

【Scientific Program】

Poster Session (Room A Small Hall 5F: December 1, 9:30~12:00)

Chair Toshiro Matumura (9:30~10:47)

- P-01 Field Survey on the Readily Vaporizable Pyrethroids, Transfluthrin and Metofluthrin, in the Residential Houses
○Toshiko Tanaka-Kagawa¹⁾, Yoko Furukawa¹⁾, Kiyomi Tsuji²⁾, Rumiko Hayashi³⁾, Hiroko Tanaka⁴⁾, Susumu Ohkawara⁵⁾, Masanori Ando⁵⁾ and Tetsuji Nishimura¹⁾
1)National Institute of Health Sciences, 2)Kanagawa Prefectural Institute of Public Health, 3)Aichi Prefectural Institute of Public Health, 4)Shiga Prefectural Institute of Public Health, 5)Musashino University
- P-02 Study on the Detoxification Metabolism of Pyrethroid Insecticides in Human
○Hideto Jinno¹⁾, Toshiko Tanaka-Kagawa¹⁾, Yoko Furukawa¹⁾, Tetsuji Nishimura¹⁾, Nobumitsu Hanioka²⁾, Shizuo Narimatsu²⁾
1)National Institute of Health Sciences, 2)Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama University
- P-03 Organophosphorus insecticide residues in polished rice stored in houses as an indicator of indoor pollution
○Shoko Fukuda, Takana Nakamura, Yuko Fujita, Sayuri Moriwaki, Saori Yasuda, kaeko Kijima, Seisaku Yoshida
Department of Food Science and Nutrition, School of Human Environmental Sciences, Mukogawa Women's University
- P-04 Exposure Analysis of Dihaloacetonitriles In the Public Bath Facilities
○Nao Okuaki^{1),2)}, Hideto Jinno¹⁾, Toshiko Tanaka-Kagawa¹⁾, Yoko Furukawa¹⁾, Susumu Ohkawara³⁾, Atsuko Takahashi⁴⁾, Masanori Ando³⁾ and Tetsuji Nishimura¹⁾
1)National Institute of Health Sciences, 2)Tokyo College of Medico-Pharmaco Technology, 3)Musashino University, 4)Hatano Research Institute, Food and Drug Safety Center

- P-05 Investigation of Chemicals in Specific Building.
○Minae Aoki¹⁾, Naoki Kunugita¹⁾, Yukio Akiyama¹⁾, Yuko Yamano²⁾, Takahiko Kato³⁾,
Iwao Uchiyama⁴⁾, Keiichi Arashidani¹⁾
1)School of Health Sciences, University of Occupational and Environmental Health, Japan.,
2)Syowa University., 3)Kumamoto University., 4)Kyoto University.
- P-06 A study on sampling indoor air quality in wall paper construction of housing renovation
○Mamoru kashima¹⁾, Katsuyoku Matsuura¹⁾, Masaya Kadono²⁾, Shingo Yanai²⁾,
Youichi Yamashita³⁾, Toshirou Matsumura⁴⁾
1)Tokyo Institute, Polytechnic University, 2)Tokyo kenbikyo-In Foundation,
3)Wallcoverings Association of Japan, 4)Nippon University
- P-07 Trend of Indoor Air Chemicals detected with higher concentrations from newly built houses
○Aya Onuki¹⁾, Ikue Saito¹⁾, Takahiro Tada¹⁾, Masao Fukuda¹⁾, Kumiko Yaguchi¹⁾, Akio Ogata¹⁾,
Emiko Todaka²⁾, Hiroko Nakaoka²⁾, Chisato Mori²⁾
1)Tokyo Metropolitan Institute of Public Health,
2)Center for Environment, Health and Field Sciences, Chiba University
- P-08 Seasonal Change and Rapid Increase by Furniture of Indoor Air Quality in the Laboratory House
in Chemiless-Town
○Hiroko NAKAOKA^{1),2),3)}, Ikue SAITOU⁴⁾, Aya ONUKI⁴⁾, Emiko TODAKA^{2),3)},
Chisato MORI^{1),2),3)}
1)Department of Bioenvironmental Medicine, Graduate School of Medicine, Chiba University,
2)Center for Environment, Health and Field Sciences, Chiba University,
3)NPO Chemilessk-town Association, 4)Tokyo Metropolitan Institute of Public Health
- P-09 Measurements by small chamber test method of 1-methy-2-pyrrolidone and texanol emitted from
water-based paints used in a elementary school where sick house syndrome broke out
○Satoshi Kobayashi¹⁾, Hiroshi Akitsu²⁾, Shinichi Isaji²⁾, Kazuo Jin¹⁾
1)Hokkaido Institute of Public Health, 2)Hokkaido Forest Product Institute
- P-10 Study on mechanism of particle formation of formate species in indoor environment
○Ayako Ohno¹⁾, Yoshika Sekine¹⁾, Kunitoshi Matsunobu²⁾, Naoto Miyashita²⁾
1)Tokai University, 2)Gastec Corporation

