

Program of JAFST 13th Annual Meeting

Total time provided for oral presentation: **12 minutes**

9 minutes to present materials

3 minutes to answer questions

1st Day (Thursday, November 8th, 2007)

	Hall 1 (1F "Fuji")	Hall 2 (1F "Hagoromo")	Hall 3 (2F "Fuyo-Higashi")	Hall 4 (2F "Fuyo-Nishi")	3F "Kujaku"	
8:50	Opening Ceremony (8:50 - 8:55, Hall 1)					
9:00	Forensic Biology A-1 - A-4 9:00 - 9:48 A-5 - A-8 10:00 - 10:48	Forensic Chemistry C-1 - C-3 9:00 - 9:36 C-4 - C-6 9:40 - 10:16 C-7 - C-9 10:20 - 10:56	Forensic Engineering [Acoustics] D-1 - D-2 9:00 - 9:24 D-3 - D-5 9:24 - 10:00 [Fire Investigation] D-6 - D-9 10:12 - 11:00	Forensic Engineering [General Engineering] D-25 - D-26 9:00 - 9:24 [Image Processing] D-27 - D-29 9:36 - 10:12 D-27 - D-29 10:24 - 11:00	Analytical Equipment Exhibition 11:00 - 17:00	
11:00	Plenary Lecture (11:10 - 12:10, Hall 1)					
12:10	Lunch Time (12:10 - 13:00)					
13:00	General Meeting (13:00 - 13:30, Hall 1)					
13:45	Forensic Biology A-9 - A-11 14:00 - 14:36 A-12 - A-14 14:48 - 15:24 A-15 - A-17 15:36 - 16:12	Forensic Chemistry C-10 - C-12 13:45 - 14:21 C-13 - C-15 14:21 - 14:57 C-16 - C-18 15:05 - 15:41 C-19 - C-22 15:41 - 16:29 C-23 - C-26 16:35 - 17:23	Forensic Engineering [Fire Investigation] D-10 - D-13 13:45 - 14:33 D-14 - D-17 14:45 - 15:33 D-18 - D-21 15:45 - 16:33 [Explosives] D-22 - D-24 16:45 - 17:21	Crime Scene Investigation E-1 - E-4 13:45 - 14:33 E-5 - E-7 14:33 - 15:09 E-8 - E-11 15:20 - 16:08 E-12 - E-14 16:08 - 16:44		
17:23 17:45	Banquet (17:45 - 19:30, Hall 1)					

2nd Day (Friday, November 9th, 2007)

	Hall 1 (1F "Fuji")	Hall 2 (1F "Hagoromo")	Hall 3 (2F "Fuyo-Higashi")	Hall 4 (2F "Fuyo-Nishi")	3F "Kujaku"
8:30	Forensic Biology A-18 - A-21 9:00 - 9:48 A-22 - A-24 10:00 - 10:36 A-25 - A-27 10:48 - 11:24	Forensic Toxicology B-1 - B-4 8:40 - 9:28 B-5 - B-7 9:33 - 10:09 B-8 - B-11 11:14 - 11:02 B-12 - B-14 11:07 - 11:43	Forensic Engineering [Firearms & Toolmarks] D-30 - D-33 8:30 - 9:06 D-36 - D-38 9:20 - 9:56 [Mechanical Eng.] D-39 - D-41 10:10 - 10:46 [Traffic Accidents] D-42 - D-45 11:00 - 11:48	Forensic Psychology F-1 - F-5 8:30 - 9:30 F-6 - F-10 9:40 - 10:40 F-11 - F-15 10:50 - 11:50	Analytical Equipment Exhibition 9:00 - 14:00
11:48	Lunch Time (12:00 - 12:45) / Luncheon Seminar (12:00 - 12:35, Hall 1)				
12:00	Symposium (12:40 - 13:55, Hall 1)				
14:00	Forensic Chemistry C-27 - C-29 15:00 - 15:36 C-30 - C-32 15:40 - 16:16 C-33 - C-35 16:20 - 16:56	Forensic Toxicology B-15 - B-18 14:00 - 14:48 B-19 - B-22 14:53 - 15:41 B-23 - B-26 15:46 - 16:34	Forensic Engineering [Traffic Accidents] D-46 - D-48 14:00 - 14:36 D-49 - D-51 14:50 - 15:26	Forensic Document Examination G-1 - G-8 14:00 - 15:36 G-9 - G-14 15:45 - 16:57	
17:00					

Plenary Lecture

Hall 1, Thursday, November 8th

11:10-12:10

Chairperson: H. Fukushima (Shinshu University)

Genetic Difference among Individuals and among Populations in Human Genome

Naruya Saitou (Professor, Division of Population Genetics, National Institute of Genetics)

Symposium

Hall 1, Thursday, November 9th

12:40-13:55

Forensic Technology Against Chemical, Biological, Radiological and Nuclear Terrorism

*Organizers: H. Fukushima (Shinshu University)
T. Kishi (Rtd. National Research Institute of Police Science)*

- S-1 **Analysis of Chemical Warfare Agents with High Sensitivity**
Y. Seto (National Research Inst. of Police Sci.)
- S-2 **Detection and Identification of Biological Warfare Agents**
Z. Yasuda (National Research Inst. of Police Sci.)
- S-3 **Detection of Radiological Material**
K. Kuroki (National Research Inst. of Police Sci.)

Luncheon Seminar

Hall 1, Thursday, November 9th

12:05-12:35

The Introduction of Drug Screening and Identification with LC/MS/MS

H. Yoshioka (Applied Biosystems Japan Ltd.)

Oral Presentations

Forensic Biology (A)

Hall 1, Thursday, November 8th

9:00-9:48

Chairperson: S. Miyasaka (National Research Institute of Police Science)

- A-1 Comparison of hair color using image analysis
*H. Matsuda, S. Kubota, H. Sato (National Research Inst. of Police Sci.)
- A-2 Utility of the 3D images obtained by a 3D software object medeller (3DSOM) for forensic anthropology
*K. Imaizumi, Y. Ogawa, S. Miyasaka (National Research Inst. of Police Sci.)

A-3 The restoration method of the bone materials destroyed for parentage specification using DNA typing method.
- For considering of bereaved feelings -

*T. Ohno, T. Nakagawa, M. Doi, H. Miyake, T. Okiura (Forensic Sci. Lab., Ehime Pref. Police H.Q.)

A-4 The relationship between the vein distribution and the fingerprint pattern

T. Okazaki, N. Ishii, S. Takahashi (School of Allied Health Sciences, Kitasato Univ.)

10:00-10:48 *Chairperson: T. Komuro (Nihon University, School of Dentistry)*

A-5 Improved 3D physiognomic range finder for establishing the database of 3D facial image

*S. Miyasaka, Y. Ogawa, K. Imaizumi, M. Yoshino (National Research Inst. of Police Sci.)

A-6 Evaluation of the correction for perspective distortion in 2D/3D face-to-face superimposition

*Y. Ogawa^{*1}, S. Miyasaka^{*1}, K. Imaizumi^{*1}, M. Yoshino^{*1}, T. Tanijiri^{*2} (National Research Inst. of Police Sci.^{*1},
Medic Engineering Co.^{*2})

A-7 The computerized correction for optical distortion of facial images in face – to –face superimposition (V)

*H. Biwasaka^{*1}, T. Tokuta^{*1}, Y. Sasaki^{*1}, T. Takagi^{*2}, H. Tanijiri^{*3}, S. Miyasaka^{*4}, Y. Aoki^{*5} (Sci. Crime Detection Lab.,
Iwate Pref. Police H.Q.^{*1}, Sci. Crime Detection Lab., Miyagi Pref. Police H.Q.^{*2}, Medic Engineering Co.^{*3}, National
Research Inst. of Police Sci.^{*4}, Dept. of Legal Medicine, Iwate Medical Univ., School of Medicine^{*5})

A-8 The morphological classification of ear components and the correlation between its categories

*H. Moriyoshi, M. Miyoshi, D. Hino, H. Nakayama, T. Morikawa, S. Nakaki, K. Itoharu (Forensic Sci. Lab., Hiroshima
Pref. Police H.Q.)

