



CIRCULARITY WEEKS PROGRAMME: 21st May – 6th June, 2023

CIBIECO project: Circular Bioeconomy: From Theory to Practice. Activities in Rovaniemi, (Lapland) and Kokkola (Ostrobothnia), Finland

Finnish-Argentinian Circularity Weeks in Rovaniemi, Kokkola, Sonka and Pyhänturi includes seminars, workshops and an intensive course on 'Circularity in Polar regions: From theory to practice' for Finnish and Argentinian students, taught by teachers from four Finnish and Argentinian universities. Researchers, lecturers, students and local partners who apply circular approaches in their economic activities are among the seminars' participants.

CIBIECO project focuses on the ideas of the circular bio-economy and their practical implementation in two polar regions – Finland (Lapland and Ostrobothnia) and Argentina (Tierra del Fuego and Cordoba). It combines research, teaching and local communities working life. The comparative aspect of the project reinforces the question of the ways of 'translating' circular concepts and approaches into practice, their benefits and limits in the context of a spatial and cultural application.

May 22, Monday

10:00 – 10:20 – Meeting in the university library (campus) for all Argentinian participants

10:30 – 11:00 Arctic Centre (Thule), registration

11:00 – 11:15 – Opening words and CIBIECO project introduction (Dr Anna Stammler-Gossmann, Arctic Centre)

11:15 – 11:30 – *Introduction to the Circularity Weeks programme* (Dr Dele Raheem, Arctic Centre)

11:30 – 11:45 – *Welcome to the Arctic Centre*. Anne Raja-Hanhela. Science Communication, Communications specialist, Arctic Centre, University of Lapland

11:45 – 12:30 – Introduction (all participants)

12:30 – 14:00 LUNCH

Open Seminar: *Circular practices in Finland and Argentina*

Venue - 14:00 - Arctic Centre, coffee room; from 14:30 Thule (hybrid: via Microsoft Teams for Kokkola and Aalto Universities, open for everybody)

14:00 – 14:05 – *CIBIECO introduction to the Arctic Centre staff*. Dr Anna Stammler-Gossmann. (Arctic Centre, University of Lapland)

14:05 – 14:30 *What happens with the waste that we produce in Rovaniemi and Lapland? Local practices of waste utilisation*. Teemu Loikkanen, (PhD candidate, University of Lapland)

From 14:30, Arctic Centre Thule room ([Click here to join the meeting](#))

14:45 – 15:15 – *Personal practices of living sustainably*. Christian Lankinen, (environmentalist, local resident, Rovaniemi)

15:15 – 15:45 - *Circular economy and social impacts in Rio Cuarto*. Prof. Arnaldo Soltermann (UNRC, University of Rio Cuarto, Rio Cuarto)

15:45 – 16:15 - *Circular practices in waste management and food production: Projects at the University of Tierra del Fuego*. Dr Marilina Penalva and Dr Alejandro Valenzuela (UNTDF, National University of Tierra del Fuego)

May 23, Tuesday, Open Seminar Arctic Centre, Thule room

10:00 – 10:30 – *The agro-industrial waste recovery as an approach to circular bioeconomy* Prof. Arnaldo Soltermann, (UNRC, National University of Rio Cuarto, Rio Cuarto)

10:30 – 11:00 – *The empire of colors*. Documentary film (25 min). Marcos Altamirano (audio-visual production manager, UNRC, University of Rio Cuarto, Rio Cuarto)

11:00 – 11:30 – *Evaluation of the biomass resources for the generation of renewable energy*. Dr Marilina Penalva (UNTDF, National University of Tierra del Fuego)

11:30 – 12:00 - *Circular economy at the End of the World: Strategies for waste valorization and material circulation on Tierra del Fuego Island, Argentina* Juan Noriega (student Environmental Science, UNTDF, Ushuaia)

12:00 – 12:30 - *Environmental Management of the Argentine Antarctic Bases in the territory of the Province of Tierra del Fuego, Antarctica and South Atlantic Islands*. Nora Jara (student, Ecology, UNTDF, Ushuaia)

12:30 – 14:00 Lunch break

14:00 -14:30 - *Perspectives on circularity and the bio-economy*, Dr Dele Raheem (Arctic Centre)