- P-11 Increase and the control of the concentration level of chloroethane and pentane volatile from insulating materials of floor heating system
○Emiko TODAKA^{1),2),3)}, Ikue SAITOU⁴⁾, Aya ONUKI⁴⁾, Hiroko NAKAOKA^{1),2),3)}, Chisato MORI^{1),2),3)}
1)Center for Environment, Health and Field Sciences, Chiba University,
2)NPO Chemiless-town Association,
3)Department of Bioenvironment, Graduate School of Medicine, Chiba University,
4)Tokyo Metropolitan Institute of Public Health
- P-12 An Estimation method for indoor air concentration of p-dichlorobenzene by measurement of those in dust
○Sumio Goto¹⁾, Kimika Kaneshima¹⁾, Chieko Suzuki¹⁾, Yukihiko Takagi¹⁾, Osamu Endo¹⁾, Daisuke Nakajima²⁾, Hajime Furudate³⁾, Tsuneaki Maeda⁴⁾
1)Azabu University, 2)National Institute for Environmental Studies,
3)Nishikawa Keisoku Co., Ltd, 4)Advanced Industrial Science and Technology
- P-13 Research on the indoor aldehydes concentration at schoolrooms
○Kazunari KUME¹⁾, Lin Lin g²⁾, Hitoshi Fukazawa¹⁾
1)Shizuoka Institute of Environment and Hygiene,
2)Graduate School of Nutritional and Environmental Sciences, University of Shizuoka
- P-14 Simulation of Moth Repellent Levels in the Residential Environment: Ventilation Rate of Clothes Storage Boxes
○Yoko Furukawa¹⁾, Toshiko Tanaka-Kagawa¹⁾, Kiyomi Tsuji²⁾, Rumiko Hayashi³⁾, Hiroko Tanaka⁴⁾, Tetsuji Nishimura¹⁾ and Hideto Jinno¹⁾
1)National Institute of Health Sciences, 2)Kanagawa Prefectural Institute of Public Health,
3)Aichi Prefectural Institute of Public Health, 4)Shiga Prefectural Institute of Public Health
- P-15 Investigation of Air Quality inside Taxi
○Keiichi Arashidani¹⁾, Manami Iwamatu¹⁾, Ryuuji Manabe²⁾, Naoki Kunugita¹⁾, Yukio Akiyama¹⁾
1)School of Health Sciences, University of Occupational and Environmental Health, Japan,
2)University of Miyazaki

- P-16 Estimation of Absorption of Hydrocarbons Diffusing from Interior Materials in an Automobile Cabin by Inhalation Pharmacokinetic Analysis in Rats.
○Toshiaki YOSHIDA
Osaka Prefectural Institute of Public Health
- P-17 Comparison of Indoor Air pollution levels Between Japan and Korea.
○Fuyoko Bori, Naoki Kunugita, Yukio Akiyama, Keiichi Arashidani.
School of Health Sciences, University of Occupational and Environmental Health, Japan
- P-18 Countermeasures for reduction of indoor air pollution by chemicals
○Toshiyuki HORIIKE¹⁾, Kazunari KUME²⁾, Nobuyuki HONMA³⁾, Shouhei YAMASHITA²⁾,
1)Pharmaceutical Affairs Office,Division of Medicine and Health,Department of Health and Welfare, Shizuoka Prefecture, 2)Institute of Environment and Hygiene,Shizuoka Prefecture, 3)Industrial Reseach Institute,Shizuoka Prefecture
- P-19 The reduction of toluene concentration of a classroom in Hokkaido
○Nobuhiro Asakura¹⁾, Hiroshi Akitsu¹⁾, Masaki Suzuki¹⁾, Shinichi Isaji¹⁾, Sayaka Murata²⁾, Satoshi Kobayashi³⁾
1)Hokkaido Forest Products Research Institute,
2)Hokkaido Northern Regional Building Research Institute,
3)Hokkaido Institute of Public Health
- P-20 Indoor air pollution by ammonia and its removal in the museum
○Ro Toshitami¹⁾, Sano Chie¹⁾, Uchiro Hiroyuki²⁾, Seko Shigeki³⁾, Amano Kentarou³⁾
1)National Research Institute for Cultural Properties,Tokyo,
2)Pola Museum of Art, 3)Takenaka Corporation
- P-21 Photocatalytic decomposition of volatile organic compounds and generation of by products.
○Shinichi Isaji, Hiroshi Akitsu
Hokkaido Forest Products Reserch Institute
- P-22 Verification of effect of indoor air pollutant reduction using room air cleaner
○Kiyomi Tsuji¹⁾, Hitoshi Uemura¹⁾, Yuichi Fushiwaki¹⁾, Hideto Jinno²⁾, Daisuke Nakajima³⁾, Sumio Goto⁴⁾, Kazuo Hasegawa¹⁾,
1)Kanagawa Prefectural Institute of Public Health, 2)National institute of Health Sciences, 3)National Institute for Environmental Studies, 4)Azabu University

