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特集〈次世代を担う若手研究者たち1〉

||| 報 文 ||| Original Articles



2014 Vol.70

7

東京農工大学大学院・生物システム応用科学府
物質機能システム学専修 物質機能設計分野

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研究分野: 有機材料化学 高分子化学

キーワード: 特殊構造ポリマー 有機半導体 フォトリフラクティブ材料

概要

多機能多相系有機材料を指向したブロックやグラフト共重合体の設計合成を行っている。ポリマーの一次構造を制御することで、ミクロ相分離構造に代表される多相な高次構造を形成させ、それに伴う高分子材料の高機能化、高性能化を目指しています。特に有機半導体関連の材料を研究対象としています。

有機半導体(光導電性材料)のナノ構造制御の必要性

高性能化に伴う材料への要求

- ・単一相系から多相系へ(機能分離型)
- ・アモルファスから規則性へ(移動度の向上)

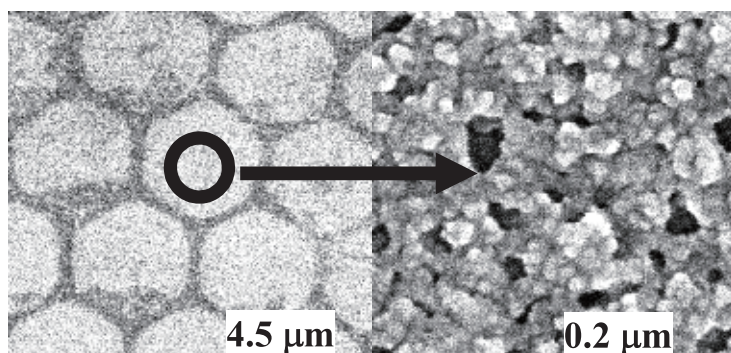
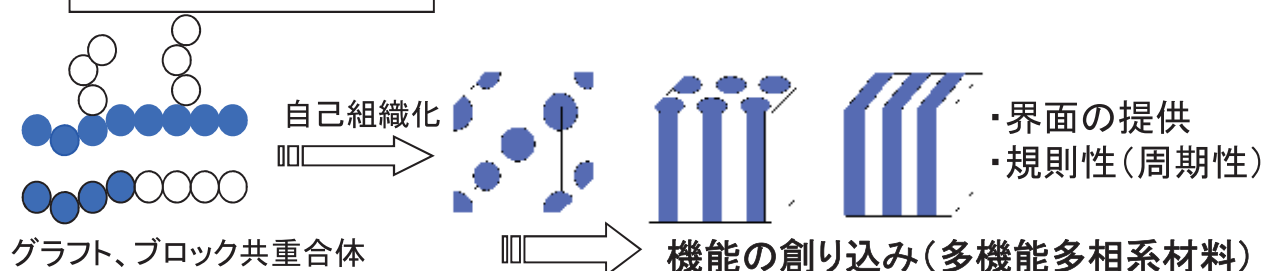


高分子の自己組織性を利用した
ナノ構造制御(ボトムアップ方式)

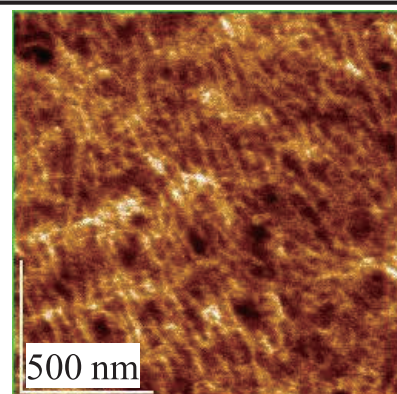
応用例

- ・電子写真
- ・有機EL素子
- ・有機トランジスタ
- ・光電変換素子
- ・フォトリフラクティブ素子 等

ナノ構造制御の手法



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平成 27 年度

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第 2 期

履修生募集

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詳しくは、本プログラムホームページ「募集要項」をご確認ください。

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本書の内容

はじめに

第 1 章 背広服（スーツ）の「着心地」を数値化するには

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教授 西松 豊典

- 1.1 はじめに
- 1.2 服飾史に見る背広服
- 1.3 「着心地 (clothing comfort)」とは
- 1.4 背広服上衣の「着心地」を数値化するには
 - 1.4.1 「着心地」の官能検査方法
 - 1.4.2 上着着用時の衣服圧と「着心地」との関係について
 - 1.4.3 上着着用時の筋活動量と「着心地」との関係について
- 1.5 おわりに

第 2 章 「快適性 (心地)」を評価する官能検査とは

……信州大学 繊維学部 先進繊維工学課程
教授 西松 豊典

- 2.1 人間快適工学とは
 - 2.2 感性情報とは
 - 2.3 視覚と触知覚について
 - 2.3.1 感覚、知覚、認知とは
 - 2.3.2 Weber-Fechnerの精神物理法則とStevensの指数則
 - 2.3.3 視覚 (visual sensation) について
 - 2.3.4 触知覚 (haptics) について
 - 2.4 官能検査を行うには
 - 2.4.1 官能検査とは
 - 2.4.2 官能検査の特徴
 - 2.4.3 被験者の判定能力をどのようにして検定するか？
 - 2.4.4 パネル (被験者)
 - 2.4.5 官能検査の環境について
 - 2.4.6 評価形容語
 - 2.4.7 官能検査におけるデータの性質
 - 2.4.8 官能検査に用いる手法について
 - 2.5 製品の「快適性」に関する官能検査の手順
 - 2.6 課 題
- #### 第 3 章 シミュレーション
- ……信州大学 繊維学部 感性工学課程
教授 乾 滋
- 3.1 シミュレーションとは

- 3.1.1 シミュレーションとコンピュータ
- 3.1.2 アナログコンピュータ
- 3.1.3 デジタルコンピュータ
- 3.1.4 シミュレーションの要素
- 3.2 テキスタイル・衣服のシミュレーション
 - 3.2.1 衣服シミュレーションのモデル
 - 3.2.2 テキスタイルシミュレーションのモデル
 - 3.2.3 シミュレーションのための人体形状計測
 - 3.2.4 布の力学特性計測
 - 3.2.5 シミュレーションの利用例

第 4 章 生理的機能量の測定

……信州大学 繊維学部 先進繊維工学課程
准教授 金井 博幸

- 4.1 はじめに
- 4.2 生理的機能量とその役割
- 4.3 生理的機能量の分類
- 4.4 心電図
 - 4.4.1 心電図とは
 - 4.4.2 測定方法
 - 4.4.3 解析方法
- 4.5 脳 波
 - 4.5.1 脳波とは
 - 4.5.2 測定方法
 - 4.5.3 解析方法
- 4.6 筋電図
 - 4.6.1 筋電図とは
 - 4.6.2 測定方法
 - 4.6.3 解析方法

第 5 章 繊維製品の物理量を測定するには

……信州大学 繊維学部 先進繊維工学課程
教授 木村 裕和

……(5.6 嗅覚に関連する物理量の測定)
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准教授 金井 博幸

- 5.1 はじめに
- 5.2 測定とは (感度、精度、有効数字、測定回数)
- 5.3 触知覚に関連する物理量 (機械的性質) の測定
 - 5.3.1 引張り特性
 - 5.3.2 圧縮特性
 - 5.3.3 曲げ特性
 - 5.3.4 摩擦・摩擦特性
 - 5.3.5 破裂強度

- 5.4 触知覚に関連する物理量 (機能的特性) の測定
 - 5.4.1 吸水・吸湿性
 - 5.4.2 はっ水性
 - 5.4.3 通気性
 - 5.4.4 温冷特性
- 5.5 視覚に関連する物理量の測定
 - 5.5.1 シワ評価
 - 5.5.2 ドレープ性
 - 5.5.3 ピリング性
 - 5.5.4 寸法変化
 - 5.5.5 色の表示
 - 5.5.6 光沢評価
- 5.6 嗅覚に関連する物理量の測定
 - 5.6.1 繊維製品の消臭加工認定試験の概要
 - 5.6.2 消臭加工認定試験の手順
- 5.7 工業規格類を利用する際の留意事項

第 6 章 繊維製品の「心地」と物理量の関係は多変量解析で

……信州大学 繊維学部 先進繊維工学課程
教授 西松 豊典

- 6.1 はじめに
 - 6.2 相関分析とは
 - 6.2.1 相関係数とは
 - 6.2.2 相関係数に対する仮説検定
 - 6.2.3 具体例 (相関係数の検定)
 - 6.3 主成分分析
 - 6.3.1 主成分分析とは
 - 6.3.2 主成分分析モデル
 - 6.3.3 主成分分析と因子分析の違い
 - 6.3.4 主成分分析の手順について
 - 6.3.5 主成分の導出について
 - 6.3.6 応用例
 - 6.4 重回帰分析
 - 6.4.1 重回帰分析とは
 - 6.4.2 重回帰分析の手順
 - 6.4.3 応用例
- 索 引

予告 2014 年 8 月発刊！

最新テキスタイル工学 II

— 繊維製品に用いられている糸、布とは —

【主 内 容】 繊維製品、繊維原料、紡績工学、ナノファイバー、製布工学、染色加工仕上げ、衣服の設計と生産、洗濯による効果

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目 次

繊維と工業(Reviews and News)

- 【時 評】 若手研究委員会…………… 宝田 亘 … P-215
- 【特 集】 〈次世代を担う若手研究者たち 1〉
- 「がんばる若手研究者」
- セルロースナノファイバーの基礎物性と構造体形成…………… 齋藤 継之 … P-216
- 機能性シルクフィブロイン材料の創製…………… 橋本 朋子 … P-219
- 「最近の博士論文より」
- 高分子材料における周期的なクレージング現象の制御および応用…………… 内藤 圭史 … P-223
- In-Situ Observations of Structural Formation Prior to Flow-Induced Crystallization
…………… Yunfeng Zhao … P-229
- 【連 載】 〈溶融紡糸の原点〉
- 溶融紡糸の原点(4)…………… 小野 輝道 … P-232
- 〈文化の伝承－祭り－ 9〉
- 能楽とは…………… 谷口 雅彦 … P-237
- 【繊維学会創立70周年記念連載】 〈技術が支えた日本の繊維産業－生産・販売・商品開発の歩み－11〉
- 「化合繊維工業の歩み(4)」 ポリエステル編(上)…………… 松下 義弘 … P-242
- 【海外ニュースレター】…………… P-255
- 【議 事 録】 一般社団法人 繊維学会平成 26 年度通常総会報告…………… P-257
- 一般社団法人 繊維学会第 655 回理事会議事録(抜粋)…………… P-274
- 一般社団法人 繊維学会平成 26 年度通常総会(議事録)…………… P-274
- 一般社団法人 繊維学会第 656 回臨時理事会(議事録)…………… P-274

報 文(Original Articles)

- 【一般報文】 Flow-Orientation of Internal Structure and Anisotropic Properties on Hydrogels
Consisted of Imogolite Hollow Nanofibers
…………… Keisuke Kaneda, Keisuke Uematsu, Hiroyasu Masunaga, Yoichi Tominaga,
Kiyotaka Shigehara, and Kazuhiro Shikinaka … 137
- 媒染染色した綿布と羊毛布のエタンチオール消臭速度…………… 雨宮 敏子・仲西 正 … 145
- 各種還元剤による処理毛髪のア結晶変性挙動
…………… 上甲 恭平・高橋 洋・武田 靖史・大崎 敦士 … 152
- 吸放湿繊維材料の水蒸気及び熱移動に関する赤外熱画像による可視化と数値解析
…………… 荻野 毅・田中 宏史 … 160

Journal of the Society of Fiber Science and Technology, Japan

Vol. 70, No. 7 (July 2014)

Contents

[Reviews and News]

〈Foreword〉

Young Scientist Committee Wataru TAKARADA ... P-215

〈Special Issue of Young Scientists (1)〉

“Active Young Researchers in Fiber and Textile Fields”

Cellulose Nanofibers: Fundamental Properties and Structures Formation

..... Tsuguyuki SAITO ... P-216

Studies on Functional Silk Fibroin-Based Biomaterials Tomoko HASHIMOTO ... P-219

“From Recent Doctoral Thesis”

Application and Control of Periodic Crazing for Polymer Materials Keishi NAITO ... P-223

In-Situ Observations of Structural Formation Prior to Flow-Induced Crystallization

..... Yunfeng ZHAO ... P-229

〈Series on Origin of Melt-Spinning Technology〉

Origin of Melt-Spinning Technology (4) Terumichi ONO ... P-232

〈Series of Cultural Tradition Associated with Festivals 9〉

What is ‘Noh Play’? Masahiko TANIGUCHI ... P-237

〈Series of Historical Reviews of Japanese Textile Industry Supported by the Technology

– History of the Production, Sales, and Product Development–11〉

Progress of Synthetic Fiber Industries (4) Yoshihiro MATSUSHITA ... P-242

〈Foreign News Letter〉 P-255

〈Minutes〉

Report of an Ordinary General Meeting (2014) P-257

Summary of 655th Sen'i Gakkai Board of Directors P-274

Summary of an Ordinary General Meeting (2014) P-274

Summary of 656th Sen'i Gakkai Board of Directors P-274

[Original Articles]

〈Transactions〉

Flow-Orientation of Internal Structure and Anisotropic Properties on Hydrogels Consisted of

Imogolite Hollow Nanofibers

..... Keisuke KANEDA, Keisuke UEMATSU, Hiroyasu MASUNAGA,
Yoichi TOMINAGA, Kiyotaka SHIGEHARA, and Kazuhiro SHIKINAKA ... 137

Deodorization Rate for Ethanethiol by Mordant-Dyed Cotton and Wool Fabrics

..... Toshiko AMEMIYA and Tadashi NAKANISHI ... 145

Alpha Crystal Denaturation Behavior of Human Hairs Treated by the Different Reducing Agents

..... Kyohei JOKO, Hiroshi TAKAHASHI, Yasushi TAKEDA, and Atsushi OSAKI ... 152

Experimental Study on Heat and Water-Vapor Transfer in a Moisture Adsorbing/Desorbing,
Heat-Generating Fiber Material by Thermal Visualization Using an Infrared Thermography
and These Numerical Analysis Takeshi OGINO and Hiroshi TANAKA ... 160

Sen'i Gakkaishi

(Journal of the Society of Fiber Science and Technology, Japan)

Vol.70 No.7

July 2014

CONTENTS OF ORIGINAL ARTICLES EDITION

[Transactions]

- Flow-Orientation of Internal Structure and Anisotropic Properties on Hydrogels Consisted of Imogolite Hollow Nanofibers
..... Keisuke Kaneda, Keisuke Uematsu, Hiroyasu Masunaga, Yoichi Tominaga, Kiyotaka Shigehara, and Kazuhiro Shikinaka ... 137
- Deodorization Rate for Ethanethiol by Mordant-Dyed Cotton and Wool Fabrics
..... Toshiko Amemiya and Tadashi Nakanishi ... 145
- Alpha Crystal Denaturation Behavior of Human Hairs Treated by the Different Reducing Agents
..... Kyohei Joko, Hiroshi Takahashi, Yasushi Takeda, and Atsushi Osaki ... 152
- Experimental Study on Heat and Water-Vapor Transfer in a Moisture Adsorbing/Desorbing, Heat-Generating Fiber Material by Thermal Visualization Using an Infrared Thermography and These Numerical Analysis Takeshi Ogino and Hiroshi Tanaka ... 160

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繊維学会誌「繊維と工業」では学会創立 70 周年記念事業の一環として本年 9 月号を記念号として特別な誌面で構成することを計画しております。9 月号は ISF2014 開催に合わせて発刊され、「報文」では当該号を英文特集とさせていただきます。このため 8 月号以降で一部受理日と掲載順が一致しないケースが生じますが、何卒ご理解をいただきますようお願い申し上げます。

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開催年月日	講演会・討論会等開催名(開催地)	掲載頁
26. 8. 27(水) 28(木)	第 27 回におい・かおり環境学会(東京都・文京学院大学 本郷キャンパス 仁愛ホール)	A31
8. 30(土) 9. 6(土)	平成 26 年度「産業資材用高性能・高機能繊維の基礎と応用」講座大阪会場(大阪市・大阪産業創造館)	A31
9. 18(木) 19(金)	第 39 回複合材料シンポジウム(秋田市・秋田大学 理工学部(手形キャンパス))	A31
9. 27(土) 10. 4(土)	平成 26 年度「産業資材用高性能・高機能繊維の基礎と応用」講座名古屋会場(名古屋市・ウインクあいち)	A31
9. 28(日) ~10. 1(水)	繊維学会創立 70 周年記念事業 International Symposium on Fiber Science and Technology 2014 (ISF2014) 繊維の科学と技術に関する国際シンポジウム 2014(東京都・ビッグサイト東京ファッションタウン(TFT)ホール)	A2~29
10. 2(木) 3(金)	Kyoto International Symposium on Neo Fiber Technology ネオファイバーテクノロジー 京都国際シンポジウム(京都市・京都工芸繊維大学)	A30
10. 16(木) 17(金)	第 19 回高分子分析討論会(名古屋市・名古屋国際会議場 白鳥ホール)	A31
10. 21(火) 22(水)	第 46 回洗浄に関するシンポジウム(東京都・タワーホール船堀 5 階小ホール)	A31
	繊維学会誌広告掲載募集要領・広告掲載申込書	平成22年 6 月号
	繊維学会定款(平成24年 4 月 1 日改訂)	平成24年 3 月号
	Individual Membership Application Form	平成24年12月号
	繊維学会誌報文投稿規定(平成24年 1 月 1 日改訂)	平成26年 1 月号
	訂正・変更届用紙	平成26年 3 月号

「繊維と工業」編集委員

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一般社団法人 繊維学会創立 70 周年記念式典・記念講演会・記念祝賀会

平素より繊維学会の活動に格別のご高配を賜り、誠にありがとうございます。

さて、一般社団法人 繊維学会は、昭和 18 年 12 月 10 日に繊維素協会(大正 13 年 4 月設立)と繊維工業学会(昭和 10 年 2 月設立)が合併して発足し、平成 25 年 12 月に、めでたく創立 70 周年を迎えました。設立の一つの母体となった繊維素協会設立から数えますと、本年 4 月に創立 90 周年を迎えたことになります。このような長きにわたって、繊維学会は、数々の事業を通じて、紙・パルプを含めた繊維分野の学術と産業の発展、文化の創造に貢献してまいりました。

この伝統ある繊維学会の創立 70 周年を期に、これまでの学会活動をより一層発展させ、今世紀においても繊維分野の発展に優れたリーダーシップを発揮していきたいと決意を新たにしている次第です。目下、今後の学会活動を盛り上げていくために、「究極のファイバー技術、豊かで持続的な人類の未来を紡ぐ」と題して、創立 70 周年記念事業を学会一丸となって推進しているところ

です。

つきましては、下記のとおり繊維学会創立 70 周年記念式典を挙行政致しますのでみなさまがたのご参加を心からお待ち申し上げます。



記

日 時：平成 26 年 9 月 28 日(日) 14:00～20:00

場 所：ビッグサイト東京ファッションタウンビル(TFT ビル)西館ホール 500

〒135-8071 東京都江東区有明 3-6-11 TEL:03-5530-5001

プログラム：〈記念式典・講演会・記念祝賀会〉

1. 受付開始(12:30～)
2. 記念式典(14:00～14:50)
3. 記念講演(15:00～15:30) 日本化学繊維協会会長 越智 仁氏
記念講演(15:30～16:00) 日本私立大学協会会長・文化学園大学学長 大沼 淳氏
記念講演(16:15～16:55) 日本化学連合会長 西出 宏之氏
4. 新繊維技術展示会内覧会(17:00～18:00)
5. 記念祝賀会(18:30～20:00)

場 所：東京ベイ有明ワシントンホテル アイリス

〒135-0063 東京都江東区有明 3-7-11 TEL:03-5564-0111

記念祝賀会参加費：10,000 円(8 月 30 日以降にお支払の場合は、12,000 円となります)

お振込先：みずほ銀行 目黒支店：普通口座：1208718

口座名：繊維学会 70 周年記念事業会

(繊維学会ホームページに申し込みフォーム「懇親会(祝賀会)」があります。)

※記念式典・記念講演会参加は無料です。

申込締切日：8 月 29 日(金)