14:30 – 15:00 – *Circular Economy transition in cities and municipalities in Northern Europe: From policy to implementation by utilising sustainable investments* Dr Adrian Braun (University of Applied Sciences, LAMK, Rovaniemi)

15:00 - 15:30 – *Circularity in Legislation: A step towards a circular economy* Dr Marlene Payva (Arctic Centre, University of Lapland)

16:00 – 18:00 - *Sustainability, circularity and forestry practices in Finland*. Pekko Riihonen (Metsähallitus, Science Centre Pilke)

May 24, Wednesday

8:30: Departure from the Arctic Centre to LAMK (Lapland University of Applied Sciences), 14-15 people (1 mini bus booked – 8 persons)

9:00 - 10:30: *Virtual reality and knowledge transfer: From laboratory to the practice. Robotics.* (Lapland University of Applied Sciences, Laboratory pLAB, and Arctic Biolab Rovaniemi, Finland)

11:00 – Departure from LAMK to Sonka (Sonka Napapiirin kyläyhdistys, around 27 km from Rovaniemi)

11:30 – 12:00 – *Waste utilisation practices in Sonka.* Sanna-Mari Suopajarvi (manager, Sonka Napapiirin kyläyhdistys).

12:00 – 13:00

13:00 – 13:30 - *Environmental governance and circular economy: An analysis from territorial proximity.* Dafne Mizdraje, (PhD candidate, Urban territorial development studies, UNRC, National University of Rio Cuarto)

13:30 – 14:00 - *Circular economy and sustainability in chemical engineering* Netta Siponmaa and Innocent Uwizeyimana (students, chemical engineering, University of applied sciences CENTRIA, Kokkola)

14:00 -17:00 – Workshop on circularity

May 25, Thursday, Open seminar: *Circular approaches in food industry* (Arctic Centre, Thule room)

9:00 - 9:30 – *From a plant to the crops: Added value of waste and by-products of the soybean oil production. An opportunity of the circular economy in the Argentinian agro-economics system* Evangelina Seitien (PhD candidate, Chemical Sciences, Urban territorial development studies, UNRC, National University of Rio Cuarto)

9:30 – 10:00 – *Stevia: Crop production, processing and possible uses of the stevia extractions.* Prof. Arnaldo Soltermann (UNRC, University of Rio Cuarto, Rio Cuarto)

10:30 -11:00 - *Food waste, circularity and industry 4.0.* Dr Dele Raheem (Arctic Centre, University of Lapland)

11:00 – 11:45 – Departure to food processing plant at REDU, Lapland Educational Centre

11:45 – 14:00 - Food processing and bio waste at the Lapland Educational Centre Ulla-Maija Poranen and Kemppe Emmi-Maria (Teachers of Food Processing, Lapland Education Centre (REDU), visit to educational food processing facilities.

15:00 – Korundi museum

May 26, Friday Open Seminar *Circularity in Nature based economies*

9:00-9:30 - *Wild berries in forest multiuse and circular economy* (Dr Rainer Peltola, Natural Resources Institute Finland (LUKE))

9:30- 10:00 – *Co-designing the climate service for snow making* (Ilona Mettiäinen, researcher, Arctic Centre)

10:00 – 10:30 - *Circular approaches in winter tourism: snow making in Lapland* (Niko Niemisalo, EU Project Specialist, Senior Project Manager, Arctic Snow, Lapin AMK, University of Applied Sciences)

10:30 – 11:00 - *Storing the snow over summer in Ruka Ski Resort*. Jusu Toivonen, Ski Resort Manager and Sustainability Specialist, Pyhä and Ruka Ski Resorts).

