



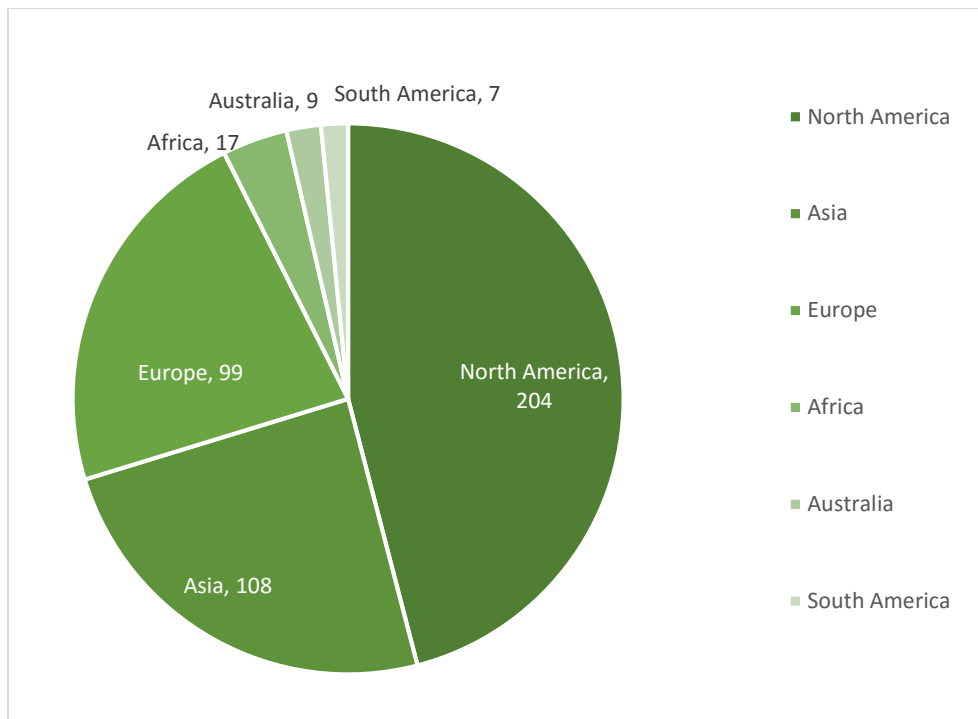
IUFRO
2017 Division 5 | SWST 60th
CONFERENCE | **International Convention**
Vancouver, BC June 12th-16th

Conference Secretariat
Faculty of Forestry
University of British Columbia
2005 - 2424 Main Mall
Vancouver, BC, V6T 1Z4
Canada
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www.iufrodiv5-2017.ca

Conference in numbers

445	Total Conference delegates
49	Countries
21%	Students
20%	Non-IUFRO members
8%	Delegates from countries with lower income economies
22	Scientist Assistance Program delegates
299	Oral presentations
116	Poster presentations