14:00-14:36 *Chairperson: H. Ikegaya (National Research Institute of Police Science)*

A-9 Effects of alcoholic drink on the hardening of boiled egg albumen

- Deduction of the kind of alcoholic drink by durometric measurement of albumen in the contents of stomach -

*T. Ito (Forensic Sci. Lab., Chiba Pref. Police H.Q.)

A-10 Value of gelatinolytic activity on diffuse intimal thickening of vasculature in relation to age

*M. Zuka, T. Ohshima (Med. Sci., Kanazawa Univ., Environment. Sci., Forensic Sci., Soc. Environment. Med.)

A-11 A preliminary test for urine detection under basic condition

*H. Oka, Y. Hashiguchi (Scientific Invest. Lab., Fukushima Pref. Police H.Q.)

14:48-15:24 *Chairperson: K. Sakurada (National Research Institute of Police Science)*

A-12 Search method for adhesive position of body fluid on clothes and so on

*T. Nagayama, S. Kirihara, R. Obata, F. Igarashi (Forensic Sci. Lab., Ibaraki Pref. Police H.Q.)

A-13 Evaluation of BLUESTAR®FORENSIC for blood presumptive test

*N. Watanabe, T. Takagi, M. Kitami, K. Umetani, M. Kai (Forensic Sci. Lab., Hokkaido Pref. Police H.Q.)

A-14 Evaluation of Rapid Stain Identification (RSID) kit to detect human saliva on vessel

*Y. Ito^{*1}, Y. Fukushima^{*1}, K. Tsukada^{*2}, Y. Sakamoto^{*1} (Center for Food Safety Sci., Kirin Holdings Co., Ltd.^{*1},
Criminal Invest. Lab., Nagano Pref. Police H.Q.^{*2})

15:36-16:12 *K. Watanabe (Criminal Investigation Laboratory, Okayama Prefectural Police Headquarters)*

A-15 Application of monoclonal antibody-coated microspheres (ABOsphia) to identification

*H. Ohkawara^{*1}, T. Akutu^{*2}, H. Ikegaya^{*2}, K. Sakurada^{*2}, S. Yazawa^{*3} (Criminal Invest. Lab., Gunma Pref. Police
H.Q.^{*1}, National Research Inst. of Police Sci.^{*2}, Tokushima Res. Inst., Otsuka Pharma Co. Ltd.^{*3})

A-16 Detection method for antigen on single fiber using latex particles adsorbing secondary antibody

*H. Nakanishi^{*1}, T. Ohmori^{*2}, A. Kido^{*3}, N. Adachi^{*3} (Forensic Sci. Lab., Yamanashi Pref. Police H.Q.^{*1}, National
Research Inst. of Police Sci.^{*2}, Dept. of Legal Med., Yamanashi Univ.^{*3})

A-17 Identification of human body fluid using anti-human albumin by ELISA

*T. Tsuruno, Y. Shimada, R. Matsuura, A. Fukudome (Forensic Sci. Lab., Nara Pref. Police H.Q.)

Hall 1, Friday, November 9th

9:00-9:48 *Chairperson: A. Kitagawa (Criminal Investigation Laboratory, Prefectural Police Headquarters)*

A-18 D19S433 primer binding site mutation and frequency of the silent allele

*N. Mizuno, T. Kitayama, K. Fujii, H. Nakahara, K. Yoshida, K. Kasai, K. Sekiguchi (National Research Inst. of Police
Sci.)

A-19 Quantitative evaluation of DNA yield using Smart Cycler

*T. Sasahara, T. Ami, H. Oka (Scientific Invest. Lab., Fukushima Pref. Police H.Q.)

A-20 Analysis of the deletions on the short arm of the Y-chromosome (Yp11.2) ()

*R. Suzuki^{*1}, T. Takayama^{*1}, N. Takada^{*1}, S. Nagaoka^{*1}, Y. Watanabe^{*1}, Y. Sasaki^{*2}, H. Biwasaka^{*2}, R. Kumagai^{*2},
Y. Aoki^{*2} (Criminal Invest. Lab., Gifu Pref. Police H.Q.^{*1}, Dept. of Legal Med., Iwate Medical Univ., School of
Med.^{*2})

A-21 Analysis of DYS448 negative males characterized by a Yq11.223 deletion on the Y chromosome.

*H. Asamura, M. Ota, T. Oki, H. Fukushima (Dept. of Legal Med, Shinshu Univ. School of Med.)

10:00-10:36 *Chairperson: H. Nakahara (National Research Institute of Police Science)*

- A-22 Development of portable and rapid Human DNA analysis system aiming on-site screening
*M. Asogawa^{*1}, M. Sugisawa^{*1}, T. Kimura^{*1}, K. Aoki^{*1}, H. Hagiwara^{*2}, Y. Mishina^{*2}, T. Hiramatsu^{*3}, T. Miyamoto^{*3}
(NEC Co.^{*1}, Arbiotec Co.^{*2}, Improve Co.^{*3})
- A-23 Possibility of Fast PCR amplification of AmpFISTR Identifier
*K. Tsukada, M. Nojiri, Y. Kurasawa, K. Kasahara (Criminal Invest. Lab., Nagano Pref. Police H.Q.)
- A-24 Detection of mtDNA polymorphism from saliva on the skin
*S. Katsumura^{*1}, K. Sato^{*1}, H. Motani^{*2}, H. Iwase^{*2}, T. Sato^{*1} (Tsurumi Univ. School of Dental Med.^{*1}, Chiba Univ.^{*2})
- 10:48-11:24 *Chairperson: K. Sekiguchi (National Research Institute of Police Science)*
- A-25 Simple method for identification of human DNA by allele specific PCR of FOXP2
*K. Hiroshige^{*1,2}, M. Soejima^{*2}, T. Nishioka^{*2}, S. Kamimura^{*2}, Y. Koda^{*2} (Forensic Sci. Lab., Fukuoka Pref. Police H.Q.^{*1}, Dept. of Forensic Med. and Human Genetics, Kurume Univ., School of Med.^{*2})
- A-26 Cannabis seed identification by chloroplast DNA
*T. Muro^{*1}, H. Nakamura^{*1}, S. Imamura^{*1}, M. Hasegawa^{*1}, C. Maseda^{*1}, I. Yuasa^{*2} (Criminal Invest. Lab., Shimane Pref. Police H.Q.^{*1}, Division of Legal Med., Faculty of Med., Tottori Univ.^{*2})
- A-27 Discrimination of species in Brassica vegetables based on sequence variation of nuclear internal transcribed spacer regions of ribosomal DNA
A. Yano^{*1}, *N. Araki^{*1}, M. Shigyo^{*2} (Forensic Sci. Lab., Yamaguchi Pref. Police H.Q.^{*1}, Faculty of Agriculture, Yamaguchi Univ.^{*2})

Forensic Toxicology (B)

