

**PRELIMINARY CONFERENCE PROGRAMME**

25/09/2017	<b>Registration &amp; Icebreaker [Hotel ARO Palace]</b>
17:00 - 19:00	Registration
19:00 - 22:00	Icebreaker
26/09/2017	<b>Conference Day 1 [AULA T. Chiriacescu - UNITBV]</b>
08:00 & 08:30	Guided walk from Hotel Aro Palace to AULA T. Chiriacescu (Optional)
08:15 - 09:00	<b>Registration</b>
09:00 - 09:30	<b>Opening Ceremony – Welcome by: [Room: Aula Magna]</b>
	Rector, Transilvania University of Brasov <i>Univ.prof.dr. Ioan Vasile ABRUDAN</i>
	Dean, Faculty of Silviculture and Forest Engineering (Brasov) <i>Univ.prof.dr. Alexandru Lucian CURTU</i>
	Vice-Dean, Faculty of Silviculture and Forest Engineering (Brasov) & Head of Organizing Committee <i>Univ.prof.dr. Stelian Alexandru BORZ</i>
	Head of Organising Committee of FORMEC 2018 in Madrid (Spain) <i>Univ.prof.dr. Eduardo TOLOSANA ESTEBAN</i>
09:30 - 10:30  (3 x 20 min)	<b>Plenary Session I - Keynote Speakers [Room: Aula Magna]</b> <b>A0</b> <b>Moderator: Stelian Alexandru BORZ</b>
	50 <sup>th</sup> 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 Forest, Croatian Journal of Forest Engineering - CROJFE, Chief Editor)
10:30 - 11:00	<b>Coffee Break</b>
11:00 - 13:00  (4 x 30 min)	<b>Plenary Session II - Keynote Speakers [Room: Aula Magna]</b> <b>Moderator: Stelian Alexandru BORZ</b>
	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) - TBC
	Strategic Agenda 2020 for the Romanian State Forests Management - <i>Mr. Ciprian PAHONTU</i> (National Forest Administration – ROMSILVA, General Director)
13:00 - 14:30	<b>Lunch Break</b>
14:30 - 15:00	<b>Poster Session I [Room: Aula T. Chiriacescu - Main Hall]</b>

15:00 – 17:00	Session - [Room:TBA] A1 <b>New trends</b> <b>Cutting edge technology I</b> Moderator: <i>TBA</i>	Session - [Room: TBA] B1 <b>Towards bioeconomy</b> <b>Biomass &amp; bioenergy I</b> Moderator: <i>TBA</i>	Session - [Room: TBA] C1 <b>How much better?</b> <b>Performance of harvesting systems</b> Moderator: <i>TBA</i>
(6 x 20min)	1. Automated Volumetric Measurement of Truckloads Through Multi-View Photogrammetry and 3D Image Processing Software - <i>Mauricio Acuna</i>	1. Dynamic Simulation of Bioenergy Facility Locations in GIS Environment - <i>Mika Aalto, Olli-Jussi Korpinen, Tapio Ranta</i>	1. Comparison of Simulated Sorting with Bucking of Timber by Harvesters - <i>Jiri Dvorak, Martin Chytry, Pavel Natov</i>
	2. Application of Laser Rangefinders in Forestry Surveys - <i>Tamás Bazsó, Péter Primusz</i>	2. Determining Chipper Maintenance Cost as a Function of Chipper Type, Age and Annual Use - <i>Raffaele Spinelli, Natascia Magagnotti, Lars Eliasson</i>	2. Depth of Damage on Pine Logs from Feed Roller Spikes at Various Engine RPM in 4 Seasons - <i>Zbigniew Karaszewski, Piotr S. Mederski, Agnieszka Łacka, Andrzej Noskowiak, Mariusz Bembenek, Martyna Rosińska</i>
	3. The Analysis of Coniferous Logs Top Diameter Measurement Accuracy Under Bark Using Harvester and 3D Systems - <i>Ziedonis Miklašēvičs</i>	3. Hybrid Solutions as Measure to Increase Energy Efficiency - A Prototype of Hybrid Technology Chipper - <i>Robert Prinz, Juha Laitila, Lars Eliasson, Johanna Routa1, Antti Asikainen</i>	3. Productivity of CTL Harvesting by Operators' Age and Experience - <i>Jukka Malinen, Janne Taskinen, Timo Tolppa</i>
	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 - <i>Martina Cambi, Francesca Giannetti, Davide Travaglini, Gherardo Chirici, Enrico Marchi</i>	4. Analysis of Chipping Operations and Chip Quality for Bioproducts - <i>John Vance, Jingxin Wang, Xinfeng Xie</i>	4. Performance of a Mid-Sized Harvester-Forwarder System in Integrated Harvesting of Sawmill, Pulpwood and Fuelwood - <i>Andrei Apăfăian, Andrea Rosario Proto, Stelian Alexandru Borz</i>
	5. Determination of Forest Road Surface Roughness by Kinect Depth Imaging - <i>Francesco Marinello, Andrea Rosario Proto, G. Zimbalatti, Raffaele Cavalli, Stefano Grigolato</i>	5. A Characterisation of the Ash Content of Conifer Stump Wood Hogfuel - <i>Coates Enda, Nieto Gámez Alejandro, Kent Thomas, Cronin Brian</i>	5. Tractor Mounted Winching Systems for Small Scale Harvesting - <i>Mehmet Eker, Davut Özer</i>
	6. Scopes and Limitations of the Use of UAV (Drones) to Support Forest Assessment and Operations - Study Case in Yungas Cloud Forest, North Argentina - <i>Fernando Rossi, Gero Becker</i>	6. The Possibility to Improve the Quality of Forest Chips During Transport - <i>Arkadiusz Gendek, Tomasz Nurek, Witold Zychowicz, Krzysztof Górnicki</i>	6. Productivity Analysis of Skidding Operations with Farm Tractor on Skid Roads: the Case of Osmaniye Forest Enterprise Chief, Turkey - <i>Neşe Gülci, Sercan Gülci, Abdullah E. Akay</i>
17:00 - 18:00	<b>Coffee Break / Poster Session II [Room: Aula T. Chiriacescu - Main Hall]</b>		
18:00 - 20:00	<b>Free Time</b>		
20:00 - 23:00	<b>Conference Dinner</b>		

