

# Joint International Symposium: Challenging the Research Development and Collaboration Through Online Discussions

## Joint Usage/Joint Research Symposium on Integrated Environmental Studies

30-Nov		
10:00	10:10	Opening remarks Prof. Koetsu Yamazaki, President of Kanazawa University
		Chair: Noriko Hasebe
10:10	11:00	<b>Hiroshi Tanimoto</b> (National Institute of Environmental Studies), K. Ikeda, Y. Kanaya, Y. Choi, D. Narita, D. Yamada, T. Nagashima and S. Inomata Black carbon emissions from Asia: Scientific highlights and policy implications
Session 1		Chair: Atsushi Matsuki
Expanding Observation Network: Atmosphere		
13:00	13:20	<b>Jianrong Bi</b> (Lanzhou University), J. Huang and B. N. Holben Study of absorption and optical properties between pure and transported anthropogenic dust over East and Central Asia
13:20	13:40	<b>Ta-Chih Hsiao</b> (National Taiwan University), Y.T. Chen, C.A. Wu, Y.D. Li, L.T. Chou, L.H. Yang Volatility, effective density and oxidative potential of aerosol particles in the urban area of Taipei, Taiwan
13:40	14:00	<b>Sonomdagva Chonokhuu</b> (National University of Mongolia), G. Byambajav, B. Batbaatar, A. Ariunsaikhan and B. Byambaa Recent years PM 2.5 pollution in Ulaanbaatar, Mongolia
14:00	14:20	N. R. Choi, Y. G. Ahn, J. Y. Lee and <b>Yong Pyo Kim</b> (Ewha Womans University) Levels and sources of particulate nitrosamines and nitramines in the atmosphere at Seoul
14:20	14:40	<b>Dmitry N. Troshkin</b> (Institute for Water and Environmental Problems, Siberian Branch of the Russian Academy of Sciences), I.V. Khvostov, A.N. Romanov Microwave satellite monitoring of natural hazards and environmental changes
Session 2		Chair: Nisikawa Usio
Expanding Observation Network: Ocean and On-land		
15:00	15:20	<b>Tung Yuan Ho</b> (Research Center for Environmental Changes, Academic Sinica) Anthropogenic aerosol metal pollution in the surface water of the Northwestern Pacific Ocean
15:20	15:40	<b>Nithi Atthi</b> (Thai Microelectronics Center, National Electronics and Computer Technology Center), W. Sripumkhai, P. Pattamang, R. Meananeatra, P. Saengdee, O. Thongsook, N. Ranron, K. Pankong, W. Uahchinkul, S. Radomyos, N. Klunngien, W. Jeamsaksiri, Y. Kitani, S. Ogiso and N. Suzuki Robust PDMS micro-structures with hydrophobic properties for marine antifouling applications
15:40	16:00	<b>Kosuke Nakanishi</b> (National Institute of Environmental Studies), T. Uéda, H. Yokomizo and T. I. Hayashi Negative effects of insecticides on the population dynamics of the dragonfly <i>Sympetrum frequens</i> in rice fields: A statistical analysis using field census data in Hokuriku region, Japan
16:00	16:20	<b>Ajai Kumar Srivastav</b> (Deen Dayal Upadhyaya Gorakhpur University, India) and N. Suzuki Environmental toxicants: Impact on fish
16:20	16:30	Outline of poster session
1-Dec		
		Chair: Ning Tang
K-INET Special Webinar II		
10:00	11:00	<b>Furong Deng</b> (Peiking University), L. Pan, H. Li, R. Chi, X. Guo Different health effects of indoor- and outdoor-originated PM <sub>2.5</sub> on cardiopulmonary function in COPD patients
Session 3		Chair: Toshio Sekiguchi
Integrated Environmental Research: PAHs Dynamics		
13:00	13:20	<b>Hisanori Iwai</b> (Kanazawa University) Separation of polycyclic aromatic hydrocarbon associated with humic substances
13:20	13:40	<b>Lulu Zhang</b> (Kanazawa University), L. Yang, J. R. Bi, Y.J. Wei, K. Hayakawa, A. Toriba and N. Tang Characteristics of PM <sub>2.5</sub> -bound polycyclic aromatic hydrocarbons and nitro-polycyclic aromatic hydrocarbons at a mountainous site in Lanzhou, China
13:40	14:00	Y. Ge, <b>Jing Cai</b> (Fudan University) and Haidong Kan Application of land use regression to assess exposure in ultrafine particles in Shanghai, China
14:00	14:20	<b>Rodrigo Mundo</b> (Kanazawa University), T. Matsunaka, H. Iwai, S. Ochiai and S. Nagao Spatial-temporal distribution of polycyclic aromatic hydrocarbons in surface water at West Nanao Bay, Noto Peninsula, during 2019-2020