P-23 Formaldehyde absorption of pot plant for indoor gardening
○Masaki Suzuki¹⁾, Nobuhiro Asakura¹⁾, Hiroshi Akitsu¹⁾, Masao Ubukata²⁾, Ryoko Suzuki²⁾
1)Hokkaido Forest Products Research Institute,
2)Hokkaido Ornamental Plants and Vegetables Research Center

P-24 Influence of diatomaceous earth wall on concentration of formaldehyde
○Koichi HARADA¹⁾, Osamu MATSUSHITA²⁾, Chang-Nian WEI²⁾, Keiko MINAMOTO²⁾,
Michiko YOSHIDA²⁾, Atsushi UEDA³⁾, Kunio HARA³⁾, Mihoko MORI⁴⁾
1)Department of Microbiology and Environmental Chemistry, School of Health Sciences,
Kumamoto University, 2)Division of Public Policy and Society, Graduate School of Social and
Cultural Sciences, Kumamoto University, 3)Department of Preventive and Environmental
Medicine, Graduate School of Medical and Pharmaceutical Sciences, Kumamoto University,
4)Department of Environmental Medicine, School of Medicine, Kurume University

Chair Kazunari Kume (10:47~11:55)

P-25 Surveillance study on TVOC concentration in classroom
○Michitada KOHNO¹⁾, Michiyasu KOHNO¹⁾, Yasuhiro SETOGUCHI²⁾,
Kunitoshi MATSUNOBU³⁾, Toshiaki TANAKA⁴⁾, Satoru MURAMATSU¹⁾
1)Riontech Inc., 2)Figaro Engineering Inc., 3)Gastec Corporation.,
4)Japanese school pharmacist society

P-26 The Analysis of Volatile Compounds Released by Fungi Collected from the Air of Railway
Stations by SPME-GCMS Method
○Takashi Kyotani¹⁾, Tamami Kawasaki¹⁾, Tomoyoshi Ushioji¹⁾,
Noritoshi Ri²⁾ and Toshio Hayakawa¹⁾
1)Biotechnology, Railway Technical Research Institute,;
2)Hygiene & Microbiology Research Center

P-27 The Research on the VOC evaluation of In-Vehicle Materials.
○Ken'ichi Koga, Toshihiro Urakawa
Fukuoka industrial technology center

- P-28 Indoor air quality monitoring via IT network- Colorimetric monitoring of formaldehyde in indoor environment using image transmission of mobile phone -
○Risa Katori¹⁾, Yoshika Sekine¹⁾, Hiroki Kashiwagi²⁾
1)Graduate School of Science, Tokai University,
2)Department of Chemistry, School of Science, Tokai University
- P-29 Measurement of ventilation rate of household refrigerators by tracer gases
○Shinichiro Murata¹⁾, Yoshika Sekine¹⁾, Michio Butsugan²⁾
1)School of Science, Tokai University, 2)Hitachi Chemical Co., Ltd.
- P-30 The evaluation test of the TVOC monitor(FID system) and its application
○Toshiro MATSUMURA¹⁾, Yasuhiro SETOGUCHI²⁾, Tomohiro KAWAGUCHI²⁾,
Takao NISHIMURA²⁾, Takashi URITA²⁾, Yukitoki MORITA¹⁾, Akio SAKURAGAWA¹⁾
1)Nihon University, College of Science and Technology, 2)Figaro Engineering Inc.,
- P-31 Study of AERO C2 system for organic compounds in indoor air
○Akira Suzuki¹⁾, Tsutoshi Imanaka¹⁾, Kenji Akatani¹⁾, Kazuyuki Ishii¹⁾, Shigeru Ogawa¹⁾,
Toshiro Matsumura²⁾
1)GL Sciences Inc., 2)Nihon University
- P-32 Analytical Method for Antimicrobial Agent; 2-chloroacetamide (CAA)
○Harunobu Nakashima¹⁾, Daisuke Nakajima²⁾, Sumio Goto³⁾, Masa-aki Kaniwa⁴⁾
1)Osaka Prefectural Institute of Public Health, 2)National Institute for Environmental Studies,
3)Azabu University, 4)National Institute of Health Sciences
- P-33 Determination of polarity compounds by canister system
○Kazuyuki Ishii¹⁾, Tsutoshi Imanaka¹⁾, Kenji Akatani¹⁾, Akira Suzuki¹⁾, Shigeru Ogawa¹⁾,
Toshiro MATSUMURA²⁾
1)GL Sciences Inc., 2)Nihon University
- P-34 Development for New collection tubes for VOCs
○YOSHIHIRO SUZUKI¹⁾, JUNKO HIRANO¹⁾, MICHIKO KOYANO²⁾, TUNEO SAITO¹⁾,
HIROMI KOYAMA¹⁾
1)Sibata Scientific Technology co. ltd., 2)National Institute of Public Health

