

IAWPS2005

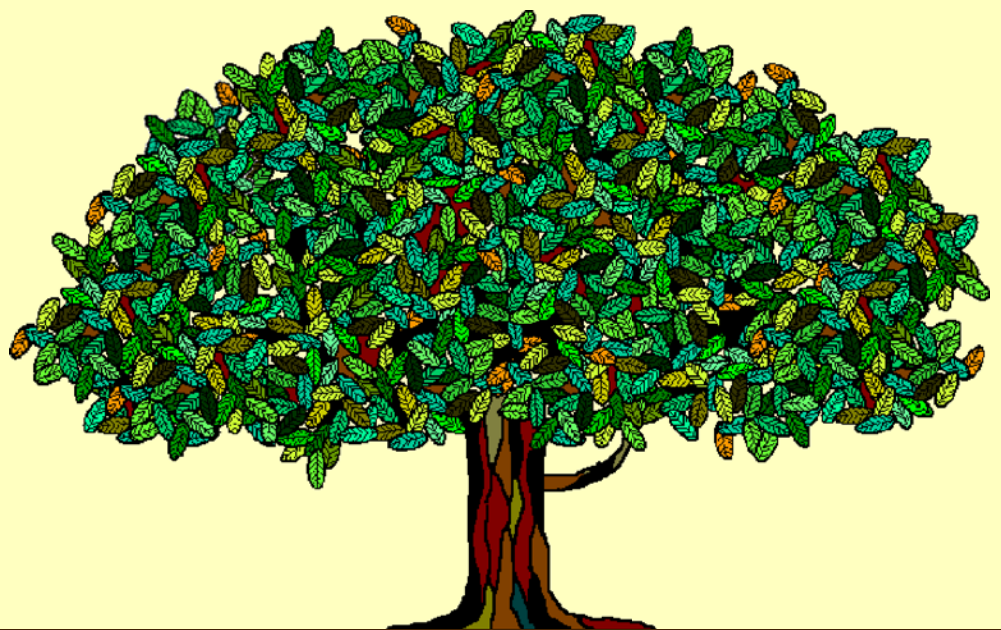
50th Anniversary of the Japan Wood Research Society

*International Symposium on Wood Science
and Technology*

Pacifico Yokohama, Japan

November 27-30, 2005

Conference Program



IAWPS 2005

International Symposium on Wood Science and Technology

Pacifico Yokohama, Japan

November 27-30, 2005

Information and Program

Organized by

The Japan Wood Research Society (JWRS)

International Association of Wood Products Societies (IAWPS)

Supported by

International Tropical Timber Organization (ITTO)

Commemorative Organization for the Japan World Exposition '70

Local Government of Yokohama City

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Program Chairman:

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Session 1: Masatoshi Sato, Nobuyuki Hattori
Session 2: Ryo Funada, Kazuhiko Fukushima
Session 3: Yoshihisa Fujii, Kohji Murata
Session 4: Shigehiko Suzuki, Fumio Kamiya
Session 5: Satoshi Shida, Yoshibumi Miyazaki
Session 6: Akio Takemura, Hiroyuki Yano
Session 7: Shiro Saka, Yasumitsu Uraki
Session 8: Yuji Matsumoto, Takayuki Okayama
Session 9: Shuichi Doi, Hiroyuki Wariishi

Organizing Committee:

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Seizo Fujikawa, Masamitsu Funaoka, Keeko Hori,
Naruhito Hori, Kiyohiko Igarashi, Yasuo Iijima,
Yuji Imamura, Masahiro Inayama, Masafumi
Inoue, Akira Isogai, Yasushi Kanagawa, Shinsaku
Kawachi, Shuichi Kawai, Teruhiko Kawahara,
Satoshi Kimura, Ryuichiro Kondo, Shigenori
Kuga, Minoru Masuda, Yuji Matsumoto, Gyosuke
Meshitsuka, Yasuhide Murase, Fumiaki Nakatsubo,
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Hirokuni Ono, Yukie Saito, Kokki Sakai,
Masahiro Samejima, Masatoshi Sato, Satoshi
Shida, Nobuo Sobue, Tomoaki Souma, Akio
Takemura, Kinji Taki, Chiaki Tanaka, Tamami
Terada, Minoru Terazawa, Bunichiro Tomita,
Mitsuyoshi Yatagai, Tomoya Yokoyama, Masahisa
Wada

Preface

Wood and other lignocellulosics are our most precious natural resources, and for their sustainable utilization, we have to fully understand their characteristics and to develop the better technologies for their utilization in harmony with global and local environment.

International Symposium on Wood Science and Technologies (IAWPS2005) is co-organized by The Japan Wood Research Society (JWRS) and The International Association of Wood Products Societies (IAWPS) and is held as 50th Anniversary of JWRS at Pacifico Yokohama. I believe it is extremely useful for us to exchange each other the latest information during the conference.

At this conference, more than 400 papers including 4 plenary lectures are presented by the participants from 28 countries and region at nine sessions arranged during the conference of Nov. 27 to Nov.30, 2005.

To take this opportunity, I would like to briefly introduce IAWPS. It was founded in 1995 by 12 societies and organizations from 7 countries and region to facilitate international understanding, information exchange and cooperation in solving world-wide problems affecting the wood products industry. Since then it had small scale international symposiums every two years, and IAWPS2003 held in Daejeon, Korea in 2003 was the first full scale one. Now IAWPS has 14 member societies from 10 countries and region.

Yokohama is a port-city with international atmosphere, and you can easily visit many historical places including Kamakura. I am sure that every participant can enjoy not only science in the session but also the culture of Japan during the stay in Yokohama.

Gyosuke Meshitsuka

Conference Chairman, IAWPS2005

President, IAWPS

Registration

Registration desk will be open:

November 26 (Sat)	16:00-20:00
November 27 (Sun) -29 (Tue)	8:00-16:00
November 28 (Wed)	8:00-13:00

On-site registration fees are:

Full time	Ordinary attendee	¥ 45,000
	Full-time Student	¥ 15,000
	Accompanying person	¥ 5,000
One day	Ordinary attendee	¥ 25,000

Social Hours

Social hours will be organized every evening during IAWPS2005 by the organizing committee.

Nov. 26 (Sat) 16:00-18:00

Welcome Reception beside registration desk
Pacifico Yokohama 6F, Cafeteria

Nov. 27 (Sun) 10:00-15:00

Lunch tour in Yokohama for accompanying persons.
(Need reservation on the desk)

Nov. 28 (Mon) 17:00-19:00

Wine party
Pacifico Yokohama 3F, Foyer

Nov. 29 (Tue) 18:00-20:00

Banquet
Intercontinental Hotel 3F, Ball Room
Banquet fee on-site: ¥ 15,000

Welcome party and wine party will be free of charge.

An additional fee will be requested to attend Banquet.

Conference Tours by Japan Travel Bureau (JTB).

Daily tour 1: Historic Kamakura

Date: November 28 (Mon) 9:00 - around 16:30

Fee: ¥ 6,500 per person *Lunch included.

Daily tour2: Yokohama Night Cruise by Yakatabune

Date: November 28 (Mon) 19:00 - around 21:30

Fee: ¥ 10,000 per person *Dinner included.

Daily tour3: Hakone Mountain Resort

Date: November 29 (Tue) 8:00 - around 17:00

Fee: ¥ 10,000 per person *Lunch included.

Post-Conference Tour: Kyoto 3 Days

Date: November 30 (Wed) - December 2 (Fri)

Fee: ¥ 63,000 (double occupancy) / ¥ 69,000 (single occupancy)

*per person including one lunch

*Tour fee includes: Sightseeing by chartered coach, tourist-class reserved seats on bullet trains, professional English-speaking guide, accommodation with bath for two nights, entrance fees(where applicable), all necessary taxes.

Instruction for Contributors

Oral Presentation

A LCD projector and a computer operated on Windows XP will be provided in all session rooms. PowerPoint 2002 will be the standard software for oral presentation. Use of this software is highly recommended to prepare materials. If you use other versions of PowerPoint, please check its compatibility in the trial room. The presentation file should be recorded on a USB type flash memory or a CD-ROM and transferred to the computer during the break before your presentation. Other medias such as floppy disk, MO, or ZIP can be used only in the trial room. If you bring your presentation materials by these medias, you can copy them on USB memory or CD in the trial room. Please ask the person in charge of the trial room for assistance.

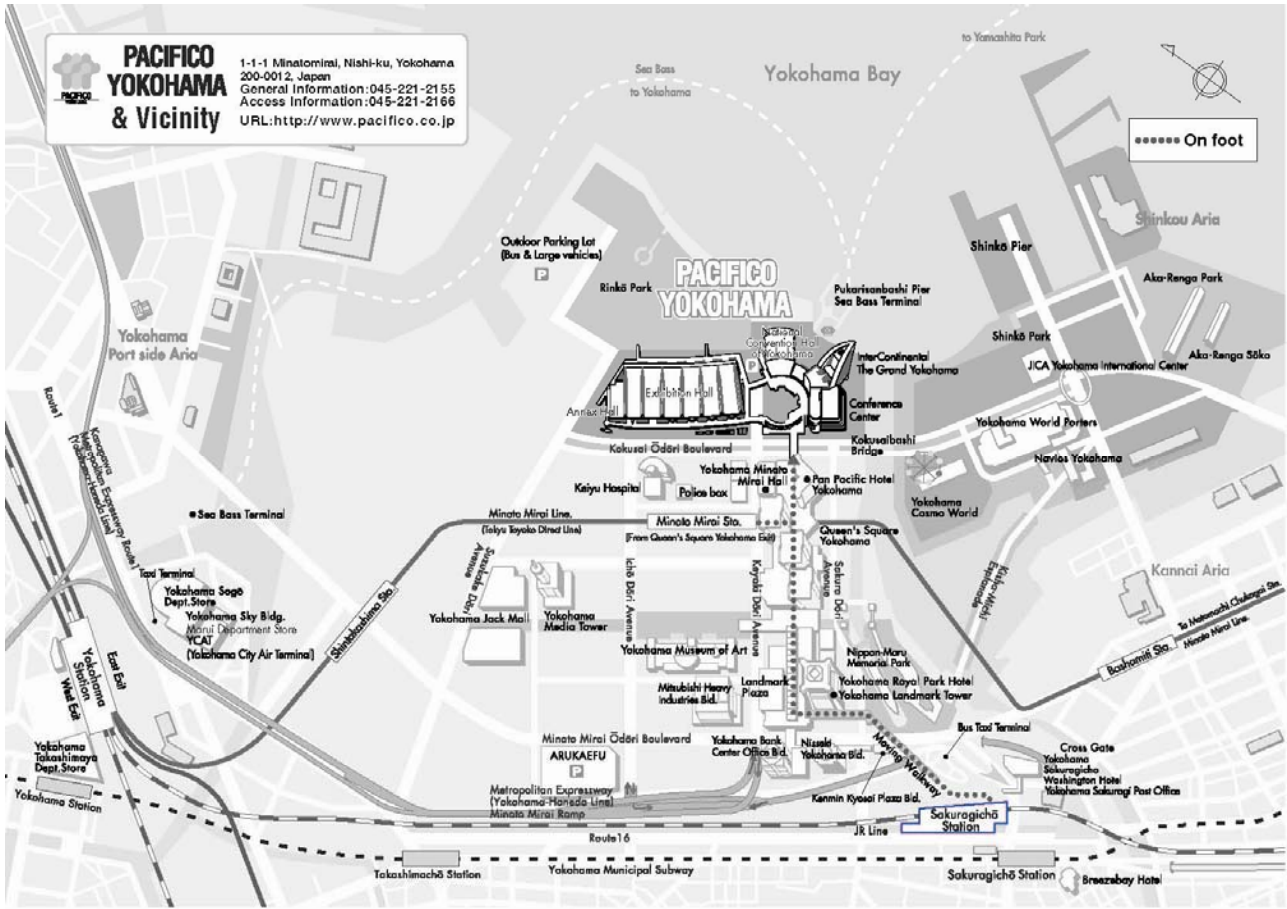
If you want, you can also use your own computer for presentation. This may be necessary for Macintosh users and for other software.

Total time for each oral presentation is 30 min which includes time for questions and discussion. Please finish your talk within 23 min to leave enough time for discussion. The timekeeper will ring a first bell at 20 minutes and a second bell at 23 minutes.

Poster Presentation

The maximum size of the board for the poster should be 90 (W) x 180 (H). Pins and/or tape for mounting the poster on a board will be supplied by the organizing committee. Poster presentations will be held during of two core times; Contributors with the odd-number posters are requested to present at 15:30-17:00 on Nov 28, whereas contributors with even-number are requested to present at 15:30-17:00 on Nov 29.

All posters can be displayed all day long on Nov 28 and 29. Posters should be mounted on the board according to the presentation number before noon on Nov 28 and taken off before the noon on Nov 30.



PACIFICO YOKOHAMA & Vicinity
 1-1-1 Minatomirai, Nishi-ku, Yokohama 200-0012, Japan
 General Information: 045-221-2155
 Access Information: 045-221-2166
 URL: <http://www.pacifico.co.jp>

..... On foot

● Traffic Information

By Train	Shibuya Sta.	Tokyu Toyoko Line : Limited Express (Connecting to Minato Mirai Line)	27min.	Yokohama Sta.	Minato Mirai Line	3min. (Connecting from Tokyu Toyoko Line)	Minato Mirai Sta.	on foot	3min.
	Shinjuku Sta.	JR Shonan Shinjuku Line	29min.		by Taxi	7min. (From taxi pool at 2nd basement of Porta shopping mall on the east exit)			
	Tokyo Sta.	JR Tokaido Line, 25min.ca.	25min.		JR Keihin-Tohoku Line	3min.	on foot	12min.	
	Shinagawa Sta.	Keiyou Express : Limited Express, KAITOKU	15min.		Sakuragicho Sta.	by Bus	7min. (From bus stop #1)	by Taxi	5min.
By Train & Shinkansen	Shin Yokohama Sta.	JR Yokohama Line (Change to Keihin-Tohoku Line)	3min.	Kikuna Sta.	Tokyu Toyoko Line 6min (Connecting to Minato Mirai Line)	15min.	15min.		
		Yokohama Subway							
By Air	Narita Airport	JR Narita Express	90min.	Yokohama Sta. YCAT Yokohama City Air Terminal Yokohama St. East.	Minato Mirai Line	3min. (Connecting from Tokyu Toyoko Line)	Minato Mirai Sta.	on foot	3min.
		Airport Limousine Bus	90min.		by Taxi	7min. (From taxi pool at 2nd basement of Porta shopping mall on the east exit)			
	Haneda Airport	Keiyou Express	24min.						
		Airport Limousine Bus	30min.						