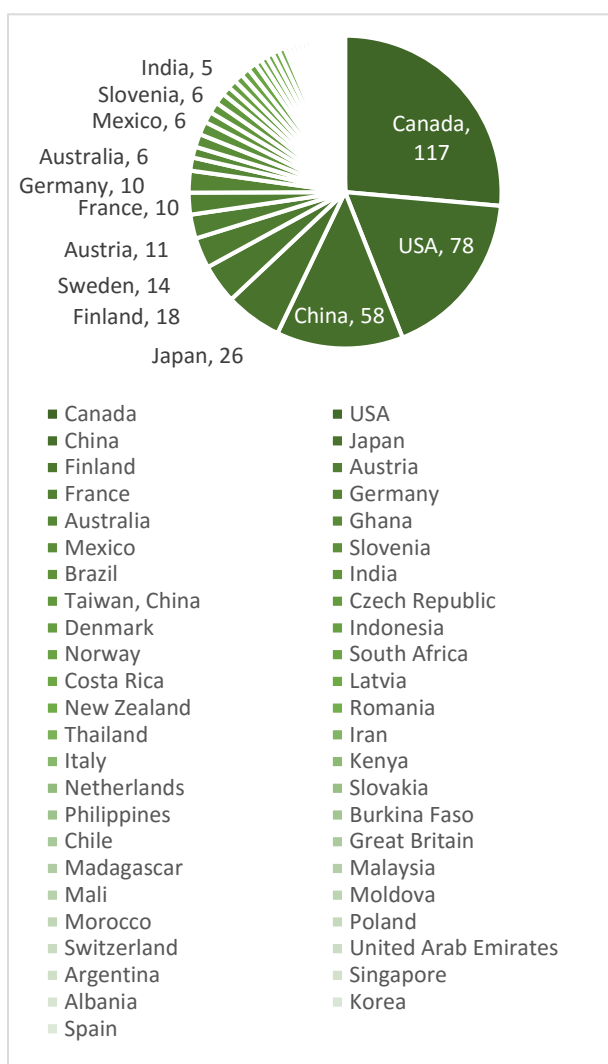
Representatives by region



Country profile

Country	Participants
Canada	113
USA	78
China	58
Japan	26
Finland	18
Sweden	14
Austria	11
France	10
Germany	10
Australia	6
Mexico	6
Slovenia	6
Brazil	5
Ghana	5
India	5
Taiwan, China	5
Czech Republic	4
Denmark	4
Indonesia	4
Norway	4
South Africa	4
Uganda	4
Costa Rica	3
Latvia	3
New Zealand	3
Romania	3
Thailand	3
Iran	2
Italy	2
Kenya	2
Netherlands	2
Slovakia	2
Philippines	2
Burkina Faso	1
Chile	1
Great Britain	1
Madagascar	1
Malaysia	1

Country	Participants
Mali	1
Moldova	1
Morocco	1
Poland	1
Switzerland	1
United Arab Emirates	1
Argentina	1
Singapore	1
Albania	1
Korea	1
Spain	1



Organizations

Albania

University of Applied Sciences in Ferizaj

Argentina

Universidad Nacional Córdoba, Facultad
Agronomía

Australia

Queensland Government
SilviScan Pty Ltd
University of Melbourne
University of Tasmania
University of the Sunshine Coast

Austria

Kompetenzzentrum Holz GmbH
University of Natural Resources and Life Sciences
(BOKU) – Vienna, Institute of Wood Technology
and Renewable Materials

Brazil

Brazilian Forest Service
Santa Catarina State University
Universidade do Estado de Mato Grosso
University of Brasília
Universty of São Paulo

Burkina Faso

Ouagadougou University

Canada

Association of BC Forest Professionals
BC Ministry of Forests, Lands and Natural
Resource Operations
Canadian Forest Service, NRCanada
Canadian Wood Fibre Centre
CIRAIG, Polytechnique Montréal, Dept. of
Industrial Engineering and Mathematics
Cobden Strategies Inc.
Cold Stream Consulting
CRM
FORAC research consortium, Université Laval
FPIInnovations
Genome BC
Lakehead University
Laval University
NCASI
Simon Fraser University
SMT Research Ltd.

Organizations

Transformation International
Université du Québec à Rimouski
Université Laval
University of Alberta
University of British Columbia, Faculty of Forestry
University of New Brunswick
University of Northern British Columbia
Western Ecology Ltd.
Wood Science and Technology Centre, University
of New Brunswick
University of New Brunswick, FOREM
Brinkman Group
University of Moncton, Edmundston

