

Ceremony | Opening/Closing

Opening

Prof. Guoyi Peng (Nihon University (Japan))

Tue. Mar 15, 2022 8:30 AM - 9:00 AM Opening/Closing (Zoom)

Live Streaming(Zoom)

[-] Opening

8:30 AM - 9:00 AM

The Special Event | Keynote Lectures

KeyNote.1 Prof. Jinjun Wang

Chair: Prof. Guoyi Peng (Nihon University (Japan))

Tue. Mar 15, 2022 9:00 AM - 10:00 AM Keynote Lectures (Zoom)

Live Streaming(Zoom) *Pre-recorded lecture

[ICJWSF2022-K01] Synthetic Jet Impinging onto Porous Walls

*Jinjun Wang¹ (1. Beihang University (China))

9:00 AM - 10:00 AM

The Special Event | Keynote Lectures

KeyNote.2 Prof. Koji Fukagata

Chair: Prof. Takahiro Kiwata (Kanazawa University (Japan))

Tue. Mar 15, 2022 10:10 AM - 11:10 AM Keynote Lectures (Zoom)

Live Streaming(Zoom)

[ICJWSF2022-K02] Application of machine learning to fluid mechanics problems

*Koji Fukagata¹ (1. Keio University (Japan))

10:10 AM - 11:10 AM

The Special Event | Keynote Lectures

KeyNote.3 Prof. Ephraim J. Gutmark

Chair: Prof. Hitoshi Ishikawa (Tokyo University of Science (Japan))

Wed. Mar 16, 2022 9:00 AM - 10:00 AM Keynote Lectures (Zoom)

Live Streaming(Zoom)

[ICJWSF2022-K03] Flow and Acoustics of Supersonic Twin Jets

*Ephraim J. Gutmark¹ (1. University of Cincinnati (United States of America))

9:00 AM - 10:00 AM

The Special Event | Keynote Lectures

KeyNote.4 Prof. Ekaterinaris, John A.

Chair: Prof. Masaki Fuchiwaki (Kyushu Institute of Technology (Japan))

Wed. Mar 16, 2022 10:10 AM - 11:10 AM Keynote Lectures (Zoom)

[ICJWSF2022-K04] Simulations Requirements Ensuring Accurate Predictions of Vortex Dominated Fields and Vortices Generated from Wings and Rotor Blades

*John A Ekaterinaris¹ (1. Embry-Riddle Aeronautical University (United States of America))

10:10 AM - 11:10 AM

Cancelled

The Special Event | Keynote Lectures

KeyNote.5 Prof. Huihe Qiu

Chair: Prof. Jinjun Wang (Beihang University (China))

Thu. Mar 17, 2022 9:00 AM - 10:00 AM Keynote Lectures (Zoom)

Live Streaming(Zoom)

[ICJWSF2022-K05] Synergetic Flow Control and Wing Flexibility Effect in a Tandem Wing Insect Flight

*Huihe Qiu¹ (1. The Hong Kong University of Science & Technology (Hong Kong))

9:00 AM - 10:00 AM

The Special Event | Keynote Lectures

KeyNote.6 Prof. Henrik Alfredsson

Chair: Dr. Yu Nishio (Seikei University (Japan))

Thu. Mar 17, 2022 10:10 AM - 11:10 AM Keynote Lectures (Zoom)

Live Streaming(Zoom)

[ICJWSF2022-K06] Rotating Disks and Cones – a Centennial of von Kármán's
1921 Paper

*Henrik P Alfredsson¹ (1. KTH Royal Institute of Technology (Sweden))

10:10 AM - 11:10 AM

Ceremony | Opening/Closing

Closing

Prof. Guoyi Peng (Nihon University (Japan))

Thu. Mar 17, 2022 11:10 AM - 11:20 AM Opening/Closing (Zoom)

Live Streaming(Zoom)

[-] Closing

11:10 AM - 11:20 AM

(1) Fundamentals of Fluid Mechanics and Heat Transfer

Professor Sergey Alekseenko

(Siberian Branch of Russian Academy of Science, Russia)

[ICJWSF2022-A01] HEAT TRANSFER ENHANCEMENT OF CIRCULAR FIN TUBE TYPE HEAT EXCHANGER BY DOUBLE TUBE

Toshihiko Shakouchi¹, *Shoma Ota¹, Koichi Tsujimoto¹, Toshitake Ando¹, Mamoru Takahashi¹ (1. Graduate School of Engineering, Mie University (Japan))

