

CONFERENCE PROGRAMME

25/09/2017	Registration & Icebreaker [Hotel ARO Palace]
17:00 - 19:00	Registration
19:00 - 22:00	Icebreaker
26/09/2017	Conference Day 1 [AULA "Sergiu T. Chiriacescu" - UNITBV]
08:00 & 08:30	Guided walk from Hotel ARO Palace to AULA "Sergiu T. Chiriacescu" (Optional)
08:00 - 09:00	Registration
09:00 - 09:30	Opening Ceremony - Welcome by: [Room: Aula Magna]
	Rector, Transilvania University of Braşov <i>Univ.prof.dr. Ioan Vasile ABRUDAN</i>
	Dean, Faculty of Silviculture and Forest Engineering (Braşov) <i>Univ.prof.dr. Alexandru Lucian CURTU</i>
	Vice-Dean, Faculty of Silviculture and Forest Engineering (Braşov) & Head of Organizing Committee <i>Univ.prof.dr. Stelian Alexandru BORZ</i>
	Head of Organizing Committee of FORMEC 2018 in Madrid (Spain) <i>Univ.prof.dr. Eduardo TOLOSANA ESTEBAN</i>
09:30 - 10:30 (3 x 20 min)	Plenary Session I - Keynote Speakers [Room: Aula Magna]
	A0
	Moderator: Stelian Alexandru BORZ
	50 th FORMEC Anniversary: achievements and perspectives for excellence in forest engineering RDI - <i>Univ.prof.dr. Karl STAMPFER</i> (Head of Department of Forest and Soil Sciences, BOKU, Vienna)
	Forest Engineering Systems: history and future - <i>Univ.prof.dr. Hans Rudolf HEINIMANN</i> (Department of Environmental Systems Science, Institute for Terrestrial Ecosystems, ETH Zürich)
	CROJFE: achievements, excellence and future trends in forest engineering research - <i>Univ.prof.dr. Tibor PENTEK</i> (University of Zagreb, Faculty of Forestry, Croatian Journal of Forest Engineering - CROJFE, Chief Editor)
10:30 - 11:00	Coffee Break [Main Hall]
11:00 - 13:00 (4 x 30 min)	Plenary Session II - Keynote Speakers [Room: Aula Magna]
	Moderator: Stelian Alexandru BORZ
	EIB in action: realising the commercial and environmental potential of forest resources - <i>Dr. Hans-Harald JAHN</i> (European Investment Bank, PJ/ETD/AGRUDEV, Head of Division)
	Vision 2030 & RDI Agenda for the European Forest-based Sector - <i>Mr. Johan ELVNERT</i> (European Forest-based Sector Technology Platform - FTP, Managing Director)
	EU Forest Strategy: increasing forest value chain competitiveness - <i>Mr. Jeremy WALL</i> (European Commission, DG GROW / Forest-based & Related Industries, Principal Administrator)
	Strategic Agenda 2020 for the Romanian State Forests Management - <i>Mr. Ciprian PAHONȚU</i> (National Forest Administration - ROMSILVA, General Director)
13:00 - 14:30	Lunch Break [Main Hall]
14:30 - 15:00	Poster Session I [Room: Aula "Sergiu T. Chiriacescu" - Main Hall]

15:00 – 17:00	Session - [Room: U I 3] A1 New trends Cutting edge technology Moderator: Adrian Enache	Session - [Room: U I 6] B1 Towards bioeconomy Biomass & Bioenergy Moderator: Raffaele Spinelli	Session - [Room: U I 2] C1 How much better? Performance of harvesting systems I Moderator: Jörn Eler
(6 x 20min)	1. Automated Volumetric Measurement of Truckloads Through Multi-View Photogrammetry and 3D Image Processing Software - Mauricio Acuna	1. Dynamic Simulation of Bioenergy Facility Locations in GIS Environment - Mika Aalto , Olli-Jussi Korpinen , Tapio Ranta	1. Comparison of Different Scaling Methods of Harvester - Processed Timber - Jiri Dvorak , Martin Chytry , Pavel Natov
