Asia and Africa Science Platform Program, Establishment of Collaboration Research for 'Neo-Fiber Technology' in Asia and Africa+ Seminar Series 10

And

Annual Report Meeting for 'Neo-Fiber Technology' Project 2016-2017

Program

16th March

9:30-9:40 Welcome Hajime MORI, Vice-President of Kyoto Institute of Technology

9:40-11:40 Chair: Tetsuya SATO, Kyoto Institute of Technology

Wool Re-fashioned

Vien CHEUNG, University of Leeds, UK

Advanced Compression Textiles for Physiotherapy and Performance Enhancement Rong LIU, The Hong Kong Polytechnic University, China

Perception of Color of Clothing Saori KITAGUCHI, Kyoto Institute of Technology, Japan

Turkish Textile Industry, Towel Production and Preferences by Users *Yuksel IKIZ, Pamukkale University, Turkey*

11:40-13:00 Lunch time

13:00-14:40 Chair: Hiroshi URAKAWA, Kyoto Institute of Technology

Oxygen Permeability and Mechanical Properties of Carboxylated Nanocellulose Films with Various Counter-ions *Michiko SHIMIZU, Kyoto Institute of Technology, Japan*

The Importance of Age Dependence Differences in The Crystal Structures of Cellulose for Physical Properties of Bamboo.

Yoko OKAHISA, Kyoto Institute of Technology, Japan

Enzymatic Functionalization of Natural and Synthetic Fabrics Fusako KAWAI, Kyoto Institute of Technology, Japan

Synthesis and Fiber Formation of The Copolymers Consisting of Poly(L-lactide) and Polyether *Kazunari MASUTANI*, *Kyoto Institute of Technology, Japan*

Degradation Analysis of Polyester Fiber by Spin-Trapping Method with Supercritical Carbon Dioxide Wataru SAKAI, Kyoto Institute of Technology, Japan

14:40-14:50 Group photo

14:50-15:50 Chair: Vien CHEUNG, University of Leeds

Poly (lactic acid)/Polyamid 11 Binary Bio-based Composites for Meltblown Nonwovens: Morphology, Crystallization, Thermal Behaviors *Bin YU, Zhejiang Sci-Tech University, China*

Challenges in The Production of A Vinyl Monomer Itaconic Acid by Metabolically Engineered Bacteria *Yuji ASO, Kyoto Institute of Technology, Japan*

15:50-16:10 Refreshment time

16:10-17:40 Poster presentation

18:00-19:30 Party at KIT guesthouse, Kosen Kaikan

17th March

10:30-12:00 Chair: Yuksel IKIZ, Pamukkale University

Functional Electrospun Nanofibrous Materials Bin DING, Donghua University, China

Micro and Nanofibrous Structures Viewed by A Mechanical Engineer: Experimental Characterization and Constitutive Modeling.

Andri ANDRIYANA, University of Malaya, Malaysia

Preparation and Applications of Functional Fibers Using Quaternary Ammonium Salt and Ag Nanoparticles *Jaewoong LEE, Yeungnam University, Korea*

12:00-13:30 Lunch time

13:30-15:00 Chair: Hideki YAMANE, Kyoto Institute of Technology

Bioplastic Fiber from Poly(lactic acid) and Poly(butylene succinate) Reinforced with Graphene *Prasit PATTANANUWAT, Chulalongkorn University, Thailand*

Enhancing Textile Performance Using Plasma *Bahira GABR*, *Helwan University*, *Egypt*

Evaluation of Whiteness in Case of Highly Tinted White Materials *Michal VIK, Technical University of Liberec, Czech*

15:00-15:20 Refreshment time

15:20-16:40 Chair: Saori KITAGUCHI, Kyoto Institute of Technology

Drug Release from Polylactide Nanofibers Spun by Laser-Heated Electrospinning *Midori TAKASAKI, Kyoto Institute of Technology, Japan*

Preparation and Evaluation of Heat-Sealed Composite Films of Polypropylene (PP) Film with PP Mesh Sheet *Kazushi YAMADA, Kyoto Institute of Technology, Japan*

Structure and Properties of The Segmented PLLA/PDLA Blend Melt-spun Fibers *Masaki YAMAMOTO, Kyoto Institute of Technology, Japan*

Novel Dyeing Technique and Functional Treatment as Applied to Polyester Fibres *Hidekazu YASUNAGA*, *Kyoto Institute of Technology, Japan*

16:40-16:50 Closing remarks Hiroshi URAKAWA, Director of The Center for Fiber and Textile Science, Kyoto Institute of Technology, Japan

Poster Presentation (16:10-17:40, 16th March)