[ICJWSF2022-A02] Numerical Study of Freestream Vortices Generating Streaky Structures in Leading Edge Boundary Layer

*Yu Nishio¹, Ryohei Unno², Seiichiro Izawa, Yu Fukunishi³ (1. Seikei University (Japan), 2. Tokyo Metropolitan University (Japan), 3. Institute of Computational Fluid Dynamics (Japan))

[ICJWSF2022-A03] New calculation scheme for compressible Euler equation

*Takashi NAKAZAWA¹, Taku NONOMURA² (1. Osaka University (Japan), 2. Tohoku University (Japan))

[ICJWSF2022-A04] Effect of rotation speed on heat transfer characteristics of impinging array jets in rotating channel

*Chayut Nuntadusit¹ (1. Prince of Songkla University (Thailand))

[ICJWSF2022-A05] FLOW AND HEAT TRANSFER CHARACTERISTICS FOR CONFINED CHANNEL INSTALLED FLOW BLOCKAGE WITH JET HOLES

Chayut Nuntadusit¹, *Ibroheng Piya¹ (1. Prince of Songkla University (Thailand))

(2) Shear Flows

Associate Professor Naoki Sekiya
(Nihon University, Japan)

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- [ICJWSF2022-B01] Impact of the kinetic energy conservation on unsteady homogeneous turbulence
*Shinnosuke Nakamura¹, Hiroki Suzuki², Shinsuke Mochizuki³ (1. Yamaguchi Univ. (Japan), 2. Okayama Univ. (Japan), 3. Yamaguchi Univ. (Japan))
- [ICJWSF2022-B02] Wall-confinement effects on the development of a turbulent shear layer
*Takumi Akao¹, Tomoaki Watanabe¹, Koji Nagata¹ (1. Graduate school of Engineering, Nagoya University (Japan))
- [ICJWSF2022-B03] A LINEAR-RESPONSE METHOD TO OBSERVE SECONDARY INSTABILITY ON NEAR-WALL STREAKS IN TURBULENT BOUNDARY LAYERS
*Tomoya Kikugawa¹, Per Henrik Alfredsson², Masaharu Matsubara¹ (1. Shinshu Univ. (Japan), 2. KTH (Switzerland))
- [ICJWSF2022-B04] TEMPORAL TRANSPORT OF TURBULENT MOMENTUM FLUX AROUND HAIRPIN VORTICES IN A CHANNEL FLOW
*Mamoru Takahashi¹, Yoshihiko Inagaki¹, Koichi Tsujimoto¹, Toshitake Ando¹, Toshihiko Shakouchi¹ (1. Mie University (Japan))
- [ICJWSF2022-B05] Effects of polymer addition on transition and length scales of flow structures in transitional channel flow
*Sattaya Yimprasert¹, Per Henrik Alfredsson², Masaharu Matsubara¹ (1. Shinshu University (Japan), 2. KTH (Sweden))
- [ICJWSF2022-B06] EFFECT OF MAIN STREAM TURBULENCE ON THE FLOW DOWNSTREAM OF A PERMEABLE CYLINDER
Kaoru Fukasawa¹, *Taisei Osano¹, Hiroyuki Tsunoda¹ (1. Univ. of Yamanashi (Japan))
- [ICJWSF2022-B07] MEASUREMENT OF FLOW ON AN AIRFOIL SURFACE BY USING THE OIL FILM INTERFEROMETRY WITH PIV ANALYSIS METHOD
*Tatsuhiko Imai¹, Kenya Kondo¹, Yasumasa Suzuki², Yuya Miki² (1. Department of Mechanical Engineering, Graduate School, Nihon Univ. (Japan), 2. Department of Mechanical Engineering, College of Science & Technology, Nihon Univ. (Japan))

(3) Vortex Flows

Professor Jiun-Jih Miao

(National Cheng Kung University, Taiwan)