平成26年度繊維学会主要行事予定

行 事 名	開 催 日	開 催 場 所
創立 70 周年記念事業 (式典・ISF2014・企業展示・ファッションショー)	平成26年 9 月28日(日)～10月 1 日(水)	ビッグサイト東京ファッションタウン TFT ホール(東京・有明)

創立70周年記念事業募金状況の中間報告

(平成 26 年 6 月 20 日現在の寄付金)

寄 付 数	口 数	金 額
個 人	217 名	1,229 口
企業・団体	44 団体	125 口
	261 件	
		12,405,000 円

(目標金額 15,000,000 円)

第二次の寄付金募集を行いますので、ご協力の程よろしくお願い致します。

繊維学会創立 70 周年記念事業

日 程：平成 26 年 9 月 28 日(日)～10 月 1 日(水)

メイン会場：ビッグサイト東京ファッションタウンビル(TFT ビル西館 2F)

〒135-8071 東京都江東区有明 3-4-10

創立 70 周年記念事業概要

日 程	式典・記念講演	新繊維技術展示会	ISF2014 国際シンポジウム ファッションショー 先端繊維素材シンポジウム	交流行事
9/28(日)	70周年記念式典 記念講演 3 件 (ホール 500)	(17:00-) 内覧会 共催：日本化学繊維協会 (ホール 300&ホワイエ)		(18:30-) 記念祝賀会 (有明ワシントンホテル) ISF2014 ウェルカム パー ティー
9/29(月)		技術展示会 (ホール 300&ホワイエ) 技術交流、B-to-B 交流、 技術説明会	ISF2014 国際シンポジウム 基調講演 4 件(ホール 1000) 招待講演・口頭発表(東館 9F) ポスター発表(ホール 500)	
9/30(火)		技術展示会 (ホール 300&ホワイエ) 技術交流、B-to-B 交流、 技術説明会	ISF2014 国際シンポジウム 基調講演 2 件(ホール 1000) 招待講演・口頭発表(東館 9F) (17:15-) ファッションショー 共催：文化学園大学 (ホール 1000)	(18:30-) ISF バンケット (有明 TOC)
10/1(水)		技術展示会 (ホール 300&ホワイエ) (15:00 まで開催)	ISF2014 国際シンポジウム 招待講演・口頭発表(東館 9F) 先端繊維素材シンポジウム 基調講演 2 件 主催：日本化学繊維協会 (ホール 1000、同時通訳付き)	(15:00-) B-to-B 懇談会 (名刺交換会)

参加料(有 料)

式典記念講演者及び ISF2014 国際シンポジウム基調講演者

式典の記念講演者 講演Ⅰ 日本化学繊維協会会長 越智 仁氏
講演Ⅱ 大沼 淳氏(日本私立大学協会会長・文化学園大学学長)
講演Ⅲ 西出 宏之氏(日本化学連合会長)

ISF2014 国際シンポジウム基調講演者(Plenary Lecturers)

Zhu Meifang(Donghua University, China)
Kee Jong Yoon(Dankook University, Korea)
William Oxenham(North Carolina State University, USA)
Satish Kumar(Georgia Institute of Technology, USA)
Thomas Gries(Institut für Textiltechnik(ITA) der RWTH Aachen University, Germany)
Dominique C. Adolphe((ENSISA), France)
Teruo Hori(University of Fukui, Japan)
Makoto Endo(Toray Industries, Inc., Japan)

繊維学会創立 70 周年記念事業

International Symposium on Fiber Science and Technology 2014 (ISF2014)

繊維の科学と技術に関する国際シンポジウム 2014

一般社団法人繊維学会では、創立 70 周年記念事業の一環として、国際シンポジウムを開催します。繊維の科学と技術に関する研究は、繊維やテキスタイルの基礎研究のみならず、バイオテクノロジー、ナノテクノロジー、インフォメーションテクノロジーをはじめとする境界領域研究と深い関わりを持ちながら、急速に発展しております。本シンポジウムは、最新の研究成果を発表し、情報の交換を行う場として、世界 29 カ国・地域から約 500 件の講演・発表を集めて開催されます。日本のなかで繊維産業の規模は縮小傾向にあるとはいえ、この分野の日本の高い技術力、研究開発能力は世界が認めるところであり、本国際シンポジウムが世界から大きな注目を集めることに疑問の余地はありません。現在の日本の立ち位置を確認し、将来のさらなる発展に向けた方向性を見出すためにも、また、世界に向けて日本の実力を発信するためにも、ISF2014 の開催は極めて意義深いものと考えられます。

開催地として東京都有明にあるビッグサイト東京ファッションタウンホールを選びました。日本の中心東京で発展を続ける臨海都市での開催も、特に海外からの参加者にとって魅力あるものに違いありません。皆様の積極的なご参加をお願い申し上げます。

主 催：繊維学会

共 催：日本化学繊維協会

協 賛：日本繊維機械学会、日本繊維製品消費科学会

後援(予定)：経済産業省

日 時：平成 26 年 9 月 28 日(日)～10 月 1 日(水)

会 場：ビッグサイト東京ファッションタウン(TFT)ホール

<http://www.tokyo-bigsight.co.jp/tft/index.html>

〒135-8071 東京都江東区有明 3-6-11

〈交通〉りんかい線国際展示場駅下車徒歩約 5 分

ゆりかもめ国際展示場正門駅下車徒歩約 1 分

研究発表：平成 26 年 9 月 29 日(月)～10 月 1 日(水)

HALL1000(基調講演)、A～H 会場(招待講演・口頭発表)、HALL500(ポスター)

一般セッション

G1 Fibers and Polymer Materials

G2 Fiber and Textile Processing

G3 Dyeing, Finishing, Coating and Laminating

G4 Textile Science and Engineering

G5 Fashion and Clothing Science

特別セッション

S1 Advanced Fiber Symposium(日本化学繊維協会主催、同時通訳付き)

S2 Symposium on Dyeing and Finishing of Textiles

S3 Flow & Deformation Induced Polymer Crystallization

S4 Smart Textiles / Nanofibers

S5 Bio-Based and Biomedical Materials

S6 Composites and Industrial Textiles

S7 International Conference on Advanced Fiber/Textile Materials

S8 Functional Textiles

S9 Neo Fiber Technology

使用言語：英語

ウェルカムレセプション：9 月 28 日(日)

ワインパーティー：9 月 29 日(月)

ポスター発表と同時に開催します。

バンケット：9 月 30 日(火)18:30～20:30 TOC 有明

ポスター賞の表彰を行います。



プログラム：公式ホームページ(<http://www.procomu.jp/isf2014/ScientificProgram.html>)にてご確認ください。

参加登録の方法：

〈事前登録締切〉平成 26 年 7 月 14 日(月)

シンポジウムでの発表、参加およびバンケットへの参加は、公式ホームページからの事前登録を原則とします。

〈申込要領〉

公式ホームページ(<http://www.procomu.jp/isf2014/RegistrationInformation.html>)からお申し込みください。参加登録料等のお支払いには原則として Paypal(<https://www.paypal.jp/jp/contents/start/about/>)による決済サービスを利用して頂きます。

〈参加登録料〉

(早期参加登録料)一般 50,000 円, 学生 20,000 円

(通常参加登録料)一般 60,000 円, 学生 25,000 円

〈バンケット代〉

8,000 円

(注)1. 参加登録料には、シンポジウムプログラム 1 冊と予稿集 USB1 個が含まれます。

2. 予稿集の事前送付はいたしませんのでご了承ください。

3. バンケットのみに参加される方は、バンケット代のみお支払いください。

問合せ先：ご不明の点は、ISF2014 事務局へお問い合わせください。

ISF2014 事務局

E-mail: isf2014@fiber.or.jp

担当：松本 英俊(東京工業大学)

山本 恵美(繊維学会事務局)

〒141-0021 東京都品川区上大崎 3-3-9-208

一般社団法人 繊維学会内

その他：不測の事態(インフルエンザ流行等)が生じた場合は公式ホームページ上で告知することをご承知おきください。

ISF2014 実行委員会：

実行委員長 鞠谷雄士(東工大)

副実行委員長 木村邦生(岡山大)

Secretary General 松本英俊(東工大)

実行委員：磯貝明(東大)、金谷利治(京大)、濱田州博(信州大学)、鋤柄佐千子(京都工繊大)、髭谷要(和洋女大)、伊藤浩志(山形大)、杉本昌隆(山形大)、河原豊(群馬大)、国岡正雄(産総研)、岩田忠久(東大)、塩谷正俊(東工大)、浅井茂雄(東工大)、森川淳子(東工大)、斎藤拓(農工大)、荻野賢司(農工大)、鮑力民(信州大)、木村睦(信州大)、金翼水(信州大)、大川浩作(信州大)、大越豊(信州大)、田上秀一(福井大)、中根幸治(福井大)、久田研次(福井大)、澤渡千枝(静岡大)、土田亮(岐阜大)、武野明義(岐阜大)、仲井朝美(岐阜大)、西田幸次(京大)、辻井敬亘(京大)、奥林里子(京都工繊大)、横山敦士(京都工繊大)、山根秀樹(京都工繊大)、櫻井伸一(京都工繊大)、小滝雅也(京都工繊大)、青木隆史(京都工繊大)、山岡哲二(国立循環器病センター)、井上真理(神戸大)、内田哲也(岡山大)、比嘉充(山口大)、田中敬二(九州大)、北岡卓也(九州大)、村瀬浩貴(東洋紡)、石丸園子(東洋紡)、福井実(旭化成せんい)、前田裕平(東レ)、山田秀夫(帝人)、山田博夫(ユニチカ)、林英男(クラレ)、大松沢明宏(日本化学繊維協会)、木村照夫(一般社団法人日本繊維機械学会)、平田耕造(一般社団法人日本繊維製品消費科学会)、伊藤瑞香(和洋女大)、大坂昇(岡山理科大)、齋藤継之(東京大)、佐藤真理子(文化学園大)、敷中一洋(農工大)、宝田亘(東工大)、田中学(首都大)戸木田雅利(東工大)、富永洋一(農工大)、中澤靖元(農工大)、長嶋直子(和洋女大)、花田朋美(東京家政学院大)、道信剛志(東工大)、野々村弘人(繊維学会事務局)、山本恵美(繊維学会事務局)

International Symposium on Fiber Science and Technology (ISF2014) Program

Plenary Lectures
(TFT WEST 9F HALL1000)

September 29th

9 : 40 **Opening Ceremony of ISF2014**

10 : 10 **Plenary-1**

“AUTEX – Network of European Textile Universities
– An accelerator of success”
Dominique C. Adolphe
President of AUTEX Association
Ecole Nationale Supérieure d'Ingénieurs Sud Alsace
(ENSISA), France

10 : 55 **Plenary-2**

“Evaluation of heat stress under extreme environments”
Kee Jong Yoon
President of the Korean Fiber Society
Dankook University, Korea

Lunch (11 : 40~12 : 50)

12 : 50 **Plenary-3**

“Functional hybrid fiber materials : design, fabrication
and applications”
Zhu Meifang
Donghua University, China

13 : 35 **Plenary-4**

“Carbon fiber composite materials : developments,
commercializations and applications”
Makoto Endo
Toray Industries, Inc., Japan

Break (14 : 20~14 : 40)

8 Technical Sessions

September 30th

9 : 20 **Plenary-5**

“Technical Textiles – Some thoughts of an academic”
William Oxenham
North Carolina State University, USA

10 : 05 **Plenary-6**

“Innovative technologies for functional modification
of textile”
Teruo Hori
University of Fukui, Japan

Break (10 : 50~11 : 10)

8 Technical Sessions

October 1st

9 : 20 **Opening of Advanced Fiber Symposium**
(Organized by Japan Chemical Fiber Association)

9 : 30 **Plenary-7**

“Process development and engineering for high
strength cellulose aerogel filaments”
Thomas Gries
RWTH Aachen University, Germany

10 : 10 **Plenary-8**

“Next generation fibers”
Satish Kumar
Georgia Institute of Technology, USA

Break (10 : 50~11 : 10)

8 Technical Sessions

5 General Sessions

A (TFT East, 9th Floor, Room 909)
G1 Fibers and Polymer Materials
S. Sakurai, H. Saito, K. Ogino, J. Morikawa,
T. Uchida, M. Higa, and K. Tanaka
Program Chairs

September 29th

Chairperson : Takeshi Kikutani

14 : 40 G1-01 **Keynote** “A hybrid processing method by
nanofiber embedding to produce flexible, conductive,
transparent films for Flexible Electronics Industry”
(University of Akron, USA) Miko Cakmak

15 : 10 G1-02 “Cost-efficient production of custom-made GI-
POFs used for illumination, data transmission and
sensor technology”
(RWTH Aachen University, Germany) Markus
Beckers, Benjamin Glauss, Thomas Gries and Christian
-Alexander Bunge

Chairperson : Miko Cakmak

15 : 30 G1-03 “Preparation of single-polymer composites
from bicomponent fibers prepared by high-speed melt
spinning process”
(Tokyo Institute of Technology, Japan) Yuanjing
Zhang, Takeshi Kikutani and Wataru Takarada

15 : 50 G1-04 “Effect of heat sealing conditions on the heat
seal properties before and after the sterilization process
for coextruded multilayered polyethylene films”
(Hosokawa Yoko Co., Ltd., Japan) Toshiharu Iwasaki,
Wataru Takarada and Takeshi Kikutani

16 : 10 G1-05 “Revisit polyester/liquid crystal blending and
fiber spinning”
(Kordsa Global, Turkey) Ozlem Turkarslan, Sezen
Gurdag, Emine Guven, Wataru Takarada and Takeshi
Kikutani

Chairperson : Wataru Takarada

16 : 30 G1-06 “Spinning of PEN and PEN/PET polymer
blends”
(Kordsa Global, Turkey) Aslı Ertan and Emine Guven

16 : 50 G1-07 “Analysis of structure formation in carbon fibers - a new method for process development” (RWTH Aachen University, Germany) Wilhelm Steinmann, Anna- Katharina Saelhoff, Gunnar Seide and Thomas Gries

September 30th

Chairperson : Kunio Kimura

11 : 10 G1-08 “Application of sericin on polyester DKTE’S” (Textile and Engineering Institute, India) Aravin Prince Periyasamy and Saatish Lavate

11 : 30 G1-09 “Growth of N-doped BiOBr nanosheets on carbon fibers for high efficient photocatalytic degradation of organic pollutants under visible light irradiation” (Zhejiang Sci Tech University, China) Guohua Jiang and Xia Li

Chairperson : TBD

11 : 50 G1-10 “New route to modify polyvinyl alcohol” (Deakin University, Australia) Ping’an Song, Zhiguang Xu and Qipeng Guo

12 : 10 G1-11 “Transport properties of charged-mosaic membranes prepared from a fabric structure of poly (vinyl alcohol)-based charged-fibers” (Yamaguchi University, Japan) Mitsuru Higa, Atsushi Jikihara, Reina Ohashi, Tetsuro Maeda, Eriko Shimizu, Megumi Nisimura, Yuriko Kakihana and Kenichi Kobayashi

Lunch (12 : 30~13 : 40)

Chairperson : Hiromu Saito

13 : 40 G1-12 **Keynote** “Effects of molecular weight in flow-induced polymer crystallization” (Kyoto University, Japan) Toshiji Kanaya

14 : 10 G1-13 “Structure analysis of ultra-high strength polyethylene fibers” (Toyobo Co., Ltd., Japan) Yasunori Fukushima, Hiroki Murase and Yoshihiko Teramoto

Chairperson : Shigeo Asai

14 : 30 G1-14 “Humidity-induced reversible and anisotropic structural change of 3D-oriented poly(vinyl alcohol)” (Toyota Technological Institute, Japan) Taiyo Yoshioka and Kohji Tashiro

14 : 50 G1-15 “Preparation of ladder-type polyimidazoproline fibers by reaction-induced crystallization during polymerization” (Okayama University, Japan) Mizuho Anabuki, Shinichi Yamazaki and Kunio Kimura

Break (15 : 10~15 : 20)

Chairperson : Keiji Tanaka

15 : 20 G1-16 “Reexamination of polymerization of N-carboxy amino acid 54. Consideration on the living polymerization mechanism of amino acid NCAs. (Fukushima University, Japan) Hitoshi Kanazawa, Aya Inada and Yuki Kanazawa

15 : 40 G1-17 “A thermally activated polymerization process of ubiquitin studied by small-angle X-ray scattering

(SAXS)”

(Shinshu University, Japan) Kouichi Inano, Keiichi Yanase, Ryoichi Arai and Takaaki Sato

Chairperson : Mitsuru Higa

16 : 00 G1-18 “Design of water interfaces with well-defined vinyl polymers”

(Kyushu University, Japan) Yukari Oda, Ayanobu Horinouchi, Toyoaki Hirata, Daisuke Kawaguchi, Norifumi L. Yamada, Shokyoku Kanaoka, Sadahito Aoshima and Keiji Tanaka

16 : 20 G1-19 “Enantioselectivity of chiral polymer films based on dynamic interface” (Kyushu University, Japan) Atsuomi Shundo, Koichiro Hori, Nobuo Kimizuka and Keiji Tanaka

16 : 40 G1-20 “Application of Xe-129 NMR spectroscopy to the characterization of gas transport properties of polymeric membranes” (Nagoya Institute of Technology, Japan) Hiraoki Yoshimizu

October 1st

Chairperson : Ken Kojio

11 : 10 G1-21 “Enhancement and suppress of segregation power at a constant volume fraction in a block copolymer solution by changing compositions of solvent mixtures” (Nagoya Institute of Technology, Japan) Remi Miyamachi, Akifumi Matsushita, Kengo Nomura and Shigeru Okamoto

11 : 30 G1-22 “Photonic polymer solutions with refractive index enhanced by selective solvents of different solvent quality” (Nagoya Institute of Technology, Japan) Shigeru Okamoto, Koji Ando, Akifumi Matsushita and Itsuki Saito

Chairperson : TBD

11 : 50 G1-23 “Self-assemblies of main-chain liquid crystalline ABA triblock copolymers” (Tokyo Institute of Technology, Japan) Maito Koga, Kohei Abe, Kazunori Sato, Koichi Sakajiri, Junji Watanabe and Masatoshi Tokita

12 : 10 G1-24 “Microdomain structures of thermoplastic elastomers after mechanical deformation based on small-angle x-ray scattering” (Nagasaki University, Japan) Ken Kojio, Genichiro Kawajiri, Takuya Komatsu, Suguru Motokucho and Kohji Yoshinaga

Lunch (12 : 30~13 : 40)

Chairperson : Masatoshi Tokita

13 : 40 G1-25 “Could hydrogel fibers replace lycra?” (Hong Kong Polytechnic University, Chin) Xinkun Lu, Ching Ying Chan, Ka I Lee, Pui Fai Ng and Bin Fei

14 : 00 G1-26 “Controlled synthesis of tetra-arm star-block copolymers and fabrication of gel with homogeneous network structure” (Kyoto University, Japan) Ryohei Ishige, Katsuya Kida, Keita Sakakibara, Kohji Ohno and Yoshinobu Tsujii

- 14 : 20 G1-27 “Robust hydrogel reinforced by an addition of imogolite which shows strain-induced reversible isotropic-anisotropic structural transition imogolite hydrogels”
(Tokyo University of Agriculture and Technology, Japan) Kazuhiro Shikinaka, Tomomi Yokoi, Keisuke Kaneda, Yoshihito Osada, Hiroyasu Masunaga and Kiyotaka Shigehara

Chairperson : Kazuhiro Shikinaka

- 14 : 40 G1-28 “Swelling of poly(vinyl alcohol) hydrogels accompanying the dye sorption in congo red aqueous solution”
(Ochanomizu University, Japan) Endang Katmiwati and Tadashi Nakanishi

- 15 : 00 G1-29 “Development of novelty functional gelator”
(Shinshu University, Japan) Zhong Wang, Masahiro Suzuki and Kenji Hanabusa

Chairperson : TBD

- 15 : 20 G1-30 “Temperature-induced structural modifications and cooperative dynamics of aqueous Poly(N-isopropylacrylamide) solution”
(Shinshu University, Japan) Keiichi Yanase, Takuya Miyashita, Daisuke Suzuki, Richard Buchner and Takaaki Sato