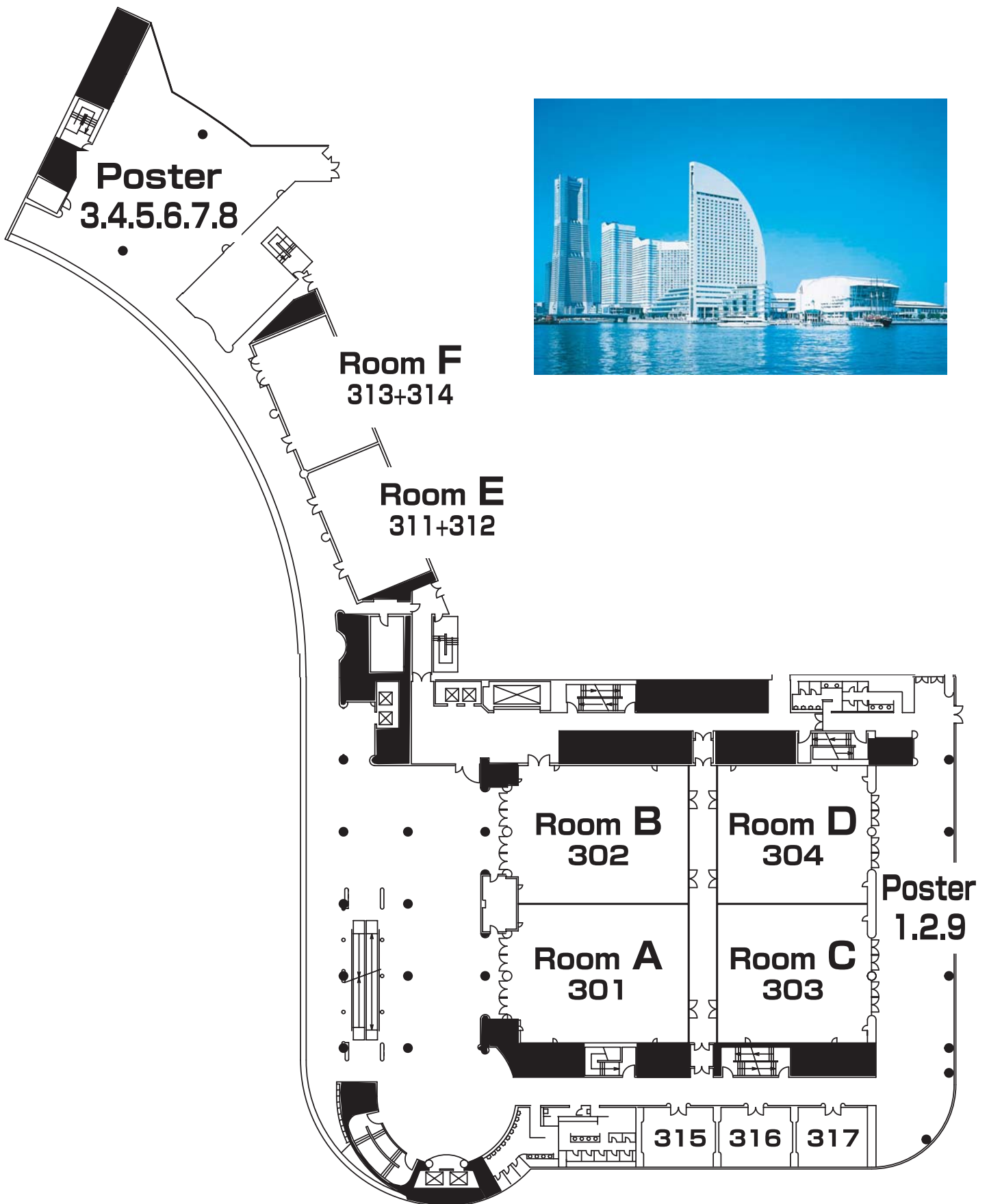
■ Driving To Pacifico

[From Tokyo]			
Metropolitan Expressway	Toward Yokohama Park, Yokohane Route	▶▶▶	Minato Mirai Ramp, 3min.ca. ▶▶▶
	Toward Yokohama (over Bay bridge), Wangan Route	▶▶▶	Minato Mirai Ramp, 3min.ca. ▶▶▶
[From Kansai or Chubu]			
Tomei Expressway Yokohama Interchange	Hodogaya Bypass, 20min.ca. ▶ Kariba Interchange ▶ Toward Yokohama, Metropolitan Expressway, Kariba Route, 10min.ca. ▶ Minato Mirai Ramp, 3min ▶		

■ Parking Lot

Minato Mirai Public Parking Lot ☎045-221-1301	Capacity: 1,200 (Standard-sized cars only)	Open 24 hours	Rates: Standard-sized car ¥520/hour (¥1,300 for max. 15hours between 8 and 23 on weekdays.)
Bus/Large Vehicles Parking Lot ☎045-221-1302	Capacity: 40	Open 24 hours	Rates: Large vehicle ¥1,000/hour

Conference Center 3F, Pacifico Yokohama



Time Table

Date	Time	Oral Session						Poster Session	
		301 Room A	302 Room B	303 Room C	304 Room D	311+312 Room E	313+314 Room F	Lounge	Foyer
Nov 27 (Sun)	10:00-10:10	Opening Ceremony							
	10:10-10:50	Plenary 1							
	10:50-11:00	Break							
	11:00-11:40	Plenary 2							
	11:40-11:50	Break							
	11:50-12:30	Plenary 3							
	12:30-13:30	Lunch							
	13:30-14:00	4O01	8O01	2O01	3O01	7O01	9O01		
	14:00-14:30	4O02	8O02	2O02	3O02	7O02	9O02		
	14:30-15:00	4O03	8O03	2O03	3O03	7O03	9O03		
	15:00-15:30	4O04	8O04	2O04	3O04	7O04	9O04		
	15:30-15:50	Coffee Break							
	15:50-16:20	4O05	8O05	2O05	3O05	7O05	9O05		
	16:20-16:50	4O06	8O06	2O06	3O06	7O06	9O06		
16:50-17:20	4O07	8O07	2O07	3O07	7O07				
Nov 28 (Mon)	9:00-9:30	4O08	8O08	2O08	3O08	6O01	1O01		
	9:30-10:00	4O09	8O09	2O09	3O09	6O02	1O02		
	10:00-10:30	4O10	8O10		3O10	6O03	1O03		
	10:30-10:50	Coffee break							
	10:50-11:20	4O10	8O11	2O11	3O11	6O04	1O04		
	11:20-11:50	4O12	8O12	2O12	3O12	6O05	1O05		
	11:50-12:20	4O13	8O13	2O13		6O06	1O06		
	12:20-13:30	Lunch							
	13:30-14:00	4O14	8O14		3O14	7O08	1O07		
	14:00-14:30	4O15	8O15	2O15	3O15	7O09	1O08		
	14:30-15:00	4O16	8O16	2O16	3O16	7O10	1O09		
	15:00-15:30	4O17	8O17	2O17	3O17	7O11	1O10		
	15:30-17:00							Core for Odd number	
	17:00-19:00	Wine party							
Nov 29 (Tue)	9:00-9:30	4O18	8O18	2O18	3O18	6O07	9O08		
	9:30-10:00	4O19	8O19	2O19	3O19	6O08	9O09		
	10:00-10:30	4O20	8O20	2O20	3O20	6O09	9O10		
	10:30-10:50	Coffee break							
	10:50-11:20	4O21	8O21	2O21	5O01	6O10	9O11		
	11:20-11:50	4O22	8O22	2O22	5O02	6O11	9O12		
	11:50-12:20	4O23	8O23	2O23		6O12	9O13		
	12:20-13:30	Lunch							
	13:30-14:00	4O24	8O24	7O12	5O03	6O13	9O14		
	14:00-14:30		8O25	7O13	5O04	6O14	9O15		
	14:30-15:00	4O26	8O26	7O14	5O05	6O15	9O16		
	15:00-15:30	4O27	8O27	7O15	5O06	6O16	9O17		
	15:30-17:00							Core for Even number	
	18:00-20:00	Banquet							
Nov 30 (Wed)	9:00-9:30			4O28	5O07	8O28	9O18		
	9:30-10:00			4O29	5O08	8O29			
	10:00-10:30				5O09	8O30			
	10:30-10:50	Coffee break							
	10:50-11:30	Plenary 4							
	11:30-11:50	Concluding remarks							
	11:50-12:30	Closing ceremony							

Chairman : Masatoshi Sato

November 28 13:30-15:30

1O07-2F1330	Quality of Teakwood from Plantation Forest in Indonesia Part 2. Comparison between Tissue Cultural and Conventional One	<u>Imam Wahyudi</u>	Indonesia
1O08-2F1400	Wood Anatomy of Pistachio (<i>Pistacia atlantica</i> Desf.) Trees in Western Iran	<u>Nooshin Toghraie</u> , and Hamid Reza Yazdanimoghadam	Iran
1O09-2F1430	Lignin: It's the Principle Role for Restoration of Degraded Land	<u>Kenji Iiyama</u> , Zhenfu Jin, Keeko Hori, Kyoko S. Katsumata, Shenkui Liu, Shengze Huang, Zesong Lan	Japan
1O10-2F1500	Enforcement Condition of the Construction Recycling Law in Nagoya City, Japan	<u>Mariko Yamasaki</u> , Akio Mizutani and Yasutoshi Sasaki	Japan

Session 2 : Cell formation and wood structures

Chairman : Ryo Funada

November 27 13:30-15:30

2O01-1C1330	Invited Effects of Abiotic Stresses on Cell Wall Formation	<u>Yoon Soo Kim</u> , Kwang Ho Lee , Tae Jin Eom and Adya P. Singh	Korea
2O02-1C1400	Effect of Different Irrigation Regimes on Radial Growth and Wood Properties of Two Poplar Clones	<u>Giovannelli A.</u> , Castro G., Scaletti L., Fragnelli G., Facciotto G., Giorcelli A., Macchioni N., Capretti C., Crivellaro A. and Brunetti M.	Italy
2O03-1C1430	Radial Pathways for Transport of Substances in Wood	<u>Peter Kitin</u> , Tomoyuki Fujii, Hisashi Abe, Katsuhiko Takata	Japan
2O04-1C1500	Decreased Growth Strain in the Tension Wood of Poplar Overexpressing Xyloglucanase	<u>Kei'ichi Baba</u> , Miyuki Takeuchi, Yong Woo Park, Masato Yoshida, Yasunori Ohmiya, Toru Taniguchi, Yasuhisa Ojio, Teiji Kondoh, Takeshi Okuyama, Takahisa	Japan

Chairman : Ryo Funada

November 27 15:50-17:20

2O05-1C1550	Invited Intercellular Signaling between Vascular Cells and Intracellular Signaling within Xylem Cells	<u>Hiroo Fukuda</u>	Japan
2O06-1C1620	Invited Plasticity in Wood Structures; Tension Wood, Ethylene and Other Hormones in <i>Populus</i>	<u>Björn Sundberg</u> , Thomas Moritz, Jonathan Love and Simon Björklund	Sweden
2O07-1C1650	Proteome Analysis of Tension Wood in Poplar	<u>Takahisa Hayashi</u> , Miyuki Takeuchi and Kei'ichi Baba	Japan

Chairman : Keiji Takabe
November 28 09:00-10:30

2008-2C0900	The Micromorphology of Pits in Dicotyledonous Wood, as Observed by Field-emission Scanning Electron Microscopy	<u>Yuzou Sano</u>	Japan
2009-2C0930	Analysis on the Wood Anatomical Structure and Properties of <i>Ostrya reheriana</i> Chun	<u>Yu You-ming</u> , Ma Ling-fei , Qiang Jun, Du Guan-le	China

Chairman : Junji Sugiyama
November 28 10:50-12:20

2011-2C1050	An Artificial Cell Wall	<u>Tetsuo Kondo</u> , Wakako Kasai, Tomoko Seyama, Tetsuhiro Nakamura, Mitsuhiko Morita	Japan
2012-2C1120	Plant Cell Wall Nano-structures and Nano-Machines	<u>Janis Gravitis</u>	Latvia
2013-2C1150	Nano-scale Observation of Fibrils on the Kraft Pulp Fiber Surface by Atomic Force Microscopy	<u>Tomokazu Sasaki</u> , Gyosuke Meshitsuka	Japan

Chairman : Kazuhiko Fukushima
November 28 13:30-15:30

2015-2C1400	Cellulose Microfibrils in Wood -Structure and Function	<u>Junji Sugiyama</u> , Yoshiki Horikawa, Bruno Clair, Takao Itoh, Tancrede Almeras, Hiroyuki Yamamoto, and the late Takeshi Okuyama	Japan
2016-2C1430	Chemical Structure and Function of the Plant Cell Wall Polysaccharide Rhamnogalacturonan II	<u>Tadashi Ishii</u> , Toshiro Matsunaga	Japan
2017-2C1500	Incorporation of Sucrose into Xyloglucan by Sucrose and Xyloglucan Synthases in Golgi	Teruko Konishi, Yasunori Ohmiya, Tomonori Nakai and <u>Takahisa Hayashi</u>	Japan

Chairman : Toshiaki Umezawa
November 29 9:00-10:30

2018-3C0900	Invited MicroRNAs in Tree Growth and Development that are Absent from Arabidopsis	<u>Vincent L. Chiang</u> , Shanfa Lu , Ying-Hsuan Sun , Rui Shi , Catherine Clark , Laigeng Li	U.S.A.
2019-3C0930	The Peroxidase Multigene Family in Poplar; Lignification, Stress-induction, and Organ-specific Expression	<u>Yuji Tsutsumi</u> , Sayaka Morinaga, Shinya Sasaki, Yu Etho, Tokihiko Nanjo, Kenji Shinohara, Ryuichiro Kondo	Japan

2020-3C1000	Immunolocalization of Enzymes Involved in Lignification of Cell Wall	<u>Keiji Takabe</u> , Miyuki Takeuchi, Takahiko Sato, Takeshi Nishimura, Masaki Ito, Minoru Fujita and Vincent Chiang	Japan
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Chairman : Yuji Tsutsumi
November 29 10:50-12:20

2021-3C1050	Determination of Ferruginol, a Heartwood Diterpene Phenol, in <i>Cryptomeria japonica</i> by Time-of-Flight Secondary Ion Mass Spectrometry (TOF-SIMS)	<u>Takanori Imai</u> , Kinuko Tanabe, Toshiyuki Kato and Kazuhiko Fukushima	Japan
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2022-3C1120	Potassium Localization in Sugi (<i>Cryptomeria japonica</i>) Black Heartwood	<u>Hiroshi Matsunaga</u> , Rika Shiotari, Satoshi Tomita, Junji Matsumura, Kazuyuki Oda, Yasuhiro Utsumi , and Koichi Yamamoto	Japan
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2023-3C1150	Rapid Characterization of Total Fatty Acids in Wood by Thermochemolysis-Gas Chromatography with Tetrabutylammonium Hydroxide	Miho Mizumoto, Hideo Nozaki, Teruyuki Seino, <u>Toshihiro Ona</u> , Yasuyuki Ishida and Hajime Ohtani	Japan
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Session 3 : Physical properties of wood and modern technologies for their processing