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- [ICJWSF2022-C01] Large Eddy Simulation of Low Reynolds Number Flow around the Porous Airfoil
*Jinyu LI¹, Tomoaki WATANABE¹, Koji NAGATA¹ (1. Nagoya University (Japan))
- [ICJWSF2022-C02] Time Evolution Analysis of the Leading-Edge Separation Vortices and Their Breakdown Phenomena over a Delta Wing
*Leon Takahashi¹, Kengo Asada¹, Kozo Fujii¹ (1. TUS (Japan))
- [ICJWSF2022-C03] Vortex dynamics around impulsively-started dragonfly wing: suppression of lambda vortex eruption and lift enhancement
*Yusuke Fujita¹, Makoto Iima¹ (1. Hiroshima Univ. (Japan))
- [ICJWSF2022-C04] INFLUENCE OF RECTANGULAR PROTRUSION-SHAPED SLOT ON FLOW CHARACTERISTICS OF SYNTHETIC JETS
*Takumi Ito¹, Yuta Miyachi², Koichi Nishibe², Kotaro Sato¹ (1. Kogakuin University (Japan), 2. Tokyo City University (Japan))
- [ICJWSF2022-C05] Estimating the energy contribution of coherent structure in a cylindrical near-wake flow using proper orthogonal decomposition
*Keh-Chin Chang¹, Chia-Chun Chu¹ (1. Department of Aeronautics and Astronautics, National Cheng Kung University (Taiwan))
- [ICJWSF2022-C06] Experimental Formation of Vortex Rings with Swirl by using a Short Rotating Nozzle
*Takashi Naitoh¹ (1. Nagoya Institute of Technology (Japan))
- [ICJWSF2022-C07] AERODYNAMIC EFFECT OF HINDWING TAIL STRUCTURE ON BUTTERFLY
*ZHIYING LIN¹, SZUI YEH¹ (1. Cheng Kung Univ. (Taiwan))
- [ICJWSF2022-C08] Flow visualization observation of the interference vortex flow from a pair of square cylinders
*Yoshifumi Yokoi¹ (1. National Defense Academy of Japan (Japan))
- [ICJWSF2022-C09] FLOW TOPOLOGY ON THE UCAV MODEL AT LOW REYNOLDS NUMBER
*Yu Hsin Chen¹, Jiun Jih Miao¹, Yen Po Chen¹ (1. Department of Aeronautics and Astronautics, National Cheng Kung University, Tainan, Taiwan (Taiwan))
- [ICJWSF2022-C10] Flow phenomenon on the surface of a one-fifth scale cyclist model
*Yu-Hsiang Chen¹, Jiun-Jih MIAU¹, Yng-Ru CHEN¹ (1. Department of Aeronautics and Astronautics, National Cheng Kung University, Tainan, Taiwan, 70101 (Taiwan))

(4) Jet and Wake Flows

Professor Takahiro Kiwata

(Kanazawa University, Japan)

- [ICJWSF2022-D01] ANALYSIS OF OSCILLATION-CONTROLLED MULTIPLE IMPINGING JETS WITH VARYING IMPINGING DISTANCE USING DNS
*Haruka Taniguchi¹, Koichi Tsujimoto¹, Toshihiko Shakouchi¹, Toshitake Ando¹, Mamoru Takahashi¹ (1. Mie Univ. (Japan))
- [ICJWSF2022-D02] VISUALIZATION OF DIFFUSION SUPPRESSION MECHANISM OF LOBED JETS USING DYNAMIC MODE DECOMPOSITION
*Ren Fukui¹, Mamoru Takahashi¹, Koichi Tsujimoto¹, Toshitake Ando¹, Toshihiko Shakouchi¹ (1. Mie Univ. (Japan))
- [ICJWSF2022-D03] FLUCTUATING FLOW CHARACTERISTICS OF CLOSED-COUPLE TYPE GAS ATOMIZER
Toshihiko Shakouchi¹, Tetsuji Ohmura¹, *Ryota Matsui², Koichi Tsujimoto¹ (1. Graduate School of Engineering, Mie University (Japan), 2. Faculty of Engineering, Mie University (Japan))
- [ICJWSF2022-D04] fine structures of transverse jet in hypersonic flow
*Jialin Wang^{1,2}, Guilai Han^{1,2}, Zonglin Jiang^{1,2} (1. State Key Laboratory of High Temperature Gas Dynamics, Institute of Mechanics, Chinese Academy of Sciences (China), 2. School of Engineering Sciences, University of Chinese Academy of Sciences (China))
- [ICJWSF2022-D05] EFFECT OF DIAMETER OF SLIT NOZZLE ON CELLULAR STRUCTURE OF UNDEREXPANDED RADIAL JET
*Tatsuya Ohkawa¹, Yoko Sakakibara², Masaki Endo³, Hiromasa Suzuki⁴ (1. Graduate School of Advanced Science and Technology, Tokyo Denki University (Japan), 2. Tokyo Denki University (Japan), 3. Tokyo Denki University (Japan), 4. Tokyo Metropolitan College of Industrial Technology (Japan))
- [ICJWSF2022-D06] THEORETICAL STUDY OF SUPERSONIC ELLIPTIC JETS
*Muhammad Minarul Islam^{1,2}, Tatsuya Nagata¹, Shinichiro Nakao¹, Yoshiaki Miyazato¹ (1. Department of Mechanical Systems Engineering, The University of Kitakyushu (Japan), 2. Department of Mathematics, Bangabandhu Sheikh Mujibur Rahman Science and Technology University. Gopalganj (Bangladesh))
- [ICJWSF2022-D07] Numerical simulations of non-Newtonian jets
*Giovanni Soligo¹, Marco Edoardo Rosti¹ (1. Okinawa Institute of Science and Technology (Japan))
- [ICJWSF2022-D08] Numerical simulation of a helium gas jet
*Ryu Makino¹, Akinori Muramatsu¹ (1. Nihon University (Japan))
- [ICJWSF2022-D09] HYSTERESIS PHENOMENON OF SIDE JETS FORMED IN A ROUND AIR JET
*Kodai Yasufuku¹, Akinori Muramatsu¹ (1. Nihon University (Japan))
- [ICJWSF2022-D10] Circular jet with annular backflow using DBD plasma actuator

