



Research projects of NRP 66

Module 1: Raw wood – supply, policies and processes of provisioning

No.	Applicant	Title	Institute
136711	Brang Peter Kaufmann Edgar Rudel Roman Thürig Esther	MOBSTRAT - Timber mobilisation strategies for Swiss forests: Opportunities and constraints on different spatial and temporal scales	Eidg. Forschungsanstalt - WSL

Module 2: Wood as a raw material for useful chemical substances

No.	Applicant	Title	Institute
136686	Corvini Philippe François-Xavier Rudolf von Rohr Philipp	Sequential treatment of lignins by advanced chemical oxidation processes and nanobiocatalysis for the production of industrially relevant oligomers and monolignols.	Fachhochschule Nordwestschweiz
136630	Dyson Paul Yan Ning	Concurrent Transformation of Wood into Chemical Commodity Feedstocks	EPF Lausanne
136709	Rudolf von Rohr Philipp	Use of scavengers in the pretreatment of lignocellulosic biomass for improved chemicals production	ETH Zürich
138739	Seebeck Florian	Characterization and engineering of lignin: protein interactions	Universität Basel
136712	Studer Michael Hans-Peter	Enhanced direct fermentative production of chemicals from forestry residues in a membrane biofilm reactor by enzymatic in-situ lignin modification	Berner Fachhochschule
136892	Vogel Frédéric Jeschke Gunnar van Bokhoven Jeroen A. Wambach Jörg	Understanding and manipulating free radicals in lignin for a controlled depolymerization to chemicals	Paul Scherrer Institut

Module 3: Wood as a source of energy

No.	Applicant	Title	Institute
136890	Biollaz Serge Ludwig Christian Schildhauer Tilman	Hot gas cleaning of woodgas for electricity/biofuels production	Paul Scherrer Institut
136707	Müller Christoph	Distributed production of ultra-pure hydrogen from woody biomass	ETH Zürich
136667	Nussbaumer Thomas	Clean Technologies for Wood Combustion from 500 kW to 50 MW	Hochschule Luzern
136891	Schildhauer Tilman Biollaz Serge	Predicting the complex coupling of chemistry and hydrodynamics in fluidised bed methanation reactors for SNG-production from wood (bioSNG - fundamentals of methanation)	Paul Scherrer Institut

Module 4: Wood as a material for components

No.	Applicant	Title	Institute
139986	Burgert Ingo Del Gado Emanuela	Improved wood materials for structures	ETH Zürich
136976	Fink-Petri Alke Susanne Grobéty Bernard Volkmer Thomas	Nanotechnology: Implications for the Wood (Preservation) Industry	Université de Fribourg
136688	Grützmaker Hansjörg Arnold Martin	Wood surface functionalisation using photoinitiators	ETH Zürich



Zimmermann Tanja			
140002	Niemz Peter Herrmann Hans Wittel Falk	Reliable timber and innovative wood products for structures: Adhesive Bonding of Structural Hardwood Elements	ETH Zürich
136559	Pichelin Frédéric Kroslakova Ivana Mayer Ingo Vettiger Hans	Extraction and characterization of bark tannin from domestic softwood species for bonding applications in wood-based materials	Berner Fachhochschule
136678	Thoemen Heiko Månson Jan-Anders E. Plummer Christopher	A new generation of ultra-light bio-based particleboard produced with an in-line foaming step	Berner Fachhochschule
136627	Volkmer Thomas Arnold Martin Schwarze Francis W.M.R.	Development of a natural UV-protection of wood surfaces by cellulose-rich layers	Berner Fachhochschule
136911	Weder Christoph	Processing of polymer/cellulose nanofiber composites	Université de Fribourg
136558	Zimmermann Tanja	Modified Nanofibrillated Cellulose in Wood Coatings	EMPA

Module 5: Wood-based structures and buildings

No.	Applicant	Title	Institute
136636	Frangi Andrea Fontana Mario Hugi Erich Köhler Jochen Steiger René	Reliable timber and innovative wood products for structures - Structural elements of wood and wood products made of beech	ETH Zürich
139444	Kohler Matthias Daniel Eduard Bachmann Gramazio Fabio Sigrist Christophe	Robotergestützte Assemblierung differenzierter Holztragwerke	ETH Zürich
136683	Krajci Lubos Hopkins Carl Wallbaum Holger	Competitive wooden floor systems - Multi-objective optimisation based on acoustics improvement and LCA	EMPA
136900	Steiger René Bernasconi Andrea Beyer Katrin	Earthquake-Resistant Timber Systems for Multi-Storey Buildings	EMPA
136680	Vallée Till Franke Steffen Tannert Thomas Vasilopoulos Anastasios	Design Tool for Adhesively Bonded Timber Joints	HES de Suisse occidentale
136918	Zwicky Daia	WooCon (wood-based concrete: building construction with composite elements of wood-concrete compounds and timber)	HES de Suisse occidentale

Module 6: Life-cycle assessment of wood-based material flows

No.	Applicant	Title	Institute
136623	Hellweg Stefanie De Schryver An Wallbaum Holger	Life Cycle Management of wood in Switzerland: methods, tools and environmental decision support	ETH Zürich
136670	Marechal François Hungerbühler Konrad	Wood2Chem: a computer aided platform to support the optimal implementation of wood-based bio refinery concepts	EPF Lausanne