- P-1 Development of Controlled Release Fertilizers Utilizing The Hydrodegradability of Poly(lactic acid)
 - Hiroaki MORI, Jin Ho SEOK, Masaki YAMAMOTO, Kazunari MASUTANI, Yoshiharu KIMURA, Hideki YAMANE (Kyoto Institute of Technology, Japan)
- P-2 Effect of The Molecular Weight on The Thermal Property of PLLAs and PLLA/PDLA Blends Esraa El-KHODARY, Ling Ling ZHOU, Masaki YAMAMOTO, Kazunari MASUTANI, Yoshiharu KIMURA, Hideki YAMANE (Kyoto Institute of Technology, Japan)
- P-3 Melt Spinning and Fiber Properties of Multi Stereo-block Poly(lactide)s with Various Block Lengths Yohanes Windu WIDHIANTO, Masaki YAMAMOTO, Kazunari MASUTANI, Yoshiharu KIMURA, Hideki YAMANE (Kyoto Institute of Technology, Japan)
- P-4 Synthesis and Characterization of Segmented Polyurethanes Consisting of Oligolactides and Polyols

 Jin Ho SEOK, Masaki YAMAMOTO, Kazunari MASUTANI, Yoshiharu KIMURA, Hideki YAMANE (Kyoto Institute of Technology, Japan)
- P-5 Formation of Core-shell Microfibers by Means of The Melt Electrospinning

 Huaizhoug XU, Bendiet BAUER, Masaki YAMAMOTO, Hideki YAMANE (Kyoto Institute of Technology, Japan)
- P-6 Water Modulated Brittle-elastic Alterations for DNA-derived Films Hidetaka MAKINO, Takashi AOKI (Kyoto Institute of Technology, Japan)
- P-7 Addition of Spin-trapping Reagent into FiberMaterials Using Supercritical Carbon Dioxide and Analysis of Degradation Reaction

 Erdenesaikhan BATMUNKH, Rina TAMAI, Kenji KINASHI, Wataru SAKAI, Naoto TSUTSUMI, and Satoko OKUBAYASHI (Kyoto Institute of Technology, Japan)
- P-8 Crystal Structure of *Thermobifida Alba* Cutinase Complexed with Bioplymers. Kengo KITADOKORO¹, Mizuki KAKARA¹, Shingo MATSUI¹, Ryouhei OSOKOSHI¹, Kensuke NAKATA¹ and Shigeki KAMITANI² (1)Kyoto Institute of Technology, Japan, 2)Osaka Prefecture University, Japan)
- P-9 Colorchangeable Sensorial Fibres, Fastness and Dynamic Properties *Viková*, *M.*, *Vik*, *M.* (*Technical University of Liberec*, *Czech*)
- P-10 Comfort Features of Multi-layered Luxicool Plain Woven Fabrics

 Gülşah1SARIKAYA¹, Yüksel IKIZ² (1)Beykent University, Turkey,2)Pamukkale University,

 Turkey)
- P-11 Evaluation of The Relation between Wrinkle Recovery Angle and Tensile Strength of Linen Woven Fabrics Treated with 1,2,3,4-Butanetetracarboxylic Acid (BTCA)

 Buket ARIK, Arzu YAVAS, Ozan AVINC (Pamukkale University, Turkey)

- P-12 Flame Retardancy Properties of Cotton Fabric Treated with Acrylate-based Polymer Paste Containing Huntite-hydromagnesite Mixture

 Nurhan Onar CAMLIBEL¹, Ozan AVINC¹, <u>Buket ARIK</u>¹, Arzu YAVAS¹, Ismail YAKIN² (1)

 Pamukkale University, Turkey 2)Setas Company, Turkey)
- P-13 Color Properties of Bamboo Fabric Printed with Reactive Printing Paste Containing UV Absorber

 Arzu YAVAS, Ozan AVINC, Ece KALAYCI, Buket ARIK (Pamukkale University, Turkey)
- P-14 Water-oil Repellent Treatment of Viscose Fabric with Microwave Irradiation Arzu YAVAS, Ece KALAYCI, <u>Ozan AVINC</u>, Buket ARIK, Arif CALISKAN, Berk Ediz BÖREKCI, Ali HACIALI (Pamukkale University, Turkey)
- P-15 Novel Colouration Technique for Silk Fabrics by Utilising Oxidation of Polyphenols *Kaito OKADA, Takanori MATSUBARA (College of Industrial Technology, Japan)*
- P-16 Hair Colouring by Utilising Chemical Oxidation of Tea Extracts

 Katsuki WATANABE, Chihiro SAKURAI, Takanori MATSUBARA (College of Industrial Technology, Japan)
- P-17 The Relationships between The Degree of Hair Damage and Suppression Effect on Hair Photodamage by Treating with Bio-Reductants

 Aya SHOMURA, Hidekazu YASUNAGA (Kyoto Institute of Technology, Japan)
- P-18 Improvement in Dyeability of UHMWPE Fiber Using Supercritical CO₂

 <u>Jaehyuk MA</u>, Satoko OKUBAYASHI (Kyoto Institute of Technology, Japan)