Hall 1, Friday, November 9th

- 8:40-9:28 *Chairperson: H. Miyaguchi (National Research Institute of Police Science)*
- B-1 Chiral analysis of methamphetamine and related compounds by capillary electrophoresis using chemical modified capillary, FunCap-CE
*S. Chinaka^{*1}, Y. Iwamuro^{*1}, R. Iio^{*1}, N. Takayama^{*1}, S. Kodama^{*2}, K. Hayakawa^{*3} (Forensic Sci. Lab., Ishikawa Pref. Police H.Q.^{*1}, Toyama Inst. of Health^{*2}, Graduate School of Natural Sci. and Tech., Kanazawa Univ.^{*3})
- B-2 Determination of antidepressants by non-aqueous capillary electrophoresis
*Y. Sasajima^{*1,2}, K. Suenami^{*1}, K. Sato^{*1}, Y. Takekoshi^{*1}, S. Kanno^{*1}, L. W. Lim^{*2}, T. Takeuchi^{*2} (Criminal Invest. Lab., Gifu Pref. Police H.Q.^{*1}, Faculty of Engineering, Gifu Univ.^{*2})
- B-3 Analysis of *p*-hydroxymethamphetamine using ECD-HPLC
*M. Yoshida^{*1}, A. Akane^{*1}, M. Nishikawa^{*2}, M. Katagi^{*2}, H. Tsuchihashi^{*2} (Dept. of Legal Med., Kansai Medical Univ.^{*1}, Forensic Sci. Lab., Osaka Pref. Police H.Q.^{*2})
- B-4 Analysis of methamphetamine using TLC-surface enhanced Raman spectroscopy with silver nanoparticles
*Y. Nishiwaki^{*1}, H. Hasegawa^{*1}, M. Mizuhata^{*2}, S. Deki^{*2} (Forensic Sci. Lab., Hyogo Pref. Police H.Q.^{*1}, Graduate School of Engineering, Kobe Univ.^{*2})
- 9:33-10:09 *Chairperson: M. Yoshida (Department of Legal Medicine, Kansai Medical University)*
- B-5 Comparison and classification of methamphetamine seized in Japan and Thailand by impurity analysis
*K. Kuwayama^{*1,2}, H. Inoue^{*1}, K. Tsujikawa^{*1}, H. Miyaguchi^{*1}, T. Kanamori^{*1}, Y. Iwata^{*1}, N. Kamo^{*2} (National Research Inst. of Police Sci.^{*1}, Pharm. Sci., Hokkaido Univ.^{*2})
- B-6 A Study on the profiling of ecstasy tablets by stable-isotope ratio analysis 2. Analysis of stable-hydrogen isotope ratio
*Y. T. Iwata, T. Kanamori, H. Miyaguchi, K. Tsujikawa, K. Kuwayama, H. Inoue (National Research Inst. of Police Sci.)
- B-7 Analysis of phenethylamines by on-column derivatization
*R. Miyamoto^{*1,2}, T. Abe^{*1}, H. Yanagisawa^{*2} (Criminal Invest. Lab., Metropolitan Police Dept.^{*1}, Dept. of Public Health and Environmental Med., Jikei Univ. School of Med.^{*2})
- 10:14-11:02 *Chairperson: K. Ebina (Forensic Science Laboratory, Hokkaido Asahikawa Area Police Headquarters)*
- B-8 Determination of amphetamines in hair by headspace trap gas chromatography-mass spectrometry
*K. Kanda (Forensic Sci. Lab., Mie Pref. Police H.Q.)
- B-9 Novel sample-preparation method for methamphetamine analysis in hair
*H. Miyaguchi^{*1}, Y. T. Iwata^{*1}, M. Kakuta^{*2}, H. Tazawa^{*2}, H. Kimura^{*3}, H. Inoue^{*1} (National Research Inst. of Police Sci.^{*1}, Inst. of Microchemical Tech.^{*2}, Juntendo Univ. School of Med.^{*3})
- B-10 Effect of H₂-blocker in urine methamphetamine test kit
*M. Kanda, T. Mizukami, T. Koizumi, G. Fukuhara (Forensic Sci. Lab., Yamaguchi Pref. Police H.Q.)
- B-11 Stereoselective metabolism of amphetamine analogues by recombinant human cytochrome P450 enzymes
*F. Kikuchi^{*1}, K. Matsushima^{*1}, T. Nagai^{*2}, S. Tokudome^{*2} (Forensic Sci. Lab., Tochigi Pref. Police H.Q.^{*1}, Dept. of Legal Med., Dokkyo Univ. of Medicine^{*2})
- 11:07-11:43 *Chairperson: R. Miyamoto (Criminal Investigation Laboratory, Metropolitan Police Department)*

- B-12 Analysis of fluoromethamphetamine and fluoroamphetamine
*A. Ishiba, K. Hisatsune, T. Matsumoto, S. Okuyama (Criminal Invest. Lab., Aichi Pref. Police H.Q.)
- B-13 Column-switching liquid chromatography/tandem mass spectrometry for determination of fentanyl and its metabolites in human urine
*H. Kamata, N. Shima, M. Katagi, A. Miki, H. Tsuchihashi (Forensic Sci. Lab., Osaka Pref. Police H.Q.)
- B-14 Simultaneous analysis of fentanyl 17 analogues by UPLCTM/MS/MS
*R. Iio^{*1}, Y. Iwamuro^{*1}, S. Chinaka^{*1}, N. Takayama^{*1}, K. Hayakawa^{*2}, Ira S. Lurie^{*3} (Forensic Sci. Lab., Ishikawa Pref. Police H.Q.^{*1}, Graduate School of Natural Sci. and Tech., Kanazawa Univ.^{*2}, Special Testing and Research Lab., U.S. DEA^{*3})

14:00-14:48 *Chairperson: S. Chinaka (Forensic Science Laboratory, Ishikawa Prefectural Police Headquarters)*

- B-15 Development of data base library based on the mass spectra of designer drugs
*H. Nishioka, M. Nishikawa, T. Kamata, K. Zaitso, H. Tsuchihashi (Forensic Sci. Lab., Osaka Pref. Police H.Q.)
- B-16 Stabilities of several compounds in formalin solution
*Y. Suzuki, S. Kogure, T. Kaneko (Forensic Sci. Lab., Chiba Pref. Police H.Q.)
- B-17 Solid phase extraction for quaternary ammonium compounds from blood by use of ion-pair reagents
*K. Kobayashi^{*1,2}, H. Asamura^{*2}, H. Fukushima^{*2} (Criminal Invest. Lab., Nagano Pref. Police H.Q.^{*1}, Dept. of Legal Med., Shinshu Univ. School of Med.^{*2})
- B-18 Extraction of drugs from superabsorbent polymer
*T. Sasaki^{*1}, A. Kuji^{*2} (Forensic Sci. Lab., Hokkaido Pref. Police H.Q.^{*1}, Forensic Sci. Lab., Hokkaido Hakodate Area Police H.Q.^{*2})

14:53-15:41 *Chairperson: H. Miyauchi (Forensic Science Laboratory, Kagawa Prefectural Police Headquarters)*

- B-19 A case of examination of the apparatus used for smoking methamphetamine
*K. Nakao, H. Ohashi, O. Takashima, Y. Inoue (Sci. Crime Lab., Tottori Pref. Police H.Q.)
- B-20 Study on selective extraction of glyphosate and its degradation product using MonoTip[®] TiO pipette tip
*H. Mohri, A. Gohda, K. Wakigawa, M. Matsumoto, S. Fukushima (Forensic Sci. Lab., Fukuoka Pref. Police H.Q.)
- B-21 Analysis of colchicine in human blood by LC/MS
*K. Ebina, Y. Adachi, M. Okada (Forensic Sci. Lab., Hokkaido Asahikawa Area Police H.Q.)
- B-22 Highly sensitive and selective analysis of lithium ion using crown ether by LC/MS (2)
*K. Wakigawa, H. Mohri, A. Gohda, M. Matsumoto, S. Fukushima (Forensic Sci. Lab., Fukuoka Pref. Police H.Q.)