- *Norimasa Miyagi¹, Motoaki Kimura¹ (1. Nihon University (Japan))
- [ICJWSF2022-D11] Jet flow control by synchronized drive of two DBD-PAs
*Masato Akimoto¹, Hiroyuki Nakagawa², Motoaki Kimura¹ (1. Nihon University (Japan), 2. Graduate School of Science and Technology, Nihon University (Japan))
- [ICJWSF2022-D12] Instability of Wall Jet Produced by Two-Dimensional Inclined Impinging Jet
*Gentaro Takeda¹, Yu Ito¹, Kenji Yamashiro¹, Hideyuki Takahashi¹, Nao Ninomiya², Yuya Uranaka² (1. JFE Steel Corp. (Japan), 2. Utsunomiya Univ. (Japan))
- [ICJWSF2022-D13] Characteristics of Plane Jet from an Asymmetrical 2D Nozzle with a Lip by Two-points Simultaneous Measurement
*Hideyuki Kawada¹, Tomotaka Motoki¹, Takashi Noguchi¹, Katsuya Hirata¹ (1. Doshisha University (Japan))
- [ICJWSF2022-D14] PASSIVE FLOW CONTROL OF A 2:1 RECTANGULAR JET BY USING SERRATED TABS, DEFLECTED PLATES AND TAPERED TRIANGULAR TUBES
*Naoki Kajitani¹, Takahiro Kiwata², Riku Ouchi¹, Peter Oshkai³ (1. Graduate School of Natural Sciences and Technology, Kanazawa University (Japan), 2. School of Mechanical Engineering, Kanazawa University (Japan), 3. University of Victoria (Canada))
- [ICJWSF2022-D15] Chemical reaction of high Schmidt number scalars in a turbulent planar wall-jet
*Koji Iwano¹, Soma Nagaya¹, Yasuhiko Sakai², yasumasa Ito¹ (1. Nagoya University (Japan), 2. Nagoya Industrial Science Research Institute (Japan))
- [ICJWSF2022-D16] Experimental study of the fine-scale structure of scalar mixing in turbulent jets with swirl
*Sergey Alekseenko¹, Georgy Bakharev¹, Aleksei Lobasov¹, Dmitriy Sharaborin¹, Vladimir Dulin¹ (1. Kutateladze Institute of Thermophysics (Russia))
- [ICJWSF2022-D17] REDUCED ORDER MODEL OF UNSTEADY FLOW USING CNN AND LSTM
*Yousuke Shimoda¹, Naoya Fukushima¹ (1. Tokai Univ. (Japan))
- [ICJWSF2022-D18] Insight into particle collision on cylinder surface interacting with wake flows by using URANS
*Yasuo Hattori¹, Hitoshi Suto¹, Naoto Kihara¹, Hiromaru Hirakuchi¹, Junichi Tani¹ (1. Central Research Institute of Electric Power Industry (Japan))
- [ICJWSF2022-D19] A wake model simulating the velocity profile of a two-dimensional vertical axis wind turbine
*Jirarote Buranarote¹, Yutaka Hara¹, Yoshifumi Jodai², Masaru Furukawa¹ (1. Tottori University (Japan), 2. National Institute of Technology (KOSEN), Kagawa College (Japan))
- [ICJWSF2022-D20] NUMERICAL ANALYSIS OF DRAG FORCE ACTING ON A CIRCULAR DISK WITH HOLES
*Yuki Kondo¹, Yoshihiro Kubota¹ (1. Toyo University (Japan))