- 15 : 40 G1-31 “Static structure of copolymer microgels comprising poly(N-isopropylacrylamide) and Poly(N-isopropylmethacrylamide) studied by small- and wide-angle X-ray scattering”
(Shinshu University, Japan) Kenshi Amano, Takuma Kureha, Takuya Miyasita, Daisuke Suzuki and Takaaki Sato

- 16 : 00 G1-32 “Hydration state analysis of polyethylene glycol in a variety of systems using small angle X-ray scattering and dielectric relaxation Spectroscopy”
(Shinshu University, Japan) Takesi Akahane, Takaaki Sato, Lok Shrestha and Hiromi Sakai

Chairperson : Tetsuya Uchida

- 16 : 20 G1-33 “Control of viscosity coefficient in polymer solution by light irradiation”
(Tokyo University of Agriculture and Technology, Japan) Toshiyuki Watanabe, Ryo Shiraishi and Toshiyuki Shikata

- 16 : 40 G1-34 “Design of photoresonant polymer network for fast response photomechanical soft actuator”
(Tokyo University of Agriculture and Technology, Japan) Toshiyuki Watanabe and Ryota Ohshima

G (TFT East, 9th Floor, Room 9F)
G1 Fibers and Polymer Materials
S. Sakurai, H. Saito, K. Ogino, J. Morikawa,
T. Uchida, M. Higa, and K. Tanaka
Program Chairs

October 1st

Chairperson : Kenji Ogino

- 11 : 10 G1-35 “Miscibility and optical property of cellulose alkyl ester blends with poly(N-vinyl pyrrolidone-co-methyl methacrylate)”
(Kyoto University, Japan) Kazuki Sugimura, Yoshikuni Teramoto and Yoshiyuki Nishio

- 11 : 30 G1-36 “Chemical modification of cellulose for melt spinning process”
(Toray Industries, Inc., Japan) Hidekazu Kano, Yoshitaka Aranishi, Yuhei Maeda and Yoshiyuki Nishio

Chairperson : Yoshiyuki Nishio

- 11 : 50 G1-37 “Polyamide / MQ-resin nanocomposites : synthesis and characterization”
(DWI an der RWTH Aachen, Germany) Yongliang Zhao

- 12 : 10 G1-38 “Quantitative analysis of phase separation structure and mechanical properties of acrylics copolymer / epoxy thermo setting resin compositions”
(LINTEC Corporation, Japan) Isao Ichikawa, Kazuhiro Takahashi, Shuichi Akasaka and Shigeo Asai

Lunch (12 : 30 ~ 13 : 40)

Chairperson : Shinichi Sakurai

- 13 : 40 G1-39 “The study of the natural weeds in the raw material used to prepare a friendly composite material between Waste hyacinth and Natural Shellac”
(Pathumwan Institute of Technology, Thailand) Pitak Panawan and Manus Srisawade

- 14 : 00 G1-40 “Preparation of green composite from rubber tree leaves and poly(lactic acid)”
(Pathumwan Institute of Technology, Thailand) Jedsada Wongon and Prayoon Surin

- 14 : 20 G1-41 “High performance technology of BIOFRONT® and recent tendency”
(Teijin Limited, Japan) Masahiro Iwai, Tomoyoshi Yamamoto and Akihiko Uchiyama

Chairperson : Junko Morikawa

- 14 : 40 G1-42 “On the way to high-strength poly(3-hydroxybutyrate) (PHB) fibers”
(EMPA, Switzerland) Rudolf Hufenus, Felix A. Reifler and Urs J. Haenggi

Break (15 : 00 ~ 15 : 10)

- 15 : 10 G1-43 “The study feasibility in production roof tile from bagasse fiber mixed maize husk fiber”
(Pathumwan Institute of Technology, Thailand) Prayoon Surin and Jedsada Wongon

- 15 : 30 G1-44 “Study on efficiency of natural fiber insulation”
(Pathumwan Institute of Technology, Thailand) Chaipapruk Apravate and Pitak Panawan

Chairperson : Shinichi Sakurai

- 15 : 50 G1-45 “The insulation board performance of coir fibers with cement and entrapped bubbles additives” (Pathumwan Institute of Technology, Thailand) Manus Srisawade and Pitak Panawan
- 16 : 10 G1-46 “Design and development of coir based adsorbent system for removal of ionic dyes from dye wastewater” (Delhi Technological University, India) Anshul Singhal, Shashank Gupta, Pulkit Aggarwal and Roli Purwar
- 16 : 30 G1-47 “Effect of acetylation and alkali treatment on the oil sorption behavior of Vietnamese kapok fibres” (Ho Chi Minh City University of Technology, Vietnam) Huong Mai Bui and Thi Kim Hue Trinh

B (TFT East, 9th Floor, Room 908)
G2 Fiber and Textile Processing
H. Ito, S. Tanoue, K. Nakane, and M. Sugimoto
Program Chairs

September 29th

Chairperson : Hiroshi Ito

- 14 : 40 G2-01 **Keynote** “Multicomponent synthetic fibers for innovative textile applications” (EMPA, Switzerland) Rudolph Hufenus, G. Fortunato, L. Gottardo, and F.A. Reifler
- 15 : 10 G2-02 **Keynote** “Twist-gel spinning for rapid production of ultra-strong polymer fibers” (Georgia Institute of Technology, USA) Donggang Yao
- 15 : 40 G2-03 “Effect of blend ratio on properties of poly(lactic acid)/polyoxymethylene blend fiber” (Rajamangala University of Technology, Thailand) Thanyaburi Natee Srisawat, Supaphorn Thumsorn, Sorapong Pavasupree, Weraporn Pivsa-Art, Sommai Pivsa-Art, Toshikazu Umemura and Hiroyuki Hamada

Chairperson : TBD

- 16 : 00 G2-04 “Preparation of ultra-fine fiber of drug-loaded poly lactide by laser-heated electrospinning for controlled release of drug” (Miyagi University of Education, Japan) Midori Takasaki, Miku Yoshizawa, Natsumi Fukushima, Sayoko Hoshi, Yuka Yamaguchi, Yutaka Ohkoshi, Toshihiro Hirai and Ikuro Omura
- 16 : 20 G2-05 “Influence of chemical bond state of silver and wool fiber on antibacterial effect” (The Japan Wool Textile Co.,Ltd., Japan) Takayuki Okabe, Kouki Jibu and Hideki Omori
- 16 : 40 G2-06 “Insitu synthesis and application of cerium oxide nanoparticles on cotton fabric for UV protection and antibacterial properties” (Institute of Chemical Technology, India) Mangesh Teli and Parag Bhavsar

September 30th

Chairperson : Naoki Shimada

- 11 : 10 G2-08 “Effect of melt blowing die assembly on fiber formation behavior and web properties”

(Tokyo Institute of Technology, Japan) Renukarn Ruamsuk, Wataru Takarada and Takeshi Kikutani

- 11 : 30 G2-09 “Multi-scale simulation for analysis of melt spinning process” (Asahi Kasei Fibers Corporation, Japan) Keiichi Toyoda, Junichi Kojima, Tomoki Ishikawa, Takeshi Aoyagi, Wataru Takarada and Takeshi Kikutani
- 11 : 50 G2-10 “Effect of airway angle of swirl nozzle on the performance of ring spun yarn” (Jiangnan University, China) Ge Mingqiao, Qiu Hua and Fu Yuye
- 12 : 10 G2-11 “Airflow state in the nozzle for an air-jet spinning machine by numerical simulation” (University of Fukui, Japan) Thi Viet Bac Phung, Akihiro Yoshida, Hideyuki Uematsu, Yoshiyuki Iemoto and Shuichi Tanoue

Lunch (12 : 30 ~ 13 : 40)

Chairperson : Shuichi Tanoue

- 13 : 40 G2-12 **Keynote** “Vortex spins future of spinning-A history of the machine development -” (Murata Machinery, Ltd., Japan) Tatsumori Matsumoto
- 14 : 10 G2-13 **Keynote** “Silk/Cellulose-based biocomposite materials : Utilization of natural fiber wastes” (Zhejiang Sci-Tech University, China) Juming Yao
- 14 : 40 G2-14 “Poly(butylene terephthalate) fibers produced by Laser melt-electrospinning” (University of Fukui, Japan) Naoki Shimada, Nobuo Ogata and Koji Nakane
- 15 : 00 G2-15 “Effect of Cross-sectional Configuration on Fiber Formation Behavior in Bicomponent Melt Spinning Process” (Tokyo Institute of Technology, Japan) Yiwen Chen, Wataru Takarada and Takeshi Kikutani

Chairperson : Masataka Sugimoto

- 15 : 40 G2-16 “Specific kinetic pathway from mesophase to single crystal of isotactic polypropylene” (Kyoto University, Japan) Koji Nishida, Harutoshi Asakawa, Tatsumasa Hirano, Rintaro Inoue and Toshiji Kanaya
- 16 : 00 G2-17 “Mutual interaction of two components with different stereo regularity in crystallization of polypropylene blend fibers” (Tokyo Institute of Technology, Japan) Kouya Kawai, Wataru Takarada, Takeshi Kikutani, Tomoaki Takebe, Yohei Koori and Toshitaka Kanai
- 16 : 20 G2-18 “Structure and properties of Poly(ethylene terephthalate) and polyamide 6 bicomponent fiber for textile application” (Rajamangala University of Technology Thanyaburi, Thailand) Suaphorn Thumsorn, Pachara Wanma, Supasit Isan, Siwawat Chanmanee and Natee Srisawat
- 16 : 40 G2-19 “Control of polyester fiber orientation at melt spinning line” (Toray Co. Ltd., Japan) Yoshitsugu Funatsu

October 1st

Chairperson : Wataru Takarada

11 : 10 G2-20 “Demolding of nanostructured-surface on UV-cured film in Roll-to-Roll UV nanoimprint process”
(Yamagata University, Japan) Kentaro Taki, Shunsuke Kondo, Tetsuo Takayama and Hiroshi Ito

11 : 30 G2-21 “Effect of polytetrafluoroethylene and carbon nanotube on the film processability of polystyrene”
(Fukui University, Japan) Hideyuki Uematsu, Masahiro Mori, Yoshiyuki Iemoto and Shuichi Tanoue

11 : 50 G2-22 “Poly(vinyl alcohol)/zinc oxide nanoparticle hybrid electrospun fiber mats for antibacterial dressings”
(Yamagata University, Japan) Tongsai Jamnongkan, Sathish K. Sukumaran, Masataka Sugimoto, Tomijiro Hara, Yumiko Takatsuka and Kiyohito Koyama

12 : 10 G2-23 “Nobel type nanofiber mat consisting of Tetra-PEG network”
(University of Fukui, Japan) Hanako Asai, Muhammad Haziq bin Miswan, Naoki Shimada, Koji Nakane, Takamasa Sakai and Nobuo Ogata

Lunch (12 : 30 ~ 13 : 40)

Chairperson : Kentaro Taki

13 : 40 G2-24 “Thermal conductivity and properties of polypropylene/magnesium oxide/vapor-grown carbon fiber composites”
(University of Fukui, Japan) Emilie Oconel, Chihiro Azuma, Hideyuki Uematsu, Yoshiyuki Iemoto and Shuichi Tanoue

14 : 00 G2-25 “Formation of alumina nanofibers and development of thermal conductive polymer composites using the nanofibers”
(University of Fukui, Japan) Koji Nakane and Nobuo Ogata

14 : 20 G2-26 “A study on complex shapes of CFRTP by using commingled yarn fabric”
(Kanazawa Institute of Technology, Japan) Patcharat Wongsriraksa, Hiroyuki Hasebe, Wataru Okumura, Mitsugu Kimizu, Kiyoshi Uzawa and Isao Kimpara

14 : 40 G2-27 “Flame retardant nonwovens of shaped PP fibers containing modified-Thai bentonite”
(National Metal and Materials Technology Center, Thailand) Chureerat Prahsarn, Nanjaporn Roungpaisan, Natthaphop Suwannamek and Wattana Klinsukhon

15 : 00 G2-28 “Relationship of crystallization and morphology of polypropylene mono-filament foam”
(King Mongkut's Institute of Technology Ladkrabang, Thailand) Natthapong Chuapon, Peerapot Pataypanakit, Hiroshi Ito and Surat Areerat

C (TFT East, 9th Floor, Room 9E)
G3 Dyeing, Finishing, Coating and Laminating
K. Hisada, A. Tsuchida, and Y. Tsujii
Program Chairs

September 30th

Chairperson : Akira Tsuchida

13 : 40 G3-01 **Keynote** “Fibers for the regenerative medicine”
(Kyoto University, Japan) Yoshito Ikada

14 : 10 G3-02 “Upgrading of synthetic fiber materials by nano-scale processing”
(Toray Industries, Inc., Japan) Yuki Ninomiya, Keiji Takeda and Atsushi Kuwabara

Chairperson : Yoshinobu Tsujii

14 : 30 G3-03 **Keynote** “Electron-beam irradiation technique for textile finishing”
(Kyoto Institute of Technology, Japan) Satoko Okubayashi

15 : 00 G3-04 “The effect of sericin on dyeing and ultraviolet protection properties of natural dyes on polyester fabrics”
(National Metal and Materials Technology Center, Thailand) Monthon Nakpathom, Nootsara Narumol and Buppha Somboon

Chairperson : Akira Tsuchida

15 : 20 G3-05 “Dyeing of silk fabric with *garcinia dulcis* (Roxb.) kurz bark by using post-mordant and pad-dry processes : Studies on metal mordants concentration parameter”
(Kasetsart University, Thailand) Nattadon Rungruangkitkrai, Rattanaphol Mongkhorrattanasit, Nattaya Punrattanasin, Kamolkan Sriharuksa, Monthon Nakpathom and Nuanchan Klaijoy

15 : 40 G3-06 “Fastness properties of artocarpus lakoocha dyed wool yarn with mordant combinations”
(Assam Agricultural University, India) Ava Phukan, Rajashree Phukan and Swapna Choudhury Choudhury

Chairperson : Kenji Hisada

16 : 00 G3-07 “The role of ozone micro-bubbles in cotton bleaching”
(Tokyo Metropolitan Industrial Technology research Institute, Japan) Ichiro Enomoto, Shin Soeda, Fumi Masuko and Chizuru Mitani

16 : 20 G3-08 “Flame retardancy of cotton fabric treated by hybrid phosphorus-silica films”
(Italian Association of Textile Chemists and Colorists (AICTC), Italy) Alessandro Gigli, Jenny Alongi, Claudio Colleoni, Emanuela Guido, Giulio Malucelli and Giuseppe Rosace

16 : 40 G3-09 “Multifunctional silica sol-gel finishing for textile fabrics”
(University of Bergamo, Italy) Giuseppe Rosace, Claudio Colleoni, Ilaria Donelli, Emanuela Guido and Giuliano Freddi

October 1st

Chairperson : TBD

11 : 10 G3-10 “Lubrication of polyion complex film prepared from cationic polyelectrolyte and anionic surfactant - Effect of linear and branched polyethylenimine with various molecular weights -”
(University of Fukui, Japan) Yoshiaki Hirano, Masaki Goto and Kenji Hisada

11 : 30 G3-11 “Pilling resistance of lyocell : - Effect of alkali pretreatments with polyfunctional reactive dyes”
(Textile and Engineering Institute, India) Aravin Prince Periyasamy and Saatish Lavate

11 : 50 G3-12 “The role of laccifer lacca kerr. in the UV-protection of silk fabric by using post-mordant and pad-dry processes : Focus on metal mordant concentration property”
(Rajamangala University of Technology Phra Nakhon, Thailand) Rattanaphol Mongkhorrattanasit, Charoon Klaichoi, Nattadon Rungruangkitkrai, Nattaya Punrattanasin, Kamolkan Sriharuksa and Monthon Nakpathom

D(TFT East, 9th Floor, Room 9A)
G4 Textile Science and Engineering
M. Inoue, L. Bao, and A. Yokoyama
Program Chairs

October 1st

Chairperson : Mitsuo Matsudaira

11 : 10 G4-01 **Keynote** “Wool meets modern consumers’ expectations”
(Senior Scientist, Apparel & Functional Textiles, New Zealand) Surinder Tandon

11 : 40 G4-02 “The actual condition and the approach of care for the damage by the wearing”
(Lion Corporation, Japan) Shoko Shogase, Ayumi Niikura, Naoya Tamura, Hiroaki Shindo and Takahiro Okamoto

Chairperson : Mari Inoue

12 : 00 G4-03 “The cooling effect of perspiration evaporation in microclimate system on human cutaneous comfort”
(Damietta University, Egypt) Ahmad Tahan

12 : 20 G4-04 “A study of physiological effects of compression garments made of new fabric ‘Elaction PRO[®]’”
(Asahi-Kasei Fibers Corporation, Japan) Junko Deguchi, Shoichi Akita and Kota Tsutsui

Lunch (12 : 40 ~ 13 : 40)

Chairperson : Mari Inoue

13 : 40 G4-05 **Keynote** “Trends of recent research activities in the field of textile science and engineering”
(SCI-TEX, Japan) Tatsuki Matsuo

Chairperson : Morihiro Yoneda

14 : 10 G4-06 “Thermally comfortable car seat using random coil fiber structure”
(Toyobo Co., Ltd., Japan) Hirotaka Harada

14 : 30 G4-07 “Thermal convection studies on aerogel treated fabrics”
(Technical University of Liberec, Czech Republic) Mohanapriya Venkataraman, Rajesh Mishra and Jiri Militky

14 : 50 G4-08 “The quest for continual growth in fibers & textiles : Innovation diversity and organizational resiliency”
(The Swedish School of Textiles, University of Borås, Sweden) Arun Aneja and Rudrajeet Pal

Chairperson : Atsushi Yokoyama

15 : 10 G4-09 “Surface structure and torsion property of cotton-rayon blended vortex yarns”
(Kyoto Institute of Technology, Japan) Jian Kang, Akihiro Okamoto, Satoru Hirosawa, Sayaka Oda and Sachiko Sukigara

15 : 30 G4-10 “Investigation on objective evaluation of fabric warm/cool feeling by finger sensor method”
(Nara Women’s University, Japan) Morihiro Yoneda and Asako Sumi

15 : 50 G4-11 “Prediction of textile structures thermal insulation”
(Technical University of Liberec, Czech Republic) Jiri Militky, Dana Kremenakova and Zu Guocheng

Chairperson : Sachiko Sukigara

16 : 10 G4-12 “New designed abrasion resistance friction multilayer woven fabric”
(Toray Industries, Inc., Japan) Keiichi Tonomori, Kenko Yamada, Hiroshi Tsuchikura and Atsushi Kuwabara

16 : 30 G4-13 **Keynote** “3 D woven structural composites and applications”
(Indian Institute of Technology, India) B. K. Behera

C (TFT East, 9th Floor, Room 9E)
G5 Textile Science and Engineering
S. Ishimaru and C. Sawatari
Program Chairs

October 1st

Chairperson : Sonoko Ishimaru

13 : 40 G5-01 **Keynote** “The science of fashion”
(The Hong Kong Polytechnic University, China) Yi Li

14 : 10 G5-02 “Investigation of the tensile behaviour of Takashima cotton crepe yarn and fabrics under different relative humidity”
(Kyoto Institute of Technology, Japan) Htet Htet Htike, Tsuyoshi Sugimoto, Hiroko Yokura and Sachiko Sukigara

Chairperson : Yayoi Satsumoto

14 : 30 G5-03 “Shape factor of flared skirts compared with that of circular fabrics”
(Kanazawa University, Japan) Mitsuo Matsudaira, Hiroko Yokura and Tomoe Masuda

14: 50 G5-04 “A study on auto-generation color image for fabric based on FFT”
(Jiangnan University, China) Hongxia Jiang, Jihong Liu and Hongfu Wang

Chairperson : Chie Sawatari

15 : 10 G5-05 **Keynote** “Evaluation and informatization of textiles for fashion clothing”
(Shinshu University, Japan) Masayuki Takatera

15 : 40 G5-06 “A framework for imbibing sustainability in fashion : Indian perspective”
(BPS Women University, India) Harinder Pal