15:46-16:34 *Chairperson: T. Ohmori (National Research Institute of Police Science)*

- B-23 Application of bioassay to forensic toxicology
*H. Miyauchi, M. Kubota, K. Suga, T. Shibayama, M. Kumihashi (Forensic Sci. Lab., Kagawa Pref. Police H.Q.)
- B-24 Analysis of cyanide by PacktestTM and microdiffusion method
*A. Watanabe, T. Ikeda (Forensic Sci. Lab., Hokkaido Kitami Area Police H.Q.)
- B-25 Suicide cases of hydrogen sulfide produced by a bathing agent and a toilet wash
*Y. Ikawa, S. Kage (Forensic Sci. Lab., Fukuoka Pref. Police H.Q.)
- B-26 Evaluation of performance of on-site chemical warfare agent detection equipment 3
*Y. Seto^{*1}, S. Yamaguchi^{*1}, Y. Takayama^{*2}, R. Sekioka^{*2}, T. Ohmori^{*1}, M. Kanamori-Kataoka^{*1}, K. Tsuge^{*1}, I. Ohsawa^{*1} (National Research Inst. of Police Sci.^{*1}, Metropolitan Police Dept.^{*2})

Forensic Chemistry (C)

Hall 2, Thursday, November 8th

9:00-9:36 *Chairperson: S. Yoshiyagawa (Forensic Science Laboratory, Hokkaido Kushiro Area Police Headquarters)*

- C-1 Highly sensitive analysis of coumarin in tax evasion diesel oil and the industrial waste by GC/MS/MS
*M. Sato (Criminal Invest. Lab., Aichi Pref. Police H.Q.)
- C-2 Analysis of biogasoline
*H. Yoshida, S. Suzuki (National Research Inst. of Police Sci.)
- C-3 Research on fatty acid methyl ester added light oil
*J. Hamamura, Y. Mandai, M. Taki (Japan Coast Guard Research Center)

9:40-10:16 *Chairperson: M. Taniguchi (Forensic Science Laboratory, Hokkaido Prefectural Police Headquarters)*

- C-4 Combustion behavior on mixture of edible oil and kerosene, and analysis of the fire residues
*N. Kawamoto^{*1}, Y. Kobayashi^{*1}, Y. Kaneko^{*1}, K. Tateno^{*1}, F. Hatamoto^{*2}, T. Yamanaka^{*2} (Analysis Center Co., Ltd.^{*1}, Comprehensive Marine Technical Inc.^{*2})
- C-5 Influence of polluted sampling tools on analysis of oil in fire residue
*Y. Kobayashi^{*1}, N. Kawamoto^{*1}, T. Sato^{*1}, Y. Kaneko^{*1}, F. Yokoyama^{*2} (Analysis Center Co., Ltd.^{*1}, Japan Specialist in Law Engineering Co.^{*2})
- C-6 A study on analytical techniques of a trace amount of vegetable oil using SPME fiber

*T. Mikuma, T. Kaneko (Forensic Sci. Lab., Chiba Pref. Police H.Q.)

10:20-10:56 *Chairperson: I. Sekimoto (Criminal Investigation Laboratory, Metropolitan Police Department)*

C-7 Application of NeedleEx™ to analysis of chemical weapons (allyl isothiocyanate)

*T. Ishiwata, E. Norimine, F. Ishizawa (Forensic Sci. Lab., Ibaraki Pref. Police H.Q.)

C-8 Simultaneous derivatization and headspace single drop microextraction of volatile drugs

*T. Iwamoto, H. Ishii, M. Sato, T. Kaneko (Forensic Sci. Lab., Chiba Pref. Police H.Q.)

C-9 Analysis of beers and beer-like beverages using derivatization GC/MS

*T. Satoh^{*1}, K. Hiraiwa^{*2} (Scientific Invest. Lab., Fukushima Pref. Police H.Q.^{*1}, Dept. of Legal Med., Fukushima Med. Univ.^{*2})

13:45-14:21 *Chairperson: S. Watanabe (Forensic Science Laboratory, Hyogo Prefectural Police Headquarters)*

C-10 Application of proteomic strategies to forensic samples

*S. Matsumura^{*1}, T. Tsukahara^{*1}, Y. Ogata^{*1}, T. Yamaba^{*1}, Y. Tanaka^{*2} (Forensic Sci. Lab., Fukui Pref. Police H.Q.^{*1}, Centers for Advanced Research Support, Fukui Univ.^{*2})

C-11 Examination of powdery luminescent markers for shadowing

*S. Kurata, I. Sekimoto, T. Iyozumi, H. Hirano (Criminal Invest. Lab., Metropolitan Police Dept.)

C-12 Development of various kinds of markers with the micrometer size

*I. Sekimoto, T. Iyozumi, S. Kurata, H. Hirano (Criminal Invest. Lab., Metropolitan Police Dept.)

14:21-14:57 *Chairperson: T. Ishiwata (Forensic Science Laboratory, Ibaraki Prefectural Police Headquarters)*

C-13 Discrimination of transparent plastic films especially pertaining to biaxial oriented polypropylene film

*T. Hashimoto (Forensic Sci. Lab., Hyogo Pref. Police H.Q.)

C-14 Surface observation of fragmented materials in microscopy - Surface roughness analysis using SPM -

*S. Kogure, Y. Suzuki, T. Kaneko (Forensic Sci. Lab., Chiba Pref. Police H.Q.)

C-15 Analysis of laminate material by IR-ATR imaging

*A. Ohnishi, Y. Akatsuka, R. Ishihara, M. Morimoto (Perkin-Elmer Japan Co., Ltd.)

15:05-15:41 *Chairperson: S. Kogure (Forensic Science Laboratory, Chiba Prefectural Police Headquarters)*

C-16 Usability investigation of evolved gas analysis (EGA) – MS for discrimination of polymer materials

*A. Hosaka^{*1}, C. Watanabe^{*1}, S. Tsuge^{*1,2} (Frontier Laboratories Ltd.^{*1}, Aichi Inst. of Technology^{*2})

C-17 Analysis of black toner using EGA

*M. Takahashi, H. Oikawa (Forensic Sci. Lab., Iwate Pref. Police H.Q.)

C-18 Analysis of functional fibers for forensic discrimination

*Y. Watanabe, H. Kanno (Forensic Sci. Lab., Fukushima Pref. Police H.Q.)

15:41-16:29 *Chairperson: M. Sakayanagi (Forensic Science Laboratory, Kanagawa Prefectural Police Headquarters)*

C-19 Discrimination of PVDF mono filaments by X-ray scattering method

*S. Watanabe^{*1}, N. Miyamoto^{*1}, S. Muratsu^{*1}, O. Shimoda^{*1}, M. Takatsu^{*1}, T. Sugiyama^{*2}, D. Kokubu^{*2}, N. Ohta^{*3}, K. Inoue^{*3}, S. Sasaki^{*3}, K. Tashiro^{*4} (Forensic Sci. Lab., Hyogo Pref. Police H.Q.^{*1}, Forensic Sci. Lab., Mie Pref. Police H.Q.^{*2}, Japan Synchrotron Radiation Research Inst.^{*3}, Toyota Technological Inst.^{*4})

C-20 Analysis of calcium carbonate and plasticizers in polyvinyl chloride adhesive tapes

*Y. Higashikawa, S. Suzuki (National Research Inst. of Police Sci.)

C-21 Forensic identification of adhesive cloth tapes using high energy X-ray fluorescence analysis

*A. Goto, A. Hokura, I. Nakai (Faculty of Sci., Tokyo Univ. of Sci.)

C-22 Examination of forensic identification method of silicone foul release coatings

*T. Asahara, Y. Yamazaki, Y. Mandai, A. Sekine (Japan Coast Guard Research Center)

16:35-17:23 *Chairperson: Y. Higashikawa (National Research Institute of Police Science)*

C-23 Discrimination of chlorine bleach splashed over clothing

*I. Abe (Criminal Invest. Lab., Metropolitan Police Dept.)

C-24 Analysis of sulfamic acid in thermos pot cleaner

*A. Yokoyama, H. Ishii, K. Okada (Forensic Sci. Lab., Okayama Pref. Police H.Q.)

C-25 Effective use of Raman spectroscopy in analysis of runaway reaction accident case at chemical factory

*H. Ohta^{*1}, D. Watanabe^{*1}, Y. Kazui^{*1}, O. Ohtsuru^{*1}, M. Noami^{*2} (National Research Inst. of Police Sci.^{*1}, Forensic Sci. Lab., Wakayama Pref. Police H.Q.^{*2})

C-26 Semi-automated baseline correction of Raman spectra

*S. Saitoh (National Research Inst. of Police Sci.)

Hall 2, Friday, November 9th

15:00-15:36 *Chairperson: M. Kasamatsu (National Research Institute of Police Science)*

C-27 Analysis of soil samples by SEM/EDX

*T. Aoki, H. Oikawa (Forensic Sci. Lab., Iwate Pref. Police H.Q.)