Chairman : Yoshihisa Fujii
November 27 13:30-15:30

3O01-1D1330	Invited Investigations on the Structure-function Relationships in Wood	<u>Stefanie Stanzl-Tschegg</u>	Austria
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3O02-1D1400	Reinforced-Matrix Theory as a Basic Theorem of Cell Wall Physics and Mechanics	<u>Hiroyuki Yamamoto</u> , Tancrede Alméras, and Kosei Ando	Japan
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3O03-1D1430	Visualization of Inner State of Brown-rotted Wood by X-Ray - Introduction of CT (Computed Tomography) Technique	<u>Sang-Joon Lee</u> , Kwang-Mo Kim, So-Ra Han, and Jun-Jae Lee	Korea
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3O04-1D1500	Physical and Fiber Characteristics of 7 Years Old <i>Paraserianthes falcataria</i> (L.) Nielsen, Solomon Provenance Wood of Various Stem Diameters	<u>Sri Nugroho Marsoem</u> , Joko Sulisty and Eka Mashudi	Indonesia
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Chairman : Yoshihisa Fujii
November 27 15:50-17:20

3O05-1D1550	Variations of Linear Shrinkage in <i>Morus alba</i> Heartwood from Plantations in Karaj-Iran	<u>Mehran Roohnia</u> , Ajang Tajdini, and Negin Manouchehri	Iran
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3O06-1D1620	Invited Mechanical Behavior of <i>Prosopis</i> Wood in Relation to Variation of its Mass	<u>Javier Ramón Sotomayor Castellanos</u> , José María Villaseñor Aguilar	Mexico
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3O07-1D1650	Rapid Prediction of Bending Strength and Stiffness of Scots Pine Wood by Near Infrared Spectroscopy	<u>Per Otto Flæte</u> , Erlend Ystrøm Haartveit and Kjell Vadla	Norway
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Chairman : Javier Ramón Sotomayor Castellanos
November 28 09:00-10:30

3O08-2D0900	Wood Quality of <i>Xylia xylocarpa</i> and <i>Khaya ivorensis</i> Planted in Sabah	<u>Mohd. Hamami Sahri</u> , Fauzi Febrianto, Edi Suhaimi Bakar, and James Josue	Malaysia
3O09-2D0930	Physical Performances of Chair and Strength of Furniture Joints Made from Oil Palm and Rubber Wood LVL	<u>S. Abdul Hamid</u> , A. Zulkifli, J. Zaihan, and A. Roslan	Malaysia
3O10-2D1000	Cross-sectional Changes of Wood Cell with Alkali Treatment	<u>Yukiko Ishikura</u> and Takato Nakano	Japan

Chairman : Stefanie Stanzl-Tschegg
November 28 10:50-12:20

3O11-2D1050	Oil-Palm Wood Treated with PF Resin by the Compreg Method: Influence of Solution Concentration and Impregnation Period	<u>Edi Suhaimi Bakar</u> , Paridah Md. Tahir, Moh. Hamami Sahri, Yap Hui San	Malaysia
3O12-2D1120	Relationship between Chemical Composition and Static Bending Properties of Indonesian Wood Species in Softening Conditions	<u>Wahyu Dwianto</u> , Sudijono, Sulaeman Yusuf, Ikuho Iida and Kazuya Minato	Indonesia

Chairman : Isao Kobayashi
November 28 13:30-15:30

3O14-2D1330	Invited Innovation of Drying System for Boxed-heart Square Timber from Sugi (<i>Cryptomeria japonica</i> D. Don)	<u>Naohiro Kuroda</u>	Japan
3O15-2D1400	Impedance Measurement of Structural Squared Timbers during Natural Drying	<u>Nobuo Sobue</u> and Masahiro Inagaki	Japan
3O16-2D1430	A analysis of Collapse-type Shrinkage Process in Plantation-grown Eucalypt Wood from China	<u>Yi-qiang Wu</u> , Kazuo Hayashi, Yuan Liu, Yingchun Cai, Masatoshi Sugimori	China
3O17-2D1500	The Contact Angle of Minute Water-drop on Cell Wall Surfaces	<u>Yoshiaki Hattori</u> , Yoshihisa Ozono	Japan

Chairman : Kohji Murata
November 29 9:00-10:30

3O18-3D0900	Hardwood Veneer Attribute Assessment, Social Judgment Theory, and Ramifications for Procurement and Manufacturing	<u>Delton Alderman</u> , Kent Nakamoto and David Brinberg	U.S.A.
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3O19-3D0930	Invited	From Basic Studies on Wood Mechanics and Wood Machining to New Improvements in Veneer Process Management.	<u>Thibaut Bernard</u>	France
3O20-3D1000	Invited	Simulation of Cutting Process of Wood Using Finite Element Method	<u>Yoshihisa Fujii</u> , Yuko Fujiwara, and Shogo Okumura	Japan

Session 4 : Wood-based materials, timber construction and symbiotic housing

Chairman : Shigehiko Suzuki
November 27 13:30-15:30

4O01-1A1330	Invited	Advancing Sustainable Forestry by Using Engineered Wood or Bio-Composites	<u>Jerrold E. Winandy</u>	U.S.A.
4O02-1A1400	Invited	Recent Development of Wood Composites in Japan -Towards the Sustainable Utilization of Forest Resources-	<u>Shuichi Kawai</u>	Japan

Chairman : Salim Hiziroglu

4O03-1A1430	Invited	The Laboratory Pressing of Individual Particles and the Commercial Pressing of Particleboards	<u>Mark Irle</u>	France
4O04-1A1500		Effect of MDI and Powder PF Combination Binder System on OSB Performance	<u>Xiang-Ming Wang</u> , Hui Wan, and Jun Shen	Canada

Chairman : Jerrold E. Winandy
November 27 15:50-17:20

4O05-1A1550	Invited	Manufacture and Properties of Charcoal Board from Municipal Wood Waste	<u>Hwa Hyoung Lee</u> , Youn Mean Cho, Han Sang Park, In Su Seo	Korea
4O06-1A1620		Recycling of Demolition Waste as a Raw Material of Wood-Based Structural Panels	<u>Tatsuya Shibusawa</u> , Kohta Miyamoto, Yasunori Hatano, and Shigehiko Suzuki	Japan
4O07-1A1650		RHPC Composites: A Novel Product from Rice Hull, Waste Plastic and Cement	<u>Dwight A. Eusebio</u>	Philippines

Chairman : Mark Irle
November 28 09:00-10:30

4O08-2A0900		Evaluation of Surface Characteristics of Overlaid Particleboard Made from Eastern Redcedar	<u>Salim Hiziroglu</u>	U.S.A.
4O09-2A0930		Crosslinked Wood – A New Wood Modification Technology on its Way to Commercial Application	<u>F. Weingart</u> , S. Schaffert, H. Miltz, A. Krause	Germany

4O10-2A1000	Effect of Processing Parameters on the Strength Properties of Laminated Strand Lumber	<u>Changtong Mei</u> , Dingguo Zhou, Xiaoyan Zhou, and Mingkai Peng	China
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Chairman : Xiang-Ming Wang, Tatsuya Shibusawa, Fumio Kamiya
November 28 10:50-12:20

4O11-2A1050	Development of Biocomposites from Abaca Fiber Glued with Urea or Phenol Formaldehydes	<u>Subyakto</u> , Sasa Sofyan Munawar, Mohamad Gopar, Firda Aulya Syamani, Ismail Budiman, Bambang Subiyanto	Indonesia
4O12-2A1120	Manufacture of Liquid Coatings Using Bamboo Charcoal and its Characterization	<u>Sang-Bum Park</u> , Su-Won Kim, Byung-Dae Park, Dong-Won Son, Jong-Young Park, Kyu-Yong Cho	Korea
4O13-2A1150	Physical and Mechanical Performance of Fiberboard Made of Coconut Fruit Fiber	<u>Entang Rasyid</u> , Bambang Subiyanto, Atmawi Darwis, Anita Firmanti	Indonesia

November 28 13:30-15:30

4O14-2A1330	Durability Performance of Wood-Based Panels Evaluated by Outdoor/Indoor Exposure Tests and Accelerated Aging Treatments	<u>Noboru Sekino</u> , Hideaki Korai and Shigehiko Suzuki	Japan
4O15-2A1400	Invited Wood Products and Construction in North America	<u>Kevin C. K. Cheung</u>	U.S.A.
4O16-2A1430	Invited Forest Products and Timber Structures in Australasia"	<u>Bryan Walford</u>	New Zealand
4O17-2A1500	Invited Service Life Modelling and Performance of Timber Construction	<u>Greg Foliente</u> , Robert Leicester, Chi-hsiang Wang, and Minh Nguyen	Australia

Chairman : Kohei Komatsu
November 29 9:00-10:30

4O18-3A0900	A Heat Transfer Model to Simulate Japan's '1 + 3' Fire Resistance Test for Wood-framed Wall Assemblies	<u>H. Takeda</u> , L.R. Richardson and S. Yusa	Canada
4O19-3A0930	Estimating Seismic Performance of Timber Structures by Pseudo-dynamic Tests and Time-history Earthquake Response Analysis	<u>Motoi Yasumura</u> , Luc Davenne, Laurent Daudeville, Motoi Uesugi	Japan
4O20-3A1000	Three-dimensional Finite Element Model of Single Nail Joints with Side Plates	<u>Jung-Pyo Hong</u> , J. David Barrett	Canada

Chairman : Motoi Yasumura
November 29 10:50-12:20

4O21-3A1050	Performance Evaluation of the "Konohana Dome" Built with Fast-Growing Sugi	<u>Yutaka Imura</u>	Japan
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4O22-3A1120	Tectonic Characteristic of Taiwan's <i>Chuandou</i> Timber Framing on the Basis of Cases in Tainan	<u>Fion, Yi-Chun Lin</u> , Min-Fu Hsu	Taiwan
4O23-3A1150	In-Service Performance of a House from <i>Acacia mangium</i> : An Alternative Timber Building Material	<u>Hamdan, H.</u> , M.K. Mohamad Omar, Ong, C.B. and Anuar, U.M.K.	Malaysia

Chairman : Tomoyuki Hayashi
November 29 13:30-15:30

4O24-3A1330	Beam-Column Joint of <i>Acasia Mangium-Albizia Falcataria</i> Glulam with Bamboo Dowel Fasteners	<u>Maryoko Hadi</u> , Bambang Subiyanto, Anita Firmanti, Kohei Komatsu	Indonesia
4O26-3A1430	Reinforcement of Glulam Beam with a Plumbing Hole by Nailed-on-Plywoods Gusset Method.	<u>Kohei Komatsu</u> , Jung Kiho, Shinjirou Takino	Japan
4O27-3A1500	Analysis of the Deformation Properties of Timber-framed Plywood Panel Shell Structures	<u>Ying Gao</u> and Masamitsu Ohta	Japan

Chairman : Kohei Komatsu
November 30 9:00-10:30

4O28-4C0900	Emerging Timber Bridge Program to São Paulo State	<u>Carlito Calil Junior</u>	Brazil
4O29-4C0930	Assessment of Wooden Structural Components by Nondestructive Methods	<u>Yi-Jen Tseng</u> , Min-Fu Hsu	Taiwan

Session 5 : Living environment and amenity

Chairman : Yuko Tsunetsugu
November 29 10:50-11:50

5O01-3D1050	Invited Preconceptions to Wood as Hints for the Study of Wood and Human Relations	<u>Masashi Nakamura</u>	Japan
5O02-3D1120	Invited Wood/human Relations for Promoting Wood Utilization	<u>Satoshi Shida</u>	Japan

Chairman : Yoshifumi Miyazaki, Masashi Nakamura
November 29 13:30-15:30

5O03-3D1330	Invited Brain Activation When Exposed to Room Pictures with Different Levels of Wooden Products: An fMRI Study	<u>Jin-Hun Sohn</u>	Korea
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5O04-3D1400	Invited	Characteristics of Physiological Responses Induced by Volatile Organic Compound from Wood	<u>Shigeki Watanuki</u> , Yeon-Kyu Kim	Japan
5O05-3D1430	Invited	Evaluation of the Impact Sound Insulation Performance of Residential Wood Framed Floors	<u>Shuzo Sueyoshi</u> , Yoshifumi Miyazaki and Takeshi Morikawa	Japan
5O06-3D1500		Physiological Effects on Humans of Actual-size Living Rooms with Different Wood Quantity and Design	<u>Yuko Tsunetsugu</u> , Yoshifumi Miyazaki, Hiroshi Sato	Japan

Chairman : Satoshi Shida
November 30 9:00-10:30

5O07-4D0900		Heat Conductivity of Straw-based Sandwich Wallboard	<u>Xiaoyan Zhou</u> , Dingguo Zhou, Changtong Mei, and Jian Li	China
5O08-4D0930		Quantitative Evaluation and Comparison of Tactile Warmth for Wood and Other Materials by Thermal Effusivity	<u>Yoshihiro Obata</u> , Kazutoshi Takeuchi and Kozo Kanayama	Japan
5O09-4D1000		Changes of Color and Psychological Images of Various Materials Used for Exterior	<u>Yoshihiro Sugie</u> , Minoru Masuda, Masashi Nakamura	Japan

Session 6 : Adhesion and chemical processing of wood

Chairman : Hiroyuki Yano
November 28 09:00-10:30

6O01-2E0900	Invited	Chemical Processing of Wood: <i>In-situ</i> Modification of Cell Wall Polymers	<u>Roger M. Rowell</u>	U.S.A.
6O02-2E0930	Invited	Cellulose Nanofibers for Films and Composites	<u>Lars Berglund</u>	Sweden
6O03-2E1000		Role of Lignin in the Excellent Affinity of Acetylated Wood and Organic Solvents	<u>Eiichi Obataya</u> , Sakae Shibusaki and Kazuya Minato	Japan

Chairman : Tadashi Okamoto
November 28 10:50-12:20

6O04-2E1050		Effects of Thermal Cycling of UV-Curable Epoxy Acrylate Coatings	<u>Jae-Hoon Choi</u> , Byoung-Hoo Lee, Hyeon-Deuk Hwang and Hyun-Joong Kim	Korea
6O05-2E1120		Weathering Performance of Wood-flour Polypropylene Composites by Natural and Artificial Test Trials.	<u>Makoto Kiguchi</u> , Yutaka Kataoka, Hiroshi Matsunaga, Takeshi Nishimura, Hiroaki Matsui, Koichi Yamamoto and Philip D. Evans	Japan
6O06-2E1150		The Use of Plywood Industry Residues as a Raw Material for WPC	<u>Fabio Minoru Yamaji</u> , Jose Claudio Caraschi, Ricardo Anselmo Malinovski, Thais H.D.Sydenstrycker, and Sandro Amico	Brazil