Chairperson : Harindar Pal

16 : 00 G5-07 “Solving algorithm of vehicle routing problem for apparel logistics with time windows”
(Xi'an Polytechnic University, China) Wang Zan and Liang Jian Fang

16 : 20 G5-08 “The fashion design and the theory of fractal pattern art”
(Damietta University, Egypt) Nashwa Nabeel

16 : 40 G5-09 “Based on the consumption behavior of the clothing store display research”
(Xi'an Polytechnic University, China) Siyao Cheng

9 Special Sessions

(TFT West, HALL1000)
S1 Advanced Fiber Symposium
A. Oomatsuzawa, M. Fukui, Y. Maeda
H. Yamada, H. Yamada, and H. Hayashi
Program Chairs
Organized by Japan Chemical Fiber Association

C(TFT East, 9th Floor, Room 9E)
S2 Symposium on Dyeing and Finishing of Textiles
K. Hamada and S. Okubayashi
Program Chairs
Supported by the 120th Committee on Functionalization of Textiles and Polymers, Japan Society for the Promotion of Science (JSPS)

September 29th

Chairperson : Teruo Hori

14 : 40 S2-01 **Keynote** “Thermal behavior and flame retardancy of cotton fabric treated by phosphorus-silica hybrid films”
(Italian Association of Textile Chemists and Colorists, Italy) Alessandro Gigli

Chairperson : Norihiro Inagaki

15 : 10 S2-02 **Keynote** “High-speed low-cost plasma activation of textile materials”
(Masaryk University, Czech Republic) Mirko Cernak

Chairperson : Satoko Okubayashi

15 : 40 S2-03 “Preparation of sodium and strontium ions absorbable non-woven fabric by using electron beam grafting”
(University of Fukui, Japan) Teruo Hori, Tatsuhiro Nishiguchi, Koji Miyazaki and Sumito Kiyooka

16 : 00 S2-04 “Preparation of polyester fabric having thermo-responsive wettability through electron beam graft polymerization with N-isopropyl acrylamide”
(University of Fukui, Japan) Kazumasa Hirogaki, Kazuki Shimada, Isao Tabata, Kenji Hisada and Teruo Hori

Chairperson : Akihiko Ouchi

16 : 20 S2-05 “Safer Hair Dyeing by Using Biobased Materials”
(Kyoto Institute of Technology, Japan)
Hidekazu Yasunaga, Takanori Matsubara, Shota Morimoto, Takanori Hagino, Isao Wataoka and Hiroshi Urakawa

16 : 40 S2-06 “Catechinone hair dyestuff preparation by chemical oxidation technique - condition for highly-efficient production and reaction mechanism—”
(Kyoto Institute of Technology, Japan)
Takanori Matsubara, Isao Wataoka, Hiroshi Urakawa and Hidekazu Yasunaga

Chairperson : Kazumasa Hirogaki

17 : 00 S2-07 “Facile bifunctional dyeing of synthetic fabrics under supercritical carbon dioxide medium. Part (I) : Dyeing polyester fabrics with new antibacterial hydrazonopropanenitrile dyes”
(Damietta University, Egypt) Tarek Abou Elmaaty, Jaehyuk Ma, Fathy El-Taweel, Eman Abd El-Aziz and Satoko Okubayashi

September 30th

Chairperson : Kunihiro Hamada

11 : 10 S2-08 **Keynote** “Design and preparation of dye chemosensors and related properties”
(Chungnam National University, South Korea) Younga Son

Chairperson : Satoko Okubayashi

11 : 40 S2-09 “Novel surface-dyeing agent with a molecular sieve structure for simplified denim dyeing production”
(The Hong Kong Polytechnic University, China)
Songmin Shang, Ka-lok Chiu, Marcus Chun Wah Yuen and Shouxiang Jiang

12 : 00 S2-10 “Photochemical treatment for the improvement of dyeability of polyester fabrics”
(National Institute of Advanced Industrial Science and Technology (AIST), Japan) Akihiko Ouchi

12 : 20 S2-11 “Novel Indoline Dyes for Dye-Sensitized Solar Cell”
(Gifu University) Masaki Matsui

D (TFT East, 9th Floor, Room 9A)
 S3 : Flow & Deformation Induced Polymer
 Crystallization
T. Kanaya, H. Murase, K. Nishida, and Y. Ohkoshi
Program Chairs
Supported by Institute for Chemical Research,
Kyoto University

September 29th

Chairperson : Toshiji Kanaya

14 : 40 S3-01 **Keynote** “Precise analysis for shish-kebab structure in uniaxial drawing”
 (Yamagata University, Japan) Go Matsuba

15 : 10 S3-02 **Keynote** “New scenario of shish-kebab formation in entangled ultrahigh molecular weight polyethylene solutions”
 (Toyobo Co.,Ltd., Japan) Hiroki Murase

15 : 40 S3-03 **Keynote** “Synchrotron X-ray study of extensional flow-induced crystallization in isotactic polypropylene”
 (Stony Brook University, USA) Benjamin Hsiao

Chairperson : Hiroki Murase

16 : 10 S3-04 “Precursor in flow-induced polymer crystallization”
 (Kyoto University, Japan) Toshiji Kanaya, Tomohiko Matsuura, Inga Polec, Tetsuaki Fujiwara, Rintaro Inoue, Koji Nishida, Hiroki Ogawa and Noboru Ohta

16 : 30 S3-05 **Keynote** “To Be Announced”
 (Materials Science Center, DSM Ahead, Netherlands) Luigi Balzano

17 : 00 S3-06 **Keynote** “Shish kebab formation under deformation - Role of long chains, matrix chains and chain structure-”
 (Sumitomo Chemical Co., Japan) Yoshinobu Nozue

September 30th

Chairperson : Sono Sasaki

11 : 10 S3-07 “Formation mechanism of kebab formed at above nominal melting temperature after applying shear flow”
 (Kyoto University, Japan) Nobuaki Takahashi, Toshiji Kanaya, Tomohiko Matsuura, Tadahiko Maede, Momoko Murakami, Rintaro Inoue, Koji Nishida, Yasuhiro Hanamoto and Osamu Bandoh

11 : 30 S3-08 **Keynote** “Molecular simulations of shear-induced polymer crystal nucleation”
 (Nanjing University, China) Wenbing Hu

12 : 00 S3-09 **Keynote** “Spin-enhanced polymer crystallization in a polymer blend during spin coating”
 (National Synchrotron Radiation Research Center, Hsinchu Science Park, Taiwan) U-Ser Jeng

Bruker Luncheon Seminar (12 : 30~13 : 40)

Chairperson : Yutaka Ohkoshi

13 : 40 S3-10 **Keynote** “Influence of shearing on composition of copolyesters prepared by phase separation during polymerization”
 (Okayama University, Japan) Kunio Kimura

14 : 10 S3-11 “Crystallization behaviors of polymers in spin-coating film-forming processes investigated by grazing-incidence X-ray scattering using synchrotron radiation”
 (Kyoto Institute of Technology, Japan) Sono Sasaki, Ryosuke Hata, Yuki Tsuji, Jiro Hoshiba, Shinichi Sakurai, Takaaki Hikima, Hiroyasu Masunaga, Hiroki Ogawa, Kohji Tashiro and Masaki Takata

Chairperson : Wenbing Hu

14 : 30 S3-12 “Insight into the origin of irreversible deformation for olefin block copolymers under uniaxial stretching”
 (Fudan University, China) Qinglong Zhang and Jiachun Feng

14 : 50 S3-13 “Kinetics of crystallization and stress relaxation in strained natural rubber network”
 (Kyoto University, Japan) Masatoshi Tosaka

15 : 10 S3-14 **Keynote** “Deformation induced crystallization of polyester materials : studies on the structural evolution mechanisms of PEN, PET and PET nanocomposites under uniaxial deformation”
 (University of Minho, Portugal) Carla I. Martins

Chairperson : U-Ser Jeng

15 : 40 S3-15 **Keynote** “Structure development in the continuous fiber drawing process”
 (Shinshu University, Japan) Yutaka Ohkoshi

16 : 10 S3-16 “Fiber structure development in laser-heated drawing of nylon 6 fiber”
 (Shinshu University, Japan) KyoungHou Kim, Yutaka Ohkoshi and Akira Wakasugi

E (TFT East 9Fth Floor, Room 901)
 S4 : Smart Textiles / Nanofibers
M. Kotaki, M. Kimura, and I. S. Kim
Program Chairs

September 29th

Chairperson : Mutsumi Kimura

14 : 40 S4-01 **Keynote** “Teaching Cotton New Tricks : molecular strategies for making smart cotton”
 (Cornell University, USA) Juan P. Hinestroza

15 : 10 S4-02 **Keynote** “Silk fibroin nanofibers for bio- medical application”
 (Seoul National University, South Korea) Ki Hoon Lee

Chairperson : Hidetoshi Matsumoto

15 : 40 S4-03 “Production scale-up and commercial applications of nanofibers”
 (Elmarco Ltd., Czech Republic) Cagri Tekmen

16 : 00 S4-04 “The development of the nano filaments “Nanofront®” and nanofiber products”
 (Teijin Limited, Japan) Noritaka Ban

16 : 20 S4-05 “Preparation and characterization of thermo-plastic polymer nanofibers and membranes”
 (Donghua University, China) Dandan Xu, Keying Zhu and Ru Xiao

16 : 40 S4-06 “High-throughput fabrications, functionalizations and applications of thermoplastic nano-fibers and nanofibrous membranes”
(University of California, Davis, USA) Gang Sun, Jing Zhu and Dong Wang

17 : 00 S4-07 “Bulky quaternary alkyl ammoniums with high degrees of dissociation enhance the dispersibility of charged nanocellulose in solvents”
(University of Tokyo, Japan) Michiko Shimizu, Tsuguyuki Saito, Hayaka Fukuzumi and Akira Isogai

September 30th

Chairperson : Midori Takasaki

11 : 10 S 4-08 **Keynote** “Grand challenge towards industrialization of “QMONOS” synthetic spider silk”
(Spiber Inc., Japan) Junichi Sugahara

**Supported by the Strategic Research Committee for Nanofiber Technology, the Society of Fiber Science and Technology, Japan*

11 : 40 S4-09 “Stress induced structure change of electrospun poly (butylene terephthalate) fibers under uni-axial stretching”
(Kyushu University, Japan) Hirofumi Kabayama, Yuji Higaki and Atsushi Takahara

12 : 00 S4-10 “pH-sensitive nanofibres based on the electrospinning of polycaprolactone and polycaprolactone/chitosan blends”
(Ghent University, Belgium) Karen De Clerck and Iline Steyaert

12 : 20 S4-11 “Novel nanofiber membrane sensor with the coordinate function of destroy and detect the bacterium designed by the template printing”
(Wuhan Textile University, China) Mufang Li, Qinghua Zhao, Ying Lu and Dong Wang

Chairperson : Ick Soo Kim

13 : 40 S4-12 **Keynote** “Innovation and up-scaling of smart, green and customized fibers for functionalized textiles : success stories of IFTH”
(Institut Français Textile Habillement, France) Pascal Rumeau

14 : 10 S4-13 **Keynote** “Actuators and energy harvesters based on polymers”
(National Institute for Applied Sciences, Lyon, France) Daniel Guyomar

14 : 40 S4-14 “In-situ polymerization of conductive PANI/PET electrode for flexible and wearable energy storage device”
(Wuhan Textile University, China) Qiongzheng Liu, Ming Xia, Zhou Zhou, Yifei Tao, Mufang Li, Ke Liu and Dong Wang

15 : 00 S4-15 “A novel textile spherical solar cell array”
(Industrial Technology Center of Fukui Prefecture, Japan) Atsushi Masuda, Tetsuhiko Murakami, Norio Sasaguchi, Takahiro Tsuji, Josuke Nakata, Hidetoshi Nakamura, Soichiro Ohtani, Ikuo Inagaki, Kenich Taira, Norifumi Nagatomo, Ryuichi Yoshioka, Tomoaki Harii and Yoshihiro Iwasaki

Chairperson : Cagri Tekmen

15 : 20 S4-16 “Electrical function of dielectric PVC gel -electro-optical function-”
(Shinshu University, Japan) Hiromu Sato and Toshihiro Hirai

15 : 40 S4-17 “Percolation in transparent and conducting two-dimensional nanowire networks”
(Tokyo Institute of Technology, Japan) Keisuke Azuma, Koichi Sakajiri, Hidetoshi Matsumoto, Sungmin Kang, Junji Watanabe and Masatoshi Tokita

16 : 00 S4-18 “Analysis of sound absorption characteristics of silica nanofiber sheet”
(Tokyo Institute of Technology, Japan) Shuichi Akasaka, Takahisa Kato, Hidetoshi Matsumoto and Shigeo Asai

16 : 20 S4-19 “Microwave absorption behavior of poly(vinyl alcohol)/multiwall carbon nanotube composite thin film and nanofiber layers”
(Islamic Azad University, Iran) Aminoddin Haji, Golestan Salimbeygi, Ahmad Mousavi Shoushtari and Komeil Nasouri

16 : 40 S4-20 “Preparation of nanocomposite fibers based on cellulose and graphene nanoplatelets using ionic liquids”
(Islamic Azad University, Iran) Shaya Mahmoudian, Muhammad Imran and Moham

F (TFT East, 9th Floor, Room 902)

S5 Bio-Based and Biomedical Materials

T. Iwata, H. Yamane, K. Ohkawa,

T. Yamamoka, M. Kunioka, and T. Kitaoka

Program Chairs

September 29th

Chairperson : Takuya Kitaoka

14 : 40 S5-01 **Keynote** “New cellulosic architectures : from 3D to 2D material”
(Aalto University, Finland) Eero Kontturi

15 : 10 S5-02 “Surface reactivity in an aqueous system of bio-nanofibers prepared by the aqueous counter collision method”
(Kyushu University, Japan) Shingo Yokota and Tetsuo Kondo

15 : 30 S5-03 “Nanocellulose is a bio-based reinforcement for biocomposites”
(Hanyang University, Korea) Seong Hun Kim and Sang Ho Park

15 : 50 S5-04 “Structural stability of the isolated molecular chain sheets composing the crystal structures of cellulose allomorphs : a DFT study.”
(Miyazaki University, Japan) Takuya Uto and Toshifumi Yui

Chairperson : Eero Kontturi

16 : 10 S5-05 “A novel strategy for the synthesis of glycolipid-based building blocks used in carbohydrate materials”
(Tohoku University, Japan) Gefei Li, Masato Noguchi, Masaki Ishihara and Shin-ichiro Shoda

16 : 30 S5-06 “Superior reinforcement effect of cellulose nanofibrils in regenerated cellulose matrix”
(The University of Tokyo, Japan) Quanling Yang,
Tsuguyuki Saito and Akira Isogai

16 : 50 S5-07 “Development of the preliminary treatment for cellulose fiber”
(Yamagata University, Japan) Ryoichiro Shimura,
Akihiro Nishioka, Ichiro Kano, Tomonori Koda, Ken Miyata and Taichi Nishio

September 30th

Chairperson : Kousaku Ohkawa

11 : 10 S5-08 **Keynote** “Functional fibrous materials based on silkworm silk”
(Soochow University, China) Zhang Ke-Qin

11 : 40 S5-09 “NMR study of Ti binding peptides for the Ti implant surface modification”
(University of Fukui, Japan) Yu Suzuki and
Tetsuo Asakura

12 : 00 S5-10 “Cellular immune responses via TLR-mediated signaling on glyco-decorated biointerfaces”
(Kyushu University, Japan) Fumi Uemura and Takuya Kitaoka

12 : 20 S5-11 “Oriented immobilization of enzyme on the electrode for efficient electron transfer and its application for biofuel cell”
(University of Fukui, Japan) Shin-Ichiro Suye, Toshiki Uchii, Ayako Koutou, Takenori Satomura, Haruhiko Sakuraba and Toshihisa Ohshima

Lunch (12 : 40 ~ 13 : 40)

Chairperson : Hideki Yamane

13 : 40 S5-12 **Keynote** “Stimuli-responsive biomaterials for local drug and gene delivery”
(University of Memphis, USA) Tomoko Fujiwara

14 : 10 S5-13 “Crystal structures and phase transition behaviors of Poly(Lactic Acid) and its stereocomplex”
(Toyota Technological Institute, Japan)
Kohji Tashiro, Kaewkan Wasanasuk, Naoto Kouno and Hideto Tsuji

14 : 30 S5-14 “Fabrication of thermoplastic flexible films of chitin butyrate/poly(ϵ -caprolactone) blends and improvement of cytocompatibility by alkaline treatment”
(Gifu University, Japan) Hiroki Hashiwaki, Yoshikuni Teramoto and Yoshiyuki Nishio

Chairperson : Zhang Ke-Qin

14 : 50 S5-15 “Positioning Biopolymers in the Textile Process Chain”
(Institut für Textiltechnik der RWTH Aachen, Germany) Benjamin Glauß, Pavan Kumar Manvi, Gunnar Seide and Thomas Gries

15 : 10 S5-16 “High performance fibers from microbial polyesters and polysaccharide derivatives”
(The University of Tokyo, Japan) Tadahisa Iwata

15 : 30 S5-17 “Structural modifications of poly(butylene succinate) a biobased and biodegradable polymer for the preparation of melt-spun fibers”

(INSA-Lyon, France) Marie Vandesteene, Françoise Fenouillot, Alain Rousseau and Nadège Boucard

Chairperson : Tomoko Fujiwara

15 : 50 S5-18 “Crystallization behavior, mechanical properties and highly ordered structure of P(3HB)/ UHMW- P(3HB) blend fiber : effect of the addition of UHMW-P(3HB)”
(The University of Tokyo, Japan) Taizo Kabe, Takeharu Tsuge, Takaaki Hikima, Masaki Takata and Tadahisa Iwata

16 : 10 S5-19 “EcoLASTANE : A novel technology for producing bio-based synthetic textile fibres from biomass-derived furanic monomers”
(Techtera, France) Bruno Mougin

16 : 30 S5-20 “Effect of processing conditions on crystallization behavior of PHBH in high-speed melt spinning process”
(Tokyo Institute of Technology, Japan) Qing Qin, Wataru Takarada and Takeshi Kikutani

October 1st

Chairperson : Masao Kunioka

11 : 10 S5-21 “Synthesis and characterization of fully biomass-based liquid crystalline copolymers”
(Tokyo University of Agriculture and Technology, Japan) Hong Sun and Kenji Ogino

11 : 30 S5-22 “Molecular and thermal properties of heat-resistant polyesters prepared from plant-derived aromatic hydroxy acids”
(The University of Tokyo, Japan) Daisuke Ishii and Tadahisa Iwata

11 : 50 S5-23 “Local delivery of sustained aspirin via novel hybrid stent/biodegradable nanofibers”
(Chang Gung University, China) Cheng-Hung Lee

12 : 10 S5-24 “Sol-gel transition of the mixed aqueous dispersions consisting of polylactide-poly(ethylene glycol) diblock and triblock copolymers : Tuning of gel properties by chain-extension and improved applicability as cell-injectable scaffolds”
(Kyoto Institute of Technology, Japan) Yu-I Hsu, Kazunari Masutani, Takashi Aoki, Tetsuji Yamaoka and Yoshiharu Kimura

Lunch (12 : 30 ~ 13 : 40)

Chairperson : Tadahisa Iwata

13 : 40 S5-25 “Study of amorphosization mechanism for rice starch as bio-based material by original milling system”
(Yamagata University, Japan) Seigo Murakami, Ken Miyata, Tomonori Kouda, Taichi Nishio and Akihiro Nishioka

14 : 00 S5-26 “Controlled chain-configurations of polylactides based on different terminal-coupling methods”
(Kyoto Institute of Technology, Japan) Hyun Jung-yub and Kimura Yoshiharu

14 : 20 S5-27 “Biomimetic alignment and responses of myoblast cells on glyco-clustered biointerfaces with micropatterned geometries”
(Kyushu University, Japan) Pornthida Poosala and Takuya Kitaoka

Chairperson : Kazuya Sawada

14 : 40 S5-28 **Keynote** “An offensive strategy for establishing the antithrombogenic property of small-diameter blood vessels”
(National Cerebral and Cardiovascular Center Research Institute (NCVC), Japan) Tetsuji Yamaoka