- [ICJWSF2022-D21] Study on Drag Coefficient for Disk with Holes under Bubbly Flow
*Kazuki Namba¹, Yoshihiro Kubota¹, Osamu Mochizuki¹ (1. Toyo University (Japan))
- [ICJWSF2022-D22] Effect of wall boundary layer on Autocorrelation of Karman vortex from a circular cylinder
*Ayumu Inagaki¹, Ryohei Mizobe², Hidemi Yamada² (1. National Institute of Technology, Oita Colleg (Japan), 2. Oita Univ. (Japan))
- [ICJWSF2022-D23] EFFECT OF SPLITTER PLATE ON PERFORMANCE OF MAGNETOSTRICTIVE WIND VIBRATIONAL POWER GENERATOR BY FLOW-INDUCED VIBRATION OF A CANTILEVERED RECTANGULAR PRISM
*Takahito Hamano¹, Takahiro Kiwata², Takuma Shima³, Alis Ekmekci⁴ (1. Kanazawa University (Japan), 2. Kanazawa University (Japan), 3. Kanazawa University (Japan), 4. University of Toronto (Canada))
- [ICJWSF2022-D24] Fluidic force and wake velocity of 3D Body with movable 4 limbs in uniform flow
*Shunsuke Yamada¹, Teppei Tsujita¹ (1. National Defense Academy (Japan))
- [ICJWSF2022-D25] WAKE FLOW VISUALIZATION OF A DANDELION PAPPUS DURING FLIGHT POSTURE CHANGE
*Yuki Shigenaga¹, Hiroaki Hasegawa¹ (1. Utsunomiya Univ. (Japan))
- [ICJWSF2022-D26] Experimental investigation of a bioinspired manta ray fin propulsor: phasing and leading-edge shape effects
*Dohyeong KIM¹, Csaba HEFLER¹, Wei SHYY¹, Huihe QIU¹ (1. The Hong Kong University of Science and Technology (Hong Kong))

(5) Flow Control

Professor Koichi Tsujimoto
(Mie University, Japan)

- [ICJWSF2022-E01] Experimental observation of the flow structure of submerged water jet with air ventilation
*Yusuke Mukaiyama¹, Yasuyuki Oguma², Guoyi Peng³ (1. Nihon Univ. (Japan), 2. Nihon Univ. (Japan), 3. Nihon Univ. (Japan))
- [ICJWSF2022-E02] VIBRATION-BASED DROP MOTION & ITS MECHANICS FOR A DIGITAL MICROFLUIDIC PLATFORM
*Liang-Je Lai¹, Chung-Hao WANG¹, Shih-Yi CHAO¹, Ting-Wei SUN¹, An-Bang WANG¹ (1. Institute of Applied Mechanics, National Taiwan University (Taiwan))
- [ICJWSF2022-E03] Flow and heat transfer characteristics of inclined rotating impinging jets using DNS
*Yuichi Banno¹, Koichi Tsujimoto¹, Toshihiko Syakouchi¹, Toshitake Ando¹, Mamoru Takahashi¹ (1. mie-university (Japan))
- [ICJWSF2022-E04] MERGING CONTROL OF VORTEX RINGS IN A ROUND JET BY ACOUSTIC EXCITATION
*Naho Inoue¹, Akinori Muramatsu¹ (1. Nihon University (Japan))
- [ICJWSF2022-E05] THE FORMATION OF HELICAL MODE IN A ROUND JET USING SYNTHETIC JETS
*Yuusuke Kobayashi¹, Akinori Muramatsu² (1. Nihon University (Japan), 2. Nihon University (Japan))
- [ICJWSF2022-E06] Effect of Artificial Large-scale Motions on Bursting in Turbulent Boundary Layer
*Xiaonan Chen¹, Koji Iwano¹, Yasuhiko Sakai², Yasumasa Ito¹ (1. Nagoya Univ. (Japan), 2. NISRI (Japan))
- [ICJWSF2022-E07] Flow control on a supersonic compression corner with the nanosecond surface dielectric barrier discharge plasma actuators
*Zongnan CHEN¹, Chih-Yung Wen¹, Jiaao Hao¹ (1. The Hong Kong Polytechnic University (Hong Kong))
- [ICJWSF2022-E08] DOUBLE COAXIAL PIPE JETS CONTROL USING DBD-PA AND BLUFF BODY
*Hiroyuki Nakagawa¹, Masato Akimoto¹, Motoaki Kimura¹ (1. Nihon Univ. (Japan))
- [ICJWSF2022-E09] NUMERICAL EXPERIMENTS ON THE RECEPTIVITY TO ACOUSTIC DISTURBANCES IN BOUNDARY LAYER OVER ISOLATED ROUGHNESS
*Ryohei Unno¹, Ayumu Inasawa¹ (1. Tokyo Metropolitan Univ. (Japan))
- [ICJWSF2022-E10] Sound pressure distribution and acoustic streaming by ultrasonic vibration
-Difference due to flexural and piston vibration-