Chairman : Lars Berglund
November 29 9:00-10:30

6O07-3E0900	Formation and Architecture of Cellulose/Apatite Biomimetic Composite	<u>Thi Thi Nge</u> , Junji Sugiyama	Japan
6O08-3E0930	The Effect of Fiber Content on the Thermomechanical and Mechanical Properties of Microfibrillated Cellulose-based Nanocomposites	<u>Antonio Norio Nakagaito</u> , Masaya Nogi, Shin-ichiro Iwamoto, Hiroyuki Yano	Japan
6O09-3E1000	Study on Optically Transparent Composites Reinforced with Nanofibers	<u>H. Yano</u> , S. Iwamoto, A. N. Nakagaito, M. Nogi and K. Handa	Japan

Chairman : Naruhito Hori
November 29 10:50-12:20

6O10-3E1050	Development and Implications of the New Generation of Canadian Wood Adhesive Standards	<u>Ciprian Pirvu</u> , Conroy Lum and Romulo Casilla	Canada
6O11-3E1120	Effect of Copper on Crosslinking Reaction of Resorcinol-formaldehyde Resin	<u>Junko Miyazaki</u> , Takao Nakano	Japan
6O12-3E1150	Modification of Gutta Percha with Maleic Anhydride and Its Application for Plywood Adhesive	<u>Fauzi Febrianto</u> , Tati Karliati, Wasrin Syafii, Malaysia and Mohd. Hamami Sahri	

Chairman : Akio Takemura
November 29 13:30-15:30

6O13-3E1330	Invited Application of Edges Sealing Treatment to Wood-based Composite in Determination of Formaldehyde Emission by Desiccator Method	Sumin Kim, Jin-A Kim, <u>Hyun-Joong Kim</u>	Korea
6O14-3E1400	Cause of Extraordinary Acetaldehyde Emission from Glued-laminated Timbers Bonded with Phenol-Resorcinol-Formaldehyde (PRF) Adhesives	<u>Shin-ichiro Tohmura</u> , Kohta Miyamoto, Akio Inoue	Japan
6O15-3E1430	Effect of Ventilation Rate on Formaldehyde Emission from Wood-based Materials	<u>Kohta Miyamoto</u> , Shin-ichiro Tohmura, Akio Inoue	Japan
6O16-3E1500	Wettability of <i>Dipterocarpus spp</i> Under Tropical Climate	<u>U.M.K Anwar</u> , M.T Paridah, A.Khairul, M. Siti Rafidah and C.W Mat Yaacob	Malaysia

Session 7 : Energy, chemicals and charcoal production

Chairman : Jack N. Saddler
November 27 13:30-15:30

7O01-1E1330	Invited Challenges and Perspectives of Charcoal Use for the Global Environment	<u>Philippe Girard</u> , Alfredo Napoli	France
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7O02-1E1400	Charcoal Production Methods for Carbon Sequestration in Indonesia	<u>Gustan Pari</u> , Han Roliadi, Kazuya Ando, Eiichiro Nakama, Kiyoshi Miyakuni and Noriaki Seki	Indonesia
7O03-1E1430	A Combined Study on the Carbonization of Korean Red Pine at Temperatures Ranging from 400 to 1000°C	<u>In-Ja Lee</u> , Wonhee Lee, Chin-Kap Chung, Yukie Saito, Bu-kug Lim	Korea
7O04-1E1500	Activated Charcoal as Catching Agent of Formaldehyde Emission from Plywood	<u>Gustan Pari</u> , Kurnia Sofyan, Wasrin Syafii, Buchari, Takeshi Okuyama and Mitsuyoshi Yatagai	Indonesia

Chairman : Philippe Girard
November 27 15:50-17:20

7O05-1E1550	Invited Progress in the Pretreatment and Hydrolysis Steps of Lignocellulose-to-Ethanol Processes	<u>Jack N. Saddler</u> and Warren E. Mabee	Canada
7O06-1E1620	Enzymatic Saccharification and Fermentation of Wood Biomass Using Pretreatments with White Rot Fungi	<u>Toshiaki Tanabe</u> , Yasunori Baba, Kenta Yano, Kei Fukutani, Tomohiko Mitani, Naoki Shinohara, Takahito Watanabe, Yoichi Honda, and Takashi Watanabe	Japan
7O07-1E1650	Utilization of Wood Charcoal for the Bioethanol Production from Woody	<u>Hisashi Miyafuji</u> , Toshiki Nakata and Shiro Saka	Japan

Chairman : Shiro Saka
November 28 13:30-15:30

7O08-2E1330	Invited Renewable Fuels and Chemicals by Fast Pyrolysis of Biomass	<u>Tony Bridgwater</u>	UK
7O09-2E1400	Pyrolysis Reactions in Thermochemical Conversion of Woody Biomass to Fuels	<u>Haruo Kawamoto</u> , Takeshi Nakamura, Wataru Hatanaka, Takashi Hosoya, Sunao Horigoshi, Masaru Murayama and Shiro Saka	Japan
7O10-2E1430	Growth Process of Conical Graphitic Whisker in Wood Cell Lumen	<u>Yukie Saito</u> , Takanori Arima	Japan
7O11-2E1500	Nickel-Catalyzed Carbonization As a Promising Energy and Material Conversion Method of Wood	<u>Tsutomu Suzuki</u> , Kyoko Suzuki, Noriyasu Okazaki, Yukio Takahashi, Tetsuo Yamada, Yuichi Shimizu, and Masashi Fujiwara	Japan

Chairman : Tony Bridgwater
November 29 13:30-15:30

7O12-3C1330	Invited Recent Progress and Prospects in Supercritical Fluid Technologies for Biofuels	<u>Shiro Saka</u>	Japan
7O13-3C1400	Optimal Conditions for the Hydrolysis of Log Woods Using Supercritical Water	<u>Bon-Wook Koo</u> , Soo-Min Lee, Jae-Won Lee, Joon-Won Choi, Don-Ha Choi, and In-Gyu Choi	Korea

7O14-3C1430	Liquefaction of Woody Biomass in Supercritical Alcohols for Liquid Biofuel Production	<u>Eiji Minami</u> , Jun Yamazaki, Takuji Ishiyama, Sung-Sub Kee, Yoshimitsu Harada and Shiro Saka	Japan
7O15-3C1500	Invited Total Utilization System of Woody Biomass	<u>Yasumitsu Uraki</u>	Japan

Session 8 : Wood chemistry, pulping and paper making chemistry

Chairman : Takayuki Okayama

November 27 13:30-15:30

8O01-1B1330	Invited Dynamic Measurement of Drying Behavior of Cellulose Fibers Using Thermogravimetric Analysis	<u>Hasan Jameel</u> , Sunkyu Park, Richard A. Venditti, and Joel J. Pawlak	U.S.A.
8O02-1B1400	Invited Computational Modelling of Stochastic Paper Structures and its Applications to Paper Material Design	<u>Tetsu Uesaka</u>	Sweden
8O03-1B1430	Automatic Stöckigt Sizing Test Using an Automatic Recognition Principle of Color Expression	<u>Chul-Hwan Kim</u> , Jae-Ok Kim, Chong-Yawl Park and Young-Min Lee	Korea
8O04-1B1500	Invited Wood and Pulp Fibre Research at the Wood Ultrastructure Research Centre (WURC), Uppsala, Sweden	<u>Geoffrey Daniel</u>	Sweden

Chairman : Shigenori Kuga

November 27 15:50-17:20

8O05-1B1550	Interaction between Water and Electrolytes Derived from Polysaccharides and Lignin	<u>Hyoee Hatakeyama</u> and Tatsuko Hatakeyama	Japan
8O06-1B1620	Molecular Characterization of Woody Cellulosics by SEC-PDA-MALS	<u>Masahiro Yanagisawa</u> and Akira Isogai	Japan
8O07-1B1650	Syntheses of Blockwise Methylated Cello-Oligosaccharides and First Study of Properties	<u>Hiroshi Kamitakahara</u> , Fumiaki Nakatsubo, and Dieter Klemm	Japan

Chairman : Nam-seok Cho

November 28 09:00-10:30

8O08-2B0900	Invited Chemistry of Compression Wood Lignin	<u>Ian D Suckling</u> , Bernadette Nanayakkara, Merilyn Manley-Harris, and Lloyd A Donaldson	New Zealand
8O09-2B0930	The Nature of Lignin in Selaginellaceae	<u>Zhenfu Jin</u> , Yuji Matsumoto, Takeshi Tange and Kenji Iiyama	Japan
8O10-2B1000	Invited Application of ToF-SIMS to Lignin Analysis	Kaori Saito, <u>Kazuhiko Fukushima</u> , Takao Kishimoto, Hitomi Takamori, Akira Yamamoto	Japan

Chairman : Takeshi Katayama**November 28 10:50-12:20**

- 8O11-2B1050 Reevaluation of the Mechanism of the β -O-4 Bond Cleavage during Acidolysis of Lignin Tomoya Yokoyama, Yuji Matsumoto and Gyosuke Meshitsuka Japan
- 8O12-2B1120 Syntheses of Monolignoyl γ -O- β -D-Glucopyranosides and their Dehydrogenative Polymerizations Toshiyuki Takano, Yuki Tobimatsu, Takashi Hosoya, Hiroshi Kamitakahara and Fumiaki Nakatsubo Japan
- 8O13-2B1150 Invited Indirect but Decisive Regulation of Lignin Structure Yuji Matsumoto Japan

Chairman : Ian D Suckling**November 28 13:30-15:30**

- 8O14-2B1330 Invited Chemical Characteristics and Enzymatic Hydrolysis of Ozonated Wood Meals Tae-Jin Eom, Kyung-Dong Yoon, Soung-Bae Park Korea
- 8O15-2B1400 A Trial to Obtain Essential Oil from the Condensate in Kiln-drying Process of Wood Hideto Fujimoto Japan
- 8O16-2B1430 Studies on Chemical Components of *Melaleuca cajuputi* Yasuyuki Kato, Nobuhisa Okuda, Masatoshi Sato and Mitsuyoshi Yatagai Japan
- 8O17-2B1500 Influence of Storing to Wood Dimension, Wood Chemical, and Pulp and Paper Quality Change of the Candle Nut (*Aleurites moluccana* L Willd) Rizki Maharani, Agus Wahono, Sipon Muladi, and Minoru Terazawa Japan

Chairman : Hasan Jameel**November 29 9:00-10:30**

- 8O18-3B0900 Delignification Properties of Dahurian Larch Heartwood and Sapwood during Kraft Pulping Yongcan Jin, Zhongzheng Li, and Diesheng Tai China
- 8O19-3B0930 The Comparisons of the Fresh and Mildewy Bamboos for Kraft Pulping and Bleaching Guolin Tong, Changrong Li, Hanling Ye, Zhongzheng Li China
- 8O20-3B1000 Determining the Suitable Conditions of Ethanol-Soda Organosolv Pulping for Producing Semi-chemical Pulp from Rice Straw S.M.J.Sepidehdam, S.A.Mirshokraie, A.J.Latibari Iran

Chairman : Seiji Ohara**November 29 10:50-12:20**

- 8O21-3B1050 Invited Biosynthesis of Lignans and Norlignans Toshiaki Umezawa Japan
- 8O22-3B1120 A Novel Stereoselective Addition of Water to One Enantiomer of Racemic 8-O-4' Quinonemethide from Two Molecules of Coniferyl Alcohol Takeshi Katayama, Yukari Tabuchi, and Toshisada Suzuki Japan

8O23-3B1150	Biosynthesis and Stereochemistry of Lyoniresinol, a Syringyl Tetrahydronaphthalene Lignan, in <i>Lyonia ovalifolia</i> var. <i>elliptica</i> : Feeding Experiments of ¹⁴ C Labeled Precursors and Isolation of Related Syringyl Lignans from the Wood	<u>Atiar Rahman</u> , Takeshi Katayama and Toshisada Suzuki	Japan
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Chairman : Wasrin Syafii
November 29 13:30-15:30

8O24-3B1330	Structure and Biosynthesis of Aromatic Domain of Suberin in Outer Bark of <i>Quercus variabilis</i> : Analysis of Methanolysis Products and Feeding Experiments of L-[U- ¹⁴ C]Phenylalanine and <i>p</i> -Hydroxy[8- ¹⁴ C]Cinnamic Acid	<u>Toshisada Suzuki</u> , Shuhei Takino and Takeshi Katayama	Japan
8O25-3B1400	Structural Elucidation and Chemical Conversion of Condensed Tannins from Tree Species	<u>Seiji Ohara</u> , Koh Hashida, Rei Makino	Japan
8O26-3B1430	Characteristics of Terpenes on Antifungal Activity Against <i>Trichophyton mentagrophytes</i>	<u>Mi-Jin Park</u> , Ki-Seob Gwak, Eui-Bae Jeung, Je-Won Chang, Ki-Woo Kim, and In-Gyu Choi	Korea
8O27-3B1500	Staining Techniques for Determining the State and Spatial Redistribution of Extractives during Birch Kraft Pulping	<u>Dinesh Fernando</u> , Jan Lidén and Geoffrey Daniel	Sweden

Chairman : Zhongzheng Li
November 30 9:00-10:30

8O28-4E0900	Estimate of Hand-making Processes of Ancient Document Papers by Fiber Orientation Analysis	<u>Yoon-Hee Han</u> , Toshiharu Enomae and Akira Isogai	Japan
8O29-4E0930	Insertion-accelerated Ageing Test of Paper : Test of Commercial Alkaline Paper for Conservation	<u>Masamitsu Inaba</u> , Kana Yamaguchi, Akiko Takagi, and Sachiko Tsubokura	Japan
8O30-4E1000	A New Deacidification Process of Acidic Paper Documents	<u>Takayuki Okayama</u> and Kohsuke Tanaka	Japan

Session 9 : Biodegradation, preservation of wood, and mushroom production

Chairman : Hiroyuki Wariishi, Daniel Cullen
November 27 13:30-15:30

9O01-1F1330	Invited The Genome of the White Rot Basidiomycete <i>Phanerochaete chrysosporium</i> : Implications Relevant to Wood Decay Mechanisms	<u>Dan Cullen</u> , Jill Gaskell, Phil Kersten, and Amber Vanden Wymelenberg	U.S.A.
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9O02-1F1400 Invited Gene and Functional Diversity of
Cytochrome P450 Molecular Species in the
Lignin-degrading Basidiomycete
Phanerochaete chrysosporium Hiroyuki Wariishi Japan

9O03-1F1430 Recent Advances in Biochemistry and
Molecular Biology of Fungal Cellobiose
Dehydrogenase and its Related Proteins Kiyohiko Igarashi, Makoto Yoshida,
Takeshi Nishino, and Masahiro Samejima Japan

9O04-1F1500 Functional Studies of Lipid-related
Extracellular Metabolites Produced by a
Selective White Rot Fungus, *Ceriporiopsis*
subvermisopra Takashi Watanabe, Hiroshi Nishimura,
Takeshi Ougi, Saeko Tsuda, Yuko
Kawasaki, Rudianto Amirta, Yasunori
Ohashi, Takahito Watanabe, Yoichi Honda
and Kurt Messner Japan

November 27 15:50-17:20

9O05-1F1550 Invited Recent Insights from Structural Studies of
GH 7, 12 and 45 Cellulases Jerry Ståhlberg, Mats Sandgren, Sherry L.
Mowbray, Colin Mitchinson Sweden

9O06-1F1620 Bioremediation Potential of White-rot Fungi
-Ligninolytic Enzymes are Effective for
Bioremediation?- Ryuichiro Kondo, Miyuki Maruyoshi and
Ichiro Kamei Japan

November 29 9:00-10:30

9O08-3F0900 Invited Unique Preservative Tolerance in
Tyromyces palustris Frederick Green III, Rachel A. Arango and
Carol A. Clausen U.S.A.

9O09-3F0930 Control of Wood Destroying Organisms
Using Volatile Leaf Oil from Philippine
Grown *E. camaldulensis* M. Sp. Dionglay, M. Y. Giron, and C. M.
Garcia Philippines

9O10-3F1000 Characterization of Bioactive Extracts of
Fancy and Industrial Woods in Several
Bioassays Koichi Ogiyama, Masato Watanabe,
Nobuhiro Sekine, Ganis Lukmandaru,
Masako Kano, Hiroyuki Kuzirai, Nyoman J.
Wistara, Wasrin Syaf II Japan

November 29 10:50-12:20

9O11-3F1050 Resistance of Wood Treated with Various
Essential Oil Compounds and Plant Extracts
Against Fungi and Termites S. Nami Kartal, Yasuo Sekine, Takeshi
Adachi, Yuji Imamura Turkey

9O12-3F1120 Evaluation of Diffusibility of Boron in
Wood under Water Leaching Condition Jong-Bum Ra, Gyu-Hyeok Kim, Sung-Mo
Kang, and Ki-Hyon Paik Korea

9O13-3F1150 Invited Natural Destruction of Wood: How it is
Accomplished by Termites Michael Slaytor Australia

November 29 13:30-15:30

9O14-3F1330 Invited Termite Problems and Management in
Pacific-Rim Asian Region Tsuyoshi Yoshimura and Kunio Tsunoda Japan

9O15-3F1400	Behavioral and Electrophysiological Investigation on Chemical Sense of a Termite to Various Wood Extractives	<u>Wakako Ohmura</u> , Mamiko Ozaki, Ryohei Yamaoka	Japan
9O16-3F1430	Termite Control Using Entomopathogenus Fungi (Class Hypomycetes)	<u>Sulaeman Yusuf</u> , Titik Kartika , Didi Tarmadi, Arief Heru P	Indonesia
9O17-3F1500	Durability Improvement for Structural Wood Composites	<u>W. Ramsay Smith</u> and Qinglin Wu	U.S.A.

November 30 9:00-10:30

9O18-4F0900	Feasibility of Sugar-Palm Tree Fiber as Physical Barrier against Subterranean Termites: Its Natural Formation, Structure, and Physical Characteristics	<u>Musrizal Muin</u> and Astuti Arif	Indonesia
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< Poster Sessions >

Odd-numbers : November 28 15:30-17:00

Even-numbers : November 29 15:30-17:00

Session 1 : Wood resources and global environment

1P01	Genetic Variation of Distribution Pattern within Growth Rings for Wood Density in Hybrid Larch F ₁ .	<u>Takaaki Fujimoto</u> , Kazuhito Kita, Makoto Kuromaru, and Hisashi Akutsu	Japan
1P02	An Environmental Friendly Slow Releasing Fertilizer from Woodchip	<u>Sheikh Ali Ahmed</u> and Su Kyoung Chun	Korea
1P03	Variation of Nutrient Content in Woodchip Fertilizer Treated With Single and Compound Chemicals	<u>Sheikh Ali Ahmed</u> and Su Kyoung Chun	Korea
1P04	Comparison of Nutrient Content in between Green and Oven Dry <i>Quercus</i> Woodchip Fertilizer	<u>Su Kyoung Chun</u> , Jin Kwan Ham and Sheikh Ali Ahmed	Korea
1P05	Surface Checking of Round Logs: Proposal of an Oil Bath Treatment	<u>Pierre Bérard</u> , Olivier Dumonceaud, Thierry Laurent, Bernard Thibaut	Japan
1P06	Synthesis of Slow-release Nitrogen Fertilizer from Lignosulfonate and its Nitrogen Release Rate	<u>Yiqin Yang</u> , Baoyu Li, Zhongzheng Li, Yongcan Jin, Gyosuke Meshitsuka	China
1P07	The Quality Standardization of Gemor Bark (<i>Alseodaphne</i> spp) in East Kalimantan, Indonesia	<u>Rizki Maharani</u> , Dedy Suprayitno, and Minoru Terazawa	Japan
1P08	General Information on Philippine Woods: Principal Uses, Distribution and Equivalent Woods in the Asia-Pacific	<u>Arenio B. Ella</u>	Philippines
1P09	Biodegradation of Phenanthrene by Fungi Screened from the Nature	<u>Tony Hadibarata</u> , Kazutaka Itoh, Sanro Tachibana	Japan
1P10	Reconstruction on the Existing Condition of Wood Based Industries in Indonesia through the Development of Alternative Raw Materials and New Products	<u>Bambang Subiyanto</u> and Anita Firmanti	Indonesia
1P11	Cellulose Microcrystals as Composite Reinforcement Materials	<u>Huihong Yuan</u> , Masahisa Wada and Shigenori Kuga	Japan
1P12	The Utilization of Core-kenaf Particles as an Alternative to Woodchip	<u>Dede Hermawan</u> , Yusuf Sudo Hadi and Shuichi Kawai	Indonesia

Session 2 : Cell formation and wood structures

2P01	Evidence for Phototropic Bending of <i>Quercus crispula</i> Woody Stems by Tension Wood Formation	<u>Jun Matsuzaki</u> , Masaya Masumori, and Takeshi Tange	Japan
2P02	Measurement of Wood Tissue Proportion by Digital Image Processing	<u>Liu Yixing</u> , Yu Haipeng, and Cui Yongzhi	China
2P03	Variation and Relationship of Tracheid Length and S ₂ Layer Microfibril Angle in <i>Cupressus arizonica</i> Compression Wood	<u>Reza Oladi</u> , Davod Parsa Pajouh, Kambiz Pourtahmasi	Iran
2P04	Assessment of Compression Wood Formation in <i>Chamaecyparis obtusa</i> Using Gene Expression as an Indicator	<u>Saori Yamashita</u> , Masato Yoshida, Masako Okada, and Hiroki Hasegawa	Japan
2P05	Diurnal Deposition of Cell Wall Components in the Secondary Cell Wall	<u>Junichi Ito</u> , Yoshihiro Hosoo, Masato Yoshida and Takanori Imai	Japan
2P06	Influence of Growth Rate on Xylem Properties of Some Fast-growing Species	<u>Yasuhisa Ojio</u> , Hiroyuki Yamamoto, Masato Yoshida, Sri Nugroho Marsoem, Morio Tsuchiya, Kenji Matsune, Kentaro Nakamura and Yoshihiko Inoue	Japan
2P07	Anatomical Structure of Aerial Root in Beringin Tree (<i>Ficus benjamina</i> L.)	<u>Imam Wahyudi</u>	Indonesia
2P08	Dimension of Higher Plant Cellulose Microfibrils Observed by Infrared Spectroscopy	<u>Yoshiki Horikawa</u> , Takao Itoh and Junji Sugiyama	Japan
2P09	Seasonal Changes in Radial Growth of <i>Larix gmelinii</i> in Central Siberia	<u>Koh Yasue</u> , Joni Kujansuu, Takuya Kajimoto, Yuichiro Nakai, Anatory P Abaimov, Yojiro Matsuura	Japan
2P10	Role of Cellulases in the Wood Formation	<u>Junko Takahashi</u> , Ulla Jonsson Rudsander, Emma R. Master, Tuula T. Teeri, Björn Sundberg and Ewa J. Mellerowicz	Sweden
2P11	Characterization of Developmental Programmed Cell Death in Xylem Fibers of Poplar (<i>Populus tremula x tremuloides</i>): From Anatomical to Molecular Insights into the Death Process of Wood	<u>Charleen Moreau</u> , Luis Muniz, Edouard Pesquet, Andreas Sjodin, Tatsuya Awano, Stefan Jansson, Hannele Tuominen	Sweden
2P12	Water Balance of Cloned <i>Cryptomeria japonica</i> Saplings Grown in a Growth Chamber with Different Irrigation Conditions	<u>Takahisa Nakai</u> and Hisashi Abe	Japan
2P13	Functional Analysis of WAP27 that were Accumulated in ER Lumen of Cortical Parenchyma Cells of Mulberry Twigs during Seasonal Cold Acclimation	Namiko Kondo, Erika Matsumoto, Manabu Nagao, Daisuke Takezawa, <u>Keita Arakawa</u> , and Seizo Fujikawa	Japan

Session 3: Physical properties of wood and modern technologies for their processing

3P01	Auto Detection of Wood Textural Orientation and Periodicity by Digital Image Processing	<u>Liu Yixing</u> , Yu Haipeng, and Liu Zhenbo	China
3P02	Effects of Impregnation with Extractives of Padouk (<i>Pterocarpus soyauxii</i>) and Muirapiranga (<i>Brosimum spp.</i>) on Mechanical Properties of Wood	<u>Yuji Konaka</u> , Toshinari Kawada, and Kazuya Minato	Japan
3P03	Basic Studies on Crushing of Wood -Effects of Wood Variables and Moisture Content on Particle Size Distribution-	<u>Takeshi Ohuchi</u> , Yuki Minami and Yasuhide Murase	Japan
3P04	Physical Characteristics of Compressed Wood after Exposed to Artificial Weathering	<u>Yanni Sudiyani</u> , Wahyu Dwianto and Kazuya Minato	Indonesia
3P05	Nondestructive Inspection for Structural Safety of Historical Buddhist Temple in Japan	<u>Yasutoshi Sasaki</u> , Mariko Yamasaki	Japan
3P06	Variation of the Wooden Specific Gravity with its Moisture Content, Experimental and Theoretical Model.	<u>Norman Barros Logsdon</u>	Brazil
3P07	Dendrological, Physical and Chemical Characterization of the Wood of ARICÁ, <i>Physocalymma scaberrimum</i> Pohl	<u>Norman Barros Logsdon</u> , Marcos Miranda Pereira, Zaira Hurtado Mendonza, and Zenesio Finger	Brazil
3P08	Comparison Among the Coefficients of Dimensional Anisotropy in Swelling and in Shrinkage	<u>Norman Barros Logsdon</u> and José Eduardo Penna	Brazil
3P09	Models for Specification of the Curves of the Shrinkage and Swelling Diagrams.	<u>Norman Barros Logsdon</u> , and Zenesio Finger	Brazil
3P10	The Superheated Steam Drying of the Boxed-heart timber from Sugi (<i>Cryptomeria japonica</i> D. Don)	<u>Isao Kobayashi</u> , Naohiro Kuroda, and Atsuko Ishikawa (Honda)	Japan
3P11	Effect of Superheated-Steam and RF/V Drying on VOCs Emissions from Sugi (<i>Cryptomeria japonica</i> D. Don) Wood	<u>Atsuko Ishikawa-Honda</u> , Tatsuro Ohira, Naoyuki Matsui, Shin-ichiro Tomura, Isao Kobayashi, and Naohiro Kuroda	Japan
3P12	Effect of Incising Processing for Preventing from Checking in Kiln Drying of Sugi Boxed Heart Square Lumber	<u>Shuetsu Saito</u> , Tetsuo Hirota, Kazuhiro Fujishima	Japan
3P13	Dynamic Modulus of Elasticity and Compressive Strength of Japanese Cedar Trees Grown with Different Plantation Spacing and Thinning Treatments in Taiwan	<u>Song-Yung Wang</u> , Jin-Hau Chen, Chung-Pin Hung, Cheng-Jung Lin, Ming-Hsun Chan	Taiwan
3P14	Removal of Excess Water in Log using Hydrostatic Pressure	<u>Yoshinori Kobayashi</u> , Masahiko Takeuchi, Takeo Fukuyama	Japan

3P15	Merits of Introducing High-frequency Heating into Hot-air Drying Depending on Wood Deterioration	<u>Yasuo Kawai</u> , Eiichi Obataya, Yohinori Kobayashi and Shuichi Doi	Japan
3P16	Preliminary Study on Effects of Electric Field on the Bending Strength and Modulus of Elasticity of Masson Pine	<u>Qian Jun</u> , Shen Zhehong	China
3P17	Differences in impact bending strength among small portions cut from Japanese larch timber kiln-dried by the high-temperature setting method	<u>Takashi Takeda</u> and Yasushi Nakashima	Japan
3P18	Effects of Delignifying Treatment on Mechano-sorptive Creep of Wood	<u>Wenbo Zhang</u> , Morihiko Tokumoto, Takashi Takeda, Koh Yasue	Japan
3P19	Evaluation on the Manufacturing of Structural Bamboo Laminated Curved Beams and Related Flexural Properties	<u>Yeh, Min-Chyuan</u>	Taiwan
3P20	Strength Properties of Compressed Sugi Wood	<u>Yasuyuki Horita</u> Yoshihiko Hirashima Masahiko Takeuchi	Japan
3P21	Gap Drying of Sugi Square Lumber	<u>Keisuke Ando</u> , Nobuaki Hattori, Hidefumi Yamauchi and Yoshinori Kobayashi	Japan
3P22	Bending Creep of Spruce Wood under Thermo-mechanical Loading	<u>Marian Babiak</u> , Stefan Král, Alexander Krakovsky	Slovak republic
3P23	Wood Properties of Sugi Cultivars(<i>Cryptomeria japonica</i>) in Southern Kyusyu, Japan	<u>Yoshio Kijidani</u> and Ryushi Kitahara	Japan
3P24	Simplified CT Method of Visualizing Internal Defects in a Lumber	<u>Yasuyoshi Kodama</u> and Zhong Zhang	Japan
3P25	Properties Enhancement of Oil Palm Lumber through the Compreg Method	<u>Edi Suhaimi Bakar</u> , Paridah Md. Tahir and Mohd. Hamami Sahri	Malaysia
3P26	Evaluation of Selected Physical and Mechanical Properties of Multiple Leader <i>Acacia crassicarpa</i> A.Cunn.Ex.Benth. Genotypes	<u>Nor Aini ab Shukor</u> , Paridah Md. Tahir and Mohd. Faisal Jaafar	Malaysia
3P27	Evaluation of the Aging of Wood: Comparison between an Accelerated Aging Treated Wood	<u>Misao Yokoyama</u> , Takao Itoh and Shuichi Kawai	Japan
3P28	Compressibility of Softwoods Produced in Eastern Canada	<u>Meng Gong</u> and Makoto Nakatani	Canada
3P29	The Thermal Expansion of Wood Cellulose - Comparison with Highly Crystalline Cellulose I _β -	<u>Ritsusko Hori</u> and Masahisa Wada	Japan
3P30	Bending Strength, Color and Wettability on the Surface of Heat-Treated <i>Styrax Tonkinensis</i> Wood	<u>Le Xuan Phuong</u> , Yukie Saito, Satoshi Shida	Japan

3P32	Non-destructive Acoustic Measurement System for Cross-section of Trees.	<u>Hisakazu Tajika</u> , Junichi Sakakibara, Masato Tanaka, Shinichi Narumi	Japan
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Session 4 : Wood-based materials, timber construction and symbiotic housing

4P01	Evaluation of Effectiveness of Mold Geometry Modifications for Manufacturing Molded Bark Particleboard by Using Finite Element Analysis	<u>Ping Yang</u> , Kouhei Inoue, Hidefumi Yamauchi and Hikaru Sasaki	Japan
4P02	Modeling the Influence of Fines Content on Properties of Mixed Hardwood Oriented Strandboard	<u>Guangping Han</u> and Qinglin Wu	China
4P03	Comparison of Shear Performance of Horizontal Diaphragm by Specimen's Scale	<u>Hideki Aoi</u> , Kenji Aoki, Ken'ichi Sugimoto, Fumio Kamiya	Japan
4P04	Effect of Density and Layer Structure on the Mechanical Properties of Bamboo Strandboard	<u>Ihak Sumardi</u> , Kazuhiro Ono, Shigehiko Suzuki	Japan
4P05	Mechanical Properties of Wooden Nails and Wood-Nailed Laminated Timber	<u>Yuichi Bamba</u> , Masamitsu Ohta	Japan
4P06	Study on the Weathering Resistance of Wood Particle-Plastic Composites	<u>T-Y Chen</u> , Y-L Chen, H-C Chen, C-H Hsu, H-D Soong	Taiwan
4P07	Producing Plastic Substitute from Bamboo	<u>Osamu Yamashita</u> , Hideyuki Yokochi, Hiroshi Imanishi, and Kozo Kanayama	Japan
4P08	Effect of Load Frequency on the Fatigue Behavior of Structural Plywood under Shear Load through Thickness	<u>Takanori Sugimoto</u> and Yasutoshi Sasaki	Japan
4P09	Prospect of the Utilization of <i>Acacia mangium</i> for Structural and non-Structural Building Materials	<u>Anita Firmanti</u> , Bambang Subiyanto, Suichi Kawai	Indonesia
4P10	Compression Creep Perpendicular to the Grain of Column-and-sill Joints Composed of Sugi for the Conventional Construction in Japan	<u>Shiro Aratake</u> , Motoi Uesugi , Takanori Arima , and Hiroshi Tanaka	Japan
4P11	Dynamic Property of Wood-based Composites	<u>Yingcheng Hu</u> , Yixing Liu, Jun Cao and Tetsuya Nakao	China
4P12	Lateral Shear Test of Singly and Doubly Braced Wood Shear Walls	<u>Yakni Idris</u> , Kohei Komatsu	Indonesia
4P13	An Experimental Study on the Strength Properties of the Moment Resisting Beam-column Joint Using Lagscrewbolts	<u>Takuro Mori</u> , Makoto Nakatani and Kohei Komatsu	Japan
4P14	Compressive Deformation Behavior of PF Resin Impregnated Wood Relating to the Production of Wood Composites	<u>Md. Iftekhar Shams</u> , Hiroyuki Yano	Japan

4P15	Formulation of Partially Compressive Displacements of Orthotropic Wood Using Pasternak Model	<u>Hideaki Tanahashi</u> , Yoshiyuki Suzuki	Japan
4P16	Effect of Interfacial Adhesion of Surface Treated Bio-flour Filled Polypropylene Bio-composites	<u>Hee-Soo Kim</u> , Seung-Woo Choi, Byoung-Ho Lee, and Hyun-Joong Kim	Korea
4P17	Effect of Biodegradability of Bio-flour Filled Biodegradable Polymer Bio-composites in Soil Environment	<u>Hee-Soo Kim</u> , Seung-Woo Choi, Hyun-Joong Kim and Han-Seung Yang	Korea
4P18	Characteristic of Formaldehyde Emission from Wooden Furniture and Flooring Materials in the Under Heating(ONDOL) System	<u>Sumin Kim</u> , Hyun-Joong Kim	Korea
4P19	Correlation Between Various Formaldehyde Emission Tests for Wood Composites	<u>Young-Kyu Lee</u> , Sumin Kim, Hyun-Joong Kim, Dong Won Yoon and Hwa Hyoung Lee	Korea
4P20	Nail Joint Performance of Several Wood-based Panels Subjected to Outdoor Exposure and Accelerated Aging Tests	<u>Yoshiyasu Fujimoto</u> , Noboru Sekino , Hideaki Korai , Hidetaka Nogami , and Kazuo Ohashi	Japan
4P21	Shear Strength of Sugi Laminae with Low Young's Modulus Grown in Miyazaki Prefecture	<u>Hideki Morita</u> , Yoshiyasu Fujimoto, and Kohei Komatsu	Japan
4P22	Testing Method for Evaluating Fire Performance of Wooden Highway Sound Barriers	<u>Toshiro Harada</u> , Saburo Uesugi, Keisuke Andoh, Shigeru Kitayama, Hideo Ishida, Hiroto Imamura	Japan
4P23	Studies about the Effect Factors on Ultrasonic Velocity of Domestic Red Pine	<u>So-Ra Han</u> , Chun-Young Park, In-Chan Lee, Jun-Jae Lee	Korea
4P24	Effect of Swelling and Shear Strain of Each Layer on Bowing of LVL Made of Alternate Laminations of Rubberwood and Falcata	<u>Koji Murata</u> and Kuniharu Yokoo	Japan
4P25	Effect of Moisture Content on Strength Properties for Sugi Full-size Timber	<u>Hiroshi Tanaka</u> and Shiro Aratake	Japan
4P26	Glued Laminated Timber Using Combinations of Different Species	<u>Castro Gaetano</u> , Paganini Franco	Italy
4P27	Matching Method for Data of Several Strengths of Laminae	<u>Satomi Sonoda</u> , Kazuhiro Shiba, Yoshiaki Wakashima, Hiroshi Nakatani	Japan
4P28	Development of Functional Wood-based Composites Using Pulverized Wood Wastes	<u>Jong-Young Park</u> , Jae-Sung Cho, Jin-Suk Suh, Byung-Dae Park, and Sang-Bum Park	Korea
4P29	The Bond Durability of Kenaf Core Binderless Boards	<u>Nobuhisa Okuda</u> , Keko Hori, Masatoshi Sato	Japan
4P30	Study on the Manufacturing Conditions and the Mechanical Properties of Bamboo Zephyr Binderless Board	<u>Kanok-on kungsuwan</u> , Nobuhisa Okuda and Masatoshi Sato	Japan

4P31	Detecting the Timber Joint Using GPR and Tomography	<u>Yi-Chun Lin</u> , Liu Hsing-Chang , Tsung-Chiang Wu, Min-Fu Hsu, Chieh-Hou Yang	Taiwan
4P32	Effect of Outdoor Storage of Shavings on MDF Performance	<u>Xiang-Ming Wang</u> , Hui Wan, Dian-Qing Yang, and Jun Shen	Canada
4P33	Modelization of Cylindrical LVL: Finite Elements Models of a Flat Interlocked LVL and Comparison with Experiments to Improve Quality of the Butt Joint	<u>Pierre Berard</u> , Ping Yang, Hidefumi Yamauchi, Kenji Umemura, Shuichi Kawai	Japan
4P34	Self-Bonding Characterization of Non-Wood Lignocellulosic Materials	<u>Ragil Widyorini</u> , Jianying Xu, Kenji Umemura, Takashi Watanabe, Shuichi Kawai	Japan
4P35	Teak Waste Wood Glulam Beams Based On Castor Oil Adhesive	<u>José Manoel Henriques De Jesus</u>	Brazil
4P36	Cement-Wood Composites with Sawdust of Tropical Wood Species from North of Mato Grosso-Brazil	<u>José Manoel Henriques De Jesus</u> , Manoel Santinho Rodrigues Jr, Lucas F. Falcioni, Ricardo Aurelio Cavalheiro Manarelli	Brazil
4P37	Effects of Weathering on Mechanical Properties of Wood-Polymer Composite	<u>M. Karina</u> and A. Syampurwadi	Indonesia
4P38	Low Formaldehyde Emission Particleboard Bonded by Tannin Based Adhesives	<u>Adi Santosa</u> and Yusuf Sudo Hadi	Indonesia
4P39	Porous Polymer Composites Using Polyurethane Resin and Aggregates Prepared from Waste Wooden Construction Materials	<u>Yasuji Kurimoto</u> , Hidefumi Yamauchi, and Takanobu Sasaki	Japan
4P40	Outdoor Exposure Tests of Several Wood-based Panels for Structural Uses	<u>Hidefumi Yamauchi</u> , Makoto Fukino, Noboru Sekino, Hideaki Korai, Shigehiko Suzuki, Kenji Umemura, Hidetaka Nogami and Yoshiyasu Fujimoto	Japan
4P41	Gas Chromatographic Analysis of the Monosaccharide Composition of Giant IPIL-IPIL [<i>Leucaena leucocephala</i> (Lam.) de Wit]	<u>Marilyn Sp. Dionglay</u> , Edna B. Bauza and Maxima E. Flavier	Philippines
4P42	Study on Influence Factors of Wood-metal Composite's Electromagnetic Shielding	<u>Li Jian</u> Wang Lijuan Liu Yixing	China
4P43	Study on Medium Density Fiberboard made from Wood fiber/Copper powder	<u>Liu Yixing</u> , Zhang Xianquan, Li Jian	China
4P44	Time-dependent Mechanical Behaviour of King-Post Truss Highway Bridge	<u>Takao Nakazawa</u> , Yutaka Iimura, Fujio Imai, and Isao Miura	Japan
4P45	Full Scale Collision Tests of Timber Guardrail	<u>Rihong Zhang</u> , Kazuo Kanemaru, Takao Nakazawa, Yutaka Iimura and Makoto Nakamura	Japan
4P46	Mechanical Properties of Particleboard Manufacture from Poplar Wood	<u>Homayoun Soleymani Ashtiani</u>	Iran

4P47	Properties of Three Plantation Species: Affecting Solid Wood Bending	<u>Elvina O. Bondad</u>	Philippines
4P48	Influence of the Geometrical and Material Variability on the Permissible Span of the Multi-webbed Composite Timber Joists	<u>Ali Bahadori Jahromi</u> , Abdy Kermani and Binsheng Zhang	UK
4P49	Relationship of Flatwise Bending Properties and Failure Modes Of Laminated Veneer Lumber Manufactured From Tropical Hardwood Species	<u>Mohd Hamami Shari</u> , H'ng Paik San, Phd & Paridah Md. Tahir	Malaysia
4P53	Effect of Rubber Addition on Tensile and Impact Properties of Composites of Wood Flour and Polypropylene	<u>Fauzi Febrianto</u> , Shinji Beppu, Mariko Yoshioka, Mohd. Hamami Sahri and Nobuo Shiraishi	Malaysia
4P54	Possibilities of Wood Based Connector for Timber Structure	<u>Masafumi Inoue</u> , Kei Tanaka, Takuro Mori, Katsuhiro Takehira, Masafumi Inoue, Masahiro Inayama, and Naoto Ando	Japan

Session 5 : Living environment and amenity

5P01	Where of Wood Grain Figures are We Looking at?	<u>Masashi Nakamura</u>	Japan
5P02	Discriminant Analysis of Tactile Dryness Concerning the Relation Between Amount of Evaporation and Moisture Content of Wood	<u>Daisuke Kobayashi</u> , Satoshi Shida, and Takanori Arima	Japan
5P03	Thermal Environment of the Space above Wood Decks	<u>Nobuhiro Takasugi</u> , Satoshi Shida	Japan
5P04	Evaluation of Condensation Property in Light-Frame Wall	<u>Se-Jong Kim</u> , Chun-Young Park, and Jun-Jae Lee	Korea
5P05	Perceptions of Homeowners Based on House Construction Materials	<u>Shuzo Sueyoshi</u> , Bradley G. Ridoutt, Roderick D. Ball, Yoshifumi Miyazaki and Takeshi Morikawa	Japan
5P06	House Dust Mites and Wood	<u>Yasushi Hiramatsu</u> , Yoshifumi Miyazaki	Japan
5P07	Indoor Air Quality in Wooden Houses in Hokkaido, Japan.	<u>Nobuhiro Asakura</u> , Satoshi Kobayashi, Sayaka Murata, Makoto Ishii	Japan
5P08	The Images of the Interior Finish Using Japanese Cedar	<u>Naoyuki Itagaki</u> , Yasuo Iijima, Keisuke Kameizawa and Mayuko Takahasi	Japan