15 : 10 S5-29 “Development of porous nanofibrous poly-L-lactide scaffolds in supercritical CO₂”
(Huaqiao University, China) Ai-Zheng Chen, Ai-Hua Deng and Shi-Bin Wang

15 : 30 S5-30 “Capacity of polyurethane elastomers fibers as a drug delivery system”
(University of Fukui, Japan) Onon Batnyam, Satoshi Fujita, Chih-Wei Chou and Shin-Ichiro Suye

15 : 50 S5-31 “Protein-protein interaction in human hemoglobin solution and its implication for functionality of artificial red cells (hemoglobin vesicles)”
(Shinshu University, Japan) Takaaki Sato, Otto Glatter and Hiromi Sakai

Chairperson : Tetsuji Yamaoka

16 : 10 S5-32 “AFM observation of polyurethane nanofibers prepared by electrospinning”
(University of Fukui, Japan) Hiroaki Sakamoto, Hitoshi Asakawa, Takeshi Fukuma, Satoshi Fujita and Shin-ichiro Suye

16 : 30 S5-33 “Electrospun gelatin nanofibrous scaffolds for corneal keratocyte cultivation”
(Chang Gung University, Taiwan) Jui-Yang Lai

16 : 50 S5-34 “Cell culture on the wool-derived keratin scaffold”
(Osaka Seikei College, Japan) Kazuya Sawada, Hiroki Goto and Toshiya Fujisato

G (TFT East, 9th Floor, Room 9F)
S6 Composites and Industrial Textiles
M. Shioya, A. Nakai, and S. Asai
Program Chairs

September 30th

Chairperson : Masatoshi Shioya

16 : 10 S6-01 “The control of pore sizes in porous carbon fiber and its microwave absorption as an absorbent in epoxy composite”
(Donghua University, China) Guang Li, Shenglin Yang, Junhong Jin and Jianming Jiang

16 : 30 S6-02 **Keynote** “Gas barrier properties improvement by aligning Fe₃O₄ / graphite nanoplatelets through a low magnetic field”
(Harbin Institute of Technology, China) Weicheng Jiao

G (TFT East, 9th Floor, Room 9F)
S6 Composites and Industrial Textiles
M. Shioya, A. Nakai, and S. Asai
Program Chairs

October 1st

Chairperson : Masatoshi Shioya

11 : 10 S6-03 “Fabrication of CFRP pipe with noncrimp fiber structure for higher productivity”
(Gifu University, Japan) Tadashi Uozumi, Motohiro Tanigawa, Tatsuhiko Miura, Akio Ohtani and Asami Nakai

Chairperson : Akio Ohtani

11 : 30 S6-04 “Effects of press molding conditions on mechanical properties of carbon fiber fabric Reinforced polycarbonate sheets”
(Kanazawa Institute of Technology, Japan) Osuke Ishida, Mitsugu Kimizu, Wataru Okumura and Kiyoshi Uzawa

11 : 50 S6-05 “Effects of content of maleic acid on mechanical properties of carbon fiber fabric reinforced polypropylene sheets”
(Industrial Research Institute of Ishikawa, Japan) Wataru Okumura, Hiroyuki Hasebe, Mitsugu Kimizu, Osuke Ishida and Hiroshi Saito

12 : 10 S6-06 “Mechanical properties of steel fibres knitted fabric”
(KU Leuven, Belgium) Marcin Barburski and Stepan V. Lomov

Lunch (12 : 30 ~ 13 : 40)

Chairperson : Asami Nakai

13 : 40 S6-07 “Facile prepared PVA-co-PE nanofiber net membrane for high efficiency air filtration”
(Wuhan Textile University, China) Ke Liu, Zuan Xiao, Pengfei Ma, Mufang Li, Qiongzhen Liu and Dong Wang

14 : 00 S6-08 “Effects of needling parameters and weight per unit area on the puncture resistance of geotextile nonwoven fabrics”
(Yazd University, Iran) Hossein Rahimi, Saeid Fattahi and Hasan Mashroteh

14 : 20 S6-09 **Keynote** “Effect of various fiber densities on mechanical properties of biaxial warp knitted textile composites” (Ondokuz Mayıs University, Turkey) Özgür Demircan

Chairperson : Shigeo Asai

14 : 50 S6-10 **Keynote** “Filler network formation induced by electric field and its physical properties of nanodiamond composites”
(Tokyo Institute of Technology, Japan) Shuichi Akasaka

15 : 20 S6-11 “Cellulose nanofiber reinforced resin composite materials by using novel polymer dispersants”
(Kyoto University, Japan) Keita Sakakibara and Yoshinobu Tsujii

15 : 40 S6-12 “Preparation of biodegradable composite from water hyacinth reinforced poly(lactic acid)”
(Pathumwan Institute of Technology, Thailand)
Jessada Wong On, Prayoon Surin and Supaphorn Thumsorn

Chairperson : Keita Sakakibara

16 : 00 S6-13 “Utilization of textile waste in green composites”
(Technical University of Liberec, Czech Republic)
Rajesh Mishra, Bijoy kumar Behera and Jiri Militky

16 : 20 S6-14 “High performance polyetherimide (PEI) fiber & composite materials”
(Kurarau Co.,Ltd., Japan) Munenori Kumagai,
Akihiro Uehata, Ryokei Endo and Yosuke Washitake

16 : 40 S6-15 “Mechanical properties of multi-layer 3D woven composites”
(Gifu University, Japan) Akio Ohtani, Hitomi Kitamura, Masayuki Kitamura and Asami Nakai

G (TFT East, 9th Floor, Room 9F)
S7 International Conference on Advanced Fiber/
Textile Materials
K. Hamada
Program Chair
Supported by Shinshu University Advanced Leading
Graduate Program

September 29th

Chairperson : Shigeru Inui

14 : 40 S7-01 “Quantitative evaluation method of fabric surface fittability”
(Shinshu University, Japan) Tomoya Suzuki,
KyoungOk Kim and Masayuki Takatera

15 : 00 S7-02 “Quantitative analysis of textile products using infrared spectroscopy and moving window partial least squares regression analysis”
(Shinshu University, Japan) Shogo Tomii, Hiroaki Ishizawa, Kyoko Katayama, Shouhei Koyama and Mika Morishima

15 : 20 S7-03 “Evaluation of tactile sensation by skin of the knitted fabric with polypropylene blended yarn”
(Shinshu University, Japan) Hideaki Mizuhashi, Hiroaki Yoshida, Masayoshi Kamijo and Masahiko Kubo

15 : 40 S7-04 “Estimation of fabric bending rigidities in any directions based on yarn properties”
(Shinshu University, Japan) Julie Peiffer,
KyoungOk Kim and Masayuki Takatera

Break (16 : 00~16 : 20)

Chairperson : Hiroaki Ishizawa

16 : 20 S7-05 “Relationship between physical properties and hand of denim”
(Shinshu University, Japan) Atsushi Kawamura

16 : 40 S7-06 “Measurement of poisson’s ratio of yarn”
(Shinshu University, Japan) Tamotsu Arichi,
KyoungOk Kim and Masayuki Takatera

17 : 00 S7-07 “Computer aided pattern making of jacket taken into account ease allowance and silhouette for individual”
(Shinshu University, Japan) Noriaki Innami,
KyoungOk Kim and Masayuki Takatera

September 30th

Chairperson : Hiroyuki Kanai

11 : 10 S7-08 “The influence of shape memory alloy wires and elastomeric yarns in tubular structures”
(Universidade Federal do Rio Grande do Norte, Brazil)
Jose Ivan Medeiros, Raul Fanguero, Juliana Cruz,
Jose Heriberto Nascimento, Fernando Oliveira and
Nilson Casimiro Pereira

11 : 30 S7-09 “Study on improvement of compression performance of UHMWPE fiber reinforced plastic”
(Shinshu University, Japan) Fangtao Ruan, Limin Bao and Yukinari Okuyama

11 : 50 S7-10 “Basis study on systolic blood pressure measurement by using FBG sensors”
(Shinshu University, Japan) Tsubasa Takagi, Hiroaki Ishizawa, Masaaki Niimura, Shouhei Koyama, Yuki Miyauchi and Yui Katsuragawa

12 : 10 S7-11 “Smart gel materials applicable to the intraocular lenses”
(Yamagata University, Japan) Jin Gong

Lunch (12 : 30~13 : 40)

Chairperson : Masayuki Takatera

13 : 40 S7-12 **Keynote** “Engineering the transport properties of fibrous materials”
(Cornell University, USA) Jintu Fan

Chairperson : Hideaki Morikawa

14 : 10 S7-13 **Keynote** “Structural functionalization of woven fabrics”
(University of Ljubljana, Slovenia) Krste Dimitrovski

Chairperson : Koji Abe

14 : 40 S7-14 **Keynote** “Bio-directed synthesis and stabilization of silver nanoparticles using pomegranate towards functionalization of wool”
(University of Twente, Netherlands) Victoria Dutschk

Chairperson : Mikihiro Miura

15 : 10 S7-15 **Keynote** “Characterization of side emitting polymeric optical fibres”
(Technical University of Liberec, Czech Republic) Jiri Militky

Chairperson : Toshihiro Hirai

15 : 40 S7-16 **Keynote** “Functionalized fibers used as sensors and actuators”
(ENSAIT, France) Vladan Koncar

H (TFT East, 9th Floor, Room 910)
S8 Functional Textiles
Y. Kawahara and A. Takeno
Program Chairs
Supported by Kanto Branch, The Textile Machinery
Society of Japan

September 29th

Chairperson : Yasushi Tamada

14 : 40 S8-01 “New developments of the Dyneema® ultra high molecular weight polyethylene fiber”
(DSM Dyneema, Netherland) Harm van der Werff

15 : 00 S8-02 “Influence of ambient conditions on deodorant property of activated carbon fiber”
(Otsuma Women’s University, Japan) Chiyomi Mizutani

Chairperson : Yutaka Kawahara

15 : 20 S8-03 **Keynote** “Fibers for Nonwoven Fabrics”
(Philipps University of Marburg, Germany) Andreas K. Schaper

15 : 50 S8-04 “Effect of weak acidic polyester on skin condition”
(Teijin Frontier Co., LTD., Japan) Naoki Horikawa

Chairperson : Chiyomi Mizutani

16 : 10 S8-05 “The outermost surface analysis of silk fibroin films and electrospun fibers treated under different ethanol-treatment conditions used in biomaterial preparation”
(Toyama Industrial Technology Center, Japan) Dohiko Terada, Shinya Hattori, Hisatoshi Kobayashi and Yasushi Tamada

16 : 30 S8-06 “Modification of polylactic acid fibres surface with ferulic acid”
(Lodz University of Technology, Poland) Dorota Wojciechowska

16 : 50 S8-07 “Plasma treatment : A versatile means for surface modification of polymers and textiles”
(Islamic Azad University, Birjand Branch, Iran) Aminoddin Haji

H (TFT East, 9th Floor, Room 910)
S9 : Neo Fiber Technology
T. Aoki
Program Chair
Supported by Kyoto Institute of Technology

September 30th

Chairperson : Yoshiharu Kimura

11 : 10 S9-01 **Keynote** “Synthesis and characterization of copolyester containing isosorbide”
(Hanyang University, Korea) Seung Soon Im, Won Jae Yoon, Sung Yeon Hwang and Jun Mo Koo

11 : 40 S9-02 **Keynote** “Natural fibres for structural composite applications-concepts and opportunities”
(University of Borås, Sweden) Mikael Skrifvars

Chairperson : Isao Wataoka

12 : 10 S9-03 “Flow behavior for composites of hydroxypropyl cellulose and nano-fibers”
(Kyoto Institute of Technology, Japan) Katsufumi Tanaka and Haruki Kobayashi

Lunch (12 : 30 ~ 13 : 40)

Chairperson : Hiroshi Urakawa

13 : 40 S9-04 **Keynote** “Silk graft copolymerization regulated by tailor-made radicals released from chain transfer agent”
(Zhejiang Sci-Tech University, China) Lei Yang, Wenwen Liu, Yi-fen Shen and Jian Han

14 : 10 S9-05 **Keynote** “Neo-PLA based composite technologies for engineering applications”
(Indian Institute of Technology Guwahati, India) Vimal Katiyar

Chairperson : Katsufumi Tanaka

14 : 40 S9-06 “Fiber formation of the terminal modified poly (lactide)s via Diels-Alder reaction”
(Kyoto Institute of Technology, Japan) Kazunari Masutani and Yoshiharu Kimura

15 : 00 S9-07 “Die drawing of poly(lactic acid) fibers”
(Kyoto Institute of Technology, Japan) Hideki Yamane, Shin Sasaki and Jae-Chang Lee

Chairperson : Takashi Aoki

15 : 20 S9-08 **Keynote** “Electrospinning principles and its possibilities in various applications”
(University of Malaya, Malaysia) Amalina M.A., Sepehr Talebian, Umma Habiba, Ang Bee Chin, Hossein M Khanlou

15 : 50 S9-09 **Keynote** “Development of bio-ethanol manufacturing technique with energy saving from cellulosic fiber waste”
(Hyogo Prefectural Institute of Technology, Japan) Shigeyuki Nakano and Tadashi Uragami

Chairperson : Hideki Yamane

16 : 20 S9-10 “Study on the structure of celluloses dissolved in ionic liquids”
(University of Natural Resources and Life Sciences, Vienna, Austria) Mitsuharu Koide, Ute Henniges, Antje Potthast, Thomas Rosenau, Shiori Shono, Isao Wataoka and Hiroshi Urakawa

16 : 40 S9-11 “Characteristics of DNA-based polyion complexes”
(Kyoto Institute of Technology, Japan) Takashi Aoki and Daiki Isobe

September 29th 17 : 30-20 : 00

Obligation Time :

Odd number : 17 : 45-18 : 45

Even number : 19 : 00-20 : 00

G1 Fibers and Polymer Materials

- PG1-01 "Metal doping effects on photocatalytic activities of titanium oxide nanotubes"
(Shinshu University, Japan) Shin Oi, Yukie Kato, Kenji Hanabusa and Masahiro Suzuki
- PG1-02 "Control of nanostructure and photocatalytic activity of titanium oxide helical nanotubes"
(Shinshu University, Japan) Shin Oi, Kenji Hanabusa and Masahiro Suzuki
- PG1-03 "Formation of supramolecular hydrogels by zwitterionic L-lysine hydrogelators"
(Shinshu University, Japan) Masahiro Suzuki, Moemi Kondo and Kenji Hanabusa
- PG1-04 "Controlled release of medicine in supramolecular hydrogels based on L-lysine hydrogelators"
(Shinshu University, Japan) Mashairo Suzuki, Ryosuke Ebina and Kenji Hanabusa
- PG1-05 "Control of helical and non-helical morphology of poly(ester-imide) crystals by crystallization during copolymerization"
(Okayama University, Japan) Takuya Ohnishi, Tetsuya Uchida, Shinichi Yamazaki and Kunio Kimura
- PG1-06 "Phosphoric acid-doped sulfonated polyimide and polybenzimidazole blend membranes: high proton transport at wide temperatures under low humidity conditions due to new proton transport pathways"
(Tokyo Metropolitan University, Japan) Takeru Wakiya, Kazuhiro Suzuki, Manabu Tanaka and Hiroyoshi Kawakami
- PG1-07 "Synthesis and properties of new thienoisindigo based polymers"
(Tokyo Institute of Technology, Japan) Tsukasa Hasegawa, Minoru Ashizawa, Junya Hiyoshi, Susumu Kawauchi and Hidetoshi Matsumoto
- PG1-08 "Structure development and mechanical properties of cellulose fibers wet spun from 1-Ethyl-3-Methylimidazolium Acetate"
(China Textile Academy, State Key Laboratory of Biobased Fiber Manufacturing Technology, China) Xiaojun Li, Yushan Sun, Nianke Li and Xianquan Duan
- PG1-09 "Remote methane and oxygen mixture plasma surface hydrophilization on polypropylene porous membrane"
(Yuan Ze University, Taiwan) Chun Huang, Wei-Ting Hou and Wei-Chun Ma
- PG1-10 "Attempted helicity induction in polyacetylenes bearing chiral alkyl chains by postfunctional modification"
(Tokyo Institute of Technology, Japan) Wataru Yairi and Tsuyoshi Michinobu
- PG1-11 "Drying dissipative structure of hectorite aqueous suspension"
(Gifu University, Japan) Saya Futamura, Hiroshi Kimura, Shinya Takahashi, Akira Tsuchida and Keiichi Kurosaka
- PG1-12 "Segregation effects for the drying dissipative structures of colloidal dispersion"
(Gifu University, Japan) Kazuki Takemoto, Hiroshi Kimura, Akira Tsuchida and Tsuneo Okubo
- PG1-13 "Enhancement of electronic excitation energy transfer efficiency caused by photon trapping of colloidal crystals"
(Gifu University, Japan) Akira Tsuchida, Hiroshi Kimura and Tsuneo Okubo
- PG1-14 "Adsorption of organic compounds to polymeric materials 9. Adsorption of organic compounds to various fibers and synthetic polypeptides"
(Fukushima University, Japan) Hitoshi Kanazawa
- PG1-15 "Dynamic excimer formation on the surface of colloidal spheres"
(Gifu University, Japan) Tatsuya Matsuba, Hiroshi Kimura, Akira Tsuchida and Koji Yoshinaga
- PG1-16 "Rapid sedimentation of colloidal particles under an electric field"
(Gifu University, Japan) Hiroshi Kimura, Shinya Takahashi and Akira Tsuchida
- PG1-17 "Determination of nanocellulose fibril length by shear viscosity measurement"
(The University of Tokyo, Japan) Reina Tanaka, Tsuguyuki Saito, Daisuke Ishii and Akira Isogai
- PG1-18 "Luminescent polymeric films with "Clicked" palladium(II) porphyrin moieties for oxygen sensor applications"
(Tokyo Institute of Technology, Japan) Aiko Hamasaki, Tsuyoshi Hyakutake, Hirotaka Sakaue and Tsuyoshi Michinobu
- PG1-19 "Compatibilizing effects on long carbon fiber reinforced polypropylene composites"
(Korea Institute of Industrial Technology, South Korea) Jung Soo Kim, Dae Young Lim and Dong Hyun Kim
- PG1-20 "Fiber structure development in high-speed meltspinning process of a new crystalline polycycloolefin"
(Tokyo Institute of Technology, Japan) Hideki Morioka, Wataru Takarada, Susumu Umemoto and Takeshi Kikutani
- PG1-21 "Well-aligned and well-oriented isotactic polypropylene nanofibers"
(Kobe University, Japan) Yuji Asahina, Chizuru

- Hongo, Masaru Kotera and Takashi Nishino
- PG1-22 “Study on interfacial shear for carbon fiber thermoplastic composites”
(Korea Institute of Industrial Technology, South Korea) Hyo Jin An and Ki-Young Kim
- PG1-23 “Mechanical properties of long carbon fiber-reinforced polyamide 46 composites”
(Korea Institute of Industrial Technology, South Korea) Hyo Jin An, Ki-Young Kim and Dong Hyun Kim
- PG1-24 “Effect of different end group balance on fiber structure during melt spinning of poly-(hexamethylene adipamide)”
(Tokushima Bunri University, Japan) Kazuishi Sato
- PG1-25 “Development of co-crystalline forms of syndiotactic polystyrene with organometallic compounds and their efficient properties”
(Shizuoka University, Japan) Takumi Sano, Jun Mochizuki and Hideyuki Itagaki
- PG1-26 “Preparation of rigid polymer nanofiber by using crystallized from dilute solution and its application”
(Okayama University, Japan) Tetsuya Uchida and Masashi Furukawa
- PG1-27 “Relationship between modulus and structure of a melt-quenched thermoplastic polyurethane as a function of annealing temperature”
(Tokyo University of Agriculture and Technology, Japan) Noboru Osaka, Yu Yanagihara, Sohgo Iimori, Satoshi Murayama and Hiromu Saito
- PG1-28 “Relationship between organic fouling behavior of anion exchange membranes and various organic fouling substances”
(Yamaguchi University, Japan) Keita Takamura, Nobuyuki Tanaka and Mitsuru Higa
- PG1-29 “Thin film structure and surface properties of poly(3-hexylthiophene)”
(Kobe University, Japan) Keishiro Nishi, Chizuru Hongo, Masaru Kotera, Kanta Fuji, Shunsuke Tamba, Atsunori Mori and Takashi Nishino
- PG1-30 “Gas diffusion properties of the magnetically oriented PBLG solids studied by NMR methods”
(Nagoya Institute of Technology, Japan) Jun Iwamoto and Hiroaki Yoshimizu
- PG1-31 “An NMR observation on gas-sorption induced molecular motion change of the alkyl side chains in layered structure of liquid crystalline polyester”
(Nagoya Institute of Technology, Japan) Masahiro Yamauchi and Hiroaki Yoshimizu
- PG1-32 “NMR of the gas in polyimides with different glassy states”
(Nagoya Institute of Technology, Japan) Masaya Fujita and Hiroaki Yoshimizu
- PG1-33 “Structural analysis of biodegradable polyester films prepared by aging on cold crystallization temperature and by soaking solvent effect”
(Shinshu University, Japan) Toshihisa Tanaka, Yumiko Takayama, Motomu Nishijo, Keigo Matsukawa and Tadahisa Iwata
- PG1-34 “Synthesis of nanofibrillated bacterial cellulose (NFBC) from biomass and mass production using a jar fermentor”
(Tokyo University of Agriculture and Technology, Japan) Ryota Kose, Hiroaki Sakurai and Kenji Tajima
- PG1-35 “DMFC performance of polymer electrolyte membrane prepared from poly(vinylalcohol)-based polyanion”
(Yamaguchi University, Japan) Shiyan Feng, Nobutaka Endo and Mitsuru Higa
- PG1-36 “Poly(vinyl alcohol)-based polymer electrolyte membrane for direct methanol fuel cells”
(Yamaguchi University, Japan) Nobutaka Endo, Shiyan Feng and Mitsuru Higa
- PG1-37 “Introduction of functional groups into poly(L-lactic acid) (PLLA) via gamma-irradiation in the presence of reagents”
(Shizuoka University, Japan) Erina Shintaku, Tatsuhiko Yagi and Chie Sawatari
- PG1-38 “Preparation of aqueous dispersions of multi-walled carbon nanotubes by the aqueous counter collision method”
(Kyushu University, Japan) Yohei Kawano and Tetsuo Kondo
- PG1-39 “Preferential subfibrillation from reducing ends in the initial stage of nano-pulverization using aqueous counter collision”
(Kyushu University, Japan) Hikari Utsunomiya, Shingo Yokota and Tetsuo Kondo
- PG1-40 “Gamma irradiation of poly(tetrafluoroethylene - hexafluoropropylene) (TFE-HFP) copolymer”
(Shizuoka University, Japan) Shota Watanabe, Tatsuhiko Yagi and Chie Sawatari
- PG1-41 “Promoting growth of graphitic whiskers on the surface of the activated carbons by phosphoric acid treatment”
(Kyushu University, Japan) Liwei Yu and Daisuke Tatsumi
- PG1-42 “Nanofiber structures composed of butadiene derivatives with tri(dodecyloxy)phenyl groups”
(Yamagata University, Japan) Kohei Kikuchi, Yoko Tatewaki and Shuji Okada
- PG1-43 “Self-assembling behaviors of collagen nanofibers in the aqueous dispersions prepared by the aqueous counter collision method”
(Kyushu University, Japan) Yutaro Tsujita, Shingo Yokota and Tetsuo Kondo
- PG1-44 “Fabrication of micro-structured surface of polymeric materials using femtosecond laser”
(Kogakuin University, Japan) Noritada Naruse, Yosuke Nishitani and Takeshi Kitano
- PG1-45 “Water-in-ionic liquid reverse micelles formed in imidazole-type ionic liquids”
(The University of Tokyo) Takumi Kusano, Kenta

Fujii, Kei Hashimoto and Mitsuhiro Shibayama

- PG1-46 “Stress concentration phenomenon in composite materials based on ultrasonic wave propagation simulation”

(Shinshu University, Japan) Li Ran

- PG1-47 “Vapor-grown carbon nanofiber/epoxy shape memory nanocomposites prepared via latex technology”

(Shinshu University, Japan) Dong Yubing

- PG1-48 “Comparative study of tubes formed by natural rubber, reinforced with natural fiber fabrics of jute, cotton, synthetic and polyester fabrics, nylon and nomex”
(Universidade Presbiteriana Mackenzie, Brazil) Nilson Casimiro Pereira, Cicera Soares Pereira and Jose Ivan Medeiros

- PG1-49 “Periodic structure on thin film of polyvinylether triblock copolymer”

(University of Fukui, Japan) Satoshi Irie, Madoka Ueno, Takashi Sasaki, Tsuguto Imaeda, Michio Urushisaki, Toshikazu Sakaguchi and Tamotsu Hashimoto

- PG1-50 “Thermal conductivity of textiles determined with temperature wave method”

(Tokyo Institute of Technology, Japan) Junko Morikawa and Toshimasa Hashimoto

- PG1-51 “Fabrication of poly(vinyl alcohol)-based porous carbon nanofibers and their application to electric double layer capacitors”

(Kyoto University, Japan) Takara Matsumoto, Shinsuke Nagamine and Masahiro Ohshima

- PG1-52 “Synthesis of nitrogen doped bamboo like carbon nanotube by plasma process in high pressures nitrogen”

(Tokyo University of Agriculture and Technology, Japan) Koichi Murakami, Yutaka Takahashi, Takuya Hashizume, Kaede Aoki and Toshiyuki Watanabe

- PG1-53 “Atomic-level structure of the crystalline domain of bombyx mori silk fibroin with silk II form studied with ¹³C Solid-state NMR”

(Tokyo University of Agriculture and Technology, Japan) Keiko Okushita, Atsushi Asano and Tetsuo Asakura

- PG1-54 “Cell adhesion on polymer scaffolds with 2D-pattern of mechanical properties”

(Kyushu University, Japan) Shinichiro Shimomura, Hisao Matsuno, Yohei Kinoshita, Satoshi Fujimura and Keiji Tanaka

- PG1-55 “Fabrication of ordered polydiacetylene thin film for electrical / optical application via simple coating process of the monomer solution”

(Tokyo University of Agriculture and Technology, Japan) Yuuki Miyazaki

- PG1-56 “Study of new soluble polymeric materials for hole transporting layer in organic EL device”

(Tokyo University of Agriculture and Technology, Japan) Kyusun Kim

- PG1-57 “Characterization of crystalline/amorphous interfaces

in isotactic polypropylene films”

(Kyushu University) Kentaro Yamamoto, Daisuke Kawaguchi and Keiji Tanaka

G2 Fibers and Textile Processing

- PG2-01 “On-line 2D retardation measurement of amorphous polymers during uniaxial elongation process”

(Yamagata University, Japan) Hiroshi Ito, Yasuto Sato, Tetsuo Takayama and Kentaro Taki

- PG2-02 “Surface replication and higher order structure of amorphous polymer film with nano surface structure fabricated by roll to roll imprinting method”

(Yamagata University, Japan) Tomofumi Egawa, Tetsuo Takayama, Kentaro Taki and Hiroshi Ito

- PG2-03 “Facile design of superhydrophobic fabrics by dopamine-induced bio-inspiration”

(University of Fukui, Japan) Zhanglian Xu, Koji Miyazaki and Teruo Hori

- PG2-04 “Formation process and structure of poly (acrylonitrile) gels”

(Yamagata University, Japan) Shota Nakano, Go Matsuba, Daiki Tominaga and Sinichi Takata

- PG2-05 “Thermal and moisture characteristics to the physical and structural properties of hybrid composites yarns and their woven fabrics”

(Yeungnam University, South Korea) Seung-Jin Kim

- PG2-06 “Analysis of bulk and surface structure of the temperature-sensitive adhesive”

(Yamagata University, Japan) Yuji Fujiyama, Go Matsuba, Koji Yamashita and Koichiro Kawahara

- PG2-07 “Effect of fiber surface area on the structural development of high-molecular weight poly(ethylene terephthalate) fibers in high-speed melt spinning process”

(Korea Institute of Industrial Technology, South Korea) Ki-Sub Lim, Do-Gun Kim, In-WooNam, Joo-Hyung Lee and Wan-Gyu Hahm

- PG2-08 “Novel core in sheath textured yarn and its fabric”

(Toray Industries, Inc., Japan) Hiroaki Date, Ryo Matsuo and Atsushi Kuwabara

- PG2-09 “Analysis on crystallization behavior of oriented polymers utilizing differential scanning calorimetry of high heating rate”

(Tokyo Institute of Technology, Japan) Seiji Shibata, Wataru Takarada and Takeshi Kikutani

- PG2-10 “A study on development of water soluble PVA needle punching nonwovens for water proof liner materials”

(Korea Institute of Industrial Technology, South Korea) Younghwan Bae, Sang Young Yeo and SungWon Byun

- PG2-11 “Preparation and characteristics of wet-laid nonwoven fabrics using polyarylate”

(Korea Institute of Industrial Technology, South Korea) Jeong-rak Choi, Yeon-sang Kim, Jung-nam Im

G3 Dyeing, Finishing, Coating and Laminating

- PG3-01 "Prussian blue dyed wool and its decontamination ability for radioactive cesium"
(Tokyo Metropolitan University, Japan) Kahori Yokota, Shio Arai, Ritsuko Nakamura, Tamako Otsu, Mika Ito, Koushi Fukunishi and Hirohisa Yoshida
- PG3-02 "Alkaline dissolution behavior and dyeing properties of sea-island type PET ultra-microfiber knitted fabrics"
(Dankook University, South Korea) Hyun Sung Kim, Young Ki Park, A Ra Jo, Kyung Min Lee and Jung Jin Lee
- PG3-03 "Eco-friendly dyeing of PLA knitted fabric with temporarily solubilized azo disperse dyes"
(Dankook University, South Korea) Young Ki Park, Hyun Sung Kim, A Ra Jo, Kyung Min Lee and Jung Jin Lee
- PG3-04 "Modification of chemically stable polymeric materials 37. Improvement in the adhesive property with normal adhesives, and water-based ink-jet printing"
(Fukushima University, Japan) Hitoshi Kanazawa, Aya Inada, Takuto Tanaka, Masaki Omori, Yuki Yamaguchi and Satoshi Yokota
- PG3-05 "A study of chitosan-based rechargeable antimicrobial finishing of cotton"
(The Hong Kong Polytechnic University, China) Chi-wai Kan and Chang-E Zhou
- PG3-06 "Effects of washing with surfactant and alkaline on surface properties of silk fabrics"
(Bunka Gakuen University, Japan) Lei Yumoto, Patra Attawiriyasakul and Yuji Yoneyama

G4 Textile Science and Engineering

- PG4-01 "Bleached hair structure elucidated by using a rubber elasticity theory to the swollen hair"
(Shinshu University, Japan) Kazuyuki Suzuta, Kunihiro Hamada and Kozo Arai
- PG4-02 "Hand value using friction coefficients measured by rotationally dragging tactile sensor"
(Kanazawa University, Japan) Toshiyasu Kinari, Hiroshi Tachiya, Lina Wakako and Hayato Komiya
- PG4-03 "3-D model for tensile simulation of multi-filament yarn"
(Kanazawa University, Japan) Toshiyasu Kinari, Tomotsugu Shimokawa, Lina Wakako and Kouichi Ohta
- PG4-04 "Characterization of optical properties of carbon fiber woven fabric"
(Kyoto Institute of Technology, Japan) Tomoko Awazitani and Sachiko Sukigara
- PG4-05 "Study on the initial maximum value of heat flux

(q_{max}) as an objective measure of fabric warm/cool feeling"

(Kobe University, Japan) Mari Inoue

- PG4-06 "Investigation on objective evaluation of fabric warm/cool feeling by finger sensor method"
(Nara Women's University, Japan) Morihiro Yoneda and Asako Sumi
- PG4-07 "Water absorption properties of hollow spun yarn"
(Shinshu University, Japan) Mika Morishima, Yoshio Oozeki and Akio Sakaguchi

G5 Textile Science and Engineering

- PG5-01 "Topography of fitting-perception of clothing pressures measured on the whole body of Japanese young adult female : In special reference for clothing pressure when the hoop tension occurred by an elastic-band"
(Shinshu University, Japan) Tamaki Mitsuno
- PG5-02 "Effect of material property and design of outdoor parker on its heat transfer and ventilation rate"
(Yokohama National University, Japan) Yayoi Satsumoto, Liu Yu, Takuya Aoyagi and Satoru Ueno
- PG5-03 "Indian Textile Industry : Issues and challenges"
(Pune University, India) Amruta Ghodawat and Bhori J. R.
- PG5-04 "Measurement of thermal resistances of infant's clothing and ensembles by means of a baby thermal manikin"
(Kyoto University of Education, Japan) Takako Fukazawa, Yuino Shibata, Sachiyo Ikeda, Keiko Watanabe and Yutaka Tochihara
- PG5-05 "Evaluation of the reduction of UV ray strength of sunlight for clothes processed or non-processed with the absorbing agents"
(Jissen Women's University, Japan) Hiromi Gocho, Miho Ogata, Yukari Takazawa, Maki Kiguchi and Tomoko Uenishi
- PG5-06 "Deodorization by Fibrous Wastes"
(Jissen Women's University, Japan) Hiromi Gocho, Hiroko Ikeda, Masumi Okabe and Tomoko Uenishi
- PG5-07 "Features of three-dimensional (3D) skirt surface shape using curvatures and image evaluations of made to order garments and pattern creation (Part 1) : tight skirt surface shape features using angle curvatures utilizing automatic creation with imaginary 3D draping in virtual reality"
(Mie University, Japan) Tomoe Masuda and Minami Wada
- PG5-08 "Features of three-dimensional (3D) skirt surface shape using curvatures and image evaluations of made to order garments and pattern creation (Part 2) : Flared skirt curved shape features using angle curvatures by body shapes, flare volumes, and materials"
(Mie University, Japan) Tomoe Masuda, Minami Wada and Hiroko Yokura

- PG5-09 "Features of three-dimensional (3D) skirt surface shape using curvatures and image evaluations of made to order garments and pattern creation (Part 3): Extraction of 3D flared skirt curved shape features relating image evaluations and physical curvature values"
(Mie University, Japan) Tomoe Masuda, Minami Wada and Kaori Murakami
- PG5-10 "Evaluation of store-bought UV absorbers for clothing under direct sunlight"
(Wayo Women's University, Japan) Chihiro Suzuki and Kaname Katsuraya
- PG5-11 "Influence of fiber fineness on the shrinkage of poly (lactic acid) (PLA) fiber yarn and fabrics"
(Tokyo Kasei Gakuin University, Japan) Tomomi Hanada, Mayo Koyama and Aya Kajino
- PG5-12 "Effects of kimono materials on wearing slippage and its mechanisms"
(Wayo Women's University, Japan) Naoko Yamaguchi, Mizuka Ito, Ayako Uchida, Kyoko Habu and Kaname Katsuraya
- PG5-13 "Effects of enzymes contained in detergent on preimmersing"
(Wayo Women's University, Japan) Naoko Nagashima
- PG5-14 "Evaluation of the thermal insulation of electrical heating textiles"
(Dong-A University, South Korea) Sunhee Lee
- PG5-15 "The effect of the placket buttonhole condition on the buttoning process: A study of thread weight of buttonhole twist"
(Shinshu University, Japan) Noriko Fukuda, Masayuki Takatera, Toyonori Nishimatsu and Yo-ichi Matsumoto
- PG5-16 "Evaluation on antibacterial activity and deodorization effect of textile fabrics and fibers for natural dyed with green tea"
(Shizuoka University, Japan) Yukie Toyoshima, Ayaka Nakaya and Chie Sawatari
- PG5-17 "Thermal comfort of "Hakama", a Japanese Ethnic costume"
(Bunka Gakuen University, Japan) Mariko Sato and Teruko Tamura
- PG5-18 "Research on sports bra design for Xi'an female sports enthusiasts"
(Xi'an Polytechnic University, China) Chuan-Yu Zhou
- PG5-19 "A study on operation comfort of uniform for Xi'an male bus driver"
(Xi'an Polytechnic University, China) Yan-Qiong Hu
- PG5-20 "The analysis of plant dyed fabrics on homewear"
(Xi'an Polytechnic University, China) Xiao Liu
- PG5-21 "Trying to wear kimono with delight"
(Wayo Women's University, Japan) Mizuka Ito, Naoko Yamaguti and Ayako Uchida

S2 Symposium on Dyeing and Finishing of Textiles

- PS2-01 "Effects of the modification of fiber surface on the mechanical properties of cotton fabric"
(Gifu City Women's College, Japan) Sawako Shibata, Kyohei Joko and Machiko Murakami
- PS2-02 "The shrink-proofing performance and dyeability of wool coated with CMADK"
(Shinshu University, Japan) Kenjiro Watanabe, Masako Shinozuka, Naoko Nagashima, Yuichi Hirata and Kunihiro Hamada
- PS2-03 "Effect of layer-by-layer treatment on the shrink proofing and dyeability of wool fibers"
(Shinshu University, Japan) Yoshihito Aizawa, Masako Shinozuka, Naoko Nagashima, Yuichi Hirata and Kunihiro Hamada
- PS2-04 "Synthesis of novel cationic surfactants having different chemical structure in the hydrophobic tail and the solubilization of nonionic dyes in their micellar solutions"
(Shinshu University, Japan) Moe Okabe, Yuichi Hirata and Kunihiro Hamada
- PS2-05 "The influence of reduction and subsequent oxidation treatments on dyeing behavior and structural changes of wool fibers"
(Shinshu University, Japan) Yasunori Matsumoto, Kazuyuki Suzuta, Yuichi Hirata and Kunihiro Hamada
- PS2-06 "Synthesis of novel cationic gemini surfactants having benzene dicarboxylic ester structures in the spacer group and the solubilization of disperse dye in their micellar solutions"
(Shinshu University, Japan) Misato Sakakibara, Yuichi Hirata and Kunihiro Hamada
- PS2-07 "Restoration with vegetable dyes of 26 Colors recorded in Kokka Chinpocho (list of national treasures) in AD 754"
(Kusaki Craft Studio, Japan) Kazuki Yamazaki, Yoichi Nakajima, Dai Huijiwara and Jiro Komiyama
- PS2-08 "Dual mode diffusion and sorption from dyeing to diffusion of NaCl in five foodsuffs"
(Tokyo Seiei College, Japan) Hiroko Hashiba, Hiromi Gocho and Jiro Komiyama
- PS2-09 "Micro measurements of 20 colors restored from the list of Kokka Chinpocho in AD754"
(Gifu Women's University, Japan) Toshio Mori, Hiromi Gocho, Kazuki Yamazaki, Yoichi Nakazima and Jiro Komiyama
- PS2-10 "Vat dyeing in deep color of cotton knit fabric using a modified jet dyeing machine"
(University of Fukui, Japan) Hiroshi Wakoh, Koji Nakane, Teruo Hori and Jiro Komiyama
- PS2-11 "Shrink proofing of keratinase treated wool fibers: effect of pretreatments"
(Wayo Women's University, Japan) Naoko Nagashima, Yoshito Aizawa, Kenjiro Watanabe, Yuichi Hirata,

Kunihiro Hamada and Toru Takagishi

- PS2-12 “Deodorant abilities of mordant-dyed cotton and wool fabrics”
(Ochanomizu University, Japan) Toshiko Amemiya, Tadashi Nakanishi and Yasuko Kobayashi
- PS2-13 “Dyeability and characteristics of dyeing by morin”
(Kyoto Institute of Technology, Japan) Mercè Tacho Pinot, Isao Wataoka and Hidekazu Yasunaga
- PS2-14 “Hair Dyeing by Using Saccharides and Amino Acids”
(Kyoto Institute of Technology, Japan) Hiroshi Osaki, Isao Wataoka, Hiroshi Urakawa and Hidekazu Yasunaga
- PS2-15 “Supercritical drying for the development of p-aramid aerogel: Optimization of process parameters and regeneration solvents”
(Kyoto Institute of Technology, Japan) Shao Zhenzong and Satoko Okubayashi
- PS2-16 “Modification of modacrylic fiber by electron-beam grafting and co-crosslinking”
(Kyoto Institute of Technology, Japan) Satoko Okubayashi and Genji Tanaka
- PS2-17 “Electron-beam graft polymerization of p-aramid fibers”
(Kyoto Institute of Technology, Japan) Arata Nasu and Satoko Okubayashi

S3 Flow & Deformation Induced Polymer Crystallization

- PS3-01 “Fiber structure development of PS/PET sea-islands conjugated fiber during the continuous laser drawing process”
(Shinshu University, Japan) Kousuke Sugawara, Toshifumi Ikaga, Yutaka Ohkoshi, Kazuyuki Okada, Hiroyasu Masunaga, Toshiji Kanaya, Masato Masuda and Yuhei Maeda
- PS3-02 “Production of multi-hollow fiber by laser-heated drawing”
(Shinshu University, Japan) YoungAh Kang, KyoungHou Kim, Yang Hun Lee and Yutaka Ohkoshi
- PS3-03 “Influences of film-thickness and surface tension on melt-isothermal crystallization behaviors of poly(3-hydroxybutyrate) thin films”
(Kyoto Institute of Technology, Japan) Jiro Hoshiba, Ryosuke Hata, Yuki Tsuji, Shinichi Sakurai, Takaaki Hikima, Hiroyasu Masunaga, Masaki Takaya and Sono Sasaki
- PS3-04 “Crystallization behaviors of blends of poly(3-alkylthiophene) and fullerene derivatives in spin-coating film-forming processes”
(Kyoto Institute of Technology, Japan) Yuki Tsuji, Jiro Hoshiba, Ryosuke Hata, Shinichi Sakurai, Takaaki Hikima, Hiroyasu Masunaga, Masaki Takata, Kohji Tashiro and Sono Sasaki
- PS3-05 “Role of high and low molecular weight components in shish-kebab formation”

(Kyoto University, Japan) Tadahiko Maede, Tomohiko Matsuura, Nobuaki Takahashi, Masayuki Sakurai, Rintaro Inoue, Go Matsuba, Koji Nishida, Toshiji Kanaya

S4 Smart Textiles / Nanofibers

- PS4-01 “Preparation and evaluation of electrospun anion conductive polymer nanofibers for alkaline fuel cell”
(Tokyo Metropolitan University, Japan) Tsukasa Watanabe, Manabu Tanaka and Hiroyoshi Kawakami
- PS4-02 “Visually-recognized antibacterial coatings by layer-by-layer techniques”
(Tokyo Institute of Technology, Japan) Tsuyoshi Michinobu and Hiroyuki Fujita
- PS4-03 “Preparation of carbon nanofibers containing oriented graphene nanoribbons via electrospinning”
(Tokyo Institute of Technology, Japan) Shohei Masuda, Minoru Ashizawa and Hidetoshi Matsumoto
- PS4-04 “Preparation and structure control of core-shell type branch nanofibers”
(Tokyo Metropolitan University, Japan) Kazunori Hara, Makoto Konno, Manabu Tanaka and Hiroyoshi Kawakami
- PS4-05 “A study on the effects of gulteraldehyde and glyceraldehyde on water stability and mechanical properties of gelatin nano fibers with particular application in tissue engineering”
(Guilan University, Iran) Sheida Aliakbarshirazi Akbar Khodaparast Haghi, Azam Talebian and Mohammad Ali Shokrgozar
- PS4-06 “Preparation of hierarchical structured carbon nanofiber electrodes for electrochemical capacitors”
(Tokyo Institute of Technology, Japan) Yoshitaka Saito, Shohei Masuda, Minoru Ashizawa and Hidetoshi Matsumoto
- PS4-07 “Micro/nano fiber weaving technology based on electroactuation force”
(Shinshu University, Japan) Hong Xia, Tsuneaki Yamabe and Toshihiro Hirai
- PS4-08 “Thermal conductivity of nanocellulose aerogel”
(The University of Tokyo, Japan) Koh Sakai, Yuri Kobayashi, Tsuguyuki Saito and Akira Isogai
- PS4-09 “Mechanical strength of chitin nanofibrils estimated via sonication-induced fragmentation”
(The University of Tokyo, Japan) Yu Bamba, Zi-Dong Qi, Tsuguyuki Saito and Akira Isogai
- PS4-10 “Preparation of all-polyimide nanocomposite using electrospinning”
(Kobe University, Japan) Keiko Mizoguchi, Chizuru Hongo, Masaru Kotera and Takashi Nishino
- PS4-11 “Effects of Cu nanoparticles on surface of electrospun cellulose nanofibers”
(Shinshu University, Japan) Hyunsik Bang, Kai Wei and Icksoo Kim
- PS4-12 “Effect of hemicelluloses in bamboo cellulose nano-

fiber produced by mechanical processing in the presence of endoglucanase”

(Forestry and Forest Product Research Institute, Japan)
Noriko Hayashi, Tomoko Shimoka, Tsutomu Ikeda and Hajime Shibuya

PS4-13 “SEC-MALLS analysis of TEMPO-oxidized cellulose nanofibers”

(The University of Tokyo, Japan) Ryoya Hiraoki, Yuko Ono, Tsuguyuki Saito and Akira Isogai

PS4-14 “Effect of coating the LED-yarn on the its durability performance”

(Industrial Technology Center of Fukui Prefecture, Japan) Takahiro Tsuji, Atsui Masuda, Tetsuhiko Murakami, Norio Sasaguchi and Koji Miyazaki

PS4-15 “Fabrication of silk fibroin-polycaprolactone blend fibres using needleless electrospinning”

(Technical University of Liberec, Czech Republic) Nongnut Sasithorn and Lenka Martinová

PS4-16 “Ion-conductive properties of polycarbonate-based composite electrolytes filled with silica nanofiber”

(Tokyo University of Agriculture and Technology, Japan) Zhenguang Li, Satoki Ishibe, Yuichi Konosu, Minoru Ashizawa, Hidetoshi Matsumoto and Yoichi Tominaga

PS4-17 “Carrier transport in isolated conducting polymer nanofibers made by whisker formation”

(Tokyo University of Agriculture and Technology, Japan) Takeshi Shimomura

PS4-18 “Mechanical properties and shape memory behaviors of silicone-coated elastomeric nanofiber filaments”

(Chonbuk National University, South Korea) Byoung-Suhk Kim and Ick-Soo Kim

PS4-19 “Development of pH sensor based on electrospun non-woven fabric”

(Chonbuk National University, South Korea) Kesavan Devarayan and Byoung-Suhk Kim

PS4-20 “Fabrication of hybrid POSS-containing poly(Vinyl Alcohol)/poly(Acrylic Acid) hydrogel nanofibers”

(Chonbuk National University, South Korea) Eun-Sook Lee and Byoung-Suhk Kim

PS4-21 “Mechanical and thermal properties of poly(Lactic Acid)/epoxidized soybean oil (ESO)/multi-walled carbon nanotubes composites”

(Chonbuk National University, South Korea) Tae Hoon Ko, Kesavan Devarayan and Byoung-Suhk Kim

PS4-22 “Effects of heat treatment on stabilization of itaconic/crotonic acid-modified PAN copolymers for carbon fibers”

(Chonbuk National University, South Korea) Danyun Lei, Kesavan Devarayan and Byoung-Suhk Kim

PS4-23 “Preparation of poly(propylene carbonate) / poly(lactic acid) biocomposites via chemical modification and electrospinning technique”

(Chonbuk National University, South Korea) Jin Seong Seo, Byoung-Suhk Kim

S5 Bio-Based and Biomedical Materials

PS5-01 “Design for sequential releasing of environmental factors input into lignocellulosics”

(Mie University, Japan) Yukari Uehara and Masamitsu Funaoka

PS5-02 “Multistep structural control of native lignins by selective deacylation”

(Mie University, Japan) Kodai Murai, Mitsuru Aoyagi and Masamitsu Funaoka

PS5-03 “Mutagenesis of Bombyx mori silk fiber by in vivo incorporation of unnatural amino acids into silk fibroin”

(National Institute of Agrobiological Sciences, Japan) Hidetoshi Teramoto, Katsura Kojima and Kenichi Nakajima

PS5-04 “Preparation of chitin nanofiber-reinforced carboxymethyl cellulose films”

(Kagoshima University, Japan) Daisuke Hatanaka, Kazuya Yamamoto and Jun-ichi Kadokawa

PS5-05 “Synthesis of poly(ether ketone)s from bio-based material”

(Okayama University, Japan) Yusuke Kanetaka, Shinichi Yamazaki and Kunio Kimura

PS5-06 “Chain extension of aliphatic polycarbonates with bis-alkenyl esters”

(Kyoto Institute of Technology, Japan) Yuki Ikejiri, Kazunari Masutani and Yoshiharu Kimura

PS5-07 “Nanomaterialization of chitin derivatives by gas bubbling-ultrasonic treatments”

(Kagoshima University, Japan) Kohei Tanaka, Kazuya Yamamoto and Jun-ichi Kadokawa

PS5-08 “Preparation and characterization of green composite using biomimetic modified lignin”

(Seoul National University, South Korea) Sung Hoon Kim and Jong Shin Park

PS5-09 “Ring-opening polymerization of anhydro alkyl glucose derivative and its antiviral activity”

(Kitami Institute of Technology, Japan) Budragchaa Davaanyam

PS5-10 “Preparation of glucomannan esters and their thermal, mechanical, and optical properties”

(The University of Tokyo, Japan) Takahiro Damjo, Yukiko Rogers, Akio Takemura and Tadahisa Iwata

PS5-11 “Effect of flaxseed consumption on postprandial blood glucose in humans”

(Waseda University, Japan) Naoko Takamizawa, Kaname Katsuraya, Mihoko Moto, Hidemaru Umemoto, Kazunaga Yazawa and Naotaka Hashizume

PS5-12 “Effect of the take-up velocity on the higher-order structure of the electro-spun PLLA/PDLA blend nanofibers”

(Kyoto Institute of Technology, Japan) Masaki Yamamoto, Goro Nishikawa, Amalina M. Afifi and Hideki Yamane

PS5-13 “Investigation on the physical and structural properties

- of multi-stereo block poly (latic-acid) melt-spun fibers”
(Kyoto Institute of Technology, Japan) Yohanes Windu Widhianto, Kazunari Masutani, Yoshiharu Kimura and Hideki Yamane
- PS5-14 “Sequential enzymatic reaction by enzyme complex immobilized on cellulose matrix via cohesin-dockerin interaction”
(Kyushu University, Japan) Takashi Nogita, Hirofumi Ichinose and Takuya Kitaoka
- PS5-15 “Synthesis and properties of alginic acid ester derivatives”
(The University of Tokyo, Japan) Fumihiko Oda, Daisuke Ishi, Akio Takemura and Tadahisa Iwata
- PS5-16 “Development of tissue-engineered cardiac patch based on silk fibroin”
(Tokyo University, Japan) Yasumoto Nakazawa, Shintaro Nemoto, Hideki Ozawa, Ryo Shimada, Toshiki Saotome, Shouji Uesugi, Kohta Sakura, Mari Sugimoto and Tetsuo Asakura
- PS5-17 “Enhancement of moisture permeation through bio-based polyurethane membrane thin film by forming microbead structure using water”
(Kumoh National Institute of Technology, South Korea) Seung Gu Kang, Byung Gil Min and Oh Kyung Kwon
- PS5-18 “Synthesis of glyceric acid polymers and copolymers”
(Kyoto Institute of Technology, Japan) Yukiko Imai
- PS5-19 “Structure formation of aqueous cellulose derivatives below lower critical solution”
(Kyoto University, Japan) Koji Nishida, Yutaka Katayama, Rintaro Inoue and Toshiji Kanaya
- PS5-20 “Docking study of the cellulose synthase subunit D octamer of acetobactor xylinum with oligosaccharide ligands”
(Miyazaki University, Japan) Yuki Ikeda, Takuya Uto, Kenji Tajima, Min Yao and Toshifumi Yui
- PS5-21 “Manufacturing and analyses of according to the acid treated carboxymethyl cellulose foam”
(Korea Institute of Industrial Technology, South Korea) MinJi Yoon
- PS5-22 “Synthesis and characterization of castor oil/polycaprolactone based biopolyurethane” (Hanyang University, South Korea) Kyungkyu Choi, Seonghun Kim, Sangho Park and Kyungwha Oh
- PS5-23 “Preparation of polylactide foam for controlling algal bloom”
(Hanyang University, South Korea) Jong Hyuk Bae, You Jung Lee, Myung-Soo Han and Seong Hun Kim
- PS5-24 “Alkylation of the nanocellulose for the polylactide composite”
(Hanyang University, South Korea) Jong Hyuk Bae and Seong Hun Kim
- PS5-25 “Influence of surface treatment method on the mechanical properties of hemp fiber reinforced polyamide 1010 biomass composites”
(Kogakuin University, Japan) Jun Mukaida, Yosuke Nishitani and Takeshi Kitano
- PS5-26 “Fixation of the functional molecules to silk fibroin materials”
(Nara Women’s University, Japan) Tomoko Hashimoto, Rika Yoshikawa, Yuki Taniguchi, Tsunenori Kameda, Yasushi Tamada and Hiromichi Kurosu
- PS5-27 “Fabrication of the fibrous nanodrugs by the reprecipitation method and their cytotoxic activities”
(Tohoku University, Japan) Yoshitaka Koseki, Yoshikazu Ikuta, Tatsuya Murakami, Tsunenobu Onodera, Hidetoshi Oikawa and Hitoshi Kasai
- PS5-28 “Effect of preparation conditions of silk fibroin aqueous solution on the electrospun silk nanofiber”
(Shinshu University, Japan) Kishimoto Yuki and Hideaki Morikawa
- PS5-29 “Highly sensitive and selective nanoscale enzymatic glucose biosensor via electrospinning”
(Korea Advanced Institute of Science and Technology, South Korea) Kyu Oh Kim, Min Su Kwon and Jong Min Kyung

S6 Composites and Industrial Textiles

- PS6-01 “Development of bio composites for heat and sound insulation”
(DKTE’S Textile and Engineering Institute, India) Aravin Prince Periyasamy and Saatish Lavate
- PS6-02 “Selective gas separation by metal-organic frameworks synthesized on cellulose nanofiber matrix”
(Kyushu University, Japan) Makoto Matsumoto and Takuya Kitaoka
- PS6-03 “Study of the ferroelectrics properties of the organic/inorganic composites”
(Kao Yuan University, Taiwan) C.-C. Wu, C.-C. Su, C.-F. Yang, C.-C. Diao, Y.-C. Chen and J.-M. Lin
- PS6-04 “The mechanical properties of discontinuous carbon fiber mat reinforced epoxy composite materials”
(Korea Institute of Industrial Technology, South Korea) Eun Soo Lee, Daniel Buecher, Si Hoon Jang, Dae Young Lim and Ki Young Kim
- PS6-05 “Effect of carbon nanotube on micro structure of biodegradable polylactide nanocomposites”
(Hanyang University, South Korea) Sangho Park, Seonghun Kim and Hiroshi Ito
- PS6-06 “Investigation of chemically recycled poly(ethylene terephthalate)/virgin poly(ethylene terephthalate) prepared by melt blending process”
(Hanyang University, South Korea) Soohyun Lee and Seonghun Kim
- PS6-07 “Mechanical and physical properties of roof tile prepared from corn cob fiber and sugar cane”
(Pathumwan Institute of Technology, Thailand) Prayoon Surin, Jessada Wong On, Chaiyaprek Apawet and Supaphorn Thumsorn

- PS6-08 "Influence of type of PTFE on the rheological properties of PTFE filled semi-aromatic polyamide (PA6T) composites"
(Kogakuin University, Japan) Yuki Takenaka, Yosuke Nishitani and Takeshi Kitano
- PS6-09 "Influence of the type of CaCO_3 on the tribological properties of PA66/ CaCO_3 composites evaluated by ball-on-plate type sliding wear tester"
(Kogakuin University, Japan) Kaito Itagaki, Yosuke Nishitani, Kenichiro Eguchi and Takeshi Kitano
- PS6-10 "Effect of addition of fillers on the tribological properties of PE/PP blends"
(Kogakuin University, Japan) Kazuma Mikawa, Yoshiaki Amano, Yosuke Nishitani and Takeshi Kitano
- PS6-11 "Proton conductive properties of polymer composite membranes filled with mesoporous organosilica"
(Tokyo University of Agriculture and Technology, Japan) Jin Nakamura and Yoichi Tominaga
- PS6-12 "Investigation of aramid bag filters to enhance filtration efficiency on a high temperature"
(Korea Institute of Industrial Technology, South Korea) Tae Hwan Lim, Sang Young Yeo and Yeong Og Choi
- PS6-13 "Local structure-local strength relationship for polyacrylonitrile-based carbon fibers"
(Tokyo Institute of Technology, Japan) Masatoshi Shioya, Kai Hayashi, Hidetaka Inoue, Yoshiki Sugimoto and Takayuki Kobayashi
- PS6-14 "The tribological properties of the polyamide 6 composite fibers"
(Tokyo Institute of Technology, Japan) Toshihira Irisawa, Haruki Kobayashi, Koichi Fujihira, Tatsuro Takamura and Masatoshi Shioya
- PS6-15 "Assessment of axial compression property of single carbon fiber"
(The University of Tokyo, Japan) Yoshiki Sugimoto, Toshihira Irisawa, Norio Iwashita and Kazuro Kageyama
- PS6-16 "Mechanical properties of multi-walled carbon nanotube/furan-based carbon composite"
(Kyoto Institute of Technology, Tokyo Institute of Technology, Japan) Haruki Kobayashi, Masatoshi Shioya, Toshihira Irisawa, Katsufumi Tanaka, Yuya Yomogizawa and Aiko Yamatsuta
- PS6-17 "A study on (carbon/glass) knitted fabric with PUD surface treatment and their composites"
(Shinshu University, Japan) Shunyu Tang, Jianping Wang, Yuqiu Yang and Haroyuki Hamada
- (Zhejiang Sci-Tech University, China) Nan Li, Wangyang Lu and Wenxing Chen
- PS7-02 "Effect of ozone-functionalized carbon nanotubes on UV resistance and compressive properties of poly(p-phenylene benzobisoxazole) fibers"
(Kumoh National Institute of Technology, South Korea) Duk Hyung Lee, Kwan Han Yoon and Byung Gil Min
- PS7-03 "Effect of 2,6-naphthalene dicarboxylic acid and nano- TiO_2 on ultraviolet-aging resistance of poly(p-phenylene benzobisoxazole) fibers"
(Kumoh National Institute of Technology, South Korea) Qingwei Wang, Kwan Han Yoon and Byung Gil Min
- PS7-04 "Effect of trifunctional 1,3,5-benzenetricarbonyl trichloride comonomer on UV resistance and compressive properties of poly(p-phenylene-2,6-benzobisoxazole) fiber" (Kumoh National Institute of Technology, South Korea) Jin Woo Jang, Kwan Han Yoon and Byung Gil Min
- PS7-05 "Structural relaxation of porous polymer by crazing"
(Gifu University, Japan) Toshiaki Miyata, Yui Horiguchi, Shinya Takahashi and Akiyoshi Takeno
- PS7-06 "Development of biotechnological Indigo Reduction using bacterial strains isolated from fermented indigo vat"
(Chonnam National University, South Korea) Younsok Shin, Kyunghee Son, Eun Sil Choi and Dong Il Yoo
- PS7-07 "Dyeing properties and antimicrobial activity of Alnus firma fruit extracts"
(Chonnam National University, South Korea) Jun Yan, Dong Il Yoo and Younsok Shin
- PS7-08 "FDTD simulation of optical properties of ideal and deformed porous silica photonic crystals"
(Shinshu University, Japan) Satoshi Yoneda, Hisanao Usami, Fuyu Itoh and Shigeru Yamanaka
- PS7-09 "Graphene oxide @ silk Fibers composites : Design, characterization and applications to high performance sensor and sterilization device"
(Shinshu University, Japan) Jiangchao Song, Sijun Xu, Tao Chen, Yasushi Tamada, Long Li and Hideaki Morikawa
- PS7-10 "The visual influence of seat color on long-term sitting"
(Shinshu University, Japan) Hodaka Yamaguchi, Hiroaki Yoshida and Masayoshi Kamijo
- PS7-11 "Clar structures and π -electron distribution of small diameter near-zigzag carbon nanotube"
(Shinshu University, Japan) Dai Morikawa
- PS7-12 "Unique carbohydrate-binding module from GH 10 xylanase that can adsorb on cellulose strongly"
(Shinshu University, Japan) Hiroto Nishijima, Kouichi Nozaki, Masahiro Mizuno, Tsutomu Arai and Yoshihiko Amano
- PS7-13 "Bending behavior of polymer-based electroactive

S7 International Conference on Advanced Fiber/Textile Materials

- PS7-01 "Cellulosic fiber-supported metallophthalocyanines for eliminating target recalcitrant contaminants in high backgrounds of complex constituents"

- nanocomposite actuator incorporated with modified CNTs”
(Shinshu University, Japan) Gan Jet Hong Melvin, Toshiaki Natsuki and Qing-Qing Ni
- PS7-14 “Relation between reduction rate of dye-cation and dye molecular structure in dye-sensitized solar cells”
(Shinshu University, Japan) Junichi Ogawa, Nagatoshi Koumura and Shogo Mori
- PS7-15 “SEM observation of core/shell microgels adsorbed at the oil/water interface”
(Shinshu University, Japan) Yoshitaka Umeda and Daisuke Suzuki
- PS7-16 “X-ray CT metal artifact reduction for accurate non-destructive inspection”
(Shinshu University, Japan) Toru Kano and Michihiko Koseki
- PS7-17 “Expression and properties of all beta-glucosidase isozymes from *trichoderma reesei*”
(Shinshu University, Japan) Boyang Guo, Kouichi Nozaki, Masahiro Mizuno and Yoshihiko Amano
- PS7-18 “3D pattern making of upper garment using 3D surface data in wearing state” (Shinshu University, Japan) Jun Zhang, KyoungOk Kim, Noriaki Innami and Masayuki Takatera
- PS7-19 “Self-assembling nano-architectures created from building blocks using *de novo* protein WA20”
(Shinshu University, Japan) Naoya Kobayashi, Keiichi Yanase, Takaaki Sato, Michael H. Hecht and Ryoichi Arai
- PS7-20 “Self-organization of thiophene-fused phthalocyanine”
(Shinshu University, Japan) Hiroyuki Suzuki and Mustumi Kimura
- PS7-21 “Comparative analysis of genes on papaya Yh and Y chromosomes”
(Shinshu University, Japan) Hiroki Ueno, Urasaki Naoya, Kentaro Yoshida, Satoshi Natsume, Kazuhoko Tarora, Ayano Shudo, Ryouhei Terauchi and Hideo Matsumura
- PS7-22 “Bulk-heterojunction solar cells composed of pyrene cored donors”
(Shinshu University, Japan) Keisuke Takemoto and Mutsumi Kimura
- PS7-23 “Preparation of the charged mosaic membrane based on nanofiber nonwoven and their solute permeability”
(Shinshu University, Japan) Hiroto Misawa, Yuichi Hirata and Kunihiro Hamada
- PS7-24 “Silica coating of PLA nanofiber nonwoven”
(Shinshu University, Japan) Toshiaki Kiso, Yuuichi Hirata and Kunihiro Hmada
- PS7-25 “Biochemical characterzization of stenopyche marmorata silk gland proteins, Smsp-1 and Smsp-4”
(Shinshu University, Japan) Kousaku Ohkawa, Masakazu Hachisu, Takaomi Nomura, Ryoichi Arai, Kimio Hirabayashi, Masuhiro Tsukada and Koji Abe
- PS7-26 “Synthesis of poly[N-4,4’-dimethoxybezhydryl -glutamine] and poly[N-4,4’-dimethoxybezhydryl -asperagine] and computations of chain”
(Shinshu University, Japan) Kousaku Ohkawa, Yasuhiro Kawashia, Masakazu Hachisu and Jun Araki
- PS7-27 “Low modulus silicone rubber used methyl trimethoxysilane as crosslinking agent” (Shinshu University, Japan) Hara Tatsuei
- PS7-28 “Improvement of stab resistance by impregnating micro particles for the textiles”
(Shinshu University, Japan) Shunsuke Sato, Hideaki Morikawa and Limin Bao
- PS7-29 “Development of self-healing method for glass fiber reinforced plastic”
(Shinshu University, Japan) Takuya Okazawa, Kiyoshi Kemmochi and Limin Bao
- PS7-30 “Development of a new molding method for the continuous fiber reinforced thermoplastic materials with cellulose thermoplastic resin” (Shinshu University, Japan) Yuji Nanki, Anchang Xu, Kiyoshi Kemmochi and Limin Bao
- PS7-31 “Evaluation of sleeping comfort by measurement of turning over while sleeping in bed”
(Shinshu University, Japan) Aoi Masataka, Uemae Mayumi, Yoshida Hiroaki and Kamijo Masayoshi
- PS7-32 “Combination of cut and other cloth manipulations in cloth model handling for draping”
(Shinshu University, Japan) Yuko Mesuda, Shigeru Inui and Yosuke Horiba
- PS7-33 “Development of the method for verification of textile simulation”
(Shinshu University, Japan) Shigeru Inui and Yosuke Horiba
- PS7-34 “Swelling behaviors of sulfoethylated slide-ring gels.”
(Shinshu University, Japan) Kengo Igarashi and Jun Araki
- PS7-35 “Surface carboxylation of cellulose nanowhiskers using TEMPO supported by magnetite nanoparticles : the effect of co-oxidant amounts on degree of oxidation”
(Shinshu University, Japan) Kenzi Iwamoto and Jun Araki
- PS7-36 “Control of degree of substitution of polyrotaxane derivatives having quaternary ammonium groups”
(Shinshu University, Japan) Yamato Takamizawa and Jun Araki
- PS7-37 “Cellulose nanowhiskers stabilized sterically by grafting of terminally-isocyanated monomethoxy poly (ethylene glycol)”
(Shinshu University, Japan) Yukiko Bessho and Jun Araki
- PS7-38 “Development of bioinspired textiles for fog collection”
(Shinshu University, Japan) Naoki Shigezawa
- PS7-39 “Construction of Grid System for Evolutionary Computation on Cloud Environment”
(Shinshu University, Japan) Kiyotaka Sugiyama, Yoshiyuki Matsumura, Toshiyuki Yasuda and

Kazuhiro Ohkura

- PS7-40 "Conversion of amino acids into isocyanato derivatives via Curtius rearrangement and subsequent addition to the polyrotaxane for preparation of amino acid-polyrotaxane derivatives"
(Shinshu University, Japan) Souki Sasatani and Jun Araki
- PS7-41 "Preparation of cellulose nanowhiskers / silver nanoparticles hybrids by different reduction methods"
(Shinshu University, Japan) Yasuhiro Hida and Jun Araki
- PS7-42 "Design and synthesis of a polyrotaxane having terminal end-capping groups capable of selective decomposition"
(Shinshu University, Japan) Yuta Honda and Jun Araki
- PS7-43 "Preparation of chitin nanowhiskey/ gold nanoparticles hybrids"
(Shinshu University, Japan) Yuuki Moriguchi and Jun Araki
- PS7-44 "Evaluation of clothing comfort of White shirt by experimented upper body dummy"
(Shinshu University, Japan) Kyohei Takahashi, Toshitaka Unno, Junki Kishimoto, Hiroyuki Kanai, Toyonori Nishimatsu and Kiyohiro Shibata
- PS7-45 "Evaluation of clothing comfort of terry room wear"
(Shinshu University, Japan) Hiroaki Murakoshi, Hiroyuki Kanai, Toyonori Nishimatsu and Syuuichi Hozumi
- PS7-46 "Rearing of transgenic silkworms with *Nephila pilipes* dragline gene"
(Shinshu University, Japan) Naoki Yanaoka, Wang Yujun, and Masao Nakagaki
- PS7-47 "Physical property and the structure of poly(L-lactic acid)/poly(butylene succinate)/poly(ethylene glycol) blends"
(Kyoto Institute of Technology, Japan) Kazunori Fujii, Weraporn Pivsa-Art, Sommai Pivsa-Art and Hideki Yamane
- PS7-48 "Electron-beam graft polymerization of p-aramid fibers"
(Kyoto Institute of Technology, Japan) Arata Nasu and Satoko Okubayashi
- PS7-49 "Investigation of value-added quality for denim fabrics"
(Kyoto Institute of Technology, Japan) Yuuki Tomotaki and Sachiko Sukigara
- PS7-50 "Reduction of hair damage due to ultraviolet light by dyeing and treating hair with flavonoids"
(Kyoto Institute of Technology, Japan) Yudai Fukuhara, Isao Wataoka, Hiroshi Urakawa and Hidekazu Yasunaga
- PS7-51 "Ink-jet printing using natural dyes"
(Kyoto Institute of Technology, Japan) Mafuyu Hashizuka, Hidekazu Yasunaga, Hiroshi Urakawa and Isao Wataoka

- PS7-52 "Design and construction of high-efficient biodevice by oriented enzyme immobilization for bio-fuel cells"
(University of Fukui, Japan) Ayako Koutou, Hiroaki Sakamoto, Takenori Satomura and Shin-ichiro Suye
- PS7-53 "Relation between textile structure and surface luster on polyester woven fabrics"
(University of Fukui, Japan) Tomoki Hatanaka, Hideyuki Uematsu, Yoshiyuki Iemoto, Shuichi Tanoue, Atsuji Masuda, Tetsuhiko Murakami, Miwa Iwashita and Seiji Kawabata
- PS7-54 "Fixation of porphyrin onto the nonwoven fabrics by electron beam graft polymerization"
(University of Fukui, Japan) Junya Muramoto, Koji Kitamura, Koji Miyazaki and Teruo Hori

S8 Functional Textiles

- PS8-01 "A study on durability improvement of textile using wool/pet/aramid spun yarn"
(Korea Institute of Industrial Technology, South Korea) Yeang Byeong Jin and Nam In Woo
- PS8-02 "Tribology of SiC fiber reinforced composites"
(Busan Technopark, South Korea) K. W. Nam, J. S. Ahn, J. W. Kim, S. H. Kim, H. W. Kim and H. R. Jeong

S9 Neo Fiber Technology

- PS9-01 "Morphological studies on assembling behavior of liquid silk"
(Gunma University, Japan) Yutaka Kawahara
- PS9-02 "Structural analysis and crystallization behavior of poly (1,4-cyclohexylenedimethylene terephthalate) containing isosorbide"
(Hanyang University, South Korea) Jun-Mo Koo
- PS9-03 "Ultrathin polypyrrole nanosheets doped with HCl as counter electrodes in dye-sensitized solar cells"
(Hanyang University, South Korea) Dong Ki Hwang

Kyoto International Symposium on Neo Fiber Technology ネオファイバーテクノロジー京都国際シンポジウム

趣 旨：

京都工芸繊維大学 繊維科学センターは、①新しい繊維科学・工学による開発研究と教育(教育と研究)②ハイテク繊維工業の支援と繊維市場の革新(産学連携)③日本の繊維文化と世界の繊維文化への貢献(国際貢献)をミッションに掲げ、繊維科学の教育研究を遂行している。

このたび、繊維学会の創立 70 周年の記念行事として、東京で国際シンポジウム 2014(International Symposium on Fiber Science and Technology 2014(ISF2014))が開催される。繊維科学センターは、この機会に、ポストシンポジウムとして Kyoto International Symposium on Neo Fiber Technology を本学で開催する。繊維分野の国際舞台で活躍する次世代の研究者間の世界的なネットワークづくりを主な目的とし、新しい繊維科学技術の情報交換の場を提供して、繊維科学・繊維産業の発展に貢献できることを期待している。

主 催：京都工芸繊維大学 繊維科学センター

協 賛：京都市産業技術研究所

日 時：2014 年 10 月 2 日(木)～3 日(金)

場 所：京都工芸繊維大学総合研究棟 4F 多目的室(404 号室)

住所：京都市左京区松ヶ崎橋上町、市営地下鉄烏丸線「国際会館」行きに乗車「松ヶ崎駅」下車・徒歩約 8 分、

URL：http://www.kit.ac.jp/01/01_110000.html

定 員：50 名

プログラム：

10月2日(木) Symposium technical tour

10月3日(金) Conference

①講演：

Seung Soon Im (Hanyang University, Korea)

Mikael Skrifvars (University of Borås, Sweden)

Mukerrem Cakmak (University of Akron, USA)

Lei Yang (Zhejiang Sci-Tech University, P. R. of China)

Amalina M. Afifi (University of Malaya, Malaysia)

鞠谷雄士(東京工業大学、繊維学会会長)

奥林里子(京都工芸繊維大学)

上田一恵(ユニチカ㈱)

倉本幹也(一般財団法人 カケンテストセンター)

西村浩和(東洋紡㈱)

保城秀樹(㈱クラレ)

②ポスター発表

参加費：無料

申込方法：

【1】ポスター発表会参加御希望の方は、電話・電子メール・FAX のいずれかの方法で 2014 年 7 月 30 日までに、京都工芸繊維大学 繊維科学センターにお申し込みください。申し込みの際は、①御氏名②発表題名③御所属と連絡先④ Symposium technical tour への参加の希望の有無をお知らせください。

【2】聴講のみの参加御希望の方は、上記の方法で 2014 年 8 月 29 日までに、京都工芸繊維大学 繊維科学センターにお申し込みください。申し込みの際は、①御氏名②御所属と連絡先③ Symposium technical tour への参加の希望の有無をお知らせください。

連絡先：京都工芸繊維大学 繊維科学センター

〒606-8585 京都市左京区松ヶ崎御所海道町

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E-mail: fiber@kit.ac.jp

詳細は URL: <http://www.cfts.kit.ac.jp/> を御参照ください。

第 27 回におい・かおり環境学会

主 催：(公社)におい・かおり環境協会
日 時：平成 26 年 8 月 27 日(水)、28 日(木)
場 所：文京学院大学 本郷キャンパス 仁愛ホール
(東京都文京区向丘 1-19-1)
プログラム：特別講演、一般口頭発表、ポスター発表、企
画セッション、機器展示
問合せ先：(公社)におい・かおり環境協会
(担当：石井、中辻)
〒160-0023 東京都新宿区西新宿 4-2-18
西新宿浅井ビル 3 階
TEL: 03-5309-2422
E-mail: info@orea.or.jp <http://www.orea.or.jp>

第 39 回復合材料シンポジウム

主 催：日本複合材料学会
日 時：平成 26 年 9 月 18 日(木)、19 日(金)
場 所：秋田大学 理工学部(手形キャンパス)
(秋田市手形学園町 1-1)
プログラム：一般講演と見学会(秋田県産業技術センター)
(テーマ)材料、力学特性、応用解析、物性お
よび機能、環境特性、試験および評価法
加工および成形法、最適構造設計、コストパ
フォーマンス、LCA、コンポジット
詳細はホームページを参照ください。
問合せ先：日本複合材料学会事務局(担当：吉田)
TEL: 03-5981-6011
E-mail: jscm@asas.or.jp

第 19 回高分子分析討論会

主 催：(公社)日本分析化学会高分子分析研究懇談会
日 時：平成 26 年 10 月 16 日(木)、17 日(金)
場 所：名古屋国際会議場 白鳥ホール
(名古屋市熱田区熱田西町 1-1)
主 題：高分子の分析及びキャラクタリゼーションを対象
とした討論会
問合せ先：中部大学 応用生物学部 堤内 要
〒487-8501 愛知県春日井市松本町 1200
TEL: 0568-51-6295
E-mail: tsutsu@isc.chubu.ac.jp

第 46 回洗浄に関するシンポジウム

主 催：日本油化学会 洗浄・洗剤部会
日 時：平成 26 年 10 月 21 日(火)、22 日(水)
場 所：タワーホール船堀 5 階小ホール
(東京都江戸川区船堀 4-1-1)
プログラム：
特集「消費者のための表示を考える」
一般講演およびオリジナルレポート
問合せ先：ライオン(株)機能科学研究所 兵頭 亮
〒132-0035 東京都江戸川区平井 7-2-1
FAX: 03-3616-5376
E-mail: senjou46@iml.chem.kit.ac.jp

平成 26 年度「産業資材用高性能・ 高機能繊維の基礎と応用」講座

日本繊維技術士センターでは産業資材関係の繊維および
繊維製品を取り扱う皆様に、産業資材用高性能・高機能繊
維に関する基礎的で実用的な知識を習得していただく講
座」を大阪と名古屋で開講します。

1. 大阪会場の概要

- (1) 日程 平成 26 年 8 月 30 日(土)、9 月 6 日(土)
- (2) 会場 大阪産業創造館
- (3) 受講料 22,000 円
- (4) 講座内容

8 月 30 日 ①繊維産業資材概論、②アラミド繊維の製
法・特性・用途、③欧州テクテキスタイル動向、④自動車
用繊維資材(：産業用 NY、PET 他)

9 月 6 日 ⑤不織布の製法・特性・用途、⑥産業資材用
高機能加工、⑦炭素繊維と複合材料の特性と用途、⑧バイ
オマス繊維の特性と今後

2. 名古屋会場の概要

- (1) 日程 平成 26 年 9 月 27 日(土)、10 月 4 日(土)
- (2) 会場 ウィンクあいち(助愛知県産業労働センター)
- (3) 受講料 22,000 円
- (4) 講座内容

9 月 27 日 ①スーパー繊維の製法・用途・今後、②輸
送用繊維資材の用途展開、③炭素繊維の用途展開と今後の
展望

10 月 4 日 ④海洋・農業・土木資材の用途展開、⑤繊
維のエレクトロニクス用途の展開と今後、⑥不織布の成長
分野と今後の展望、⑦天然物繊維の非衣料用途の展開、⑧
高機能加工の展開状況
(詳細は下記ホームページに記載)

3. 問い合わせ

〒564-0062 吹田市垂水町 3 丁目 7 番 18 号
P&M ビル 2F
一般社団法人 日本繊維技術士センター(JTCC)
TEL 06-6339-1237 FAX 06-6339-0337
ホームページ <http://homepage3.nifty.com/jtcc/>

入会のご案内

皆様のお知り合いで当学会に入会を希望される方はいらっしゃいませんか。

ご入会の申し込みについて

1. ホームページから「入会のご案内(申込み用紙)」をダウンロードしてご記入の上、当学会事務局へお送りください。

送り先：〒104-8139 東京都品川区上大崎 3-3-9-208

一般社団法人 繊維学会 TEL:03-3441-5627 FAX:03-3441-3260

ホームページ：<http://www.fiber.or.jp/> E-mail: office@fiber.or.jp

2. 会員の種類

個人正会員 繊維に関連ある学理とその応用に関して相当の学識または経験を有するもので本会の趣旨に賛同される方

学生会員 大学(大学院、短期大学含む)、高等専門学校などの学生で、繊維および関連の学科・技術に興味をもつ学生とする。

維持会員 繊維に関連ある団体、又は個人で、この法人の目的を賛助し、この法人の維持に協力をするものとする。

賛助会員 繊維に関連ある団体、又は個人で、この法人の目的を賛助するものとする。

3. 会員の特典

ご入会いただきますと次のような特典があります。

- ・繊維学会誌「FIBER」月刊誌(掲載論文のいくつかは英文)を毎号お届けします。
(学生会員には原則として電子媒体にて送付し、希望者のみに冊子配付をしています)
- ・繊維学会の本部主催の行事、年次大会/夏季セミナー/秋季研究発表会/繊維基礎講座/繊維の応用講座/最新の繊維技術レビュー講演会に割引料金にてご参加いただけます。
- ・維持会員と賛助会員には毎月、海外ニュースレター(海外業界専門誌の記事情報の和文案内)を電子媒体にて送付します。
- ・年1回(通常は6月)総会にご参画いただき、ご要望を学会運営に反映できます。

4. 入会手続き

入会申込書が届き次第、入会月の学会誌、定款、会費納入案内書をご送付申し上げますので会費の納入をお願いします。

5. 会員の会費は次の通りです。入会金は不要です。会費は非課税扱いとなります。

個人正会員：会費(年額)	9,600 円
学生会員：会費(年額)	3,600 円
維持会員：会費(年額)	210,000 円
賛助会員：会費(年額)	70,000 円