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Education

Ph.D. in Department of Environmental Engineering, Graduate School of Engineering, Kyoto Univ., Kyoto, Japan, 2007

M.Sc. in Department of Human and Environmental Studies, Graduate School of Human and Environmental Studies, Kyoto Univ., Kyoto, Japan, 2001

B.Sc. in Chemistry System, Faculty of Science, Kyoto Univ., Kyoto, Japan, 1999

Employment

University of Shizuoka, School of Nursing, Research Associate, 2015-present

Kyoto Univ., Research Center for Environmental Quality Management (RCEQM), Graduate School of Engineering, Postdoctoral Research Fellow (Institute Researcher), 2012-2015

Ehime Univ., Center for Marine Environmental Studies (CMES), Global Center for Excellence (G-COE) Researcher, 2010-2012

Juntendo Univ., Institute for Environmental and Gender-specific Medicine, Graduate School of Medicine, Postdoctoral Research Fellow, 2007-2010

Professional activities

The Japanese Environmental Mutagen Society (JEMS)
Japan Society for Atmospheric Environment (JSAE)
Japan Society of Allergology (JSA)
Japan Society for Environmental Chemistry (JEC)
Japan Society on Water Environment (JWE)
Japan Society of Endocrine Disrupters Research (JSEDR)
The Chemical Society of Japan (CSJ)
American Chemical Society (ACS)
Japan Endotoxin and Innate Immunity Society (JEIIS)

Publications

1. K. Misaki, N. M. Tue, T. Takamura-Enya, H. Takigami, G. Suzuki, L. H. Tuyen, S. Takahashi and S. Tanabe. Antiandrogenic and estrogenic activity evaluation of oxygenated and nitrated polycyclic aromatic hydrocarbons using chemically

activated luciferase expression assays. **Int. J. Environ. Res. Public Health**, 20(1), 80, 2023.

2. K. Misaki, H. Takano, H. Kanazawa and K. Inoue. Biological response-enhancing activity with antigens in A549 cells exposed to representative polycyclic aromatic hydrocarbons. **ACS Omega**, 6(34), 22224-22232, 2021.
3. M. Yasui, T. Fukuda, A. Ukai, J. Maniwa, T. Imamura, T. Hashizume, H. Yamamoto, K. Shibuya, K. Narumi, Y. Fujiishi, E. Okada, S. Fujishima, M. Yamamoto, N. Otani, M. Nakamura, R. Nishimura, M. Ueda, M. Mishima, K. Matsuzaki, A. Takeiri, K. Tanaka, Y. Okada, M. Nakagawa, S. Hamada, A. Kajikawa, H. Honda, J. Adachi, K. Misaki, K. Ogawa and M. Honma. Weight of evidence approach using a *TK* gene mutation assay with human TK6 cells for follow-up of positive results in Ames tests: A collaborative study by MMS/JEMS. **Genes and Environ.**, 43(1):7, 2021.
4. K. Misaki, S. Matsuda, T. Matsuda, T. Kusakabe and Y. Shimizu. Detection of DNA damage formation by natural organic matter using EGFP-fused MDC1-expressing cells. **Chemosphere** 235, 169-174, 2019.
5. K. Misaki, Y. Morita, K. Kobayashi, Y. Sugawara, Y. Shimizu and T. Kusakabe. Evaluation of algal photosynthesis inhibition activity for dissolved organic matter with the consideration of inorganic and coloring constituents. **Chemosphere** 224, 333-342, 2019.
6. K. Misaki, H. Takano, H. Kanazawa and K. Inoue. Adverse effects of DEP and nanomaterials on bacteria-induced pulmonary disorder. **Endotoxin and Innate Immunity (Japanese)**, 19, 46-50, 2016.
7. K. Misaki, T. Takamura-Enya, H. Ogawa, K. Takamori and M. Yanagida. Tumour-promoting activity of polycyclic aromatic hydrocarbons and their oxygenated or nitrated derivatives. **Mutagenesis** 31(2), 205-213, 2016.
8. K. Misaki, G. Suzuki, N. M. Tue, S. Takahashi, M. Someya, H. Takigami, Y. Tajima, T. K. Yamada, M. Amano, T. Isobe and S. Tanabe. Toxic identification and evaluation of androgen receptor antagonistic activities in acid-treated liver extracts of high-trophic level wild animals from Japan. **Environ. Sci. Technol.** 49(19), 11840-11848, 2015.
9. L. H. Tuyen, N. M. Tue, G. Suzuki, K. Misaki, P. Hung Viet, S. Takahashi and S. Tanabe. Aryl hydrocarbon receptor mediated activities in road dust from a metropolitan area, Hanoi-Vietnam: Contribution of polycyclic aromatic hydrocarbons (PAHs) and human risk assessment. **Sci. Total Environ.** 491-492, 246-254, 2014.
10. J. –W. Kim, N. M. Tue, T. Isobe, K. Misaki, S. Takahashi, P. H. Viet and S. Tanabe. Contamination by perfluorinated compounds in water recycling and disposal sites in Vietnam. **Environ. Monit. Assess.** 185(4), 2909-2919, 2013.
11. M. Okada, Y. Hozumi, K. Iwazaki, K. Misaki, M. Yanagida, Y. Araki, T. Watanabe, H. Yagisawa, M. K. Topham, K. Kaibuchi and K. Goto. DGKζ is involved in LPS-activated phagocytosis through IQGAP1/Rac1 pathway. **Biochem. Biophys. Res. Commun.** 420(2), 479-84, 2012.
12. K. Misaki, Y. Hisamatsu, H. Suzuki and T. Takamura-Enya. Evaluation of the mutagenicity of nitration products derived from phenalenone (1*H*-phenalene-1-one). **Mutagenesis** 23(5), 359-366, 2008.
13. K. Misaki, M. Suzuki, M. Nakamura, H. Handa, M. Iida, T. Kato, S. Matsui and T.

