

Draft Program 24<sup>th</sup> Annual Meeting of the Society of Packaging Science & Technology, Japan

Venue: Yayoi Auditorium, Faculty of Agriculture, University of Tokyo

July 2, 2015 Day One Morning Program

Yayoi Auditorium

9:00 ~ Hall Opens, Registration, Poster Preparation (Seihoku Gallery)

Yayoi Auditorium Ichijo Hall

9:50~10:00 Opening Comments

10:00~10:50 D, E Poster Sessions Outline Presentations

10:50~11:00 Break

11:00~12:20 Session B1 Functional Materials

b-01 Effect of heat shrinkage of film on weep production in vacuum packed fresh meat

KUREHA Corporation Food Packaging Technology Center

○Kayoko Onizawa, Mikio Tanaka, Kazuhiko Hirose

b-02 Development of Packaging Materials on Content Resistance Characteristic

Dai Nippon Printing Co., Ltd.

○ Yuya Takasugi

b-03 Development and Application Effect of Renovated Oxygen Scavenger Packaging Material in Dry Condition

Mitsubishi Gas Chemical Company, Inc.

○Akihiro Masuda, Takayoshi Itoh, Ryuichiro Kawai,

Daiki Sato, Kenichi Niimi

b-04 Application of stretched film for skin pack

KUREHA Corporation Food Packaging Technology Center

○Shota Nambu, Junji Nakajima,

Ichiro Kitada, Tadayoshi Ito

Seihoku Gallery

11:00~12:20 Session E Poster Transport Packaging

e-01 Vibration measurement of truck in Southeast Asia

SHINYEI TESTING MACHINERY CO., LTD.

○ Kazuaki Kawaguchi

e-02 Number of vibration measurement times for random vibration test

SHINYEI TESTING MACHINERY CO., LTD.

○Tomohiro Kuroda, Kazuaki Kawaguchi

e-03 Practice and Assessment of Packing and Transport of cultural properties

Tokyo National Museum

○Hiroshi Wada

- e-04 Prevent of Secondary Damage Caused by Absorbent Sheets in Cargo Container  
National Institute of Technology, Yuge College      ○Koji Yoshida, Tomohiro Murakami, Shingo Ikeda
- e-05 Influence of Physical Modeling to Precision of Hybrid Free Fall Test  
Kobe University      ○ Meishu PIAO, Katsuhiko Saito  
Kyocera Document Solutions Co.,LTD.      Hiroshi Setoue  
SHINYEI TESTING MACHINERY CO., LTD.      Kazuaki Kawaguchi
- e-06 Influence of Moisture Content Ratio of Corrugated Board to Box Compression Speed in Stacking Load  
Kobe University      ○Hidemi Hirokawa, Katsuhiko Saito  
Rengo Co. LTD      Akira Higashiyama
- e-07 Simulated Vibration Test of Corrugated Box Abrasion Damage  
Kobe University      ○Chinami Sawada, Katsuhiko Saito  
Rengo Co. LTD      Akira Higashiyama
- e-08 Estimation for Axis of Rolling of A moving Truck under different Load Conditions by Detection of 3-D Center of Gravity  
Tokyo University of Marine Science and Technology      ○ Dang Runan, Yutaka Watanabe
- e-09 An efficient Algorithm of stacking Marine Containers in Container Terminals  
Tokyo University of Marine Science and Technology      ○Ning Zhang, Yutaka Watanabe  
Hitachi Transport System, Ltd.      Ying Cong
- e-10 Lashing Design System for Marine and Terrestrial Transport  
Sankyu Inc.      ○ Masahiro Ito, Masanobu Eguchi
- e-11 Digital Tensiometer for Transport Cargo Lashing Belts  
Sankyu Inc.      ○Haruki Shikashi, Masanobu Eguchi

12:20~13:30 Lunch

July 2, 2015 Day One Afternoon Program

Yayoi Auditorium Ichijo Hall

13:30~14:50 Session A 1 Transport Packaging

- a-01 Measurement and analysis of shock and vibration during cargo handling operation in the airport  
eXsearch Corporation      ○Masahiro Takagi  
Nippon Cargo Airlines Co., Ltd.      Kazutaka Toyama

- Morimatsu Sangyou Co., Ltd.                      Nagateru Morimatsu
- a-02      A calculation method of an order number in statistical analysis of a result including two kinds of incomplete data.
- Technology Research Institute of Osaka Prefecture                      ○Shogo Horiguchi, Takamasa Nakajima
- a-03      The effect of Shock and Vibration in Transportation of fruits and vegetables part 8 Vibration control measures of cargo
- National Federation of Agricultural Co-operative Associations (ZEN-NOH)
- Hiroshi Uchida, Takashi Inoue
- Kanagawa Industrial Technology Center                      Yoshiaki Itoh, Masamichi Kojima
- a-04      Investigation of the Relation between the Compression Strength and the Role of the Part of the Corrugated Box
- Oji Industrial Materials Management Co., Ltd.                      ○Mitsuru Shimomura
- Seihoku Gallery
- 13:30~14:50 Session D   Poster   Functional materials, etc.
- d-01      Freshness-keeping packaging of Chinese chives corresponding to the vacuum precooling
- Oita Industrial Research Institute                      ○Shoichi Asaki
- Omori Machinery Co., Ltd.                      Shoichi Tsuchida
- d-02      Usability evaluation of drug packages for oral tablet
- Yokohama University of Pharmacy      ○Masaru Mizoguchi , Mikio Murata , Kiyomi Sadamoto
- d-03      Visualization study on the Oxygen and Odor barrier functions of the freezing bag "Oishisa-Keep"
- KUREHA Corporation Technical Department Plastics processing Factory                      ○Akiko Omori,
- Yusuke Sato, Tomonori Hosoda
- d-04      Development of tear tape design for chub package
- KUREHA Corporation Food Packaging Technology Center                      ○Hiroki Maki, Kayoko Onizawa
- Akiko Omori, Mikio Tanaka
- d-05      Measurement of specific heat capacity of paper
- Kyoto University Grad School of Agri.                      ○Tatsuo Yamauchi
- d-06      The effect of modified atmosphere and different temperatures on the respiratory enzymatic activity of broccoli
- The University of Tokyo                      ○Wang Hsiao-Wen, Makino Yoshio, Harada Naoto,
- Oshita Seiichi, Noguchi Ko
- d-07      Development of the packaging material with printed invisible identification codes.

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|------|---|--|
|      | UACJ Corp   | ○Hiroshi Nishio, Yukie Kitada  |
|      | Think Laboratory Co.,Ltd  | Kaku Shigeta , Eiji Takahashi, Tomoko Murata   |
| d-08 | Water-organic solvent permeation properties of poly (lactic acid) film  |  |
|      | School of Science and Technology, Meiji University  | ○Ryo Iida, Tomoki Yonezu,<br>Yasuaki Shinkawa, Kazukiyo Nagai  |
| d-09 | Development of bio-based film derived from cinnamic acid and application of barrier materials by cross-linking reaction |  |
|      | School of Science and Technology, Meiji University  | ○Daichi Watabe, Shohei Itami, Miho<br>Kobayashi, Shinji Kanehashi, Kazukiyo Nagai  |
| d-10 | Preparation of organic-inorganic hybrid gas barrier membranes using cellulose   |  |
|      | Graduate School of Maritime Sciences, Kobe University   | ○ Tomomi Iwasaki, Koji Kuraoka<br>ARAKAWA CHEMICAL INDUSTRIES, LTD.<br>Yukiyasu Nishioka, Masanori Kobayashi,<br>Hideharu Takeuchi |
| d-11 | New opening method of operating force twice heat sealing strength in bag packaging                                      |  |
|      | Hishinuma Consulting Engineering Office   | ○Kazuo Hishinuma   |
| d-12 | Preparation of organic-inorganic hybrid gas barrier films dispersed layered compound                                    |  |
|      | Graduate School of Maritime Sciences, Kobe University   | ○Tomohiro Haratani , Koji Kuraoka  |
| d-13 | The evaluation of disintegration at the waste multipack paper for can beer  |  |
|      | Rengo Co.,Ltd   | ○Mariko Sugane, Kenichi Ito  |
| d-14 | Development of acid type polymer with easy purging and excellent adhesion property                                      |  |
|      | DuPont-Mitsui Polychemicals Co., Ltd  | ○Koichi Nishijima, Nobuyuki Maki   |

14:50~15:20 Break

Yayoi Auditorium Ichijo Hall

15:20~17:20 IPS'15

New Biomass Derived Materials and Applications for Agricultural Product and Food Packaging

1) Renewable polymers for barrier functions in packages

○Dr. Mikael Gällstedt, Innventia-Packaging Solutions (Sweden)

2) Biobased and Biodegradable Polymer Development for Packaging Application in Thailand

○Dr. Sommai Pivsa-Art, Rajamangala University of Technology Thanyaburi (Thailand)

3) Current trends and issues of Biomass Derived materials

○Dr. Kazufumi Osima, Japan Bioindustry Association (Japan)

17:20~17:30 Break

17:30~17:50 Panel Discussion

Yayoi Auditorium Lobby

18:00~ Reception

July 3, 2015 Day Two Morning Program

Yayoi Auditorium Ichijo Hall

8:50~ Hall Opens

9:00~10:00 General Meeting

10:00~10:10 Break

10:10~10:30 Society of Packaging Science & Technology, Young Researcher Award Presentation

10:30~10:50 Society of Packaging Science & Technology, Paper Award Presentation

10:50~11:00 Break

11:00~12:00 Session B2 Functional Materials

b-05 Light-weighting of large beverage PET bottles with enhanced usability

Research laboratories for Packaging Technologies Kirin Company, Limited

○Daisuke Koike, Yohei Yamaguchi, Yuuki Arai

Technology Development Dept. Kirin Beverage Company, Limited

Takanori Nishijima

Technology Development Center Kirin Brewery Company, Limited

Shuichi Hanada

b-06 Quality retention effect of foods in active barrier packaging

Toyo College of Food Technology

○Yoshifumi Taguchi, Kazuki Saomoto

b-07 Development of liquid sachets with ethylene type ionomer

Du Pont-Mitsui Polychemicals Co., Ltd

○Hidenori Hashimoto, Nobuyuki Maki

Seihoku Gallery

11:00~15:00 Poster Viewing

12:00~13:20 Lunch

July 3, 2015 Day Two Afternoon Program

Yayoi Auditorium Ichijo Hall

13:20~14:20 Session A2 Transport Packaging

- a-05 Correlation Analysis of Vehicle Vibration for Non-Stationary Vibration Test  
Technology Research Institute of Osaka Prefecture ○Akira Hosoyama
- a-06 A method for estimating logistics environment from generally available indicators and indexes  
Japan National Mirror Committee to ISO/TC 122 /SC 3 ○Masahiro Takagi  
Japan Packaging Institute
- a-07 Relationship between drop height and number of specimens on drop tests  
Technology Research Institute of Osaka Prefecture ○Takamasa Nakajima

14:20~14:30 Break

14:30~15:50 Session F1 Processing, Design, Safety, Environment

- f-01 Development of melting surface temperature response model in impulse heat sealing  
Toyo College of Food Technology ○Tamotsu Inoue, Daiki Sakane, Tsuyoshi Siono
- f-02 Effect of annealing conditions on shrinkage behavior and structure of PVDC film  
KUREHA Corporation Plastics Processing Factory ○Masanori Shitsukawa, Tomonori Hosoda,  
Yuji Minegishi, Hitoshi Ujiie  
KUREHA Corporation Food Packaging Technology Center Kazuhiko Hirose
- f-03 Numerical Analysis for Seaming Process  
Mitsubishi Materials Co., Ltd ○Ryo Muranaka  
Nippon Institute of Technology Hideo Takizawa  
Universal Can Co., Ltd Taizo Ishikawa
- f-04 International comparative analysis of packaging  
Graduate School of Economics, Kobe University ○Risa Kojima, Masanobu Ishikawa

15:50~16:00 Break

16:00~17:00 Session F2 Processing, Design, Safety, Environment

- f-05 Analysis of crushing characteristics of wedge blade during continuous cutting of raw fiberboards  
Nagaoka University of Technology ○Nagasawa Shigeru, Oyake Takuya  
Rengo Co. Ltd Kajizuka Takashi
- f-06 Film interface temperature analysis in the rapid thermal conduction  
Yamagata University Graduate School of Science and Engineering ○Ken Miyata, Masahiro Kamiya  
Tomonori Koda, Taichi Nishio,  
Akihiro Nishioka
- f-07 Simulation study on cutting performance of the household wrap carton  
KUREHA Corporation ○Seishiro Kobayashi, Naoki Ueda,

Yoshihiro Takagi, Masaru Sato, Satoko Yoshioka

17:00~17:10 Closing

Building 2 Classroom 3

13:20~14:20 Session B3 Functional Materials

- b-08 A study on a relation between shape and expansion of a plastic bottle for carbonated  
Dai Nippon Printing Co.,Ltd ○Jun Kanehara, Kazuya Hirose, Akitomo Sekine,  
Takuma Miyawaki, Katsunobu Ito
- b-09 Influence of the inorganic particles on the impact resistance of the PVDC film  
KUREHA Corporation Food Packaging Technology Center ○Yuzo Ishii, Kenichi Masuda  
Jyunji Nakajima
- b-10 Development of new technology for heat sealing that unites Easy Open to Perfect Sealing.  
Hishinuma Consulting Engineering Office ○Kazuo Hishinuma

14:20~14:30 Break

14:30~15:50 Session B4 Functional Materials

- b-11 Development of Non Adsorption Packaging Materials  
Dai Nippon Printing Co., Ltd. ○Syouhei Okumura, Masato Yuno, Shin Yamada,  
Katsunobu Ito
- b-12 Structure analysis and temperature sensitive barrier property of clay/poly(N-isopropylacrylamide)  
nanocomposite membrane  
National Institute of Technology, Yuge college ○Shingo Ikeda, Tomohiro Murakami  
Kobe University Graduate School of Maritime Sciences Koji Kuraoka
- b-13 Heat seal properties and dynamic mechanical analysis of biodegradable polymer blends and composite  
films  
Kyoto Institute of Technology ○Supaphorn Thumsorn, Kazushi Yamada, Hiroyuki Hamada  
Rajamangala University of Technology Thanyaburi Sommai Pivsa-Art  
Yamagata University Ken Miyata

15:50~16:00 Break

16:00~17:00 Session B5 Functional Materials

- b-15 Method of moisture-proof packaging for ice cream cone  
Shimizu Professional Engineer Office ○Keisuke Shimizu
- b-16 Biomaterial barrier materials

Kuraray Co., LTD.

○Ryoichi Wada, Nick McCaffrey, Yuki Morino

b-17 Preparation and properties of organic-inorganic hybrid gas barrier membranes using polysilsesquioxane

Graduate School of Maritime Sciences, Kobe University ○Yuta Shimmen, Koji Kuraoka

Toray Fine Chemicals Co., Ltd.

Takeshi Nishikawa, Hiroyasu Seki

17:00~17:10 Closing