- C-28 Forensic soil examination using image processing software (1) - Color determination -
*Y. Marumo (Pharm. Sci., Nagasaki Int. Univ.)
- C-29 Pedological approach to find evidence of continuous gas leak from corrosion holes of a buried gas pipe
*S. Yoshiyagawa^{*1}, M. Taniguchi^{*2}, M. Hata^{*1}, K. Suzuki^{*2}, R. Uchida^{*2}, F. Yonebayashi^{*1} (Forensic Sci. Lab., Hokkaido Kushiro Area Police H.Q.^{*1}, Forensic Sci. Lab., Hokkaido Pref. Police H.Q.^{*2})

15:40-16:16 *Chairperson: M. Suzuki (Forensic Science Laboratory, Ehime Prefectural Police Headquarters)*

- C-30 Forensic discrimination of low carbon steel wirerods by determination of trace elements with ICP-MS
*H. Ohsaki^{*1}, K. Murakami^{*1}, M. Kasamatsu^{*2}, Y. Suzuki^{*2}, S. Suzuki^{*2} (Forensic Sci. Lab., Hiroshima Pref. Police H.Q.^{*1}, National Research Inst. of Police Sci.^{*2})
- C-31 Identification of stainless steels (SUS) - II
*M. Taniguchi, T. Sakai, H. Iida (Forensic Sci. Lab., Hokkaido Police H.Q.)
- C-32 Forensic discrimination of sheet glass manufactured in Japan by LA-ICP-MS (II)
*M. Ito^{*1}, A. Hokura^{*1}, I. Nakai^{*1}, Y. Nishiwaki^{*2}, M. Oishi^{*3} (Dept. of Appl. Chem., Facul. of Sci., Tokyo Univ. of Sci.^{*1}, Forensic Sci. Lab., Hyogo Pref. Police H.Q.^{*2}, Materials Analysis Center, TDK Corp.^{*3})

16:20-16:56 *Chairperson: Y. Suzuki (National Research Institute of Police Science)*

- C-33 Examination of hardening process of cement paste
*K. Yamaguchi, S. Kurata (Criminal Invest. Lab., Metropolitan Police Dept.)
- C-34 Screening analysis of GSR (gunshot residues) using bench-top TXRF (total reflection X-ray fluorescence) spectrometer
*K. Aranami^{*1}, S. Kamihirata^{*2}, T. Mukai^{*2}, Y. Shimizu^{*1}, M. Hirai^{*1}, T. Yamada^{*1} (Rigaku Industrial Corp.^{*1}, Forensic Sci. Lab., Nara Pref. Police H.Q.^{*2})
- C-35 Application of human serum electrolytes (chlorine, sodium and potassium ions) to forensic science (4)
*H. Satoh, M. Hida (Criminal Invest. Lab., Aichi Pref. Police H.Q.)

Forensic Engineering (D)

Speech and Acoustics

Hall 3, Thursday, November 8th

9:00-9:24 *Chairperson: T. Osanai (National Research Institute of Police Science)*

- D-1 Preliminary experiments about the recording method through the telephone
*M. Takao^{*1}, T. Osanai^{*2}, T. Kamada^{*2}, H. Makinae^{*2}, M. Tanimoto^{*2} (Criminal Invest. Lab., Aichi Pref. Police H.Q.^{*1}, National Research Inst. of Police Sci.^{*2})
- D-2 A study of effects on digital compression technique in speaker verification
*T. Kamada, T. Osanai, H. Makinae, M. Tanimoto (National Research Inst. of Police Sci.)

9:24-10:00 *Chairperson: M. Takao (Criminal Investigation Laboratory, Aichi Prefectural Police Headquarters)*

- D-3 Examination regarding the difference of utterance contents on a text-independent speaker verification
*T. Osanai, T. Kamada, H. Makinae, M. Tanimoto (National Research Inst. of Police Sci.)
- D-4 Text-dependent speaker verification with bone-conduction speech
*H. Makinae, T. Osanai, T. Kamada, M. Tanimoto (National Research Inst. of Police Sci.)
- D-5 Speaker recognition using weighted formant frequency
*M. Tanimoto, T. Osanai, T. Kamada, H. Makinae (National Research Inst. of Police Sci.)

Fire Investigation

Hall 3, Thursday, November 8th

10:12-11:00 *Chairperson: H. Yamamoto (Forensic Science Laboratory, Ishikawa Prefectural Police Headquarters)*

- D-6 Influence of door window opening on combustion in automotive cabins (part3)
*T. Nakayama^{*1}, H. Sato^{*2}, M. Suwa^{*3}, K. Okamoto^{*1}, N. Watanabe^{*1}, Y. Hagimoto^{*1} (National Research Inst. of Police Sci.^{*1}, Forensic Sci. Lab., Chiba Pref. Police H.Q.^{*2}, Criminal Invest. Lab., Saitama Pref. Police H.Q.^{*3})
- D-7 Vapor pressure and evaporation as the characteristics of gasoline
*M. Ohno^{*1}, H. Fukushima^{*2}, M. Hata^{*3}, K. Usui^{*4}, I. Abe^{*5}, M. Hori^{*6}, T. Arikawa^{*1}, Y. Hagimoto^{*7}, N. Watanabe^{*7}, K. Okamoto^{*7}, T. Nakayama^{*7} (Forensic Sci. Lab., Miyazaki Pref. Police H.Q.^{*1}, Forensic Sci. Lab., Hokkaido Pref. Police H.Q.^{*2}, Forensic Sci. Lab., Hokkaido Kushiro Area Police H.Q.^{*3}, Forensic Sci. Lab., Miyagi Pref. Police H.Q.^{*4}, Criminal Invest. Lab., Metropolitan Police Dept.^{*5}, Criminal Invest. Lab., Aichi Pref. Police H.Q.^{*6}, National Research Inst. of Police Sci.^{*7})
- D-8 Diffusion and ignition of gasoline vapor

*M. Hori^{*1}, H. Fukushima^{*2}, M. Hata^{*3}, K. Usui^{*4}, I. Abe^{*5}, T. Arikawa^{*6}, M. Ohno^{*6}, Y. Hagimoto^{*7}, N. Watanabe^{*7}, K. Okamoto^{*7}, T. Nakayama^{*7} (Criminal Invest. Lab., Aichi Pref. Police H.Q.^{*1}, Forensic Sci. Lab., Hokkaido Pref. Police H.Q.^{*2}, Forensic Sci. Lab., Hokkaido Kushiro Area Police H.Q.^{*3}, Forensic Sci. Lab., Miyagi Pref. Police H.Q.^{*4}, Criminal Invest. Lab., Metropolitan Police Dept.^{*5}, Forensic Sci. Lab., Miyazaki Pref. Police H.Q.^{*6}, National Research Inst. of Police Sci.^{*7})

- D-9 Computational simulation of evaporation and diffusion behavior of gasoline spill on a floor
*K. Okamoto^{*1}, H. Fukushima^{*2}, M. Hata^{*3}, K. Usui^{*4}, I. Abe^{*5}, M. Hori^{*6}, T. Arikawa^{*7}, M. Ohno^{*7}, T. Nakayama^{*1}, N. Watanabe^{*1}, Y. Hagimoto^{*1} (National Research Inst. of Police Sci.^{*1}, Forensic Sci. Lab., Hokkaido Pref. Police H.Q.^{*2}, Forensic Sci. Lab., Hokkaido Kushiro Area Police H.Q.^{*3}, Forensic Sci. Lab., Miyagi Pref. Police H.Q.^{*4}, Criminal Invest. Lab., Metropolitan Police Dept.^{*5}, Criminal Invest. Lab., Aichi Pref. Police H.Q.^{*6}, Forensic Sci. Lab., Miyazaki Pref. Police H.Q.^{*7})

13:45-14:33 *Chairperson: Y. Ibata (Forensic Science Laboratory, Kumamoto Prefectural Police Headquarters)*

- D-10 Fire hazard of a bundled cord (2)
*M. Hiramatsu, T. Iwashita, Y. Yamamoto, J. Ohtake (Forensic Sci. Lab., Yamanashi Pref. Police H.Q.)
- D-11 Deformation of electrical wires by overcurrent / short circuit
*S. Miyoshi (Forensic Sci. Lab., Kochi Pref. Police H.Q.)
- D-12 Heating at a loosely screwed solderless terminal
*T. Shigematsu (Forensic Sci. Lab., Ehime Pref. Police H.Q.)
- D-13 Velocity of incandescent particles scattered from an electrical short circuit
*Y. Hagimoto, N. Watanabe, K. Okamoto, T. Nakayama (National Research Inst. of Police Sci.)

