https://phosphorusplatform.eu/espc4

V 01/03/2021

Preliminary draft outline programme for the 4th European Sustainable Phosphorus Conference (ESPC4) 20th – 22nd June 2022

***Registration fees** = 400 € (+ VAT), including PERM R&D Meeting = 500 € (+VAT), evening event = 85 € (+VAT)*
(ESPP members/presenters/students = 200 € (+ VAT), including PERM = 300 € (+VAT), evening event = 85 € (+VAT)

All ESPP members are invited to send a poster to display. Sponsors will have a stand and a promotion package.

Monday 20th June 2022

Andaz Vienna am Belvedere, Arsenalstraße 10, 1100 Wien

8h30 – 9h00 – Registration and coffee

9h00 – 10h30 – Opening and Water Policy Context (plenary)

- Ulli Sima, City Minister for Environment – welcome on behalf of the city government
- Josef Thon, Vienna City Administration – welcome on behalf of the city administration
- Ludwig Hermann, ESPP – conference objectives and what ESPP has done in last 3 years
- Franz Josef Radermacher (FAWn) – Energy, Agriculture, Climate - what has to be done?
- José Alegre-Seoane/Wim Debeukelaere, European Commission, DG ENVI – Sustainable use of nutrients – EU perspective
- Arabel Amann, TU Vienna – Considerations about an Austrian Sustainable Phosphorus Strategy

10h30 – 11h00 – Break

11h00 – 13h00 Phosphorus Sustainability Policies at the City / Region Level (plenary)

- Lukas Egle, Vienna
- Fabian Kraus, Berlin, tbc
- Speaker tbc, Hamburg
- Hidenobu Wakimoto, Kobe City
- Speaker tbc, Paris
- Adrien Azé, Amsterdam
- Dines Thornberg, Copenhagen
- Paula Lindell, Helsinki
- Leo Morf, Zürich

13h00 – 14h15 – Lunch

14h15 – 15h45 – Parallel Sessions – Detailed Programme Attached

Regional Circular Perspectives	P-recycling Projects	New Technologies

15h45 -16h15 – Break

16h15 - 18h00 – New Business Models for the Circular Nutrient Economy (plenary)

- Reports from parallel sessions
- Silvia Tonti, Yara (VP Circular Economy) / Yves Thelier, Veolia (VP), Circular Phosphorus Economy
- Wolfgang Hofmair, Borealis, Circularity in Crop Nutrition
- Christian Kabbe, EasyMining, Ash2Phos & CleanMap – from Waste to Pure Commercial Product
- Anthony Zanelli, ICL, Compound Fertilisers with Recycled Phosphate for Sustainable Food Production
- Ahren Britton, Ostara, Reimaging Resources: Recovering Phosphorus from Phosphogypsum and beyond
- Alvaro Mayor Pillado, SUEZ Cetaqua, Turning Wastewater Treatment Plants into Biorefineries
- Q&A and Discussion

19h00 – Evening Event at Belvedere Palace or Vienna City Hall

- 19h00 Pre-dinner drinks
- 19h30 Guided visit of Vienna's Austrian Gallery ("The Kiss" of Gustav Klimt and other Art Nouveau paintings), tbc
- 20h00 Talk by Thomas Bubendorfer, extreme climber and keynote speaker
- 20h30 Conference dinner, Viennese music interlude
- 22h00 Big John Whitfield & The Vienna Soul Society