14:20	14:40	<b>Masato Honda</b> (Kanazawa University), K. Mukai and Y. Oshima Biomonitoring of PAH pollution in super-tidal zone
Session 4		Chair: Tetsuya Matsunaka
Integrated Environmental Research: Human health and Ecosystem		
15:00	15:20	<b>Toshio Sekiguchi</b> (Kanazawa University) Identification of polycyclic aromatic hydrocarbons receptor in marine invertebrate ascidian <i>Ciona intesitinalis</i> Type A
15:20	15:40	<b>Akinori Hara</b> (Kanazawa University) Relationship between environmental factors and kidney disease
15:40	16:00	M. Lv, X. Luan, <b>Chunyang Liao</b> (Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences), D. Wang, D. Liu, G. Zhang, G. Jiang and L. Chen Human impacts on polycyclic aromatic hydrocarbon distribution in Chinese intertidal zones
16:00	16:20	<b>Nisikawa Usio</b> (Kanazawa University), M. Lailati, T. Q. Huynh, Y. Shang, K. Ito, N. Katsumi, Y. Mizuuchi and M. Ino Application of ground bamboo in agrochemical-free rice farming
16:20	16:30	Closing remarks Prof. Seiya Nagao, Director of INET Kanazawa University

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### Chozen International Symposium on Understanding the Transboundary Pollution along North-South Transect in western Pacific region

2-Dec			
10:00	10:10	Opening remarks K-INET Special Webinar III	Prof. Takashi Wada, vice president of Kanazawa University Chair: Nobuo Suzuki
10:10	11:00	<b>Ken Buesseler</b> (Woods Hole Oceanographic Institution)	Fukushima Dai-ichi nuclear power plants and the oceans- 10 years later
13:00	13:20	<b>Seiya Nagao</b> (Kanazawa University)	The outline of chozen project and science under the COVID 19 pandemic
Session 1		Human health and Ecosystem	Chair: Yoichiro Kitani
13:20	13:40	<b>Nobuo Suzuki</b> (Kanazawa University)	The effects of environmental pollutants such as heavy metals and endocrine disruptors on osteoblasts and osteoclasts in fish scales
13:40	14:00	<b>Edward G. Nagato</b> (Shimane University)	Microplastics in the Japan Sea Environment
14:00	14:20	<b>Davaasuren Davaadorj</b> (National University of Mongolia), D. Bataa, B. Batchimeg and O. Altansukh	Land disturbance impact in open mining area reduced soil quality and led to soil degradation in arid regions of southern Mongolia
14:20	14:40	<b>Yuji Oshima</b> (Kyushu University), X. Qiu, S. Saovany, Y. Takai, A. Akasaka, Y. Inoue, N. Yakata, Y. Liu, M. Waseda and Y. Shimasaki	Vector effect of microplastics on anthracene bioaccumulation in Japanese medaka ( <i>Oryzias latipes</i> )
Session 2		Poster presentations	Chair: Mutsuo Inoue
15:00	16:30		
3-Dec			
		K-INET Special Webinar IV	Chair: Keisuke Fukushi
10:00	11:00	<b>Ning Tang</b> (Kanazawa University), L.L. Zhang, A. Matsuki, Y. Inomata, K. Hayakawa and S. Nagao	Polycyclic aromatic hydrocarbons (PAHs) monitoring network in East Asia
Session 3		Oceanic and Terrestrial Research	Chair: Shinya Ochiai
13:00	13:20	<b>Mutsuo Inoue</b> (Kanazawa University)	Migration of Cs-134 in the northwestern North Pacific Ocean; implications for water circulations
13:20	13:40	<b>Tetsuya Matsunaka</b> (Kanazawa University), S. Nagao, R. Mundo, S. Tanaka, M. Inoue, N. Tang, N. Suzuki, S. Ogiso, M. Yoshida, N. Hirohashi, H. Ando, M. Morita and K. Hayakawa	Environmental behavior of polycyclic aromatic hydrocarbons in the East Asian marginal seas
13:40	14:00	<b>B. Taivanbat</b> (National University of Mongolia), O. Altansukh, M. Enkhuur, K. Steven and Kees van Leeuwen	An assessment of integrated urban water management in the small and big cities of Mongolia and its implementation
14:00	14:20	<b>Hyo-Bang Moon</b> (Hanyang University), S. Lee, K. Kim and J. Jeon.	Optimization of suspect and non-target analytical methods using GC/TOF for prioritization of emerging contaminants in the Arctic environment
14:20	14:40	<b>Keiichiro I. Oshima</b> (Hokkaido University), Y. Fukamachi, S. Nihashi, T. Tamura and K. Iwamoto	Global mapping of sea-ice production and discovery of 4th Antarctic Bottom Water
Session 4		Atmospheric Research	Chair: Yayoi Inomata
15:00	15:20	<b>Atsushi Matsuki</b> (Kanazawa University), N. Tsuchiya, S. Kato and K. Kazuo	Magnetic properties of atmospheric aerosols as a new air pollution index
15:20	15:40	<b>Lu Yang</b> (Kanazawa University), H. Zhang, X. Zhang, W.L. Xing, Y. Wang, A. Takami, K. Sato, A. Shimizu, A. Yoshino, N. Kaneyasu, L.L. Zhang, A. Matsuki, K. Hayakawa, and N. Tang	Comparative analysis of PM <sub>2.5</sub> -bound polycyclic and nitropolycyclic aromatic hydrocarbons and water-soluble inorganic ions between Wajima and Fukue Island, Japan
15:40	16:00	<b>Tatsuhiko Mori</b> (Tokyo University of Science), S. Ohata, K. Goto-Azuma, Y. Kondo, K. Fukuda, Y. Ogawa-Tsukagawa, N. Moteki, A. Yoshida, M. Koike, P. R. Sinha, N. Oshima, H. Matsui, Y. Tobo, M. Yabuki and W. Aas	Seasonal variation of wet deposition of black carbon at Ny-Ålesund in Svalbard and Barrow in Alaska
16:00	16:20	<b>Yongjoo Choi</b> (Japan Agency for Marine-Earth Science and Technology), Y. Kanaya, M. Takigawa, C. Zhu, S.-M. Park, A. Matsuki, Y. Sadanaga, S.-W. Kim, X. Pan, I. Pisso, I. Uno, M. Lee, H. Kim and D. H. Jung	Regional variability in black carbon and carbon monoxide ratio from long-term observations over East Asia: assessment of emission inventories and wet removal scheme
16:20	16:40	Closing remarks and Student Poster Award	Prof. Seiya Nagao, Director of INET Kanazawa University

Poster presentations		
P-01	<b>Hao Zhang</b> (Kanazawa University), Lu Yang, Xuan Zhang, Wanli Xing, Yan Wang, Lulu Zhang, Kazuichi Hayakawa and Ning Tang	Changes of long-range transported air pollutants from the East Asian continent to Wajima during COVID-19
P-02	<b>Xuan Zhang</b> (Kanazawa University), Lu Yang, Hao Zhang, Wanli Xing, Yan Wang, Lulu Zhang, Kazuichi Hayakawa, Yongjie Wei and Ning Tang	Personal exposure to air pollution and lung function of urban residents in Beijing and Baoding, China
P-03	<b>Wanli Xing</b> (Kanazawa University), Lu Yang, Hao Zhang, Xuan Zhang, Yan Wang, Lulu Zhang, Kazuichi Hayakawa and Ning Tang	Characteristics of PM <sub>2.5</sub> -bound PAHs and WSIs at a roadside air pollution monitoring station from 2017 to 2020 in Kanazawa, Japan
P-04	<b>Yan Wang</b> (Kanazawa University), Quanyu Zhou, Lu Yang, Hao Zhang, Xuan Zhang, Wanli Xing, Lulu Zhang, Kazuichi Hayakawa and Ning Tang	The seasonal characteristics and the potential sources of inorganic ions in the atmosphere at a Japanese remote background site, Wajima
P-05	<b>Minkyung Kang</b> (Ewha Womans University), Kiae Kim, Narae Choi, Yong Pyo Kim and Ji Yi Lee	Recent concentrations of PAHs in PM <sub>2.5</sub> at Seoul, Korea and characteristics of their Sources
P-06	<b>Na Rae Choi</b> (Ewha Womans University), Ji Yi Lee, Yun Gyong Ahn and Yong Pyo Kim	Quantification of volatile organic amines using gas chromatography-tandem mass spectrometry in the atmosphere at Seoul, South Korea.
P-07	<b>Seiji Kubota</b> (Kanazawa University), Alessia Nicosia, Yoko Iwamoto, Naoki Kaneyasu, Ayumi Iwata, Hiroshi Tsurumaru and Atsushi Matsuki	Long-term measurements of aerosol physical properties in the Noto Peninsula
P-08	<b>Kohei Ohno</b> (Kanazawa University), Yuki Mizushima, Masaki Furuya, Ryota Kunihisa, Nozomu Tsuchiya, Takeshi Fukuma, Ayumi Iwata and Atsushi Matsuki	Direct Measurement of Adhesion Force of Individual Aerosol Particles by Atomic Force Microscopy and application for ambient aerosol particles
P-09	<b>Tatsuki Yamamoto</b> (Kanazawa University), Mika Ikegame, Umi Kawago, Yoshiaki Tabuchi, Jun Hirayama, Toshio Sekiguchi, Yukihiro Furusawa, Koji Yachiguchi, Hajime Matsubara, Makoto Urata, Atsuhiko Hattori and Nobuo Suzuki	Detection of RANKL-producing cells and osteoclastic activation by the addition of RANKL in the regenerating scales of goldfish.
