinium carterae in pilot-scale<br>photobioreactors illuminated with Light<br>Emission Diodes<br>14:40 <b>Huber Gregor</b> Comparison of al-  | 14:40 Bernard Miriam qPCR-based   | model to predict rotifer growth in microalgal production cultures  14:40 Bernard Olivier Opti-  | of carbon metabolism in response to CO <sub>2</sub> modifications in the diatom Phaeodacty-<br>lum tricomutum<br><b>14:40 Solovchenko Alexei</b> Luxury up- | Utilization of Power Plant Flue Gas ${\rm CO_2}$ with Microalgae<br>14:40 Le Gélébart Erwan A step                                    | tic factors on selected microalgae for omega-3 PUFA production  14:40 Khozin-Goldberg Inna The pe-   | mission to be pub                     | er meeting catalyz   | 14:20 Gilles Mathilde The notion of Hy- 14:20 Torzillo Giuseppe Constraints bridicity? an efficient tool to explain the in the scale-up of photobiological hy- carrageenan behaviors drogen production with microalgae outdoors  14:40 Boa Ventura Thallis Felipe 14:40 Morales Marjorie Life Cycle As-  |
| periment and large scale production  | detection of a filamentous brown algal<br>endophyte in Saccharina latissima wild<br>populations and kelp farms  | ration using weather forecasts  | croalgal cell   | ment, metabolic induction applied to macroalgae cell culture  | ra incisa and its biotechnological implications  | nprove my sut                         | ike: Stakeholc   | Growth rate and carrageenan quality sessment of algal biodiesel production of Kappaphycus alvarezii cultivated with coupled with photovoltaic panels: envimarine shrimp effluent farmed in bio- ronmental impacts and energy balance flocs system  |
| strategy to reduce the energy input of a<br>flat-panel airlift photobioreactor with in-<br>trinsic static mixers   |   | Seaweed aquaculture in Norway: recent industrial developments and future perspectives   | bility to nitrogen and specific regulation<br>of proteins involved carbon partitioning<br>drive lipid over accumulation in Tisochry-<br>sis lutea 2X strain | gae for coproducts and energy (PĂCE) consortium   | containing lipids in brown algae   | p: "How can lin                       | Seaweed at Sta   | 15:00 Hosseini Seyed Abdollah Growth 15:00 Maadane Amal Antioxidant acti-<br>promotion of Wheat and Brassica napus vity and biochemical composition of mi-<br>by Seaweed Extract Ascophyllum nodo-<br>croalgae isolated from Moroccan coast-<br>lines and enhancement of their activities<br>in stress conditions  |
| design dark fraction on the loss of bio-<br>mass productivities in photobioreactors  | <b>15:20 Bruhn Annette</b> Comparing productivity, biomass quality and genetics of four Danish populations of Saccharina latissima                                      | lanie Algae & innovation: Let's talk about Novel food and Nagoya!   | ty acid production in microalgae by me-<br>tabolic engineering  | between composition and functionality of seaweed extracts: a practical case on cosmetic and pharmaceutical applications               | terisation of newly isolated Dunaliella<br>strains: impact of light on high carote-<br>nes content   | chers worksho                         |  | 15:20 Holdt Susan Adsorption of mi- 15:20 Mathiot Charlie Starch-based croplastics to the edible Fucus vesicu- bioplastics from microalgae: screening losus and possible wash off before food of strains for starch accumulation and application assays of unfractionated algal biomass  |
| analysis of hydrodynamics and light dis-   | 15:40 Thiriet-Rupert Stanislas Identification of transcription factors involved in the phenotype of a domesticated oleaginous microalgae strain of Tisochrysis lutea    | based cultivation of two Atlantic nori species: Porphyra dioi-  | croalgae neutral lipid productivity by  | tural astaxanthin- The superb   |  | Young resear                          |  | 15:40 Nyvall Collen Pi The first 15:40 Benoit Maud Development of<br>Seaweed Biorefinery in France: a natu- seaweed-based surfactant<br>ral resource for nutrition and health ap-<br>plications  |
|  |   |   |   | COFFEE BREAK  |  |                                       |  |  |
| 16:30 Olmix, Pi Nyvall Collen OLMIX group: innovative algae-based solutions, for a better life!  | 16:30 Terme Nolwenn Selective extraction of lipid classes from Solieria chordalis and Sargassum muticum using supercritical carbon dioxide and conventional methods     | PC  | DSTER SESSION 1   | gation of the genotype - environment interaction during cultivation of gene-  | <b>16:30 Tremblay Réjean</b> Prophylactic effect of Haslea ostrearia culture supernatant containing the pigment marennine to stabilize bivalve hatchery production   | <b>16:30 –18:30</b><br>vith your PhD! | 16:00 –18:00 collaboration   | SOURCE SESSION 2 POSTER SESSION 2  |