	2. Application of Laser Rangefinders in Forestry Surveys - Tamás Bazsó , Péter Primusz	2. Determining Chipper Maintenance Cost as a Function of Chipper Type, Age and Annual Use - Raffaele Spinelli , Natascia Magagnotti , Lars Eliasson	2. Depth of Damage on Pine Logs from Feed Roller Spikes at Various Engine RPM in 4 Seasons - Zbigniew Karaszewski , Piotr S. Mederski , Agnieszka Łacka , Andrzej Noskowiak , Mariusz Bembenek , Martyna Rosińska
	3. The Analysis of Coniferous Logs Top Diameter Measurement Accuracy Under Bark Using Harvester and 3D Systems - Ziedonis Miklašēvičs	3. Hybrid Solutions as Measure to Increase Energy Efficiency - A Prototype of Hybrid Technology Chipper - Robert Prinz , Juha Laitila , Lars Eliasson , Johanna Routa , Antti Asikainen	3. Productivity of CTL Harvesting by Operators' Age and Experience - Jukka Malinen , Janne Taskinen , Timo Tolppa
	4. Use of High Multi-Temporal Ground Resolution Model by Portable Laser Scanner and Physical Parameters Sampling to Assess Soils Disturbance Caused by Logging Operation - Martina Cambi , Francesca Giannetti , Davide Travaglini , Gherardo Chirici , Enrico Marchi	4. Analysis of Chipping Operations and Chip Quality for Bioproducts - John Vance , Jingxin Wang , Xinfeng Xie	4. Cable Yarding in North America and New Zealand: A Review of Developments and Practices - Rien Visser , Hunter Harrill
	5. Determination of Forest Road Surface Roughness by Kinect Depth Imaging - Francesco Marinello , Andrea Rosario Proto , G. Zimbalatti , Raffaele Cavalli , Stefano Grigolato	5. A Characterisation of the Ash Content of Conifer Stump Wood Hogfuel - Enda Coates , Alejandro Nieto Gámez , Thomas Kent , Brian Cronin	5. Tractor Mounted Winching Systems for Small Scale Harvesting - Mehmet Eker
	6. Scopes and Limitations of the Use of UAV (Drones) to Support Forest Assessment and Operations - Study Case in Yungas Cloud Forest, North Argentina - Fernando Rossi , Gero Becker	6. The Possibility to Improve the Quality of Forest Chips During Transport - Arkadiusz Gendek , Tomasz Nurek , Witold Zychowicz , Krzysztof Górnicki	6. Productivity Analysis of Skidding Operations with Farm Tractor on Skid Roads: The Case of Osmaniye Forest Enterprise Chief, Turkey - Neşe Gülci , Sercan Gülci , Abdullah E. Akay
17:00 - 18:00	Coffee Break / Poster Session II [Room: Aula "Sergiu T. Chiriacescu" - Main Hall]		
18:00 - 19:30	Free Time		
19:30 - 23:30	Conference Dinner - Coliba Haiducilor (Poiana Braşov) - Two-way bus trip: ARO Palace - Poiana Braşov		

27/09/2017	Conference Day 2 [AULA "Sergiu T. Chiriacescu" - UNITBV]			
08:30 - 10:30	Session - [Room: U I 3] A2 Doing it even better Performance of harvesting systems II Moderator: <i>Tadeusz Moskalik</i>	Session - [Room: U I 6] B2 Infrastructure is the key Forest road networks Moderator: <i>Tibor Pentek</i>	Session - [Room: U I 2] C2 Innovation for mobilization Optimized Transport & Logistics Moderator: <i>Rien Visser</i>	Session - [Room: U I 7] D1 Backing the industry Forest operations & Enterprises Moderator: <i>Dirk Jaeger</i>