P-10	<b>Junko Migitaka</b> (Kanazawa University), Azusa Seki, Atsuhiko Hattori, Mika Ikegame, Masato Honda, Toshio Sekiguchi and Nobuo Suzuki	Effect of melatonin on bone metabolism in naturally aged mice
P-11	<b>Umi Kawago</b> (Kanazawa University), Koji Yachiguchi, Toshio Sekiguchi, Atsuhiko Hattori, Megumi Yamamoto, Keiichiro Kitamura, Yoshiaki Tabuchi and Nobuo Suzuki	Both inorganic mercury and methylmercury decrease osteoclastic and osteoblastic activities in the scales of marine teleosts
P-12	Hiroaki Koyama and <b>Noriko Hasebe</b> (Kanazawa University)	Thin section etching of zircon for micro thermochronology by fission track method: A trial
P-13	<b>Januar Ridwan</b> (Kanazawa University), Noriko Hasebe, Eko Yulianto, Nandang Supriatna and Amar	Analyses of Sag Pond Stratigraphy to Assess the Disaster History along Lembang Fault, West Java, Indonesia
P-14	<b>Uyangaa Udaanjargal</b> (Kanazawa University), Noriko Hasebe, Davaadorj Davaasuren, Yudai Igarashi, Keisuke Fukushi, Hitoshi Hasegawa, Baasansuren Gankhurel, Nagayoshi Katsuta, Shuuhaaz Ganbat and Ichinnorov Niiden	Preliminary results of 10.5 m core record from lake Olgoi, Valley of the Lake in Mongolia
P-15	<b>Baasansuren Gankhurel</b> (Kanazawa University), Keisuke Fukushi, Davaadorj Davaasuren, Eigo Imai, Takuma Kitajima and Noriko Hasebe	Distribution of uranium and arsenic between sediments and lake water in alkaline- hyposaline lake from Valley of Gobi Lakes in Mongolia
P-16	<b>Kosuke Inoue</b> (Kanazawa University), Keisuke Fukushi, Koki Morida, Hiroki Suga, Yoshio Takahashi, Yasuo Takeichi and Takahiro Kawai	Construction of a multi-element XANES library of layered silicates used for water metamorphism analysis in meteorite mother celestial bodies
P-17	<b>Akihiro Okuyama</b> (Kanazawa University) and Keisuke Fukushi	Robust prediction model of As(V) adsorption on oxide minerals
P-18	<b>Takuma Kitajima</b> (Kanazawa University), Keisuke Fukushi, Yasuhito Sekine, Masahiro Yoda, Baasansuren Gankhurel, Davaadorj Davaasuren, YasuoTakeichi and Yoshio Takahashi	Formation of monohydrocalcite at temperatures around the freezing point
P-19	<b>Shotaro Hanaki</b> (Kanazawa University), Mutsuo Inoue	Surface water circulations in the southwestern Sea of Japan: Implications from the Ra-228/Ra-226 ratio and Cs-134 concentration
P-20	<b>Mikiya Tsuruoka</b> (Kanazawa University), Shinya Ochiai, Atsushi Matsuki and Seiya Nagao	Transport of Soil Particle in the Reservoir-Catchment System Using Fallout Radionuclides <sup>7</sup> Be and <sup>210</sup> Pb
P-21	<b>Kazuhiro Miyagawa</b> (Kanazawa University), Seiya Nagao, Hisanori Iwai, Takeshi Yoshimura and Tomonori Isada	Variation of aquatic humic substances characteristics in river, brackish lake and coastal marine environments
P-22	<b>Rodrigo Mundo</b> (Kanazawa University), Tetsuya Matsunaka, Hisanori Iwai, Mutsuo Inoue, Takami Morita and Seiya Nagao	Oceanic currents driven PAHs surface distribution differences in 2017 and 2019 at northeast Japan Sea
P-23	<b>Davaadorj Davaasuren</b> (National University of Mongolia), Bataa Dandar, Batchimeg Batsaikhan and Altansukh Ochir	Land disturbance (land subsidence) impact in open mining area reduced soil quality and led to soil degradation in arid regions of southern Mongolia
P-24	<b>Tuvshin Gerelmaa</b> (National University of Mongolia), D.Davaadorj Davaasuren, Shuukhaaz Ganbat and Baasansuren Gankhurel (National University of Mongolia)	Water body extraction and change detection using time series: A case study of Buuntsagaan, Orog and Olgoi lakes