14:45-15:33 *Chairperson: S. Miyoshi (Forensic Science Laboratory, Kochi Prefectural Police Headquarters)*

- D-14 Measurement of the discharge current and voltage of a low power type stun gun
*A. Ogawara (Scientific Criminal Invest. Lab., Kanagawa Pref. Police H.Q.)
- D-15 Consideration on discharge aspect for building and on the destructive situation of electric products (television) due to lightning surge
*H. Yamamoto^{*1}, R. Hanaoka^{*2}, S. Takata^{*2} (Forensic Sci. Lab., Ishikawa Pref. Police H.Q.^{*1}, Kanazawa Inst. of Technology^{*2})
- D-16 TV CPT destruction patterns caused by external fire
*Jung-Woo Nam, Jae-Yong Song, Jong-Taek Park, Jin-Pyo Kim, Nam-Kyu Park (National Inst. of Scientific Invest. in KOREA)
- D-17 Case report of push-button gas cooking stove (II)
*Y. Ibata (Forensic Sci. Lab., Kumamoto Pref. Police H.Q.)

15:45-16:33 *Chairperson: K. Okamoto (National Research Institute of Police Science)*

- D-18 Evaluation of time to ignition for spontaneous combustion of plastic-waste
*T. Sato^{*1}, D. Takeuchi^{*1}, O. Sugawa^{*1}, K. Kamiya^{*2} (Tokyo Univ. of Sci., Suwa^{*1}, Japan Specialist in Law Engineering, Co.^{*2})
- D-19 Estimation on heat flow direction in fire debris using electric nose
*K. Kamiya^{*1}, O. Sugawa^{*2}, T. Sato^{*2}, D. Takeuchi^{*2} (Japan Specialist in Law Engineering, Co.^{*1}, Tokyo Univ. of Sci., Suwa^{*2})
- D-20 Kinetic study of thermal degraded drying oil
*K. Shibasaki (Forensic Sci. Lab., Chiba Pref. Police H.Q.)
- D-21 Ignition of the oil in a car dropped on its exhaust pipe
*M. Sato, N. Endo (Forensic Sci. Lab., Yamaguchi Pref. Police H.Q.)

Explosives

Hall 3, Thursday, November 8th

16:45-17:21 *Chairperson: H. Arai (National Research Institute of Police Science)*

- D-22 Bursting behavior of aerosol cylinders
*M. Kudo, M. Kazama, I. Abe, T. Yamada (Criminal Invest. Lab., Metropolitan Police Dept.)
- D-23 Analysis of organic peroxides and explosives by LC/MS/MS (II)
*M. Kazama, I. Abe, M. Kudo (Criminal Invest. Lab., Metropolitan Police Dept.)
- D-24 Study of extraction methods for peroxide explosives in blood
*M. Kumihashi, K. Suga, T. Shibayama, H. Miyauchi (Research Inst. of Sci. Criminal Invest., Kagawa Pref. Police H.Q.)

Engineering

Hall 4, Thursday, November 8th

- 9:00-9:24 *Chairperson: M. Hori (Criminal Investigation Laboratory, Aichi Prefectural Police Headquarters)*
D-25 Detection of temperature history from heat-treated Cu plates
*K. Kuroki, K. Tsuchiya, N. Akiba, N. Igarashi (National Research Inst. of Police Sci.)
D-26 Estimation of height during walking and running
*Y. Miyazaki (Criminal Invest. Lab., Metropolitan Police Dept.)

Image Processing

Hall 4, Thursday, November 8th

- 9:36-10:12 *Chairperson: K. Kurosawa (Forensic Science Laboratory, Ishikawa Prefectural Police Headquarters)*
D-27 Evaluation of improved image by using the property of power spectrum
*K. Fujita^{*1}, M. Araki^{*2}, K. Kadono^{*3}, Y. Kida^{*3} (Science and Engineering, Ryukoku Univ.^{*1}, Shiga Info. Infra. Council^{*2}, Forensic Sci. Lab., Shiga Pref. Police H.Q.^{*3})
D-28 Improvement of classification rules for low-resolution license plate numbers (Part 4)
*A. Yoshikawa^{*1}, Y. Kida^{*2}, K. Kadono^{*2}, K. Fujita^{*3} (Konan Univ.^{*1}, Forensic Sci. Lab., Shiga Pref. Police HQ.^{*2}, Ryukoku Univ.^{*3})
D-29 Discriminating the numbers of car license plate in low resolution surveillance image by using Bayesian identification method
*Y. Kida^{*1}, K. Fujita^{*2}, A. Yoshikawa^{*3} (Forensic Sci. Lab., Shiga Pref. Police H.Q.^{*1}, Ryukoku Univ.^{*2}, Konan Univ.^{*3})
10:24-11:00 *Chairperson: Y. Kida (Forensic Science Laboratory, Shiga Prefectural Police Headquarters)*
D-30 Study on optimal parameter determination for unsharp mask image processing
*N. Kounishi^{*1}, K. Kurosawa^{*2} (Identification Div., Ishikawa Pref. Police H.Q.^{*1}, Forensic Sci. Lab., Ishikawa Pref. Police H.Q.^{*2})
D-31 Restoration of blurred digital video image
*K. Tsuchiya, N. Akiba, N. Igarashi, K. Kuroki (National Research Inst. of Police Sci.)
D-32 Detection of identical textures from the hardcopy of a tampered image
*N. Igarashi, K. Tsuchiya, N. Akiba, K. Kuroki (National Research Inst. of Police Sci.)

Firearms and Toolmarks

Hall 3, Friday, November 9th

- 8:30-9:06 *Chairperson: T. Abe (Forensic Science Laboratory, Miyagi Prefectural Police Headquarters)*
D-33 Internet resources for firearms identification
*M. Nagai (National Research Inst. of Police Sci.)
D-34 Individuality and reproducibility of ejector mark impressed on caliber 8mm Nambu cartridge cases
*T. Uchiyama (National Research Inst. of Police Sci.)
D-35 Visualization of the power of the air gun
*K. Toyama, A. Miyamoto, Y. Nishijima, H. Takeshita, A. Hirashima (Forensic Sci. Lab., Fukuoka Pref. Police H.Q.)
9:20-9:56 *Chairperson: K. Toyama (Forensic Science Laboratory, Fukuoka Prefectural Police Headquarters)*
D-36 Relationship of power to mass of 0.2 gram plastic pellet for toy gun
*T. Fuwa, S. Takeuchi, K. Nakano (Criminal Invest. Lab., Gifu Pref. Police H.Q.)
D-37 Relation between quantity of gunpowder, seating depth of the ball and muzzle energy
- High speed video analysis of velocity of steel ball launched by muzzleloader with firecracker powder -
*T. Abe (Forensic Sci. Lab., Miyagi Pref. Police H.Q.)
D-38 Study of tool mark identification using 3D-data
*T. Harama^{*1}, T. Nishigaya^{*1}, K. Kurata^{*1}, T. Kawasaki^{*2} (Forensic Sci. Lab., Shizuoka Pref. Police H.Q.^{*1}, Keyence Co., Ltd.^{*2})

Mechanical Engineering

Hall 3, Friday, November 9th

- 10:10-10:46 *Chairperson: T. Harama (Forensic Science Laboratory, Shizuoka Prefectural Police Headquarters)*
D-39 The Applications of measuring the impulsive force with a load cell
*M. Matsui, T. Kimura (Criminal Invest. Lab., Aichi Pref. Police H.Q.)