Chile

UDT, University of Concepción

China

Beijing Forestry University
Fujian Agriculture and Forestry University
Guangdong Academy of Forestry
International Centre for Bamboo and Rattan
Northeast Forestry University
Nanjing Forestry University
Northwest Agriculture and Forestry University
Research Institute of Forestry New Technology
Shaanxi University of Science & Technology
South China Agricultural University
State Forestry Administration
Research Institute of Chemical Processing and
Utilization of Forest Products
Central South University of Forestry and
Technology
Jiangxi University of Finance and Economics
Beijing Forestry University, College of Materials
Science and Technology
Chinese Academy of Forestry, Research Institute
of Wood Industry
Chinese Academy of Forestry, Experimental
Center of Tropical Forestry
Chinese Academy of Forestry, Research Institute
of Resource Insects
South China Agricultural University, College of
Materials and Energy

Organizations

Costa Rica

Instituto Tecnológico de Costa Rica
Novelteak Costa Rica

Czech Republic

Mendel University in Brno

Denmark

Aarhus University
University of Copenhagen

Finland

Aalto University
Kajaani University of Applied Sciences
Natural Resources Institute Finland (Luke)
NIRAS International Consulting
The Guides and Scouts of Finland
University of Eastern Finland
University of Helsinki
University of Vaasa

France

AgroParisTech
Ecole Supérieure du Bois
FCBA
GRENOBLE INP
INRA
Institut Charles Gerhardt Montpellier
Institut technologique FCBA

Germany

Albert-Ludwigs Universität Freiburg
Bauen-auf-Mietgrund
Forest Research Institute Baden-Wuerttemberg
FVA Baden-Württemberg
Master School for Carpentry
Thünen Institute of Wood Research
Universität Hamburg
University of Freiburg
Wood Research Munich

Ghana

BIDG
Resource Management Support Centre of
Forestry Commission, Ghana
Samartex Timber and Plywood Company Limited
Forestry Commission of Ghana

Organizations

Great Britain

Forest Research UK

India

Forest Research Institute
International Teak Information Network
(TEAKNET)
Panjab University
Institute of Wood Science and Technology, India

Indonesia

Bogor Agricultural University (IPB)
Center of Research and Development of Forest
Products
Kerala Forest Research Institute
University of Muhammadiyah Purwokerto

Iran

Research Institute of Forests and Rangelands

Italy

CNR - IVALSA
GESAAF University of Florence

Japan

Akita Prefectural University
Building Research Institute
Chiba Institute of Technology
Forestry and Forest Products Research Institute
International Tropical Timber Organization (ITTO)
JEMAI
Kumamoto University
Nagoya University
National Institute of Advanced Industrial Science
and Technology (AIST)
Norinchukin Research Institute Co.
Shizuoka University
Showa Women's University
Tokyo University of Agriculture and Technology
Tsukuba University

Kenya

Kenya Forestry Research Institute (KEFRI)

Korea

Korea University

Latvia

LRCAF, Institute of Forestry
Green home

Organizations	Organizations
Madagascar	South Africa
School of Agronomy, Department of Water and Forests	Hans Merensky Holdings Pty Ltd Stellenbosch University University of Pretoria
Malaysia	Spain
Faculty of Resource Science & Technology	Spectraply Biotechnology
Mali	Sweden
Institute of Rural Economy	Linköping University Linnaeus university Luleå University of Technology Swedish University of Agricultural Sciences, Department of Forest Products
Mexico	Switzerland
Kaltia Consultoria y Proyectos SA de CV Postgrado en Ciencias Forestales, Colegio de Postgraduados - México Universidad Autónoma Chapingo	Swiss Federal Institute of Technology
Moldova	Taiwan, China
Forest Research and Management Institute	Experimental Forest, National Taiwan University National Taiwan University National Chung Hsing University, Department of Forestry
Morocco	Thailand
Faculty of Sciences, Mohammed 5 University in Rabat	Nakhon Si Thammarat Rajabhat University School of Engineering and Resources, Walailak University
Netherlands	Uganda
MOSO International BV Utrecht University	Makerere University
New Zealand	United Arab Emirates
Scion	Faculty of Art and Architecture, Department of Architecture, Shiraz Branch, Isla
Norway	USA
Inland Norway University of Applied Sciences Norwegian Institute of Wood Technology Norwegian University of Life Sciences	Bowyer and Associates, Inc. Colorado School of Mines International Wood Culture Society Iowa State University JELD-WEN INC. Louisiana Forest Products Development Center Michigan Technological University North Carolina State University Northern Arizona University Oregon State University - College of Forestry Portland State University Smithsonian Institution Society of Wood Science and Technology SUNY-ESF
Philippines	
Forest Products Research and Development Institute Pest Science Corporation	
Poland	
Wood Technology Institute	
Romania	
Faculty of Wood Engineering Transylvania University of Brasov	
Singapore	
Nanyang Technological University	
Slovakia	
Technical University in Zvolen	
Slovenia	
University of Ljubljana	

