



Keynote Session	Leading Pilot Facilities for the Bioeconomy (Pilots4U)
Title	Latvian State Institute of Wood Chemistry your partner in biomass valorization in Baltics
Company	Latvian State Institute of Wood Chemistry
Speaker	Ugis Cabulis
Keywords feedstock (max 2)	Forest resources; Agriculture side streams
Keywords technology (max 2)	Biorefinery; Carbonization
Keywords End-Product (max 2)	Betulin; Super activated charcoal
Abstract:	
In 2020, the Pilot-Scale Hangar of the Latvian State Institute of Wood Chemistry was opened, which promotes the commercialization of the technologies developed in our laboratories. Raw material preparation and material production sections, biorefining process workshop, which includes biomass hydrolysis, pyrolysis, extraction, are available in the hangar; carbonization; steam explosion equipment for biomass decomposition. Pilot facilities provide an opportunity to up-scale laboratory processes developed at LSIWC or at the Institute's cooperation partners, reaching technological readiness level (TRL) 4-6. Key Equipment: • Coarse/vibrating mills, coarse/fine sieves, dryer, spray dryer, vacuum evaporator, filter press, climatic chamber; • Wood impregnation unit, NDT machine, digital microscope, mini-reactor; • Polyurethane production and testing equipment, impact tester; • 10 L extraction unit, micro-/nano-cellulose homogenizer, electrospinning system; • Steam explosion reactor, hydraulic press, extraction station, tunnel oven, fermentation unit. Innovation thrives where science meets industry. At LSIWC, we refine biorefining technologies for real-world applications. Join us in transforming biomass into sustainable solutions.	