- D-40 Measurement of impulse force by only one load cell
*T. Ogura^{*1}, H. Toda^{*1}, Y. Itoh^{*2} (Forensic Sci. Lab., Mie Pref. Police H.Q.^{*1}, Nat. Inst. For Longevity Sci., N.C.G.G.^{*2})
- D-41 Observation of occurrence of fatigue crack by using of strain gage
*K. Furukawa (National Research Inst. of Police Sci.)

Traffic Accidents

Hall 3, Friday, November 9th

- 11:00-11:48 *Chairperson: Y. Motomiya (Forensic Science Laboratory, Niigata Prefectural Police Headquarters)*
- D-42 A study on model identification of two-wheeled vehicle
*M. Ishino (Criminal Invest. Lab., Metropolitan Police Dept.)
- D-43 Wheel falling off accident (the third report)
*H. Fukusima, R. Utida, K. Akita, K. Nisidate, K. Suzuki, N. Abiko (Forensic Sci. Lab., Hokkaido Pref. Police H.Q.)
- D-44 Discrimination of automobile-bulb-filament oxidation time (2) - Just collision or after collision -
*H. Kamita, K. Nakano (Forensic Sci. Lab., Osaka Pref. Police H.Q.)
- D-45 Technical innovation hazards for judgment of road traffic accident
*N. Murasaki (Tokyo Univ. of Agriculture Technology)

14:00-14:36 *Chairperson: T. Takahashi (Forensic Science Laboratory, Hokkaido Prefectural Police Headquarters)*

- D-46 Why are rear passengers easily thrown from the vehicles when they crash ?
*Y. Motomiya^{*1}, H. Yamanouchi^{*2} (Forensic Sci. Lab., Niigata Pref. Police HQ^{*1}, Forensic Med., Niigata Univ.^{*2})
- D-47 Visualization of vehicle collision calculation by computer graphics
*N. Endo (Forensic Sci. Lab., Yamaguchi Pref. Police H.Q.)
- D-48 Development of dangerous advanced age and dementia driver early detection approach
*Y. Ito^{*1}, M. Kihira^{*2}, S. Yanai^{*1}, Y. Konagaya^{*3}, T. Watanabe^{*3}, H. Oono^{*4}, A. Inamori^{*1}, T. Nemoto^{*1}, H. Matsuura^{*1}
(National Inst. for Longevity Sci.^{*1}, National Research Inst. of Police Sci.^{*2}, Obu Dementia Care Research and Training Center^{*3}, Softopia Japan Foundation^{*4})

14:50-15:26 *Chairperson: N. Takubo (National Research Institute of Police Science)*

- D-49 Experiment research on relation between "turning center" and "vehicle speed"
*K. Tameda^{*1}, T. Nakamura^{*2} (Automobile Traffic Accident Analysis Sci. Lab.^{*1}, Shimodate Driving School^{*2})
- D-50 Characteristic of digital drive recorder
*H. Kato, N. Maeta (Scientific Crime Lab., Tottori Pref. Police H.Q.)
- D-51 Measurement of vehicle braking performance by electric control unit
*R. Oga^{*1}, K. Nakano^{*2}, K. Kato^{*1} (National Research Inst. of Police Sci.^{*1}, Forensic Sci. Lab., Gifu Pref. Police H.Q.^{*2})

Crime Scene Investigation (E)

Hall 4, Thursday, November 8th

13:45-14:33 *Chairperson: M. Ito (Identification Division, National Police Agency)*

- E-1 New fluorescence detection method for latent fingerprint using pyrolysis vapor fuming of modified polycyanoacrylate (2)
*O. Shimoda, M. Takatsu (Forensic Sci. Lab., Hyogo Pref. Police H.Q.)
- E-2 Research and development of eco-friendly and harmless nonmetal fingerprinting powder (Eco-friendly powder), and its exclusive matte-black board (matte-black board)
*H. Nagai (Criminal Invest. Dept., Identification Division, Hyogo Pref. Police H.Q.)
- E-3 On fingerprint components emitting UV fluorescence
*N. Akiba, N. Saitoh, K. Kuroki, N. Igarashi, K. Tsuchiya (National Research Inst. of Police Sci.)
- E-4 Development of latent fingerprint on adhesive tapes by iron dispersion liquid - Effect of particle size of the iron powder -
*K. Hibino^{*1}, H. Aoyama^{*1}, K. Kanno^{*1}, Y. Sasajima^{*2}, N. Tomita^{*4}, T. Tsukame^{*3}, S. Takeuchi^{*2}, M. Ito^{*1} (Identification Div., National Police Agency^{*1}, Criminal Invest. Lab., Gifu Pref. Police H.Q.^{*2}, Criminal Invest. Lab., Saitama Pref. Police H.Q.^{*3}, Identification Div., Saitama Pref. Police H.Q.^{*4})

14:33-15:09 *Chairperson: Y. Kamei (Identification Division, Wakayama Prefectural Police Headquarters)*

- E-5 The relation between vertex and foot position in various postures
*H. Ohta, K. Sugawara (Forensic Sci. Lab., Metropolitan Police Dept.)
- E-6 A device of taking look-down photographs at a narrow crime scene
*T. Shirase, S. Sugano (Identification Section, Metropolitan Police Dept.)
- E-7 A study of 3D measurement system with vision sensor

*J. Morishita^{*1}, T. Kanatani^{*2} (Forensic Sci. Lab., Hyogo Pref. Police H.Q.^{*1}, Hyogo Pref. Inst. of Technology^{*2})

15:20-16:08 *Chairperson: H. Mitani (Identification Division, National Police Agency)*

- E-8 Interfering effect of foods advertised “to hide alcohol smell” in breath test
*H. Nojima, Y. Sanpei, H. Watanabe, Y. Suzuki, T. Mkuma, S. Kogure (Forensic Sci. Lab., Chiba Pref. Police H.Q.)
- E-9 Evaluation of commercial blood identification kits
*Y. Hayashi, Y. Yonezawa, A. Ashiguchi, K. Maeta (Scientific Crime Lab., Tottori Pref. Police H.Q.)
- E-10 Image taking of the dental findings using intra-oral color image scanner system, part 3, An experimental remote examination of dental findings using dental chart constructed with “DENTALPAK”
*M. Yoshida^{*1}, Y. Hanaoka^{*2}, T. Tsuzuki^{*1,3}, A. Ueno^{*1}, T. Takagi^{*1}, K. Iwahara^{*3}, M. Yasuda^{*4}, Y. Sato^{*1}, K. Minaguchi^{*2} (Dept. of Legal Med., Kyorin Univ. Sch. of Med.^{*1}, Dept. of Forensic Odont., Tokyo Dental Coll.^{*2}, Ctr. of Legal Med. of Dent., Nippon Dental Univ. Sch. of Dent. at Tokyo^{*3}, Products Dev. Dept., Kawasaki Res. & Dev. Ctr., Mitsutoyo Corp.^{*4})
- E-11 Reaction of detector tube for light mineral oils with bio-fuels
*E. Norimine, F. Ishizawa, T. Ishiwata (Forensic Sci. Lab., Ibaraki Pref. Police H.Q.)

16:08-16:44 *Chairperson: T. Suzuki (Identification Division, Miyagi Prefectural Police Headquarters)*

- E-12 Cigarette brand identification by visual inspection (2)
*Y. Narita^{*1}, T. Sasaki^{*3}, Y. Oyama^{*2}, A. Kuji^{*1}, N. Yamagata^{*1} (Forensic Sci. Lab., Hokkaido Hakodate Area Police H.Q.^{*1}, Identification Div., Hokkaido Hakodate Area Police H.Q.^{*2}, Forensic Sci. Lab., Hokkaido Police H.Q.^{*3})
- E-13 Development of a new tracking fluorescent reagent
T. Ishiwata, *F. Ishizawa, A. Hirasawa, Y. Sakaba (Forensic Sci. Lab., Ibaraki Pref. Police H.Q.)
- E-14 About the relevance of the footmark produced in the insole, and a footprint
*K. Azuma (Forensic Sci. Lab., Fukushima Pref. Police H.Q.)