|  | 16:50 <b>Dumay Justine</b> Use of enzymatic assisted extraction to increase extraction yields of R-PE in different life cycle types of the red seaweed Chondrus crispus | Jean-Claude Enabling Earth a nd Mankind to produce the best   | condary effluent from biological trickling<br>filter (btf) using high rate agal ponds   |   | seaweeds on marine shrimp resistance   |                                       | 16:00 –18:00 Seaweed at Stake: Stakeholder meeting catalyzing future collaboration | 17:00 Lane Todd Algal crop protection 17:00 Rodolfi Liliana Oil and high-va-<br>strategies and technologies lue products from the marine diatom<br>Phaeodactylum tricornutum   |
| 17:10 Bardor Muriel Understanding the<br>N-glycosylation of microalgae: a critical<br>prerequisite towards optimizing the pro-<br>duction of biopharmaceuticals  |   | 17:20 Demais Hervé Eva-<br>luation of the antidepressant-<br>and anxiolytic-like effects of<br>a hydrophilic extract from the<br>green seaweed Ulva sp. in rats | to treat anaerobic digestion piggery effluent (ADPE)  | of the coupling between growth and  | lecular tools for routine monitoring of toxic algae and pathogens in aquatic   | -                                     | e: Stakeholder m   | 17:20 Schmedes Peter Palmaria pal- 17:20 Tannoury Mona Antiprolifera-<br>mata hatchery - tetraspore settlement tive and Antioxydant Effects of Sargas-<br>and development survey and the Sargas Survey Sargas Survey Sargas Survey Sargas Survey Sargas Survey Sargas Survey Sargas Sarga |
| protein conversion factor for seaweed dependent on season?   | 3,  | ti-inflammatory effects of<br>different Phaeodactylum tri-<br>cornutum extracts on hu-<br>man peripheral blood mono-<br>nuclear cells                           | tania for photocatalytic air purification applications  | microalgae to advanced biofuels?<br>AUFWIND & OptimAL   | gassum filipendula and Ascophyl-<br>lum nodosum extracts in the survival<br>of post-larvae of marine shrimp Li-<br>topenaeus vannamei under hypother-<br>mic stress  |                                       | Seaweed at Stak  | 17:40 Vonshak Avigad What does it 17:40 Picot Laurent Antimelanoma take to have an algal strain fitted to mass activity of Heterocapsa triquetra pig-culture outdoors?   |
| trogen-starvation induced expression of<br>proteins in Phaeodactylum tricornutum   | 17:50 <b>Delauré Yan</b> Evaluation of mixing and shear stresses in High Rate Algae Ponds for different paddle wheel designs  | dan in complementary medi-<br>cine applications   | cycling of shrimp wastewater into econo-<br>mically valuable Halymenia floresii grown<br>at land-based IMTA system  | gal Carbon Conversion Flagship Pro-<br>gram: Research activities in support<br>of commercial algae cultivation in<br>northern regions | pounds from microalgae: potential ap-<br>plication of the diatom Haslea ostrea-<br>ria in aquaculture  |                                       |  | 18:00 Augyte Simona Cultivation of a 18:00 Trepos Rozenn Antibacterial unique form of sugar kelp, Saccharina and Antioxidant Properties of Macroal-latissima forma angustissima, from Norgal Compounds from Brittany thwestern Atlantic with a focus on nutrient uptake and production   |
| Poly-phosphate is a highly dynamic<br>polymer in the green alga Chlorella vul-<br>garis  | Ü   | dor Characterization of immune-modulatory substances from algae   | lized products from Algae: From extracts to actives. Three examples   | cultivation of Chlorococcum sp. un-<br>der outdoor conditions using a diges-<br>tate from pig waste as culture medium                 | Ulva armoricana: a new source of sulfated polysaccharides as immunomodulating compound to improve animal heath   |                                       |  | 18:20 Le Norcy Tiffany Impact of 18:20 Boulho Romain Antiherpetic roughness and surface hydrophobicity (HSV-1) activity of carrageenans from on marine organisms adhesion: focus the red seaweed Solieria chordalis (Rhoon microalgae dophyta, Gigartinales) extracted by Microwave Assisted Extraction (MAE)  |
| Selection and isolation of indigenous  | 18:30 Cerón-García M.c Multi-step process for an integral use of biomass from dinoflagellates Amphidinium and Karlodinium   | mical composition and antiviral   | sian algae biotechnology platform   | the dinoflagellate Alexandrium po-<br>hangense: a specialist for ichthyo-   | 18:30 Evans Franklin Effect of a macroalga derived Ascophyllum nodo-<br>sum feed supplement, Tasco®, on the productivity and actions in monogastric and ruminant animals: A review of our latest scientific findings |                                       |  | 18:40 Borowitzka Michael What is 18:40 Burlot Anne-Sophie An en-<br>"stress" in microalgae? zymatic extract of the proliferative red seaweed Solieria chordalis reduces the virulence of Pseudomonas aeruginosa and stimulates the immune system of Caenorhabditis elegans   |