Tuesday 21st June 2022		
Andaz Vienna am Belvedere, Arsenalstraße 10, 1100 Wien		
9h00 – 11h00 – EU Policies (plenary)		
• Isidro Campos Rodriguez, European Commission, DG AGRI - CAP FaST Tool for P use in Agriculture • Theodora Nikolakopoulou/Johanna Bernsel, European Commission, DG Grow - Circular Economy & Fertilising Products Regulation • Annika Eskusson/Katja Klasinc, European Commission DG Research & Innovation - EU R&D on P sustainability – H2020, LIFE, Interreg, Horizon Europe & Missions • Isabella Lang, IFOAM Organics International - New FPR and Perspectives for Organic Farming • The Role of National Nutrient Platforms in Enabling a Circular Nutrient Economy: • Renske Verhulst, 10 Years of the Dutch Nutrient Platform • Emma Lundin, Conclusions of Swedish Enquiry into sewage land use and P-recycling, Sweden P Platform • Other platforms and projects: Germany, Ireland, Italy, Czech Republic • Q&A and Discussion		
11h00 – 11h30 – break		
11h30 – 13h00 – Parallel Sessions – Detailed Programme Attached		
Potentials and Policy Tools	**P-Recovery Beyond Europe**	**New Resources and Products**
13h00 – 14h15 – Lunch		
14h15 – 15h45 – Research Perspectives (plenary)		
• Reports from parallel sessions • Jacob B. Hansen, Fertilizers Europe - Research Perspectives for Tomorrow's Fertilisers for P Sustainability • Speaker tbc - P_4 as a Critical Raw Material and P use beyond fertilisers • Leon Korving, WETSUS NL, P-recovery and Reuse Research & Development Strategies and beyond • Mark Sutton/Will Brownlie, Centre For Ecology & Hydrology - Our Phosphorus Future – the Need for a Global Phosphorus Cycle R&D Project • Mahesh Pradhan, UN Environment – Perspectives for Global Nutrient Management • Q&A and Discussion		
15h45 – 16h15 – break		
16h15 – 17h30 – Conclusions and the Way Forward		
• Tbc, European Commission, The Green New Deal • Lukas Egle, City of Vienna, Summary and Closing the Urban Loops • Tbc, Dutch Ministry of Infrastructure & Environment • Chris Thornton, ESPP, Summary, the 2030 Mission of ESPP and announcing the next ESPC Conference • Panel discussion on perspectives for phosphorus sustainability policies • Conclusions and Closing Remarks		
17h30 – ESPC4 Main Conference Closure		
19h00 – 22h00 The Third Woman – NESTERVAL City Adventure Inspired by the 1949 Movie "The Third Man" (tbc)		

Wednesday 22nd June 2022	
Optional parallel events	
Excursion to Vienna Municipal Sewage Treatment Works & Urban Vegetable Farmers Using Heat from Sludge Incineration	**R&D projects and networks** **4th PERM Phosphorus in Europe Research Meeting**
Max. 80 participants *Meeting at Hotel Andaz*	*Max. 150 participants, TU the SKY Technical University Vienna, Getreidemarkt 9, 1060 Vienna, see separate programme*

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Day 1 (Monday) 20th June, 14h15 – 15h45

Regional Circular Perspectives

1. Roest, K. (KWR Water Research, NL): Impact and opportunities for the urban water cycle of the 'fully circular in 2050' target of the Netherlands - Circular Water 2050
2. Kärrman, E. (RISE, Research Institute, SE): A set of methods to promote the use of extracted phosphorus from sewage in agriculture
3. Kleemann, R. (UCD Dublin, IR): Nutrient Content of Manures and Potential for Valorisation: Case Study of Monaghan and Tipperary, Ireland
4. Hébert, M. (Conseil, CA): Toward Greener Sludge Combustion - the Case of Montreal, Longueuil and Quebec City
5. Weigand, H. (Uni Giessen, DE): MH-RegPhos: P-recovery and the Energetic Valorisation of Municipal Sewage Sludge from the Regional Perspective
6. Miller Alonso Camargo-Valero (Lancaster University, UK): RePhoKUs – P and food security in the UK

P-recycling Projects

1. Adam, C. (BAM, DE): RePhoR: Industrial Implementation of the AshDec Technology in Germany
2. Dimporzano, G. (Università Milano, IT): LIFE DOP District Model for Nutrient Management and Manure processing
3. Lloret, S. (Egevasa, ES): LIFE Newest New Urban Wastewater Treatment Based on Natural Coagulants
4. Baquet, K., (Stockholm Environment Institute, SE), Research Gaps Revealed by the Bonus Return Project
5. Ploteau, M-E. (EGLV, DE): Possible business models for phosphorus recycling from wastewater based on the Phos4You experiences
6. Speaker tbc, (Baltic Sea Action Group, FI): Baltic Blue Mission / SuMaNu Initiative