11:00 – 11:30 - *Consumption ideology in the tourist sector: Experiences from Lapland*. Krista Perälä. (student, Faculty of Social Science)

11:30 – 12:00 - *Social dimensions of biological invasion: Insights from Tierra del Fuego, Argentina* Dr Alejandro Valenzuela (UNTDF, National University of Tierra de Fuego, Ushuaia)

12:00 – 13:00 Lunch

13:00 – 13:30 – *Finding a good mine tailing cover for Arctic conditions and the role of circular economy*. Dr Marja Uusitalo (LUKE)

13:30 – 14:00 *Sami handy craft and circular economy*. Aki Aikioniemi (student, Faculty of Art and Design, University of Lapland)

14:00 – 14:30 break

14:30 – 15: 00 *Urban environment: Arctic garden botanical experience* Prof. Monica Tennberg (Arctic Centre, University of Lapland)

15:00 – 16:00 – walk in the Arctic garden (Prof. Monica Tennberg)

May 28, Sunday

09:00 – Departure to Kokkola

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May 29, Monday

Visit to Centria (Address: Talonpojankatu 2A)

9:00 – 9:30: Introduction to Centria UAS and RDI

9:30 – 10:30: *Introduction to Chemistry & bioeconomy and valuables from biomasses* (Dr. Leena Faven)

10:30 coffee break

11:00-11:30: *visit to the laboratories at Talonpojankatu - drying, distillation, Chemplant* (TH, MJ)

12:00-13:00: lunch

13:00-14:00: *visit to KPEDU, Närvilänkatu, pilot scale freeze-drier*

14:00-14:30: *visit to laboratories at Innogate (LH)*

14:30: coffee break

15:00-16:00: *workshop and brainstorming- common challenges and opportunities in Finland and Argentina. New ideas for collaboration*

Tuesday, 30th May

Visit to N63 Herbs cooperative and Wennström farm

9:00-10:15: Leave Kokkola by car

10:15-11:30: *Visit to N63 Herbs cooperative, Kentala farm. Address: Hietalantie 60, Halsua*

11:30 Leave for lunch

12:00-13:00: Arrive at Pikku-Peura restaurant, Kinnulantie 725 Lestijärvi. *Lunch and short introduction to local food in Central Ostrobothnia (Dr. Leena Faven)*

13:30 Leave for Wennström farm

14:00-14:30 *Visit to Wennström farm. Address: Härkänevantie 465, Sykäraäinen*

Visit to Lylyn Pisara. An introduction to Finn Spring Ltd

15:00-15:30 Leave for Kokkola

16:00-16:30 Back to Kokkola

Wednesday, May 31

9:00-11:30 - *Industrial ecosystem in Kokkola. Kokkola Industrial Park- largest inorganic chemistry ecosystem in Northern Europe, Dr Egidija Rainosalo*

13:00-14:30 *visit to Kokkola city hall and presentation of Kokkola's activities within Carbon Neutral Municipalities network (HINKU <https://www.hiilineutraalisuomi.fi/en-US/Hinku>)*

14:30-16:00 – Kokkola old town, walk around the city

Thursday, June 1

9:00-11:00 - *Fibre Reinforced Polymer composites: biobased materials, 3D printing, recycling in Finland (Dr Egidija Rainosalo) Venue: CENTRIA*

12:00-13:00 - *3D printing in practise, visit to Centria PlastLab. Dr Egidija Rainosalo*

16:16 – 20:23 Travel Kokkola-Rovaniemi by train

Friday, June 2

11:30 – Departure to the Arctic Circle

12:00 – 13:00 *Waste utilisation practices at the reindeer farm*. Miia Ylinampa, Arctic Reindeer ltd

13:00 – 15:00 – Santa Claus village

Saturday, 3rd June – 6th June. Stay in Pyhätunturi (approx. 200 km from Rovaniemi)

Saturday, June 3

9:30 – Departure to Pyhätunturi from the Arctic Centre

14:30 – 15:30 - *Indelible*, documentary film Marco Altamerano, audio-visual production manager (UNRC, University of Rio Cuarto, Rio Cuarto)

15:30 – 16:30 – Group work: Circularity in comparative context: Reflective journal from students & Staff

Sunday, 4th June

Circularity - interactive group work (Dr Anna Stammler-Gossmann)

Circularity in comparative context: Reflections from Argentina and Finland

Planning intensive course during the second mobility: From Finland to Argentina

June 5, Monday

Circularity Course Development: Argentinian and Finnish Contribution (Discussion)

Circular Weeks Summary: Discussion on circular approaches in different economic sectors: Practices, challenges and potential)

Reflective journal from students & staff

June 6, Tuesday

05:00 am – Early departure from Pyhä to Rovaniemi airport