(6 x 20min)	1. Trunk Utilisation as a Factor Affecting Harvester Productivity - <i>Martyna Rosińska, Mariusz Bembenek, Zbigniew Karaszewski, Agnieszka Łacka, Piotr S. Mederski</i>	1. Conditions of Forest Road Network in Terms of Sustainability in Geraka - Kimmeria - Xanthi Forest Complex - <i>Daoutis Christodoulos, George Tasionas, Dimitrios E. Farmakis, Vasileios C. Drosos</i>	1. Utilization of Phone Application Technology to Record Log Truck Movement in the Southeastern US - <i>Marissa Jo Daniel, Tom Gallagher, Tim McDonald</i>	1. A Study at Different Scales of the Potential of Biomass Use: GIS, Yields, Costs and Logistics - <i>Sandra Sánchez-García, Eduardo Tolosana, Lars Eliasson, Dimitris Athanassiadis, Celia Martínez, Juan Majada, Elena Canga</i>
	2. Determinants of Harvesting Efficiency of Genetically Modified Poplar (<i>Populus Trichocarpa</i>) - <i>Witold Zychowicz, Tomasz Nurek, Monika Aniszewska, Arkadiusz Gendek</i>	2. Challenges in Forest Road Network Development in Eastern Europe - <i>Stelian Alexandru Borz, Eugen Iordache</i>	2. Design and Implementation of an Integrated Transport Framework System to Optimize Timber and Biomass Supply Logistics: A Case Study in Asturias, Spain - <i>Mauricio Acuna, Elena Canga, Sandra Sánchez-García</i>	2. Comparison of Video-Based and Conventional Time and Motion Studies of Mechanized Forest Operations - <i>Maximilian Kammermeier, Eric R. Labelle, Fabian Schulmeyer</i>
	3. What Density of Strip Roads for Early Thinning? Productivity and Cost of Various Mechanised Thinning Operations in 2 nd Age Class Pine Stand - <i>Piotr S. Mederski, Mariusz Bembenek, Zbigniew Karaszewski, Martyna Rosińska, Zenon Pilarek, Michał Surus</i>	3. A New Spatially Explicit Method to Assess the Quality of a Forest Network in Terms of Terrain Access for Harvesting Operations - <i>Leo Gallus Bont</i>	3. State-Of-The-Art of Log and Biomass Transportation: A Comparative Analysis Between Spain and Australia - <i>Rubén Laina, Mauricio Acuña, Juan Picos</i>	3. Harvesting Conditions, Market Particularities or Just Economic Competition: a Romanian Case Study Regarding the Evolution of Standing Timber Contracting Rates - <i>Mădălina Fornea, Stelian Alexandru Borz, Marcian Bîrda, Bogdan Popa</i>
	4. Simulation of Boom-Corridor Thinning Using a Multi-Tree Felling-Head Mounted on a Processor-Bundler - <i>Jussi Manner, Petrus Jönsson, Örjan Grönlund</i>	4. Development of the New Method for Assessing Condition of Forest Road Surface - <i>Marijan Šušnjar, Zdravko Pandur, Hrvoje Nevečerel, Krno Lepoglavec, Marin Bačić</i>	4. Forest Products Transport by Activating Upgraded Forest Road and Intermediate Depots - <i>Mika Yoshida, Jiyoung Son, Hideo Sakai</i>	4. Timber Harvesting Methods in Eastern European Countries - <i>Tadeusz Moskalik</i>

	5. Disc Saw Feller-Buncher Productivity Analysis in a Holm-Oak (<i>Quercus ilex</i>) Coppice Biomass Harvesting Operation in Central Spain - <i>Eduardo Tolosana, Raffaele Spinelli, G. Aminti, Ruben Laina, I. Lopez-Vicens</i>	5. Predicting the Traffic of a Forest Road Network - <i>Balázs Kisfaludi, Péter Primusz and József Péterfalvi</i>	5. Developing Primer Transportation Plan for Forested Areas Under the Risk of Winter Storm Damage – <i>Abdullah E. Akay, İnanç Taş</i>	5. Use of Timber Harvesting Data from Single Grip Harvesters - A Survey of Contractors in Central Germany - <i>Dirk Jaeger, Kevin Hammerich, Olaf Müller, Thilo Wagner, Christian Suchomel</i>