27/09/2017	Conference Day 2 [AULA T. Chiriacescu - UNITBV]			
08:30 - 10:30	Session - [Room: TBA] A2 <b>Doing it even better</b> <b>Performance of harvesting systems II</b> Moderator: TBA	Session - [Room: TBA] B2 <b>Infrastructure is the key</b> <b>Forest road networks</b> Moderator: TBA	Session - [Room: TBA] C2 <b>Innovation for mobilization</b> <b>Optimized Transport &amp; Logistics</b> Moderator: TBA	Session - [Room: TBA] D1 <b>Backing the industry</b> <b>Forest operations &amp; enterprises</b> Moderator: TBA
(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, Dana Mitchell</i>	1. A Study at Different Scales of the Potential of Biomass Use: GIS, Yields, Costs and Logistics - <i>Sandra Sánchez-García, Eduardo Tolasana, Lars Eliasson, Dimitris Athanassiadis, Celia Martínez, Juan Majada, Elena Canga</i>
	2. The effectiveness of the process of harvesting of poplar wood from plantation for paper and chipboard <i>Witold Zychowicz, Tomasz Nurk, Monika Aniszewska, Arkadiusz Gendek</i>	2. Challenges in Forest Road Network Development in Eastern Europe - <i>Stelian Alexandru Borz</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 2nd Age Class Pine Stand - <i>Piotr 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>Bont Leo Gallus</i>	3. Roundwood and Biomass Transport: Comparing Spain and Australia - <i>Rubén Laina, Mauricio Acuña, Juan Picos</i>	3. Harvesting 800K M3 of Wood: What Does It Take? - <i>Stelian Alexandru Borz, Mădălina Fornea, Marcián Bírda</i>
	4. Improvements in Forwarder Technology as the Forest Operations Practitioners See It - <i>Stelian Alexandru Borz</i>	4. Development of the New Method for Assessing Condition of Forest Road Surface - <i>Marijan Šušnjar, Zdravko Pandur, Hrvoje Nevečerel, Kruno 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. New Principle for Harvester	5. Predicting the Traffic of a Forest Road Network - <i>Balázs</i>	5. Developing Primer Transportation Plan for Forested Areas Under	5. Use of Timber Harvesting Data from Single Grip Harvesters - A

	Heads for Hardwood - <i>Knobloch Christian</i>	<i>Kisfaludi, Péter Primusz and József Péterfalvi</i>	the Risk of Winter Storm Damage - <i>Abdullah E. Akay, İnanç Taş</i>	Survey of Contractors in Central Germany - <i>Jaeger Dirk, Hammerich Kevin, Wagner Thilo, Müller Olaf, Suchomel 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	<b>Coffee Break / Poster Session II [Room: Aula T. Chiriacescu - Main Hall]</b>			
11:00 - 13:00  (6 x 20min)	<b>Session - [Room: TBA] A3</b>  <b><i>Creativity reloaded</i></b> <b><i>Innovations &amp; process optimization</i></b> <b>Moderator: TBA</b>	<b>Session - [Room: TBA] B3</b>  <b><i>Improving your Bio(energy)</i></b> <b><i>Bioenergy &amp; quality improvement</i></b> <b>Moderator: TBA</b>	<b>Session - [Room: Aula Magna] C3</b>  <b><i>All about timber flow</i></b> <b><i>Wood supply chain challenges I</i></b> <b>Moderator: TBA</b>	<b>Session - [Room: TBA] D2</b>  <b><i>Humans and nature</i></b> <b><i>Social &amp; environmental challenges</i></b> <b>Moderator: TBA</b>
	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 (Populus Spp. L.) 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 Poršinsky, 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, Ângelo 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>Natascia Magagnotti, Mathew Smidt, Raffaele Spinelli</i>
	4. Implementation of the Optimization Model Results in a Spatial Wood Flow Analysis Using GIS - <i>Katrina Amerika, Maris Kuzmins</i>	4. Performance of a Mobile Star Screen to Improve Woodchip Quality of Forest Residues - <i>Christoph Huber, Huberta</i>	4. Multiobjective Optimization of Timber and Bioenergy Supply Chain from Beetle-Killed Biomass in Colorado - <i>Ji She, Hee Han,</i>	4. The Dialog Tool: A Support Document for Deeper Trust - <i>Philippe Ruch, Xxavier Montagny, Morgan Vuillermoz</i>

	<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, Kalle Kärhä, Joonas Mutanens</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><i>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><i>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>5. Is LCA 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	<b>Lunch Break</b>			
14:30 – 16:30  (6 x 20min)	<p><b>Session - [Room: TBA] A4</b></p> <p><b><i>Looking after Mama Nature</i></b></p> <p><b><i>Environmental footprint</i></b></p> <p><b>Moderator: TBA</b></p>	<p><b>Session - [Room: Aula Magna] B4</b></p> <p><b><i>Mitigating the risks</i></b></p> <p><b><i>Safety &amp; ergonomics in steep terrain</i></b></p> <p><b>Moderator: TBA</b></p>	<p><b>Session - [Room: TBA] C4</b></p> <p><b><i>For the cashflow</i></b></p> <p><b><i>Economic performance</i></b></p> <p><b>Moderator: TBA</b></p>	<p><b>Session - [Room: Aula Magna] D3</b></p> <p><b><i>It's about lumberjacks</i></b></p> <p><b><i>Manual operations challenges</i></b></p> <p><b>Moderator: TBA</b></p>
	<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>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>3. Soil Disturbance of a Cable</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>2. Inspecting Wire Rope Tensions and End Connectors on Cable-Assist Operations - <i>Rien Visser, Hunter Harrill, James Byron</i></p> <p>3. Two Years Steep Slope Initia-</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>2. Machine Cost Calculation to Determine the Forest Operations Costs - <i>Sebastian Pilz, Jörn Erler</i></p> <p>3. The Profitability of Biomass Har-</p>	<p>1. Using Sound Pressure Sensors to Monitor the Performance of Manually Operated Circular Saws: What Parameters Can Be Inferred? - <i>Nicolae Talagai, Marius Cheța, Daniel Șerban, Mădălina Fomea, Stelian Alexandru Borz, Gheorghe Ignea</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. Coupling Motion Detection and</p>

	Assisted CTL Harvester Forwarder Thinning in Northwest US - <i>Preston Green, Woodam Chung, Ben Leshchinsky, John Sessions, Stephen Fitzgerald, Jeff Wimer</i>	tive - Questions, Answers, and Practical Outcomes - <i>Dzhamal Amishev, Jim Hunt</i>	vesting in Spruce Stands When Considering Nutrient Cycling - <i>Borchert Herbert, Fritsch Christian, Weis Wendelin, Kölling Christian, Göttlein Axel</i>	Sound Pressure Sensors to Automate Data Collection in Motor-Manual Production Studies - <i>Marius Cheța, Nicolae Talagai, Stelian Alexandru Borz</i>
	4. Pressure Allocation Under Forest Tires - Static and Dynamic Examination and Rutting Process in Field Tests - <i>Hinte Bastian, Brokmeier Henrik</i>	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>	4. An Approach for Active Cost Control in Running Timber Harvesting Operations - <i>Michael Starke, Martin Ziesak</i>	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>
	5. Stump Treatment Against Heterobasidion Annosum in Finnish Forests - <i>Kalle Kärhä, Ville Koivusalo, Teijo Palander</i>	5. Using of Fine Kinney Risk Assessment Method in the Wood Production Process - <i>Saliha Ünver-Okan, H. Hulusi Acar, İbrahim Ergenç</i>	5. Challenges in Road Construction and Timber Harvesting in Japan - <i>Hideo Sakai</i>	5. Field Performance of Motor-Manual Felling in Willow Short Rotation Crops - <i>Nicolae Talagai, Stelian Alexandru Borz</i>
	6. Estimating Marginal Tree(S) Damaged Following Forest Harvesting by Artificial Neural Networks - <i>Hadi Bayati, Akbar Najafi</i>			
16:30 – 17:00	<b>Coffee Break / Poster Session II [Room: Aula T. Chiriacescu - Main Hall]</b>			
17:00 – 18:00	<b>Closing ceremony – Welcome by: [Room: Aula Magna]</b>			
	Vice-Dean, Faculty of Silviculture and Forest Engineering (Brasov) & Head of Organizing Committee <i>Univ.prof.dr. Stelian Alexandru BORZ</i>			
18:00 - 20:00	<b>Free time</b>			
20:00 - 23:00	<b>Conference Dinner</b>			

28/09/2017	<b>Field Trip to FOREST ROMANIA</b>	
	<b>Forest machinery and technology fair [Zizin: <a href="http://www.forestromania.com">www.forestromania.com</a>]</b>	
9:00	Transfer Hotel Aro PALACE - FOREST ROMANIA 9:00	
16:00	Transfer FOREST ROMANIA - Hotel ARO PALACE: 16:00	
17:00	<b>Free time</b>	

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