Forensic Psychology (F)

Hall 4, Friday, November 9th

8:30-9:30 *Chairperson: M. Fujii (Criminal Investigation Laboratory, Gifu Prefectural Police Headquarters)*

- F-1 The respiratory activity measured by the digital polygraph system
*N. Tsuji, R. Ikegaya (Forensic Sci. Lab., Hokkaido Pref. Police H.Q.)
- F-2 An analysis of respiratory inhibition patterns during the field polygraph test
*N. Fukada (Sci. Invest. Lab., Fukushima Pref. Police H.Q.)
- F-3 The influences of self-referent processing on respiratory movements during detection of deception
*T. Ohama (Forensic Sci. Lab., Yamaguchi Pref. Police H.Q.)
- F-4 Measurement of the respiratory movement using a linear encoder
*R. Kuga^{*1}, S. Mimura^{*1}, T. Kosugi^{*2} (College of Humanities and Sci., Nihon Univ.^{*1}, Forensic Sci. Lab., Metropolitan Police Dept.^{*2})
- F-5 Eye-blink and eye-movement in the polygraph test: A study on the mock-crime experiment
*K. Sugawa, M. Ishikawa (Forensic Sci. Lab., Ishikawa Pref. Police H.Q.)

9:40-10:40 *Chairperson: T. Okuno (Forensic Science Laboratory, Mie Prefectural Police Headquarters)*

- F-6 The phasic cardiovascular reactivity in the CITs under the practical settings
*R. Suzuki^{*1}, M. Nakayama^{*2} (Forensic Sci. Lab., Chiba Pref. Police H.Q.^{*1}, Forensic Sci. Lab., Shizuoka Pref. Police H.Q.^{*2})
- F-7 Effects of smoking on cardiovascular indices
*K. Ohshima^{*1}, S. Ohno^{*2}, Y. Shibuya^{*3}, T. Suzuki^{*4}, Y. Tamaki^{*5}, S. Tousaka^{*6}, M. Nakano^{*7}, Y. Nagano^{*8} (Forensic Sci. Lab., Saitama Pref. Police H.Q.^{*1}, Forensic Sci. Lab., Tochigi Pref. Police H.Q.^{*2}, Sci. Crime Lab., Tottori Pref. Police H.Q.^{*3}, Forensic Sci. Lab., Metropolitan Police Dept.^{*4}, Sci. Invest. Lab., Fukushima Pref. Police H.Q.^{*5}, Japan Air Self Defense Force^{*6}, Forensic Sci. Lab., Oita Pref. Police H.Q.^{*7}, Faculty of Human Studies, Bunkyo Gakuin Univ.^{*8})
- F-8 The applicability of the chaos analysis for the polygraph test
*H. Izumikawa^{*1}, A. Imanishi^{*2}, A. Yagi^{*2}, M. Oyama^{*2} (Forensic Sci. Lab., Osaka Pref. Police H.Q.^{*1}, Dept. of Psychology, Kansei Gakuin Univ.^{*2})
- F-9 Concealed information test using a visual orienting task
*T. Ogawa, I. Matsuda, A. Hirota (National Research Inst. of Police Sci.)
- F-10 Effects of cognition of critical item on information processing
*Y. Shibuya (Sci. Crime Lab., Tottori Pref. Police H.Q.)

10:50-11:50 *Chairperson: G. Fujita (National Research Institute of Police Science)*

- F-11 The relationship of street crime to public housing in Tokyo 23 wards
*T. Suzuki, T. Kasuya (Forensic Sci. Lab., Metropolitan Police Dept.)
- F-12 The molester in train, this urban criminal behavior

- *T. Kasuya (Forensic Sci. Lab., Metropolitan Police Dept.)
- F-13 Indoor-rapists in the course of robbery
*D. Okamoto, K. Yokota, K. Watanabe, T. Wachi, A. Sato, G. Fujita (National Research Inst. of Police Sci.)
- F-14 Patterns of criminal homicide in Kanagawa
*T. Suzuki (Sci. Criminal Invest. Lab., Kanagawa Pref. Police H.Q.)
- F-15 Offender's residential location on serial arson: From the perspective of the convergence of center of geographic gravity.
*N. Hasegawa, H. Kawamura (Criminal Invest. Lab., Aichi Pref. Police H.Q.)

Questioned Documents (G)

Hall 4, Friday, November 9th

14:00-15:36 *Chairperson: K. Tabata (Forensic Science Laboratory, Aomori Prefectural Police Headquarters)*

- G-1 Influence of fingerprint detection on investigating inkjet printer's models
*M. Tsukahara, M. Fukui, N. Henmi (Forensic Sci. Lab., Hokkaido Pref. Police H.Q.)
- G-2 Detection of spur mark using a high resolution scanner
*N. Nemoto (Forensic Sci. Lab., Ibaraki Pref. Police H.Q.)
- G-3 Synthesis of indented pattern by superimposing of oblique lighting images
*T. Kamitani^{*1}, S. Cheupoxiong^{*1}, M. Ueda^{*2}, S. Tanaka^{*2} (Facul. . Eng., Osaka Sangyo Univ.^{*1}, Forensic Sci. Lab., Kyoto Pref. Police H.Q.^{*2})
- G-4 Classification of documents produced by copiers in convenience stores using an electrostatic detection apparatus
*Y. Ohori (Forensic Sci. Lab., Miyagi Pref. Police H.Q.)
- G-5 Production of a wide field white light interferometer for film distortion measurement
*S. Sugawara (National Research Inst. of Police Sci.)
- G-6 Discrimination of pen ink using fluorescence characteristics
*T. Ohuchi (Criminal Invest. Lab., Aichi Pref. Police H.Q.)
- G-7 Classification of forged printings using the correlation coefficients between histograms of brightness - Experiment of application for printings with different patterns -
*M. Shimoyama, K. Kobayashi (Forensic Sci. Lab., Hyogo Pref. Police H.Q.)
- G-8 A study on examination the encircled stamp
*H. Sugahara (Criminal Invest. Lab., Aichi Pref. Police H.Q.)

15:45-16:57 *Chairperson: K. Sugawa (Forensic Science Laboratory, Ishikawa Prefectural Police Headquarters)*

- G-9 Investigation of the signature in Asia
*M. Ueda^{*1}, S. Tanaka^{*1}, D. Narantungalag^{*2}, Q. Gaowa^{*3}, L. Fei^{*4}, T. Kamitani^{*5} (Forensic Sci. Lab., Kyoto Pref. Police H.Q.^{*1}, Facul. . Econ., Momoyama Gakuin Univ.^{*2}, Dept. Business Management and Accounting, Osaka Seikei Coll.^{*3}, Facul. ul.. Business Management, Osaka Sangyo Univ.^{*4}, Facul. . Eng., Osaka Sangyo Univ.^{*5})
- G-10 Development of character clipping system for questioned document identification (2)
*Y. Taguchi, M. Okubo, M. Shimizu (Forensic Sci. Lab., Fukuoka Pref. Police H.Q.)
- G-11 Framework of retrieval system for identification
*A. Yamamoto (National Research Inst. of Police Sci.)
- G-12 Writer identification based on character geometry (3)
*K. Tokiwa^{*1}, K. Fukue^{*2} (Forensic Sci. Lab., M.P.D.^{*1}, Tokai Univ. Research and Information Center^{*2})
- G-13 Comparison of writing speed between natural handwriting and disguised handwriting
*M. Fujii^{*1}, K. Oshima^{*2}, N. Yokota^{*3}, T. Katoh^{*1} (Criminal Invest. Lab., Gifu Pref. Police H.Q.^{*1}, Criminal Invest. Lab., Okayama Pref. Police H.Q.^{*2}, Criminal Invest. Lab., Mie Pref. Police H.Q.^{*3})
- G-14 Handwriting identification using Hiragana characters
*Y. Seki, Y. Akao, S. Sugawara, A. Yamamoto, N. Ishihara (National Research Inst. of Police Sci.)