	6. New Principle for Harvester Heads for Hardwood - <i>Knobloch Christian</i>	6. Design and Construction Experiences with Simple Soil Stabilization Based Pavements - <i>József Péterfalvi, Péter Primusz, Balázs Kisfaludi</i>	6. Improved Route Generation for Logging Trucks Considering Curvature, Hilliness and Intersections - <i>Gunnar Svenson, Patrik Flisberg, Mikael Rönnqvist</i>	6. Planning of Skid Roads After Forest Fire in Turkey (A Case Study of Adrasan Forest Enterprise) - <i>Tolga Ozturk, Ebru Bilici</i>
10:30 - 11:00	Coffee Break / Poster Session III [Room: Aula "Sergiu T. Chiriacescu" - Main Hall]			
11:00 - 13:00	Session - [Room: U I 6] A3 <i>Creativity reloaded</i> <i>Innovations & Process optimization</i> Moderator: <i>Hideo Sakai</i>	Session - [Room: U I 3] B3 <i>Improving your bio(energy)</i> <i>Bioenergy & Quality improvement</i> Moderator: <i>Stefano Grigolato</i>	Session - [Room: U I 2] C3 <i>All about timber flow</i> <i>Wood supply chain challenges</i> Moderator: <i>Karl Stampfer</i>	Session - [Room: U I 7] D2 <i>Humans and nature</i> <i>Social & Environmental challenges</i> Moderator: <i>Mauricio Acuna</i>
(6 x 20min)	1. Optimized Clearing and Early Thinning by Spacer and Motor-Saw - <i>Christian Suchomel, Dirk Jaeger</i>	1. Impact of Splitting on the Drying Performance of Poplar (<i>Populus Spp. L.</i>) Logs Stored in Piles for Energy Purposes - <i>Gernot Erber, Karl Stampfer</i>	1. In-Forest Debarking of Radiata Pine to Improve Supply Chain Efficiency in Australia and New Zealand: Effect of Harvesting Season, System and Equipment - <i>Mauricio Acuna, Glen Murphy</i>	1. Good Practices in Health and Safety in Forest Enterprises - <i>Edgar Kastenholz, Joachim Morat, Ute Seeling</i>
	2. A New Technique for Pre-commercial Thinning Using a Clearing Saw Designed for Top Spacing - <i>Michel Soucy, Martin Béland</i>	2. The Comminution Cost of Wood Raw Material for Fuel in Estonian Conditions - A Case Study - <i>Marek Irdla, Allar Padari, Vahur Kurvits, Peeter Muiste</i>	2. Innovative and Adapted Wood Supply Chains as a Prerequisite for Sustainable Management of the Brazilian Atlantic Forest - <i>Pedro Britto, Dirk Jaeger, Stephan Hoffmann, Renato Robert, Alfredo Fantini</i>	2. Characteristics and Improvement of Forestry Workers Training in Croatia - <i>Matija Landekić, Ivan Martinić, Matija Bakarić, Tibor Pentek, Tomislav Poršin-sky, Mario Šporčić</i>
	3. Scenario Planning for Skid Trail Implementation and Long Term Trafficability - <i>Christophe Ginet, Philippe Ruch, Morgan Vuillermoz</i>	3. Reducing Fuel Consumption and Improving Chip Quality by Adjusting Chipper Settings - <i>Paulo Silva, Angelo Moura, Raffaele Spinelli</i>	3. Forecast of Forest Biomass Supply Chain Capacity and Efficiency at The Regional, Local and Individual Level in Finland - <i>Kalle Karttunen, Mika Aalto, Jarno Föhr, Tapio Ranta</i>	3. Trainees' Perceptions of Logger Training: The Effect of Course Demographic Variation on Survey Outcomes - <i>Nataschia Magagnotti, Mathew Smidt, Raffaele Spinelli</i>