Organizations

University of Georgia
University of Maine
University of Minnesota
University of North Texas
University of Washington - Center for
International Trade in Forest Products
University of Wisconsin-Stout

Organizations

Utah State University - Forestry Extension
Virginia Tech
Washington State University
West Virginia University
US Forest Service
Pennsylvania State University

Plenary talks

June 12	<i>Forest Sector Innovation: Then, Now and ???</i> - Jim Bowyer, Bowyer and Associates	
June 13	Innovations in Forest Products and Services	
	Canada's Forest Innovation System: A Retrospective and Way Forward Catherine Cobden, Cobden Strategies Inc.	Essential Oils from Forest Trees as Source of Natural Herbicides: Opportunities, Prospects and Challenges Daizy Rani Batish, Panjab University
June 14	Innovations in Wood Building and Design: Brock Commons John Metras, UBC Campus and Community Planning	
June 14	International Academy of Wood Science (IAWS) Academy Lecture: <i>Renaissance of Wood Building Design and Construction in North America</i> Ian de la Roche, UBC Forestry	
June 14	CEO Panel: <i>Innovations in Forest Products Successful models from around the world</i>	Alex Berg, Chile Johanna Buchert, Finland Benhua Fei, China World L-S Nieh, USA Trevor Stuthridge, Canada
June 15	Innovations in Forest Policy and Management	
	Potential Forest Sector Contributions to <i>Greenhouse Gas Emission Reductions</i> Werner Kurz, NRCanada	Using Global Trends to Our Advantage: Successful Forest Management in an Uncertain Future Doug Konkin, UBC Forestry
June 16	Innovations in Business Models and Management	
	Forest Innovation: The Canadian Way. How a national commodity-focused industry has evolved into a world leader in sustainability and a global hub of innovation Jean-François Levasseur, NRCanada	Innovations in Indigenous Business Models and Management Carol Anne Hilton, Transformation International

Concurrent general meetings

IUFRO Foresight Task Force
Society of Wood Science and Technology Business meeting
Division 5 Meeting and Research Group reporting

Technical sessions (in order of occurrence)

Session theme/Research group	Chair and Co-Chairs
Recycled Wood and Non-Wood Lignocellulosics for the Composite Industry	Chair: Mark Irle, Ecole Supérieure du Bois Co-Chair: Marius Catalin Barbu, Universitatea Transilvania Brasov
Wood and Forest Culture: A Path to a Greener Future	Chair: Howard Rosen, US Forest Service R&D Co-Chair: Ping Yang, Faculty of Education, Kumamoto University
Innovations in Wood Property Assessment and Characteristics of Forest Resources	Chair: John Moore, Scion Co-Chair: Xiping Wang, USDA Forest Products Laboratory
New Frontiers in Wood Science and Technology	Chair: Rupert Wimmer, Universitat fur Bodenkultur Wien, Austria - BOKU Co-Chair: Andreja Kutnar, University of Primorska
Structural Bamboo Products: Global Trends, Products and Processes	Chair: Felix Boeck, UBC Faculty of Forestry
Novel Wood Protection Technologies and Environmental Awareness	Co-Chair: Nami Kartal, Faculty of Forestry, Istanbul University
Forest and Mill Residues to Biojet	Chair: Jack Saddler, UBC Faculty of Forestry
Innovative Utilization of Bamboo and Rattan Resource for a Green World	Chair: Yan Yu, International Center for Bamboo and Rattan, China Co-Chair: Fei Benhua, International Center for Bamboo and Rattan, China - ICBR
Advances in Wood Quality Modelling Methods and Simulation Software	Chair: Alexis Achim, Université Laval Co-Chair: David Auty, Northern Arizona University
Perspectives on Quality for Forests and Timber Resilience	Chair: Rupert Wimmer, Universitat fur Bodenkultur Wien, Austria - BOKU Co-Chair: Pekka Saranpää, Natural Resources Institute Finland
Ensuring a Greener Future with Non-Timber Forest Products	
Wood Deconstruction for Biorefinery Purposes: Recent Developments and Promising Approaches	Chair: Dominique Lachenal, Grenoble INP Co-Chair: Md Sarwar Jahan, Pulp and Paper Research Division, BCSIR
Industrial Engineering and Logistics for Greening the Production	Chair: Manfred Gronalt, BOKU – University of Natural Resources and Life Sciences, Vienna, Institute of Production and Logistics Co-Chair: Henry Quesada, Virginia Tech
Using Wood in the Built Environment to Promote Human Health, Social wellbeing, and Environmental Sustainability	

Session theme/Research group	Chair and Co-Chairs
Recent Developments in Wood Protection Research Relevant to Climate Change Mitigation by Conferring Long-term Carbon Storage in Wood	Chair: Andrew H.H. Wong, Universiti Malaysia Sarawak (Unimas) Co-Chair: Rod Stirling, FPIInnovations
Transforming Lignin and Hemicelluloses into Bioproducts and Biomaterials of High Added Value	Chair: Dominique Lachenal, Grenoble INP Co-Chair: Md Sarwar Jahan, Pulp and Paper Research Division, BCSIR
X-Ray and 3-D Scanning Technology	Chair: Julie Cool, University of British Columbia Co-Chair: Dick Sandberg, Luleå University of Technology
Impacts of Forest Certification on Sustainable Forest Management	Chair: Robert Deal, USDA Forest Service, PNW Research Station Co-Chair: Wenming Lu, Chinese Academy of Forestry
Prefabrication Building Solutions and What it Means to the Forest Industry	Chair: Mark Kaustinen, FPIInnovations
Timber Drying: Basic and Applied R&D for Optimum Processing and Product Quality	Chair: Stavros Avramidis, University of British Columbia Co-Chair: Ciprian Lazarescu, FPIInnovations
The Economic Role of Ecosystem Services and Markets	Chair: Robert Deal, USDA Forest Service, PNW Research Station
Learning from the Past: Wood Quality, Species Selection and Properties in Former Times vs. Today	Chair: Rupert Wimmer, Universitat fur Bodenkultur Wien, Austria - BOKU Co-Chair: Michael Grabner, University of Natural Resources and Life Sciences, BOKU – Vienna, Austria
Evolution of the Global Wood-based BioEnergy Sector	Chair: Richard P. Vlosky, Louisiana State University
New Approaches in Mechanical Wood Conversion and Manufacturing	Chair: Alfred Teischinger, BOKU, Department of Material Science and Process Engineering Co-Chair: Marius-Catalin Barbu, Salzburg University of Applied Sciences
Linking Life Cycle Assessment to Carbon Accounting and Multi-criteria Indicators for Sustainable Forest Products	Chair: Richard Bergman, USDA Forest Service Co-Chair: Arno Fruehwald, University of Hamburg
Enabling the Forest Sector of Tomorrow to Contribute to Global Challenges: a Test for Governments, Industry, and Society	Chair: Anne-Helene Mathey, Canadian Forest Service, NRCanada
Fundamental Properties of Green Bio-economy Building Blocks to Innovative Materials	Chair: Saurabh Patankar, University of British Columbia

Session theme/Research group	Chair and Co-Chairs
Principles of the Innovation Systems Approach for Forestry	
Case Studies Describing Innovative Indigenous Forest Products and Markets	Chair: Andrea Lyall, University of British Columbia, Canada Co-Chair: Chris Gaston, University of British Columbia / FPInnovations
No-added Formaldehyde Adhesives for Manufacturing of Wood and Lignocellulose Products	Chair: Marius-Catalin Barbu, Salzburg University of Applied Sciences Co-Chair: Milan Sernek, University of Ljubljana, Biotechnical Faculty
Function Driven Variability in Wood and Bark: A Joint IAWA - RG 5.01 Session	Chair: Paul McLean, Forest Research (UK) Co-Chair: Pekka Saranpää, Natural Resources Institute Finland
The Bioeconomy: Implications for Business and Marketing Structures and Practices	Chair: Richard P. Vlosky, Louisiana State University Co-Chair: Eric Hansen, Oregon State University
Innovative Mass Timber and Timber Hybrid Structural Systems	
Improving the Efficiency of the Forest Products Value Chain through Innovative Non-destructive Evaluation	Chair: Xiping Wang, USDA Forest Products Laboratory Co-Chair: Franka Brüchert, Forest Research Institute of Baden-Wurtemberg
Decision Support Tools and Models for the Forest Products Sector	Chair: Taraneh Sowlati, UBC
Collaborative Approaches to Forest Management between Indigenous and Non-Indigenous Governments and Industry	Chair: Ngaio Hotte, University of British Columbia Co-Chair: Stephen Wyatt, Université de Moncton Campus d'Edmundston
Opportunities, Challenges and Successes in Replacing Native Forest Harvest with Plantation-Grown Resources in the Tropics	Chair: Roger Meder, University of the Sunshine Coast, Australia Co-Chair: Andrew H.H. Wong, Universiti Malaysia Sarawak (Unimas)
Student & Early Stage Researcher Incubator: An IUFRO, International Forestry Students Association, and Society of Wood Science and Technology Collaborative Special Session	Chair: May Anne Then Co-Chair: Pekka Saranpää, Natural Resources Institute Finland Co-Chair: Jamie Barbour, USDA, Forest Service

Session theme/Research group	Chair and Co-Chairs
Structural Assessment and Monitoring of Wood Structures - Wood Structures	Chair: Mariapaola Riggio, Oregon State University
Innovations in Sensing Technologies for the Forest Products Industry	Chair: Zarin Pirouz, FPIInnovations Co-Chair: Brigitte Leblon, University of New Brunswick Forestry
Nano Cellulose Composites and Potential Applications	Chair: Zhiyong Cai, USDA Forest Service
Teak Resources for a Sustainable Future	Chair: Yafang Yin, Chinese Academy of Forestry Co-Chair: Thulasidas PK, International Teak Information Network
Supply Chain Analytics based on Enhanced Forest Inventory	Chair: Denis Cormier, FPIInnovations Co-Chair: Vincent Roy, Canadian Wood Fibre Centre, Canadian Forest Service
Innovation in Forest Products Education and Knowledge Transfer: Opportunities and Challenges	Chair: Robert Smith, Virginia Tech Co-Chair: Sudipta Dasmohapatra, North Carolina State University, USA
Current Developments in Cellulose Nano Materials	Co-Chair: Jianxiong Lyu, Research Institute of Wood Industry, Chinese Academy of Forestry Manzhen Xiong, Research Institute of Wood Industry, Chinese Academy of Forestry
Development of Wood Biomass Use	Chair: Marius-Catalin Barbu, Salzburg University of Applied Sciences Co-Chair: Marian Marinescu, FPIInnovations