

NPC–NAS 2025 Programme

Day 1 – Monday 20 October		
	NPC	NAS
Day 1 20/10 Session 1: NPC	Structure and function of photosynthetic complexes	
13:00–13:15	Welcome Address	
13:15–14:00	Invited international Roberta Croce, Vrije Universiteit Amsterdam, The Netherlands: Photosynthesis in the far-red: from cyanobacteria to plants	
14:00–14:30	Nordic invited Wolfgang Schröder, Umeaa University, Sweden: Arabidopsis PSII as seen by Cryo-EM	
14:30–15:00	Nordic invited Alexey Amunts, The Max Planck Institute of Molecular Physiology, Dortmund, and Univ. of Münster, Germany (EMBO Young Investigator Lecture): Integrated structural biology reveals unprecedented plasticity in Photosystem I	
15:00–15:30	Coffee	
15:30–16:00	Nordic invited Fikret Mamedov, Uppsala University, Sweden: Long-range donor-acceptor side interactions in Photosystem II	
16:00–16:25	Selected from abstract	
16:25–16:50	Selected from abstract	
16:50–17:15	Selected from abstract	
17:15–18:30	Posters – NPC	
19:00	Dinner	

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Day 2 – Tuesday 21 October		
	NPC	NAS
Day 2 21/10 Session 2		
8:30–9:25	Invited – International Jonathan Zehr, University of California, Santa Cruz, USA: The marine algal nitroplast UCYN-A: ecology, evolution and implications for the future	
9:25–9:55	Invited – Nordic Susan Løvstad Holdt, DTU, Technical University of Denmark: Challenges and opportunities in advancing seaweed as a compliant, nutritious, and scalable food source for Europe	
9:55–10:15	Photon System Instruments	
10:15–10:45	Coffee	
Session 2 – NPC – NAS	Regulation of photosynthesis	Current capacity and needs for algae in the Nordic region
10:45–11:15	Nordic invited Lauri Nikkanen, University of Turku, Finland: Dynamic regulation of the proton motive force in cyanobacteria	TBA
11:15–11:45	Nordic invited Dimitris Petroutsos, Uppsala University, Sweden: Photoreceptor-mediated regulation of photosynthesis in green microalgae	Selected from abstract
11:45–12:00	Selected from abstract	Selected from abstract
12:00–13:00	Lunch	
Session 3:		
13:00–13:45	Invited – International Tomas Morosinotto, Università di Padova, Italy: Balancing Photoprotection and Efficiency to Enhance Photosynthetic Productivity in Algae and Plants	
13:45–14:15	Invited – Nordic Johan Andersen–Ranberg, Univ. of Copenhagen, Denmark: Identification and characterization of enzymes for biosynthesis of algae pigments	
14:15–14:30	Invited – Nordic Kirsten Krause, UiT The Arctic University of Norway: National education and infrastructure networks connect and unify plant and algae research across Norway	

14:30-14:45	CLF Plant Climatics	
14:45-15:15	Coffee	
Session 3 NPC - NAS	Molecular basis of assembly, photoinhibition and repair	Algae based products
15:15-15:45	Nordic invited Simon Stael, The Swedish University of Agricultural Sciences, Uppsala, Sweden: Burning Glass Effect of Water Droplets Triggers a High Light-Induced Calcium Response in the Chloroplast Stroma	Nordic invited Cornelia Spetea Wiklund, University of Gothenburg, Sweden: SEAlgaePower – Sustainable development of microalgae-based ingredients using waste streams from aquaculture and seafood processing industry as feedstock
15:45-16:05	Selected from abstract	Selected from abstract
16:05-16:25	Selected from abstract	Selected from abstract
16:25-16:45	Selected from abstract	Selected from abstract
16:45-18:00	Poster session – NPC–NAS	
19:00	Dinner	

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Day 3 – Wednesday 22 October		
	NPC	NAS
Day 3 22/10 Session 4		
8:30–9:15	Invited – International Maria Barbosa, Wageningen University & Research, The Netherlands: TBA	
9:15–9:45	Invited – Nordic Pia Lindberg, Uppsala University, Sweden: Engineering cyanobacteria for sustainable production of solar chemicals and fuels	
9:45–10:00	TBA	
10:00–10:30	Coffee	
Session 4 – NPC – NAS	Light harvesting	Algae engineering
10:30–11:00	Invited Dario Leister, Ludwig-Maximilians-University Munich, Germany: Adaptive evolution in fluctuating light	Nordic – invited Pauli Kallio, University of Turku: Approaches to cyanobacterial pathway optimization via combinatorial engineering
11:00–11:20	Selected from abstract	Selected from abstract
11:20–11:40	Selected from abstract	Selected from abstract
11:40–12:00	Selected from abstract	Selected from abstract
12:00–13:00	Lunch	
Session 5:		
13:00–13:45	Invited – International Christiane Raines, University of Essex, UK: Engineering photosynthetic carbon fixation for crop improvement	
13:45–14:15	Invited – Nordic Armando F J Perez Cueto Eulert, Umeaa University, Sweden: TBA	
14:15–14:30	Selected from abstract	
14:30–15:00	Coffee	
Session 5 – NPC–NAS	Improving and utilizing photosynthesis	Algae biotechnology

15:00-15:30	<p>Nordic invited Cecilia Blikstad, Uppsala University, Sweden: Encapsulation and regulation of carboxysomal carbonic anhydrases</p>	<p>Nordic invited Luca Morelli, University of Southern Denmark: Decoding and rewiring <i>Phaeodactylum tricornutum</i> metabolism for high-value compound production.</p>
15:30-16:00	Selected from abstract	<p>Nordic invited Tore Brembu, Norwegian University of Science and Technology, Norway: Investigating fundamental features of cell wall biomineralization in the large diatom <i>Coscinodiscus</i></p>
16:00-16:20	Selected from abstract	Selected from abstract
16:20-16:40	Selected from abstract	Selected from abstract
16:45-18:00	Poster session – NPC-NAS	
19:00	Conference Dinner	

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Day 4 – Thursday 23 October		
	NPC	NAS
Day 4 23/10 Session 6:		
8:30–9:15	Invited – International Vitor Verdelho, European Algae Biomass Association / CEO of Cell4Food, Portugal: Beyond conventional algae applications: cellular agriculture	
9:15–9:45	Invited – Nordic Joan Albert Porcar-Castell, Univ. of Helsinki, Finland: The quest to characterize the optical expression of photosynthesis under field conditions	
9:45–10:00	Selected from abstract	
10:00–10:30	Coffee	
Session 6 – NPC – NAS	New methods	Algae biorefining
10:30–11:00	Nordic – Invited Mikko Tikkanen, University of Turku: Minibiosphere and technologies for optimizing indoor farming	Christiane Funk, Umeaa University, Sweden: Waste-2-Plastic: recycling of CO ₂ , nitrogen, phosphorus and water for the production of bioplastic.
11:00–11:20	Selected from abstract	Selected from abstract
11:20–11:40	Selected from abstract	Selected from abstract
11:40–12:00	Selected from abstract	Selected from abstract
12:00–13:00	Lunch and Goodbye	