	<p>4. Innovating Forestry using 3D Geospatial Technology Based on GEOSLAM Mobile Scanner – <i>Mihai Daniel Niţă, Stelian Alexandru Borz, Ştefan-Bogdan Candrea Bozga</i></p> <p>5. Multiple-Objective Stem Bucking in Log Cutting of Norway Spruce (<i>Picea abies</i>) Stems for Maximizing Monetary Value of Timber Trade in Finland - <i>Teijo Palander, Joonas Mutanen, Kalle Kärhä, Juha-Antti Sorsa, Tapio Räsänen</i></p> <p>6. Optimal Timber Supply in Time Slots with Integrated Planning of Harvest and Transport Operations - <i>Thomas Smaltschinski, Martin Müller</i></p>	<p>4. Performance of a Mobile Star Screen to Improve Woodchip Quality of Forest Residues - <i>Christoph Huber, Huberta Kroisleitner, Karl Stampfer</i></p> <p>5. Future Scenario Analysis for Predicting Forest Woody Biomass Availability for Energy Use and Its Economic Impact for The Mexican Bioeconomy - <i>Ulises Flores, Dirk Jaeger</i></p> <p>6. Pre-Feasibility Study of Supply Systems Based on Artificial Drying of Forest Chips Made of Delimbed Stems - <i>Juha Laitila, Jaakko Repola, Anssi Ahtikoski, Johanna Routa</i></p>	<p>4. Multiobjective Optimization of Timber and Bioenergy Supply Chain from Beetle-Killed Biomass in Colorado - <i>Ji She, Hee Han, Woodam Chung</i></p> <p>5. Research Trends in European Forest Fuel Supply Chains: A Review of the Last Ten Years (2007-2017) - <i>Martin Kühmaier, Gernot Erber</i></p> <p>6. Review of Efficient and Cost-Effective Biomass Recovery Technologies and Supply Chains in Forest Operations - <i>Mohammad Reza Ghaffariyan, Mark Brown, Mauricio Acuna, John Sessions, Tom Gallagher, Martin Kühmaier, Raffaele Spinelli et al.</i></p>	<p>4. The Dialog Tool: A Support Document for Deeper Trust - <i>Philippe Ruch, Xavier Montagny, Morgan Vuillemoz, Cyrille Pupin</i></p> <p>5. Is Life Cycle Assessment in Forestry Still at Starting Position? - <i>Andreja Đuka, Dinko Vusić, Marin Bačić, David Janeš, Zdravko Pandur, Ivica Papa</i></p> <p>6. Soil Protection in Wood Harvesting: Insights from Production-, Industrial- and Institutional Economics - <i>Oliver Thees</i></p>
13:00 - 14:30	Lunch Break [Main Hall]			
14:30 - 16:30	<p>Session - [Room: U I 7] A4</p> <p>Looking after Mama Nature</p> <p>Environmental footprint</p> <p>Moderator: Andreja Đuka</p>	<p>Session - [Room: U I 2] B4</p> <p>Mitigating the risks</p> <p>Safety & Ergonomics in steep terrain</p> <p>Moderator: Hans Rudolf Heinimann</p>	<p>Session - [Room: U I 6] C4</p> <p>For the cashflow</p> <p>Economic performance</p> <p>Moderator: Woodam Chung</p>	<p>Session - [Room: U I 3] D3</p> <p>It's about lumberjacks</p> <p>Manual operations challenges</p> <p>Moderator: Eduardo Tolosana</p>
(6 x 20min)	<p>1. New Techniques for Estimating the Extent, Severity and Distribution of Soil Disturbance from Machine Traffic During Clearfell Harvesting - <i>Bruce Talbot, Rasmus Astrup</i></p>	<p>1. The Influence of Soiling on the Breaking Strength of Covered and Uncovered 12-Strand Uhmpe - Ropes for Forestry Applications - <i>Nikolaus Nemestothy</i></p>	<p>1. Economic Analysis of Long-Term Operation of a Harvester and Forwarder Under Forest Owner Management - <i>Martin Chytry, Pavel Sladek</i></p>	<p>1. Using Sound Pressure Sensors to Monitor the Performance of Manually Operated Circular Saws: What Parameters Can Be Inferred? - <i>Marius Cheţa, Daniel Şerban, Gheorghe Ignea, Rudolf Alexandru Derczeni, Victor Sfeclă, Stelian Alexandru Borz</i></p>

	<p>2. Effects of Soil Penetration Resistance on Early Response of Q. Robur Seedlings Since Germination - <i>Martina Cambi, Barbara Mariotti, Alberto Maltoni, Fabio Fabiano, Andrea Tani, Enrico Marchi</i></p>	<p>2. Inspecting Wire Rope Tensions and End Connectors on Cable-Assist Operations - <i>Hunter Harrill, Rien Visser, James Byron</i></p>	<p>2. Machine Cost Calculation to Determine the Forest Operations Costs - <i>Sebastian Pilz, Jörn Erler</i></p>	<p>2. Oxygen Expenditure During Motor-Manual Harvesting in the Mediterranean Forests - <i>Andrea R. Proto, Giuseppe Zimbalatti, Diego Russo</i></p>