- P-35 Development of TVOC detector using a MEMS sensor (Part3)
Humiharu KATSUMATA*, Masataka KANO, ○Kazuhiro TOYODA*, Takahiko SASAHARA,
Tatsuo SUNAYAMA
(*Member)
Yazaki Co.Ltd.
- P-36 Comparative study of the genus *Aspergillus* of collection from museum
○Kazuhiro Hashimoto^{1,3)}, Azumi Fukuda^{1,2)}, Yuji Kawakami^{1,2)}
1)FCG Research Institute,Inc, 2)Istituto per il restauro “L'AMBIENTE”,
3)Graduate School of Environmental Health, Azabu University
- P-37 The climate suitable for the growth of a fungus *Aspergillus fumigatus*
○Keiko Abe
Institute of Environmental Biology
- P-38 Indoor Air Analysis for Monitoring Biological Activity in Kitora Tumulus
○Chie SANO and Hajime MABUCHI
National Research Institute for Cultural Properties, Tokyo
- P-39 Research of Provision for Iatrogenic Infection on Oral Implant Therapy Analytical Evaluation of
Operative Air-purifying Unit (Part 2)
○M NASHIMOTO¹⁾, ○Y SUYAMA²⁾, K ITOH¹⁾, H KOSHI¹⁾, U TUNOSUE¹⁾
1)General Implant Research Center,
2)Department of Epidemiology and Public Health Tokyo Dental College
- P-40 Correlation between the judgment by monitor surveys and concentrations of airborne fungi in the
railway stations
○Tamami Kawasaki¹⁾, Takashi Kyotani¹⁾, Tomoyoshi Ushiogi¹⁾, Yasuhiko Izumi²⁾,
Kouhei Fujinami³⁾, Toshio Hayakawa¹⁾
1)Railway Technical Research Institute, Biotechnology
2)Railway Technical Research Institute, Architecture
3)Railway Technical Research Institute, Ergonomics laboratory
- P-41 Survey of drifting microbes by water in the indoor environment, and the measures against the mi-
crobes
○Saitou Satoshi
Takenaka Corporation

- P-42 Development of a micro-scale chamber for estimating chemical concentrations in indoor air
 ○Hiroya SHINOZAKI, Haruyuki HIGASHINO
 National Institute of Advanced Industrial Science and Technology
- P-43 Influence of indoor particulate matter on the bioluminescence of marine bacterium vibrio fischeri
 ○Shiro Ikeda¹⁾, Yoshika Sekine¹⁾, Masafumi Oikawa²⁾
 1)Graduate School of Science, Tokai University,
 2)Department of Chemistry, School of Science, Tokai University
- P-44 Research of subjective symptom and indoor air quality of MCS and/or sick house syndrome patients.
 ○Tamami SUZUKI¹⁾, Yoshiko BAI¹⁾, Misaki MATSUSHITA¹⁾, Masao INOUE²⁾
 1)Faculty of health science,Gumma PAZ College,
 2)NPO Indoor Air Quality Survey Association,technical manager
- P-45 Effects of developmental exposure to toluene on testosterone secretion and apoptotic cell death in the brain
 Shinji Tsukahara, Yoshiko Kuroda, ○Daisuke Nakajima, Shiho Kageyama and Hidekazu Fujimaki
 National Institute for Environmental Studies

Report from subcommittee

- SUB-1 The report of activity progress from a chemical substance subcommittee-The measurement result of personal exposure for TVOC-
- Toshiro MATSUMURA¹⁾, Yukioki MORITA¹⁾, Akio SAKURAGAWA¹⁾, Ikue SAITO²⁾,
 Yasuhiro SETOYUCHI³⁾, Tomohiro KAWAGUCHI³⁾, Tsutoshi IMANAKA⁴⁾,
 Kunitoshi MATSUNOBU⁵⁾, Shintaro TANAKA⁶⁾, Yoichi SITANAKA⁷⁾, Kenji OHTUKA⁸⁾,
 Eiji OSADA⁹⁾, Kazukiyo KUMAGAI¹⁰⁾
 1)Nihon University, College of Science and Technology, 2)Tokyo Metro-poritan Institute of Public Health,
 3)Figaro Engineering Inc., 4)GL Sciences Inc., 5)Gastec Corporation,
 6)Industrial Hygien DeviceCalibration. Inc., 7)JFE Techno-Research Corporation,
 8)TakamizawaAnalytical Chemistry Research Institute Inc., 9)TOA • DKK Corporation,
 10)Institute of Environmental System Studies, Graduate School of Frontir Sciences, The Tokyo University

Oral Session(Room G Exhibition Hall 1F: December 2, 9:30~11:00, 14:00~16:00)

Chair Ikue Saitou (9:30~11:00)

G-01 A Comparative study of indoor aldehydes concentrations between in China and in Japan

○Masashi Kamoi¹⁾, Takeshi Ohura¹⁾, Takashi Amagai¹⁾, Mili Weng, Zhu Lizhong²⁾

1)Graduate School of Nutritional Department of Environmental Science,University of Shizuoka,

2)Department of Environmental Science, Zhejiang University

G-02 Emission Source of Pentane in a Newly Built House

○Ikue SAITOU¹⁾, Aya ONUKI¹⁾, Kumiko YAGUCHI¹⁾, Akio OGATA¹⁾, Emiko TODAKA²⁾,
Hiroko NAKAOKA²⁾, Chisato MORI²⁾

1)Tokyo Metropolitan Institute of Public Health,

2)Center for Environment, Health and Field Sciences, Chiba University

G-03 Investigation of Styrene from Hecycling Polystyrene(PS)

○Yo Yamakawa¹⁾, Kazukiyo KUMAGI¹⁾, Miyuki NOGUCHI¹⁾, Atsushi MIZUKOSHI¹⁾,
Yukio YANAGISAWA¹⁾

1)Graduate School of Frontier Sciences, The University of Tokyo

G-04 Field Survey on the Indoor Air Concentration of Prallethrin in the Residential Houses

○Rumiko HAYASHI¹⁾, Hideto JINNO²⁾, Toshiko TANAKA-KAGAWA²⁾, Yoko FURUKAWA²⁾,
Kiyomi TSUJI³⁾, Hiroko TANAKA⁴⁾, Toru KAZUMA⁵⁾, Atsuhiko MUTO⁵⁾,
Tetsuji NISHIMURA²⁾, Tsutomu OHNO¹⁾

1)Aichi Prefectural Institute of Public Health, 2)National Institute of Health Sciences,

3)Kanagawa Prefectural Institute of Public Health, 4)Shiga Prefectural Institute of Public Health,

5)Japan Environmental Sanitation Center

G-05 Evaluation of Indoor Air Quality by Means of Ratio that Divided Chemical Concentration by Odor Threshold Value

○Hiroshi SETO^{1),5)} Shun-ichi MATSUDA^{2),5)}, Ikue SAITOU³⁾, Aya ONUKI³⁾,
Emiko TODAKA^{4),5)}, Hiroko NAKAOKA^{4),5)}, Chisato MORI^{4),5)}

1)Tokyo Kenbikyo-in Foundation, 2)YKK AP Inc.,

3)Tokyo Metropolitan Institute of Public Health,

4)Center for Environment, Health and Field Sciences, Chiba University,

5)NPO Chemiless-town Association

G-06 Perpendicular Distribution of Chemical Substances and Particulated Matters in a Kindergarten.

○Yasuto Matsui, Nobumitsu Sakai, Tomohisa Urabe, Hiroshi Okuda, Tsuguo Mizoguchi, Iwao Uchiyama

Institute of Engineering Innovation, The University of Tokyo

Chair Naohide Shinohara (14:00~15:00)

G-11 Measurement method of VOC emission rate from adhesive by using of material diffusion

○Shin-ichi Tanabe, Hoon Kim, Hisato Nakamura

Department of Architecture, Waseda University

G-12 Determination of Acrolein by DNPH derivatization and HPLC

○Miyuki Noguchi, Takako Yamaki, Kazukiyo Kumagai and Yukio Yanagisawa

Graduate School of Frontier Sciences, The University of Tokyo

G-13 A development study on test methods for represents of chemical substance emission characteristic during reform action in buildings (Part 2)

Atsuo NOZAKI¹⁾, ○Yuki YAMASHITA¹⁾, Toshifumi OGURA²⁾, Motoya HAYASHI³⁾,
Yasunori NARITA⁴⁾, Haruki OSAWA⁵⁾

1)Graduate school of health and environment sciences, Tohoku bunka gakuen university,

2)Living and cultural science, 3)Miyagi gakuin women's university

4)Indoor environmental technology research, 5)National Institute of public health

G-14 Evaluation of the Odor Emitted from Electronic Products by Large Chamber Method

○Yoji OHSHIMA, Eiko OKAMURA, Tatsuo TAKAHARA, Tatsuo NONAKA

Sumika Chemincal Analysis Service, Ltd

Chair Miyuki Noguchi (15:00~16:00)

G-15 Development of the small size air suction pump for indoor environmental measurement

○Nobuyuki Sanari, Kentaro Kojima, Isao Hiyama, Tsuneo Saito, Hiromi Koyama
Sibata Scientific Technology, LTD.