Session 6 : Adhesion and chemical processing of wood

6P01	Production of the High Density and Strength Moldings from Wood Flour without Binder by the WIP (warm isostatic pressing) Technology II. Effect of Pre-molding by CIP (cold isostatic pressing) Technology	<u>Makoto Ohkoshi</u> and Yutaka Kataoka	Japan
6P02	Attempts of Continuous Separation of CCA Component from Waste CCA-Treated Wood Using the Phenolic Liquefaction	<u>Satoshi Suzuki</u> , Yasushi Fujisawa, Hiroshi Nakatani	Japan
6P03	Bonding Properties of Chitosan	<u>Kenji Umemura</u> , Yasuo Iijima, Shuich Kawai	Japan
6P04	Study on Photo-curing Kinetics of UV-curable Urethane Acrylate Coatings by Photo-DSC	<u>Hyeon-Deuk Hwang</u> , Jae-Hoon Choi, and Hyun-Joong Kim	Korea
6P05	Thermal Properties of UV-Curable Epoxy Acrylate Coatings Using by TGA.	<u>Jae-Hoon Choi</u> , Byoung-Hoo Lee, Hyeon-Deuk Hwang and Hyun-Joong Kim	Korea
6P06	Thermal Analysis of Blending of Melamine Formaldehyde resin and Poly(vinyl acetate)	<u>Sumin Kim</u> , Hyun-Joong Kim	Korea
6P07	Thermal Behavior of Scavenger Addition Urea-Formaldehyde Resin	<u>Young-Kyu Lee</u> , Sumin Kim, Hyun-Joong Kim	Korea
6P08	The Properties of Wood/Thermoplastic Polymer Composites with a High wood Content	<u>Masahiro Takatani</u> , Ryo Ikuto, Kohei Ikeda and Tadashi Okamoto	Japan
6P09	Thermoplasticization of Bamboo by Graft Copolymerization of Poly(Methyl Methacrylate)	<u>Masahiro Yoshinobu</u> , Satoshi Ohsaki, and Takato Nakano	Japan
6P11	Dyad Sequence Distribution and Glass Transition Behavior of Poly(Vinyl Alcohol-Vinyl Levulinate) Copolymer	<u>Yan Mei Wang</u> , Atsushi Ikeda, Naruhito Hori, Akio Takemura, Hirokuni Ono, Tatsuhiko Yamada, Toshihide Tsukatani	Japan
6P12	Utilization of Giant IPIL-IPIL [<i>Leucaena leucocephala</i> (Lam.) de Wit] Seed Flour as Plywood Glue Extender	F.D. Chan , M. Sp. Dionglay , and <u>I.I. Palanginan</u>	Philippines
6P13	Optimization of High Transparency and Low Thermal Expansion in Bacterial Cellulose Nanocomposites	<u>M. Nogi</u> , S. Ifuku, K. Abe, K. Handa, and H. Yano	Japan
6P14	Chemical Modifications of Transparent Bacterial Cellulose Nanocomposites	<u>Shinsuke Ifuku</u> , Masaya Nogi, Keishin Handa, Fumiaki Nakatsubo, and Hiroyuki Yano	Japan

Session 7 : Energy, chemicals and charcoal production

7P01	Manufacture of a High-density Charcoal from Cellulosic Biomass by Hot Press Molding	<u>Sakae Horisawa</u> , Takao Imanishi, Takashi Ichihara, Terunobu Manabe, Hiroshi Frusawa, and Mitsuhiro Sakawa	Japan
7P02	Carbonization of CCA (Chromated Copper Arsenate) Treated Wood	Youichi Hamamoto, <u>Miyusse Sakasegawa</u> , Yuji Enomoto, Masahiro Nishiyama and Mitsuyoshi Yatagai	Japan
7P03	Liquid Pyrolysis Products Obtained under Different Pyrolysis Temperature	<u>Shumpei Iida</u> , Keko Hori, Mitsuyoshi Yatagai	Japan
7P04	CGS (Carbonization-gasification System) Method for Fuel Gas Production from Wood Materials	<u>Yasuo Kojima</u> , Yujiro Goto, Yoshihito Umemura	Japan
7P05	New Monitoring Concept of Moisture Content Distribution in Wood during Drying	<u>Kazuo Hayashi</u> , Yingchun Cai	Japan
7P06	Enzymatic Saccharification of Sawdust-based Culture Wastes of some Edible Mushrooms for Bio-Ethanol Production	<u>Shinso Yokota</u> , Keisuke Yamada, Futoshi Ishiguri, and Nobuo Yoshizawa	Japan
7P07	Effects of Woody Biomass Variety on Gasification in an Entrained Gasifier	<u>Tomoko Ogi</u> , Aki Kawamura, Masakazu Nakanishi, Sei-ichi Inoue, and Yan Zhang	Japan
7P08	Analysis of Extracellular Proteins from <i>Lentinula edodes</i> Grown on Cellulose Substrate	<u>Jae-Won Lee</u> , Bon-Wook Koo, Soo-Min Lee, and In-Gyu Choi	Korea
7P09	Development of Production Process of Energy and Chemicals from Softwood Biomass	<u>Yoshitoshi Nakamura</u> , Fumihisa Kobayashi, Harumi Take, and Akihiro Kurosumi	Japan
7P10	Saccharification of Cellulose Materials by Vacuum Pyrolysis	<u>Gujoong Kwon</u> , Masashisa Wada, Shigenori Kuga	Japan
7P11	Carbonization of Cellulose by Dehydrating Pretreatment	<u>Yusuke Yasukawa</u> and Shigenori Kuga	Japan
7P12	Adsorption Characteristics of Carbonized Material Prepared from Chicken Excrement	<u>Kei Fujishiro</u> , Masahiro Shimada and Takayuki Okayama	Japan
7P13	Pyrolysis Mechanism of Lignin Related to the Woody Biomass Conversion	<u>Haruo Kawamoto</u> , Takeshi Nakamura and Shiro Saka	Japan
7P14	Production of Levoglucosenone and Furfural through Controlled Pyrolysis of Cellulosic Biomass	<u>Shinya Saito</u> , Haruo Kawamoto and Shiro Saka	Japan
7P15	Organic Acid Production from Japanese Beech by Hydrothermal Treatment	<u>Kei Yoshida</u> , Shiro Saka	Japan
7P16	Production of Fermentable Saccharides from Lignocellulosics by Hot-compressed Water Treatment	Junko Kusaki, Katsunobu Ehara and <u>Shiro Saka</u>	Japan

7P17	Comparative Study on Lignin-Derived Products from Softwood and Hardwood as Treated in Supercritical Water	Katsunobu Ehara, Daishi Takada and <u>Shiro Saka</u>	Japan
7P18	Production of Formic Acid from Woody Biomass as Treated by Hot-compressed Water	<u>Seiya Sakaguchi</u> , Shiro Saka	Japan
7P19	Inhibitory Effect by the Contaminants on the Bioethanol Production from Cellulose	<u>Toshiki Nakata</u> , Hisashi Miyafuji and Shiro Saka	Japan
7P20	Biodiesel Production from Wood Oils/Fats	<u>Eiji Minami</u> , Hiroaki Imahara, Kudrat Sunandar, Kamaruddin Abdullah and Shiro Saka	Japan
7P21	Supercritically-treated TiO ₂ -activated Carbon Composites for Cleaning Ammonia	<u>Hongmei Hou</u> , Hisashi Miyafuji, Haruo Kawamoto and Shiro Saka	Japan
7P22	Hydrogen Production from Wood by in-situ CO ₂ Removal Gasification using a Continuous Bench Scale Unit	Shinji Fujimoto, Toshiaki Hanaoka, Kouji Kuramoto, Shi-Ying Lin, Kenji Kamei and <u>Tomoaki Minowa</u>	Japan
7P23	Deodorizing Effects of Essential Oils against Bad Odors -Relation of Physiological Evaluation and Subjective Evaluation-	<u>Satoshi Sakuragawa</u>	Japan

Session 8 : Wood chemistry, pulping and paper making chemistry

8P01	Delignification and the Paper Making Characteristics of Populus Deltoides in Different Ages	<u>Amirhooman Hemmasi</u> , Mehdi Faezipour, Shahram Rahnamoon	Iran
8P02	Adsorption and Degradation of Sugars on Woods	<u>Masanori Matsuura</u> , Michiaki Matsumoto, Kazuo Kondo	Japan
8P03	Preparation of Nylon Microcapsule and Nylon Porous Material on Paper Surface by Utilizing Interfacial Polymerization Technique for Use in Smart Paper	<u>Hideaki Ichiura</u> , Masaaki Morikawa and Katsuhisa Fujiwara	Japan
8P04	The Dissolution of Chemical Components from <i>Gmelina arborea</i> Roxb during Alkali Extraction	<u>Deded S. Nawawi</u> , Wasrin Syafii, Takuya Akiyama, Yuji Matsumoto, Gyosuke Meshitsuka	Indonesia
8P05	Characteristic Mechanical Properties of Washi Papers	<u>Tatsuo Yamauchi</u> , and Naohara Usami	Japan
8P06	Influence of Cationic Retention Aids on Water- and Oil-repellencies of Papersheets Prepared with Diperfluoroalkylethyl Phosphate	<u>Satoru Fukuda</u> , Akira Isogai, Takuya Kitaoka and Naomi Sumikawa	Japan
8P07	Effect of Fractionation and Mechanical Treatment of Recycled Pulp on the Strength and Formation of Linerboard	<u>Lee Hak Lae</u> , Hye Jung Youn, Sang Gil Lee, Tae Young Kang, Kyoung Ho Lee	Korea

8P08	Effect of Polymer Properties on Flocculation of Short Fiber Fraction of KOCC	<u>Ik Sun Choi</u> , Seong Min Chin, Hui Cho, and Hye Jung Youn	Korea
8P09	Screening of White Rot Fungi for Biobleaching of Acacia Pulp	<u>Afrida</u> , Yutaka Tamai and Mitsuru Osaki	Japan
8P10	Chemotaxonomy of <i>Shorea</i> Based on the Heartwood Extractives	<u>Atsushi Kato</u> and Shojiro Hishiyama	Japan
8P11	Application of Mordants Prepared from Lignin for Rosin Size in Neutral Papermaking	<u>Yasuyuki Matsushita</u> and Kazuhiko Fukushima	Japan
8P12	Antioxidant Activity of Extractives from Steam Exploded Bamboo (<i>Phyllostachys pubescens</i>)	<u>Kokki Sakai</u> Daisuke Nomoto and Tomoya Nishiyama	Japan
8P13	Anticancer Activity of some Tropical Wood Extractive	<u>Rita Kartika Sari</u> , Wasrin Syafii and, K. Ogiyama	Indonesia
8P14	Characterization of Diazoethane-Ethylated Guaiacyl and Guaiacyl/Syringyl Dehydrogenation Polymers by Pyrolysis in the Presence of Tetramethylammonium Hydroxide	<u>Akiko Nakagawa-izumi</u> and Ken-ichi Kuroda	Japan
8P15	FT-IR Depth Profiling of Photodegradation in Japanese Cedar and Japanese Cypress - Relationship between Wood Density and Photodegradation Depth -	<u>Yutaka Kataoka</u> , Makoto Kiguchi, Takeshi Fujiwara, Philip D. Evans	Japan
8P16	Condensed Tannins from the Bark of Tropical <i>Acacia</i> Tree Species and Their Antioxidative Activity	<u>Rei Makino</u> , Seiji Ohara and Koh Hashida	Japan
8P17	Profiles of Subtracted cDNAs Expressed during Generation of Norlignan in Sugi (<i>Cryptomeria japonica</i> D. Don) Sapwood	<u>Kazumasa Yoshida</u> , Mitsuru Nishiguchi, Norihiro Futamura, Tokihiko Nanjo	Japan
8P18	Effect of Mercerization on the Solubility of Cellulose in LiCl/DMAc	<u>Hajime Aono</u> , Daisuke Tatsumi, and Takayoshi Matsumoto	Japan
8P19	Determination of Pentachlorophenol in Paper Samples by Gas Chromatography	<u>Ji-Hye Park</u> , Ai-Ran Hahn, Byoung-Muk Jo, and Jung-Soo Oh	Korea
8P20	Enantioselective Formation of (+)-Medioresinol in <i>Liriodendron tulipifera</i> and Diastereoselective Formation of erythro-Guaiacylglycerol-8-O-4'-(Sinapyl Alcohol) Ether in <i>Eucommia ulmoides</i> : the Presence of Stereoselective Cross-coupling of Coniferyl Alcohol	Nattaya Lourith, Yousuke Kurita, Toshisada Suzuki and <u>Takeshi Katayama</u>	Japan
8P21	Absolute Configurations of Four Stereoisomers of Arylglycerol- β -Aryl Ethers and 8-O-4' Neolignans	<u>Takeshi Katayama</u> , Shigeaki Okamoto, Yukari Tabuchi, and Toshisada Suzuki	Japan

8P22	Langmuir-Blodgett Films from Novel Regioselectively Substituted Cellulose Derivatives	<u>Keita Sakakibara</u> , Shinsuke Ifuku, Hiroshi Kamitakahara, Toshiyuki Takano, and Fumiaki Nakatsbo	Japan
8P23	Deodorant Components of the Essential Oil of <i>Cryptomeria japonica</i> against BTX and Formaldehyde	<u>Ki-Seob Gwak</u> , Mi-Jin Park, Eui-Bae Jeong, Je-Won Chang, In-Gyu Choi	Korea
8P24	Isolation and Characterization of Antifungal Compounds from <i>Boehmeria tricuspis</i> Makino	<u>Jun-Yeong Park</u> , Ha-Young Kang, Hyun-Jin Jo, In-Gyu Choi	Korea
8P25	Hemicellulose Attached with Cellulose in Seed Hairs	<u>Lucia Indrarti</u> , Rike Yudianti, Hiroshi Takeda, Masahiro Sakamoto and Jun-ichi Azuma	Indonesia
8P26	The Cyanoethylation of Cyclodextrin and the Rotaxane.	<u>Eiko Nakayama</u>	Japan
8P27	Dehydrogenative Polymerization of Coniferyl Alcohol and Sinapyl Alcohol	<u>Wakako Chiba</u> , Takao Kishimoto, Kaori Saito, Kazuhiko Fukushima, Yasumitsu Uraki, and Makoto Ubukata	Japan
8P28	Cellulose Derivatives Carrying a Single Pyrene Group at the Reducing-End and Fluorescent Studies of their self-Assembly Systems in Aqueous NaOH Solutions	<u>Yukiko Enomoto</u> , Hiroshi Kamitakahara, Toshiyuki Takano, and Fumiaki Nakatsubo	Japan
8P29	Structural Changes of Residual Lignin from Straw and Poplar Soda Pulps Treated with Manganese Peroxidase	<u>Huifang Xie</u> , Yongcan Jin, Zhongzheng Li	China
8P30	cDNA Cloning of <i>Asparagus officinalis</i> Hinokiresinol Synthase	<u>Masaomi Yamamura</u> , Shiro Suzuki, Tomoyuki Nakatsubo, Takefumi Hattori, Mikio Shimada, and Toshiaki Umezawa	Japan
8P31	The functions of <i>Carthamus tinctorius</i> CoAOMT and AldOMT	<u>Tomoyuki Nakatsubo</u> , Norikazu Sakakibara, Takefumi Hattori, Laigeng Li, Vincent L. Chiang, Mikio Shimada, and Toshiaki Umezawa	Japan
8P32	Biological Activities and Isolation of Extractives from <i>Callistemon citrinus</i>	<u>Youngki Park</u> , Wi Young Lee, So Young Park, Jin Kwon Ahn and Hak-Ju Lee	Korea
8P33	Characterization of Polymer Brush-Type Polysaccharide β -Ketoesters	<u>Yutaka Yoshida</u> and Akira Isogai	Japan
8P34	Improvement of Paper Strength by TEMPO-mediated Oxidation of Kraft Pulp	<u>Saito, T.</u> & Isogai, A.	Japan
8P35	Geometry of Ink Dots on Ink-Jet Paper Prepared with Calcium Carbonate as Coating Pigment	<u>Toshiharu Enomae</u> , Dmitry Ivutin and Akira Isogai	Japan
8P36	Application of Spherical Calcium Carbonate to Paper	<u>Yohta Mori</u> , Toshiharu Enomae, Akira Isogai	Japan
8P38	The Chemical Pulping of the Fast Growing Tree - <i>Broussonetia Papyrifera</i> Goushu	<u>Guolin Tong</u> , Yiqing Yang, and Zhongzheng Li	China

8P39	Vibrational Spectroscopic Analysis of Successive Structural Change of Lignin during Alkaline Oxygen Treatment	<u>Minoru Yada</u> , Gyosuke Meshitsuka	Japan
8P40	Lignin Formation in Ray Parenchyma Cell	<u>Kenya Kondo</u> , Takuya Akiyama, Yuji Matsumoto, Gyosuke Meshitsuka	Japan
8P41	Accurate Measurement of Oxygen Consumption during Oxygen-Alkali Treatment of Kraft Lignin, Pulp and Lignin Model Compounds	<u>Aiko Imai</u> , Iori Tomoda, Tomoya Yokoyama, Yuji Matsumoto and Gyosuke Meshitsuka	Japan
8P42	Characteristics of Lignin Structures in MWL Isolation Residue (MWLR)	<u>Aya Fujimoto</u> , Yuji Matsumoto, Hou-min Chang, Gyosuke Meshitsuka	Japan
8P43	Structural Changes in Lignin during Digestion by Termite	<u>Kyoko S. Katsumata</u> , Keeko Hori and Kenji Iiyama	Japan
8P44	Comparative Study of Wood and Pulp Fibres Obtained from Natural Forest and Plantation Aspen Trees	<u>Arnis Treimanis</u> , Uldis Grinfelds, Marite Skute	Latvia
8P45	Antioxidant Glycosides Isolated from <i>Amorpha fruticosa</i> L.	<u>Lee, Hyun-Jung</u> , Hak-Ju Lee, Yeong-Han Kwon, Il-Kwon Park, Sang-Chul Shin, Ha-Young Kang, Don-Ha Choi, and Ki-Hyon Paik	Korea
8P46	Effect of Deuterium Exchange for the Rapid Lignin Structural Analysis by FT-Raman Spectroscopy	<u>Shuichi Murakami</u> Kaori Saito. Kazuhiko Fukusima. and Toshihiro Ona	Japan
8P47	Preparation and Wet-End Performance of Cellobiose-Pendant Polymer	<u>Takefumi Ohta</u> , Shingo Yokota, Takuya Kitaoka, Hiroyuki Wariishi and Toshihiro Ona	Japan
8P48	Structural Characteristics of Cellulose Layer Self-Assembled on Au Surface	<u>Shingo Yokota</u> , Takuya Kitaoka, Junji Sugiyama and Hiroyuki Wariishi	Japan
8P49	Wetting and Morphological Characteristics of Cellulosic Substrates	<u>Kana Matsuyama</u> , Shingo Yokota, Takuya Kitaoka and Hiroyuki Wariishi	Japan
8P50	Process and Application of Manila Copal for Paper Size	Mariluz Sp. Dionglay , Mildred M. Fidel & <u>Irma I. Palanginan</u>	Philippines
8P51	Effects of Protozoa on cell Wall Degradation in Cattle	<u>Natsuki Kasuya</u> , Itsuko Wada, Mimune Shimada, Hiroshi Kawai, and Hisao Itabashi	Japan
8P52	Use of Carbohydrate Binding Modules as Molecular Markers for Mapping Wood and Pulp Fibre Surfaces	<u>Geoffrey Daniel</u> , Lada Filonova, Åsa Kallas, Janne Lehtiö, Lionel Greffe, and Tuula Teeri	Sweden

Session 9 : Biodegradation, preservation of wood, and mushroom production

9P01	Application of Raman Spectroscopy and Doppler Broadening Method of Prompt Gamma-Rays to Analysis of Boron in Wood Treated with Boric Acid Solutions	<u>Shigeru Yamauchi</u> , Yoichi Sakai, Michael Kenya Kubo, Hideaki Matsue, Shuichi Doi	Japan
9P02	Eco-morphological Studies of <i>Laetiporus sulphureus</i> from The Western Ghats of India	<u>M.G.Anand</u>	India
9P03	Cloning of the Fatty Acid Desaturase Genes from White Rot Fungi	<u>Takahito Watanabe</u> , Saeko Tsuda, Taro Yoshida, Takeshi Ougi, Hiroshi Nishimura, Yuko Kawasaki, Yoichi Honda, and Takashi Watanabe	Japan
9P04	A Novel Class of Extracellular Amphipathic Metabolites Produced by a White Rot Fungus, <i>Ceriporiopsis subvermispora</i>	<u>Hiroshi Nishimura</u> , Takahito Watanabe, Yoichi Honda, Takashi Watanabe	Japan
9P05	Structure-function Relationship between Ceriporic Acid B and its Analogues on Inhibitory Effects of Fe ³⁺ Reduction and Hydroxyl Radical Production on the Fenton Reaction.	<u>Yasunori Ohashi</u> , Yoshihiko Kan, Takahito Watanabe, Yoichi Honda, Takashi Watanabe	Japan
9P06	Molucular Analysis of a Glycopeptide Gene from the White-Rot Basidiomycete <i>Phanerochaete chrysosporium</i> that Produces Hydroxyl Radical during Wood Decay	<u>Hiromi Tanaka</u> , Gou Yoshida, Kenta Matsumura, Shuji Itakura, and Akio Enoki	Japan
9P07	Biodegradation of Diethyhexylphthalate by White Rot Fungi	<u>Myungkil Kim</u> , Don-Ha Choi, In-Gyu Choi, Euibae Jeung, Sung-Suk Lee, Hyun Park, Joonweon Choi and Soomin Lee	Korea
9P08	Staining of Extracellular Peroxidase Reaction in the Ligninolytic Cultures of <i>Phanerochaete crassa</i> WD1694	<u>Mariko Takano</u> , Hisashi Abe, and Noriko Hayashi	Japan
9P09	The Ultra-structural Changes of <i>Halocynthia</i> Microcrystalline Cellulose after Enzymatic Degradation	<u>Noriko Hayashi</u> , Tetsuo Kondo	Japan
9P10	Field Tests of Sugi (<i>Cryptomeria japonica</i> D.Don) Round Wood Treated with High-Temperature Liquid Paraffin	<u>Yoshiaki Matsuoka</u> , Shinji Fujiwara , Yasushi Kanagawa	Japan
9P11	Quantitative Determination of Active Ingredients in Wood Preservatives Using Solid-phase Extraction and Liquid Chromatography with Ultraviolet Detection	<u>Teruhisa Miyauchi</u> , Mitsunori Mori	Japan
9P12	Evaluation of the Durability of Domestic Wood from Hokkaido Using Fungus Cellar Testing	<u>Mitsunori Mori</u> , Teruhisa Miyauchi, Tomoaki Sugiyama	Japan

9P13	Possibility of Sustainable Use of Durable Wood Species from the Tropics	<u>Koichi Yamamoto</u> , Ikuo Momohara, Makoto Kiguchi	Japan
9P14	Antifungal and Fruiting-inducing Activities of 3- <i>O</i> -alkyl-D-glucose Derivatives against Basidiomycetes	<u>Takeshi Nishimura</u> , Yumi Magae and Seiji Ohara	Japan
9P15	Bioactive Extract of Teakwood (<i>Tectona grandis</i> L.f.)	<u>Ganis Lukmandaru</u> and Koichi Ogiyama	Japan
9P16	Host Selection of Meshimakobu (<i>Phellinus linteus</i>) to Yamaguwa (<i>Morus bombycis</i>)	<u>Tomoko Kawamura</u> , Sadatoshi Meguro, Shinsaku Kawachi	Japan
9P17	Purification and Properties of Cellulolytic Enzymes from <i>Fomitopsis palustris</i>	<u>Tomoko Shimokawa</u> , Takeshi Nishimura, Hajime Shibuya, Masanobu Nojiri, and Mitsuro Ishihara	Japan
9P18	Decolorization of Wood Blue-Stain by Dual Culture of Basidial Fungi and Blue-staining Fungi	<u>Nam-Seok Cho</u> , Tae-Ho Choi and N. Pashenova	Korea
9P19	The Bioactive of Extract of <i>Dalbergia latifolia</i>	<u>Nobuhiro Sekine</u> and Koichi Ogiyama	Japan
9P20	Distribution of Fire-retardants in Sugi (<i>Cryptomeria japonica</i>) Sapwood Related to Fire Resistance	<u>Hiroshi Matsunaga</u> , Naoya Kitamura, Toshiro Harada, and Makoto Kiguchi	Japan
9P21	Marine Borer Exposure Trial of Non-treated or DDAC-treated Glulam Samples	<u>Masao Yamada</u>	Japan
9P22	Effect of Preservation on Bending Property of Japanese Cedar Pole from Thinning Log	<u>Kazuhiro Shiba</u> , Hiroshi Nakatani and Hiroshi Kurisaki	Japan
9P23	The Effect of Substituent Distribution on the Decay Resistance of Chemically Modified Wood	<u>Naoto Habu</u> , Yoko Nagasawa, Masahiro Samejima, and Tomoko M. Nakanishi	Japan
9P24	Evaluation on the Ligninolytic Enzymes during Biodegradation of Di-Butyl Phthalate by White Rot Fungus, <i>Polyporus brumalis</i>	Ki-Ryeong Park, Soo-Min Lee, <u>Jae-Won Lee</u> , Myung-Kil Kim, In-Gyu Choi	Korea
9P25	Relationship between the Structure of Soil Microbial Community and Lignocellulose Decomposition in a Forest	<u>Miho Matsushita</u> , Satoshi Ito, Sadatoshi Meguro, Shinsaku Kawachi	Japan
9P26	Purification and some Properties of Cellouronate Lyases from <i>Brevundimonas</i> sp. SH203	<u>Naotake Konno</u> , Naoto Habu, Isamu Maeda, Norihiro Azuma, Akira Isogai	Japan
9P27	Storage Effect of the Spent Maitake Mushroom (<i>Grifola frondosa</i>) Culture Medium on its Ethanol Conversion	<u>Takafumi Shimoda</u> , Takayoshi Nakao, Takashi Shirouchi, Kozo Nishibori, Yasushi Morikawa, and Yasuo Odaira	Japan
9P28	Establishment of Quantitative Detection System for Wood Rot Fungi	<u>Sakae Horisawa</u> , Yoh Sakuma, and Shuichi Doi.	Japan
9P29	Development of the Waste-Paper Charcoal Media for White-Rot Fungi	<u>Akito Asano</u> , Takao Imanishi, Takashi Ichihara, Sakae Horisawa	Japan

9P30	Fungi Colonizing Bamboo Used in Exterior Applications: Identification and their Decay Capabilities	<u>Gyu-Hyeok Kim</u> , Jae-Jin Kim, Jong-Bum Ra, Ki Hyon Paik	Korea
9P31	Possible Mechanism for Carbon Metabolism in Relation to Oxalate Biosynthesis in Wood-rotting Basidiomycete <i>Fomitopsis palustris</i>	<u>Takefumi Hattori</u> , Shunsuke Sakai, Tatsunori Nishide, Erman Munir, Kei'ichi Baba, Hiroshi Inui, Yoshihisa Nakano, Tomoki Watanabe, Nobukazu Shitan, Kazufumi Yazaki, and Mikio Shimada	Japan
9P32	Characterization of β -1,3-Glucanases from the White-Rot Fungus <i>Phanerochaete chrysosporium</i>	<u>Rie Kawai</u> , Makoto Yoshida, Kiyohiko Igarashi, Motomitsu Kitaoka, and Masahiro Samejima	Japan
9P33	Enzymatic Properties of Glycoside Hydrolase Family 7 Cellulase from the Brown-Rot Fungus <i>Coniophora puteana</i>	<u>Taira Kajisa</u> , Makoto Yoshida, Kiyohiko Igarashi, and Masahiro Samejima	Japan
9P34	Hydrolysis of Crystalline Cellulose by Glycoside Hydrolase Family 7 Cellobiohydrolases from the Cellulolytic Fungus <i>Trichoderma viride</i> and <i>Phanerochaete chrysosporium</i>	<u>Kiyohiko Igarashi</u> , Masahisa Wada, and Masahiro Samejima	Japan
9P35	Alcohol Oxidase: An Important Source of H ₂ O ₂ During Decay of Cellulose and Wood by the Brown Rot Fungus <i>Gloeophyllum trabeum</i>	<u>Geoffrey Daniel</u> , Lada Filonova, Elena Kubatova and Jindrich Volc	Sweden
9P36	Crosstalk between TCA Cycle and Heme Synthetic Pathway in the Lignin-degrading Fungus <i>Phanerochaete chrysosporium</i>	<u>Daisuke Miura</u> , Motoyuki Shimizu, and Hiroyuki Wariishi	Japan
9P37	Proteomic Profiling of <i>Phanerochaete chrysosporium</i> in Response to Nitrogen Availability	<u>Hiroshi Teramoto</u> , Motoyuki Shimizu, and Hiroyuki Wariishi	Japan
9P38	Proteomic Analysis of <i>Phanerochaete chrysosporium</i> for Enzymes Involved in 2,4-Dichlorophenol Degradation and Associated Responses	<u>Uma Kanta Aryal</u> , Motoyuki Shimizu, Hiroshi Teramoto and Hiroyuki Wariishi	Japan
9P39	Microarray Profiling of Cytochrome P450 Gene Expression in the White-Rot Fungus <i>Phanerochaete chrysosporium</i>	<u>Chie Nakamura</u> , Shinji Hirosue, Nobuhiro Hiratsuka, Shuji Yamada, Masafumi Oyadomari, Yukiko Tsuru, Akira Arisawa, Hiroshi Tsunekawa and Hiroyuki Wariishi	Japan
9P40	Proteomic Analysis of the White-Rot Basidiomycete <i>Phanerochaete chrysosporium</i> Grown in Cellulose Medium	<u>Motoyuki Shimizu</u> , Naoki Yuda, Hiroyuki Wariishi	Japan
9P41	Molecular Characterization of a Fused Protein of P450 and P450 Reductase from the White-Rot Fungus <i>Phanerochaete chrysosporium</i>	<u>Motoyuki Shimizu</u> , Fumiko Matsuzaki, Shinji Hirosue, Akira Arisawa, Hiroshi Tsunekawa, Hiroyuki Wariishi	Japan

9P42

Microbial Pesticide Based on the Wood
Extracts for the Bio-Control of Plant
Pathogens

Jong-Yoon Lee, Bu-Kug Lim, Danny Lee Korea
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