Matsuda. Aryl hydrocarbon receptor and estrogen receptor ligand activity of organic extracts from road dust and diesel exhaust particulates. **Arch. Environ. Contam. Toxicol.** 55(2), 199-209, 2008.

14. T. Matsuda, A. Matsumoto, M. Uchida, R. Kanaly, K. Misaki, S. Shibutani, T. Kawamoto, K. Kitagawa, K. I. Nakayama, K. Tomokuni and M. Ichiba. Increased formation of hepatic N^2-ethylidene-2'-deoxyguanosine DNA adduct in *aldehyde dehydrogenase 2* knockout mice treated with ethanol. **Carcinogenesis** 28(11), 2363-2366, 2007.
15. K. Misaki, H. Kawami, T. Tanaka, H. Handa, M. Nakamura, S. Matsui and T. Matsuda. Aryl hydrocarbon receptor ligand activity of polycyclic aromatic ketones and polycyclic aromatic quinones. **Environ. Toxicol. Chem.** 26(7), 1370-1379, 2007.
16. K. Misaki, S. Matsui and T. Matsuda. Metabolic enzyme induction by HepG2 cells exposed to oxygenated and nonoxygenated polycyclic aromatic hydrocarbons. **Chem. Res. Toxicol.** 20(2), 277-283, 2007.
17. P. –H. Chou, S. Matsui, K. Misaki and T. Matsuda. Isolation and identification of xenobiotic aryl hydrocarbon receptor ligands in dyeing wastewater. **Environ. Sci. Technol.** 41(2), 652-657, 2007.
18. R. Tamura, D. Fujimoto, Z. Lepp, K. Misaki, H. Miura, H. Takahashi, T. Ushio, T. Nakai and K. Hirotsu. Mechanism of preferential enrichment, an unusual enantiomeric resolution phenomenon caused by polymorphyic transition during crystallization of mixed crystals of two enantiomers. **J. Am. Chem. Soc.** 124(44), 13139-13153, 2002.

Conference presentations in English

1. K. Misaki, H. Takano, H. Kanazawa and K. Inoue, The search for polycyclic aromatic quinones with amplifying action in antigen response. **The Japanese Society of Allergology / the World Allergy Organization the 27th World Allergy Congress.** online, Japan, September 2020.
2. K. Misaki, H. Takano, H. Kanazawa and K. Inoue, Adverse Effects of DEP and Nanomaterials on Bacteria-Induced Pulmonary Disorder. **The 8th Congress of the International Federation of Shock Societies.** Tokyo, Japan, October 2016.
3. K. Misaki, Y. Morita, T. Kusakabe and Y. Shimizu, Evaluation of Algal Photosynthesis Inhibition Activity for Natural Organic Matter, **The 4th Symposium on Research and Education Center for the Risk Based Asian Oriented Integrated Watershed Management.** Johor Bahru, Malaysia, December 2014.
4. K. Misaki, G. Suzuki, N. M. Tue, M. Someya, H. Takigami, Y. Tajima, T. K. Yamada, M. Amano, T. Isobe, S. Takahashi and S. Tanabe, Contribution of organochlorine pesticides and PCBs as androgen receptor antagonists in acid-treated liver extracts of higher trophic wild animals, **32nd International Symposium on Halogenated Persistent Organic Pollutants- Dioxin 2012**, Cairns, Australia, August 2012.
5. K. Misaki, T. Takamura, K. Takamori and M. Yanagida, Tumor promoting activity of polycyclic aromatic compounds and the investigation about the mode of action, The Society of Environmental Toxicology and Chemistry (SETAC) Asia/Pacific Joint Conference, **1st International Conference on Environmental Pollution, Restoration, and Management**, Ho Chi Minh, Vietnam, March 2010.
6. K. Misaki, H. Kawami, T. Matsuda and S. Matsui, Aryl hydrocarbon receptor (AhR)

ligand activity of polycyclic aromatic quinones and ketones, **4th International Water Association, Assessment and Control of Hazardous Substances in Water -ECOHAZARD 2003-**, Aachen, Germany, September 2003.

7. R. Tamura, D. Fujimoto, K. Misaki, Z. Lepp, H. Takahashi and T. Ushio, Mechanism of Polymorphic Transition Responsible for Preferential Enrichment, **15th International Conference on the Chemistry of the Organic Solid State**, Mainz, Germany, August 2001.