G-16 Development of Biosensor through Image Analysis for House Dust Mite Activity

○Makoto Yamaguchi, Kazuyuki Tomioka, Keigo Takeuchi
Shimizu Corporation

G-17 application of passive colometric emission sensor (PECS) for the measurement of indoor/outdoor concentration of formaldehyde

○Naohide SHINOHARA¹⁾, Masato OHNISHI²⁾, Atsushi Mizukoshi³⁾, Yukio YANAGISAWA³⁾

1)National Institute of Advanced Industrial Science and Technology (AIST), Research Institute of Scien,

2)Nippon Living Co., Ltd, 3)University of Tokyo

G-18 Continuous generation of calibration gas for formaldehyde with permeation tube method

○Reiji Aoyagi, Kunitoshi Matsunobu
Gastec Corporation

Oral Session (Room C Seminar Room #401 4F:

December 2, 9:30~11:00, 14:00~16:00)

Chair Kiyomi Tsuji (9:30~11:00)

C-01 Studies on the Durability of Chemical Substance Removal Performance on Room Air Cleaner (Part2)

Atsuo NOZAKI¹⁾, ○Masaya SHINOTSUKA¹⁾, Haruki SAKURABA¹⁾, Yusuke ICHIJO²⁾

1)Graduate school of health and environmental sciences, Tohoku bunka gakuen university,

2)Indoor Environmental Technology Research Association

C-02 Studies on Durability of Chemical Substance Removal Performance on Room Air Cleaners (Part 3)

○Yusuke ICHIJO¹⁾, Atsuo NOZAI¹⁾, Masaya SHINOTSUKA¹⁾, Haruki SAKURABA²⁾

1)Graduate school of health and environment sciences, Tohoku bunka gakuen university,

2)Indoor environment technology research association

C-03 A Study on Gaseous Contaminants and Odor Removal Performance of Room Air Cleaners

Atsuo NOZAKI¹⁾, ○Haruki SAKURABA¹⁾, Masaya SHINOTSUKA¹⁾, Yusuke ICHIJO²⁾,

Susumu YOSHIZAWA³⁾

1)Graduate school of health and environment sciences, Tohoku bunka gakuen university,

2)Indoor environmental technology research association

C-04 Studies on the countermeasure technology against indoor chemical substance pollutions by using a control technique of indoor humidity (Part 1) Examinations of an experimental method

Atsuo Nozaki¹⁾, ○Yasunori Narita²⁾, Yoshio Okamoto³⁾, Atsushi Matsubara³⁾, Kenkichi Kagawa³⁾

1)Graduate school of health and environment sciences, Tohoku Bunka Gakuen University,

2)Life Science Research Laboratory Co., Ltd, 3)Daikin industries, Ltd.

C-05 Studies on the countermeasure technology against indoor chemical substance pollutions by using a control technique of indoor humidity (Part 2) Effect evaluation in real environmental condition

Atsuo NOZAKI¹⁾, Yasuaki NARITA²⁾, ○Yoshio OKAMOTO³⁾, Kenkichi KAGAWA³⁾,

Atushi MATUBARA³⁾

1)Tohoku Bunka Gakuen Univ., 2)Life science Research Laboratory Co.,Ltd.,

3)DAIKIN Industries,Ltd.

C-06 Studies on the decay characteristics of indoor odorant concentration by using countermeasure products

Atsuo NOZAKI¹⁾, ○Aya KIKKAWA²⁾, Syungo TOKUSHIMA³⁾, Noriyuki SUGIYAMA³⁾

1)Graduate school of health and environment sciences, Tohoku Bunka Gakuen University,

2)The aino institute of life science, 3)INAX Corporation

Chair Naoki Kunukita (14:00~15:00)

C-11 A Study on the Emission Rates of Chemical Substances Mitigation Technique on the Printed Matters

Atsuo NOZAKI¹⁾, ○Yasuhiro FUKUSHIMA¹⁾, Yutaka FUKUDA²⁾, Yasuhiro HASHIMOTO³⁾

1)Graduate school of health and environment sciences, Tohoku bunka gakuen university,

2)Indoor environmental technology research association, 3)The aino institute of life science

C-12 Studies on the Classroom Air Pollution Caused by Educational Products and the Development of Concentration Prediction Method (Part 4) Termination of the Main Chemical Substances Emission Source from Textbooks

Atsuo NOZAKI¹⁾, ○Yutaka FUKUDA¹⁾, Yasuhiro FUKUSHIMA¹⁾, Yasunori NARITA²⁾, Yasuhiro HASHIMOTO³⁾

1)Graduate school of health and environment sciences, Tohoku bunka gakuen university,

2)Indoor Environmental Technology Research Association, 3)The Aino institute of life science

C-13 Studies on the Classroom Air Pollution Caused by Educational Products and the Development of Concentration Prediction Method (Part 5) Emission Rates of Chemical Substances on the Sporting Goods

Atsuo NOZAKI¹⁾, ○Yasuhiro HASHIMOTO²⁾, Yasuhiro FUKUSHIMA¹⁾, Yutaka FUKUDA³⁾

1)Grauate school of health and environment sciences, Tohoku bunka gakuen university,

2)The Aino institute of life science, 3)Indoor environmental technology research association

C-14 Seasonal change of indoor air chemicals of anti

○Emiko TODAKA^{1),2),3)}, Ikue SAITOU⁴⁾, Aya ONUKI⁴⁾, Hiroko NAKAOKA^{1),2),3)},
Mikio ISHIKIRIYAMA^{2),5)}, Yukihiro KONDO^{2),6)}, Atsushi FUKUHARA^{2),7)}, Masato Hozumi^{2),8)},
Chisato MORI^{1),2),3)}

1)Center for Environment, Health and Field Sciences, Chiba University,

2)NPO Chemiless-town Association,

3)Department of Bioenvironment, Graduate School of Medicine, Chiba University,

4)Tokyo Metropolitan Institute of Public Health, 5)Kanto Leather Co., 6)Lonseal Corp.,

7)Itoki Corp., 8)Achilles Corp.

Chair Yasuhiro Hashimoto (15:00~16:00)

C-15 Relationship between indoor and outdoor concentrations of airborne cedar pollens and particulate matters in a kindergarten in Isehara city

○Naomichi Yamamoto^{1),2)}, Miho Sakamoto¹⁾, Yumi Shimizu¹⁾, Junko Nishikawa¹⁾,
Hideaki Matsuki¹⁾

1)School of Health Sciences, Tokai University,

2)Japan Society for the Promotion of Science (JSPS)

C-16 Instructions for Health Protection of Students in School Facilities-for Indoor Air Pollution-

○Hiroshi HIROSE, Kenichi AZUMA, Hideko ITOU, Iwao UCHIYAMA,
Toshikazu YOSHIKAWA

Study Group on Prevention for Residential Diseases

C-17 Study of the relationship between inhalation of indoor fungi and the development of intractable lung disease

○Eri Ochiai¹⁾, Masaru Nagayoshi^{1),2)}, Ayaka Sato¹⁾, Akira Watanabe^{1),3)}, Takahito Toyotome¹⁾,
Kazutoshi Shibuya⁴⁾, Katsuhiko Kamei¹⁾

1)Medical Mycology Research Center, Chiba University,

2)Graduate School of Medicine, Chiba University, 3)Chiba University Hospital,

4)Toho University School of Medicine

C-18 Effects of CYP2A6 genotype on urinary nicotine and its metabolites in environmental tobacco smoke exposure

OKUNUGITA Naoki¹⁾, YAMAGUCHI Manami¹⁾, AKIYAMA Yukio¹⁾,
KAWAMOTO Toshihiro²⁾, ARASHIDANI Keiichi¹⁾

1)University of Occupational and Environmental Health, Japan, School of Health Sciences,

2)University of Occupational and Environmental Health, Japan, School of Medicine, Department
of Environmental Health

Oral Session (Room D Seminar Room #303 3F: December 2, 14:00~16:00)

Chair Yoshika Sekine (14:00~15:00)

D-11 Field study on ultra fine particle concentrations in houses

○Naoki Kagi, U Yanagi and Koichi Ikeda

National Institute of Public Health

D-12 Actual Survey about Indoor Air Contamination by Microbe in Apartment House

○Satomi MATSUU¹⁾, Sumiyo ISHIMATSU²⁾, Yuji RYU³⁾

1)Graduate School of Environmental Engineering, The University of Kitakyushu,

2)School of Health Sciences, University of Occupational and Environmental Health, Japan,

3)Faculty of Environmental Engineering, The University of Kitakyushu

D-13 Difference of indoor airborne particular and biological contamination with various scales of buildings

○Koichi Ikeda¹⁾, U Yanagi¹⁾, Naoki Kagi¹⁾, Naoya Nishimura²⁾, Hideki Saito³⁾, Keiko Saito³⁾, Ryota Kamakura³⁾

1)National Institute of Public Health, 2)Shibaura Institute of Technology,

3)Building Management Education Center

D-14 Microbial contamination in individual air conditioning system

○Yanagi U¹⁾, Saito Hideki²⁾, Saito Keiko²⁾, Kamakura Ryota²⁾, Sugiyama Junichi²⁾, Omawari Kazuhiko³⁾, Shimizu Susumu³⁾

1)National Institute of Public Health, 2)Building Management Education Center,

3)Japan Air Duct Cleaning Association

Chair U Yanagi (15:00~15:45)

D-15 Building a healthy indoor environment employing plaster board containing Chitosan derivatives for prevention of Sick House Syndrome (1) Evaluation of formaldehyde removal performance using a small test chamber

○Mitsuru Fukuda¹⁾, Masumi Ideguchi²⁾, Wataru Hashimura³⁾, Yoshika Sekine⁴⁾

1)Graduate School of Science, Tokai University, 2)Sunstar Engineering Inc.,

3)PanaHome Corporation, 4)School of Science, Tokai University

D-16 Building a healthy indoor environment employing plaster board containing Chitosan derivatives for prevention of Sick House Syndrome (2) Influence of wallpaper and glue on the permeation of formaldehyde gas

○Masumi Ideguchi¹⁾, Wataru Hashimura²⁾, Mitsuru Fukuda³⁾, Yoshika Sekine⁴⁾

1)Sunstar Engineering Inc., 2)PanaHome Corporation,

3)Graduate School of Science, Tokai University, 4)School of Science, Tokai University

D-17 Building a healthy indoor environment employing plaster board containing Chitosan derivatives for prevention of Sick House Syndrome (3) Field tests in a model experimental house

○Wataru Hashimura¹⁾, Mitsuru Fukuda²⁾, Masumi Ideguchi³⁾, Yoshika Sekine⁴⁾

1)PanaHome Corporation, 2)Graduate School of Science, Tokai University,

3)Sunstar Engineering Inc., 4)School of Science, Tokai University

Oral Session (Room B Seminar Room 4F: December 2, 14:00~15:45)

Chair Yusuke Ichijo (14:00~14:45)

- B-11 Development of air filter for inactivation of influenza virus
○Yasushi Nishibori¹⁾, Yutaka Ogaki¹⁾, Takateru Mochizuki¹⁾, Toshihiro Ito²⁾, Hiroshi Ito²⁾
1)Japan Vilene Company, Ltd.,
2)Avian Zoonosis Reserch Center, Faculty of Agriculture, Tottori Universtiy
- B-12 Evaluation of the removal effect of the airborne virus on gas fan heater
○Nobuhiko Yamashita, Toshinari Momose
Energy & Technology Laboratories OSAKA GAS Co., Ltd.
- B-13 VOCs adsorbing power of Akita cedar wood
○Katsumi Saitoh¹⁾, Takashi Kobayashi¹⁾, Yasuji kurimoto²⁾, Shigeru Yamauchi²⁾
1)Akita Prefectural Research center for Public health and Environment,
2)Institute of Wood Technology, Akita Prefectural University

Chair Katumi Saito (14:45~15:30)

- B-14 Studies on the odorant pollution and countermeasure technology in the toilet space (Part 1) The emission rates of odorant and chemical substances from urine
○Hisato NISHINA¹⁾, Atsuo NOZAKI¹⁾, Kiyooki HONDA²⁾, Syungo TOKUSHIMA³⁾, Noriyuki SUGIYAMA³⁾
1)Graduate school of health and environment sciences, Tohoku bunka gakuen university,
2)Indoor environmental technology research association, 3)INAX Corporation
- B-15 Studies on the odorant pollution and countermeasure technology in the toilet space (Part 2) The emission rates of odorant and chemical substances from feces
Atsuo Nozaki¹⁾, Kiyooki Honda¹⁾, Syungo Tokushima²⁾, Noriyuki Sugiyama²⁾, Hisato Nishina³⁾
1)Graduate school of health and environment sciences, Tohoku bunka gakuen university,
2)INAX corporation, 3)Indoor Environmental Technology Research Association

B-16 Studies on the odorant pollution and countermeasure technology in the toilet space (Part 3)

Removal performance of toilet units for odorant

○Atsuo NOZAKI¹⁾, Hisato NISHINA¹⁾, Kiyooki HONDA²⁾, Syungo TOKUSHIMA³⁾,
Noriyuki SUGIYAMA³⁾, Yasuhiro HASHIMOTO⁴⁾

1)Graduate school of health and environment sciences, Tohoku bunka gakuen university,

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4)The Aino Institute of Life Science