New Technologies

1. De Jager, P. (Aquacare/WETSUS, NL): BioPhree: Next Generation Solution to Remove and Re-use Phosphate in Surface & Effluent Waters to ppb-level
2. Øfsti, A. (Hias How2O, NO): Sustainable Phosphorus Removal with the Hias Process
3. Zambrano, R. (TreaTech, CH): Phosphorus Recovery from Hydrothermally Treated Sewage Sludge
4. Kyllönen, H. (VTT, FI): Phosphorous removal from municipal wastewater as a part of full resource recovery – comparing 6 technologies
5. Blaikie, F.H. (Teknologisk Institut Aarhus, DK): INCOVER Phosphorus Absorbing Material – Idea to Demonstration Scale in 3 Years
6. Regelink, I. (WUR, NL) SYSTEMIC RePeat Recovery of Phosphorus and Organic Soil Improver from Co-digested Manure

Day 2 (Tuesday) 21st June, 11h30 – 13h00

Potentials and Policy Tools

1. Persona, A. (IHS/Fertecon, UK): Phosphorus recovery: a market perspective
2. Garske, B. (Rostock University, DE): Economic instruments for phosphorus governance – how taxes and cap-and-trade systems achieve a sustainable phosphorus management
3. Motta, S. (ERSAF Lombardy, IT): Phosphorus an Issue or a Resource? Material Flow Analysis in Lombardy Region.
4. Rechberger, H. (TU Vienna, AT): How to Improve Phosphorus Stewardship, MFA for Austria
5. Stubenrauch, J. (Rostock University, DE): Synergies between sustainable soil P management and climate protection – policy implications at EU level
6. Bianchini A./Fatone F. (University of Bologna/Università delle Marche, IT): Methodology and tools to assess new business models to close the Phosphorus cycle

P-Recovery Beyond Europe

1. Amanullah, Jr. (Agricultural University Peshawar, PK): Integrated Phosphorus Management in Field Crops Production: Symbiosis for Sustainable Agriculture in Changing Climate
2. Borges, B. (University of São Paulo, BR): Novel Biochar Fertilizer Increased Plant Available Phosphorus in Weathered Soils
3. Vanotti, M. (USDA, US): Enhanced recovery of phosphorus and proteins from manure using fruit waste
4. Walsh, M. (University of Queensland, AU): Advancing next-generation phosphorus fertilisers by optimising plant root exudate and microbe interactions
5. Weinberg, E. (ESSRE Consulting, US): Watershed Scale Pollutant Phosphorus Removal, Recovery, and Sustainable Redistribution Using Phosphorus Adsorptive Media
6. Yamasue (Ritsumeikan University, JP): Zero-Emission Yellow Phosphorus Production by Combination of Wastes

New Resources and Products

1. Bogdan, A. (Ghent University, BE): Dynamic efficiency of recovered P products: Matching plant P nutrient demand with fertilizer P availability
2. Erhart, E. (Bioforschung Austria, AT): Testing sewage sludge ash for a P-enriched organic fertilizer
3. Myrbeck, A. (RISE, Research Institute, SE): Reuse of phosphorus from wastewater in agricultural products – fertiliser effect and set up of cultivation tests
4. Thomas, J.B. (KTH Royal Institute of Technology, SE): Closing the nitrogen and phosphorus loop in Sweden using marine biomass
5. Windisch, St. (Montanuniversität Leoben, AT): Phosphorus removal from sewage sludge ashes with the RecoPhos (thermal) Process: Recent Advancements and results
6. Monea, M.C. (University of Stuttgart, DE): Phosphorus Recovery from Sewage Sludge Using the Stuttgart Process: Large-Scale Operating Experience with a Mobile Plant