	<p>3. Soil Disturbance of a Cable Assisted CTL Harvester Forwarder Thinning in Northwest US - <i>Preston Green, Woodam Chung, Ben Leshchinsky, John Sessions, Stephen Fitzgerald, Jeff Wimer</i></p>	<p>3. Two Years Steep Slope Initiative - Questions, Answers, and Practical Outcomes - <i>Dzhamal Amishev, Jim Hunt</i></p>	<p>3. The Profitability of Biomass Harvesting in Spruce Stands When Considering Nutrient Cycling - <i>Herbert Borchert, Christian Fritsch, Wendelin Weis, Christian Kölling, Axel Göttlein</i></p>	<p>3. Coupling Motion Detection and Sound Pressure Sensors to Automate Data Collection in Motor-Manual Production Studies - <i>Marius Cheţa, Nicolae Talagai, Stelian Alexandru Borz</i></p>
	<p>4. Pressure Allocation Under Forest Tires - Static and Dynamic Examination and Rutting Process in Field Tests - <i>Bastian Hinte, Henrik Brokmeier</i></p>	<p>4. Operators in Steep Slope Logging and Safety Measurement - <i>John Garland, Francisca Belart, Robert Crawford, Woodam Chung, Tamara Cushing, Laurel Kincl, Ben Leshchinsky, John Sessions, Jeff Wimer</i></p>	<p>4. Accuracy, Efficiency and Usability of Photo-Optical Pile Measurement Systems in the Wood Supply Chain - <i>Martin Opferkuch, Martina Attinger, Dirk Jaeger</i></p>	<p>4. Determining the Vibrations Transmitted by Electric Chainsaws in Conifer Cross-Cutting Operations - <i>Enrico Marchi, Francesco Neri, Andrea Laschi, Cristiano Foderi, Martina Cambi, Fabio Fabiano</i></p>
	<p>5. Stump Treatment with Chemical and Biological Controls Against <i>Heterobasidion</i> Spp. Root Rot in Coniferous Forests of Finland - <i>Kalle Kärhä, Ville Koivusalo, Teijo Palander, Matti Ronkanen</i></p>	<p>5. Using of Fine Kinney Risk Assessment Method in the Wood Production Process - <i>Saliha Ünver-Okan, H. Hulusi Acar, İbrahim Ergenç</i></p>	<p>5. Challenges in Road Construction and Timber Harvesting in Japan - <i>Hideo Sakai</i></p>	<p>5. Field Performance of Motor-Manual Felling in Willow Short Rotation Crops - <i>Nicolae Talagai, Stelian Alexandru Borz</i></p>
	<p>6. Estimating Marginal Tree(s) Damaged Following Forest Harvesting by Artificial Neural Networks - <i>Hadi Bayati, Akbar Najafi</i></p>	<p>6. Green Energy Cluster - Community-Driven Sustainable Bioenergy Projects - <i>Boglarka Vajda</i></p>	<p>6. TIMFLOW - The Solution for Wood Traceability - <i>Adrian Dulgheru</i></p>	<p>6. KRONOSPAN - Excellence in Wood Processing - <i>Biborka Bartha</i></p>
16:30 - 17:00	Coffee Break [Room: Aula "Sergiu T. Chiriacescu" - Main Hall]			
17:00 - 18:00	Closing ceremony - [Room: Aula Magna]			
	Vice-Dean, Faculty of Silviculture and Forest Engineering (Braşov) & Head of Organizing Committee <i>Univ.prof.dr. Stelian Alexandru BORZ</i>			
18:00 - 20:00	Free time			
20:00 - 23:00	Conference Dinner - PRATO Restaurant			

28/09/2017	Field Trip to FOREST ROMANIA
	Forest machinery and technology fair [Zizin: www.forestromania.com]
9:00	Transfer Hotel ARO PALACE - FOREST ROMANIA 9:00
16:00	Transfer FOREST ROMANIA - Hotel ARO PALACE: 16:00
17:00	Free time

Sponsors:

