

8 Oct (Thu)			
9:20-9:40		Opening ceremony	
9:40-10:00	O1	Impact of the COVID-19 Pandemic on the Pulp and Paper Industry in Australia	
		<u>Terry McDonald</u>	President, APPITA
10:00-11:10	Session 1-1 (CNF) Chairperson: Ryota Kose, Tokyo University of Agriculture and Technology, Japan		
10:00-10:45 CNF	K1	Nanocelluloses: Their Fundamentals, Applications, and Relationships with Pulp and Paper Industry	
		<u>Akira Isogai</u>	Professor, Department of Biomaterial Sciences, The University of Tokyo, Japan
10:50-11:10 CNF	1	Application of Cellulose Nanofibril in Sodium Acetate Trihydrate Based Phase Change Material for Thermal Energy Storage	
		<u>Zhenghui Shen</u> ^a , <u>Kyudeok Oh</u> ^{b,c} , <u>Martti Toivakka</u> ^c , <u>Hak Lae Lee</u> ^{a,b}	^a College of Agriculture and Life Sciences, Seoul National University, Korea ^b Research Institute of Agriculture and Life Sciences, Seoul National University ^c Laboratory of Natural Materials Technology, Åbo Akademi University, Finland
11:15-12:25	Session 1-2 (CNF, Film and Paper Surface Sizing) Chairperson: Hak Lae Lee, Seoul National University, Korea		
11:15-11:35 CNF	2	Characterization of Phosphorylated CNFs Prepared from Various Native Celluloses	
		<u>Mengchen Zhao</u> ^{a,b} , <u>Yuichi Noguchi</u> ^a , <u>Shuji Fujisawa</u> ^b , <u>Tsuguyuki Saito</u> ^b	^a CNF R&D Center, Oji Holdings Co., Ltd., Japan ^b Department of Biomaterial Sciences, The University of Tokyo, Japan
11:40-12:00 Film	3	Comparisons of Lignocellulose Thin-film Fabricated by Coagulation and Hydrogen-bonding	
		<u>Eun Ji Seo</u> ^a , <u>Ji-Ae Ryu</u> ^a , <u>Won Hee Lee</u> ^b , <u>Jung Myoung Lee</u> ^b	^a Department of Wood Science and Technology, Kyungpook National University ^b Department of Wood Science and Technology, School of Forestry, Science and Landscape Architecture, Kyungpook National University, Korea.
12:05-12:25 Paper Surface Sizing	4	Preparation of Dialdehyde Starch and Application on Paper Surface Sizing	
		<u>Gwo Chao Ben</u> , <u>Perng Yuan Shing</u> , <u>Hsiao Meng Guan</u> , <u>Liu Jian Ting</u>	Department of Forestry, National Chung Hsing University, Taiwan
12:25-13:30		Lunch break	
13:30-15:05	Session 2-1 (Chemical Pulp and Technical Education) Chairperson: Agusta Samodra Putra, Indonesian Institute of Sciences, Indonesia		
13:30-14:15 Chemical Pulp	K2	RIAUPULP Quality Mind Set and Operational Management/Coordination	
		<u>Azka Aman</u> ^a , <u>Dompok M. Siregar</u> ^b , <u>Eduward Ginting</u> ^c	^a Departement of April Learning Institute, APRIL-Kerinci, Indonesia ^b Departement of Technical Pulp, RIAUPULP, APRIL-Kerinci, Indonesia ^c Chief Operation Officer APRIL-Kerinci, Indonesia
14:20-14:40 Technical Education	5	Pulp and Paper Technology in Indonesia: Education, Research, and Safety Program	
		<u>Evelyn</u> ^a , <u>Azka Aman</u> ^b , <u>Chairul</u> ^a , <u>Yusnimar</u> ^a , <u>Sunarno</u> ^a , <u>David Andrio</u> ^a , <u>Hiroshi Ohi</u> ^c	^a Department of Chemical Engineering, Faculty of Engineering, University of Riau ^b APRIL Learning Institute, PT. Riau Andalan Pulp and Paper, Indonesia ^c Faculty of Life and Environmental Sciences, University of Tsukuba, Japan
14:45-15:05 Dissolving Pulp	6	Effects of Soluble Anthraquinone Application on Prehydrolysis Soda and Kraft Cooking for <i>Acacia crassicarpa</i> Biorefinery	
		<u>Syelvía Putri Utami</u> ^{a,b} , <u>Mouylin Chem</u> ^a , <u>Keishi Tanifuji</u> ^a , <u>Akiko Nakagawa-Izumi</u> ^a , <u>Evelyn</u> ^b , <u>Hiroshi Ohi</u> ^a	^a Graduate School of Life and Environmental Sciences, University of Tsukuba ^b Faculty of Engineering, University of Riau, Indonesia
15:05-15:25		Coffee break	
15:25-17:00	Session 2-2 (Pulp, Non-Wood and Composites) Chairperson: Shiho Takahashi, Forestry and Forest Products Research Institute, Japan		
15:25-15:45 Chemical Pulp	7	Residual Content of 2-Methylanthraquinone in Eucalyptus Pulp Obtained from Kraft Cooking with a Natural Anthraquinone Derivative	
		<u>Yulia Anita</u> ^{a,b} , <u>Agusta Samodra Putra</u> ^{a,b} , <u>Keishi Tanifuji</u> ^b , <u>Akiko Nakagawa-Izumi</u> ^b , <u>Evelyn</u> ^c , <u>Hiroshi Ohi</u> ^b	^a Research Centre for Chemistry, Indonesian Institute of Sciences, Indonesia ^b Graduate School of Life and Environmental Sciences, University of Tsukuba ^c Faculty of Engineering, University of Riau, Indonesia

15:50-16:10 Non-wood	8	The Development of Seed Fiber of <i>Ceiba speciosa</i> for New Material of Papermaking	
		<u>Chang Chien Cheng Yu</u> , Perng Yuan Shing, Hsiao Meng Guan, Liu Jian Ting	Department of Forestry, National Chung Hsing University, Taiwan
16:15-16:35 Composites	9	Characteristics of CNF/Epoxy Composites with Different Properties of CNF and CNF Sheets	
		<u>Shin Young Park</u> ^a , Simyub Yook ^{a,b} , Sooim Goo ^{a,c} , Hye Jung Youn ^{a,b,c}	^a College of Agriculture and Life Sciences, Seoul National University, Korea ^b Research Institute of Agriculture and Life Sciences, Seoul National University ^c Department of Agriculture, Forestry and Bioresources, College of Agriculture and Life Sciences, Seoul National University
16:40-17:00 Non-wood	10	Verification of Technologies for Producing Mechanical Pulp from Oil Palm Empty Fruit Bunch in Indonesia	
		<u>Evi Oktavia</u> ^a , Saeki Nobuaki ^b , Ryoji Hidaka ^b , Sinichiro Takeda ^c , Teddy Kardiyansyah ^a , Renan Raimundus ^d , Saku Ueda ^e , Masayasu Kamijo ^e	^a Center for Pulp and Paper, Ministry of Industry, Indonesia ^b PIC, Co. Ltd, Japan ^c Curogo, Co. Ltd, Japan ^d Yamada Consulting, Singapore ^e Taizen, Co. Ltd., Japan
17:00-21:00		Dinner break	
21:00-22:10		Session 3-1 (Non-Wood and Lignin) Chairperson: Akiko Nakagawa-Izumi, University of Tsukuba, Japan	
21:00-21:20 (EST8:00-) Non-wood	11	Alternative Chemical Pulping of Non-wood and Integration with Biorefinery Concept	
		M Sarwar Jahan ^{a,b} , M. Mostafizur Rahman ^a , <u>Yonghao Ni</u> ^b	^a Pulp and Paper Research Division, Bangladesh Council of Scientific and Industrial Research, Bangladesh ^b Limerick Pulp and Paper Centre, University of New Brunswick, Canada
21:25-21:45 Lignin	12	Improvement of Delignification Selectivity in Prebleaching Process by Application of Manganese Dioxide	
		Shirong Sun ^a , Takuya Akiyama ^b , <u>Tomoya Yokoyama</u> ^a , Yuji Matsumoto ^a	^a Laboratory of Wood Chemistry, Department of Biomaterial Sciences, Graduate School of Agricultural and Life Sciences, The University of Tokyo ^b Forestry and Forest Products Research Institute, Japan
21:50-22:10 Lignin	13	Preparation of Softwood Soda Lignin-based Water Reducer for Concrete	
		<u>Shiho Takahashi</u> , Tatsuhiko Yamada	Forestry and Forest Products Research Institute, Japan
22:15-23:00		Session 3-2 (Lignin) Chairperson: Tomoya Yokoyama, The University of Tokyo, Japan	
22:15-22:35 Lignin	14	Current Status of Lignin Based Dispersant and Flocculant Productions	
		<u>Pedram Fatehi</u>	Biorefining Research Institute, Lakehead University, Canada
22:40-23:00 (-EST10:00) Lignin	15	Differences between SW and HW Kraft Lignin and Potential for Application. Application of lignins in phenol formaldehyde adhesive	
		Xiao Jiang, Fangda Zhang, Jing Du, <u>Hasan Jameel</u> , Hou-min Chang	Department of Forest Biomaterials, North Carolina State University, USA
9 Oct (Fri)			
9:00-10:10		Session 4-1 (Paper Industry and Tissue Paper) Chairperson: Evelyn, University of Riau, Indonesia	
9:00-9:45 (EST20:00-) Paper Industry	K3	Global Dynamics of the Pulp and Paper Industry - 2020	
		Richard B. Phillips	Adjunct Professor, Forest Biomaterials, College of Natural Resources, North Carolina State University, USA
9:50-10:10 Tissue Paper	16	Understanding the Effect of Fiber Features and Creping Process on the Performance and Value of Tissue Paper	
		<u>Hasan Jameel</u> ^a , Ronalds Gonzalez ^a , Tiago de Assis ^b , Clay Cambell ^b , Lee Reisinger ^c , Dale Kavalew ^d	^a North Carolina State University, USA ^b Kemira, ^c ReiTech Inc, ^d Dale Kavalew and Associates
10:15-11:25		Session 4-2 (Paper Drying, Packaging and Paper Machine) Chairperson: Takanori Miyanishi, Japan TAPPI, Japan	
10:15-10:35 Paper Drying	17	Drying Stress Development of Styrene/acrylate Latex Films and Implication in Inkjet Coating Layer	
		SangGil Lee ^a , Sunhyung Kim ^b , <u>Hak Lae Lee</u> ^c	^a Yuhan-Kimberly Co. Ltd. ^b Drying PJT, Platform Technology. Corporate R&D, LG Chem. Ltd. ^c Research Institute of Agriculture and Life Sciences, Korea

10:40-11:00 Paper-based Packaging	18	Proposal of Novel Paper-based Packaging Materials such as SILBIO EZ SEAL, SILBIO BARRIER	
		<u>Shinichi Kirita</u> , Yasutomo Noishiki, Tomofumi Isozaki, Masahiro Tsuruhara, Yuta Shyamoto, Miyoko Tanaka	Packaging Innovation Center, Oji Holdings Co., Ltd., Japan
11:05-11:25 Paper Machine	19	Causal Factor Analysis of Winder Vibration with the Technique of MSTFT Analysis	
		<u>Kohei Fujita</u> , Junji Yamamoto, Katsumasa Ono	Research Laboratory, Research & Development Division, Nippon Paper Industries Co., Ltd., Japan
11:25-13:00		Lunch break	
13:00-14:10		Session 5 (Properties, Coating and Paper-based Sensor) Chairperson: Tsuguyuki Saito, The University of Tokyo, Japan	
13:00-13:20 Paper Properties	20	Effect of Kneading Operating Parameters on Fibrillation of Organosolv Pulp	
		<u>Sa Rang Choi</u> ^a , Kang-Jae Kim ^b , Tae-Jin Eom ^b , Jung Myoung Lee ^b	^a Department of Wood Science and Technology, Kyungpook National University ^b Department of Wood Science and Technology, School of Forestry, Science and Landscape Architecture, Kyungpook National University, Korea
13:25-13:45 Paper Properties	21	Effect of Simultaneous Increase in Basis Weight and Beating Degree on Basic Properties of Paper	
		<u>Ryota Inoue</u> ^a , Gentiane Venture ^b , Ryota Kose ^a	^a Graduate School of Agriculture, Tokyo University of Agriculture and Technology ^b Institute of Engineering, Tokyo University of Agriculture and Technology, Japan
13:50-14:10 Paper Coating	22	New Method to Quantify Morphological Structure of Latex Binder in Pigment Coating Layer	
		<u>Jee-Hong Lee</u> ^a , Hak Lae Lee ^{a,b}	^a Department of Forest Sciences, College of Agriculture and Life Sciences, Seoul National University, Korea ^b Research Institute of Agriculture and Life Sciences, Seoul National University
14:15-14:35 Paper-based Sensor	23	A Study of Paper-based Sensor with Assistance of Paper-based Heater for Detection of Residual Pesticides through Colour Change	
		<u>Khiev Kimnannara</u> ^a , Xiaqing Du ^a , Toshiharu Enomae ^a	^a Graduate School of Life and Environmental Sciences, University of Tsukuba, Japan
14:35-14:55		Coffee break	
14:55-16:30		Session 6 (Pulp, Lignin and Bleaching) Chairperson: Tsutomu Ikeda, Forestry and Forest Products Research Institute, Japan	
14:55-15:15 Mechanical Pulp	24	High Brightness Mechanical Pulp from Eucalyptus Planted Trees	
		<u>Takanori Miyanishi</u>	Japan TAPPI
15:20-15:40 Chemical Pulp	25	Optimization of Wood Chips Mixture	
		<u>Kukjin Yoon</u> , Hiroshi Ougiya	Pulp Section, Pulp Production Department, MPM Operation Co., Ltd., Japan
15:45-16:05 Lignin	26	Revisiting Condensation Reaction of Lignin in Alkaline Cooking Process on the Basis of Quantification	
		<u>Toshihiro Komatsu</u> ^a , Takuya Akiyama ^b , Tomoya Yokoyama ^a , Yuji Matsumoto ^a	^a Laboratory of Wood Chemistry, Department of Biomaterial Sciences, Graduate School of Agricultural and Life Sciences, The University of Tokyo ^b Forestry and Forest Products Research Institute, Japan
16:10-16:30 Pulp Bleaching	27	Yield Increment of Hardwood ECF Bleached Pulp by Addition of Peroxymonosulfuric Acid	
		<u>Keishi Tanifuji</u> ^a , Agusta Samodra Putra ^a , Taisuke Nakahira ^b , Katsuyuki Murai ^b , Hiroshi Ohi ^a	^a Graduate School of Life and Environmental Sciences, University of Tsukuba ^b Tokyo Research Laboratory, Mitsubishi Gas Chemical, Japan
16:30-16:40		Closing ceremony	