*Hirofumi Nonaka¹, Koki Ito¹, Kenji Kofu¹ (1. Nihon University (Japan))

[ICJWSF2022-E11] EFFECTS OF CONTRACTION RATIO ON LOSS
REDUCTION OF THE FLOW IN THE REDUCING ELBOW
DUCT WITH A WEIR-SHAPED OBSTACLE

*Toshitake Ando¹, Toshihiko Shakouchi¹, Atsushi Hanai¹, Nobuyuki Hayashi¹,
Yohei Fukuta¹, Koichi Tsujimoto¹, Mamoru Takahashi¹ (1. Graduate School of
Engineering, Mie University (Japan))

[ICJWSF2022-E12] Combined flow control strategies aimed to turbulence
structure modification

*Yevhenii Shkvar^{1,2} (1. College of Engineering, Zhejiang Normal University
(China), 2. Institute of Hydromechanics (Ukraine))

(6) Fluid-Solid Interaction

Professor Masaki Fuchiwaki

(Kyushu Institute of Technology, Japan)

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- [ICJWSF2022-F01] Flight dynamics in forward flights of a cabbage white butterfly
*Kosuke Suzuki¹, Masaya Kouji¹, Masato Yoshino¹ (1. Shinshu University (Japan))
- [ICJWSF2022-F02] KINEMATICS AND AERODYNAMICS OF BOUNDED PASSIVE ROTATION DRAGONFLY WINGS
*Di Liu¹, Wei Shyy¹, Huihe Qiu¹ (1. Hong Kong University of Science and Technology (Hong Kong))
- [ICJWSF2022-F03] EFFECT OF BUTTERFLY' S WING FLEXIBILITY IN FLAPPING MOTION
*Yu Cheng Lee¹, Yi Hsien Lee², Po Hsiang Chang³, Szu I Yeh⁴ (1. student/National Cheng Kung university (Taiwan), 2. student/National Cheng Kung university (Taiwan), 3. student/National Cheng Kung university (Taiwan), 4. professor/National Cheng Kung university (Taiwan))
- [ICJWSF2022-F04] Shape of water splash by object impinging to water surface
*Takashi Yasui¹, Yoshihiro Kubota¹ (1. Toyo University (Japan))
- [ICJWSF2022-F05] Computational study on the flapping motion of a flag in grid-induced turbulence
*Stefano Olivieri¹, Marco Edoardo Rosti¹ (1. Okinawa Institute of Science and Technology (OIST) Graduate University (Japan))
- [ICJWSF2022-F06] Fluid-thermal-structural Interaction in Supersonic Retro propulsion
*Kalyani Bhide¹ (1. University of Cincinnati (United States of America))
- [ICJWSF2022-F07] Vorticity Generation and Growth ON a Wall of a Heaving Elastic Airfoil
*Masaki Fuchiwaki¹ (1. Kyushu Institute of Technology (Japan))
- [ICJWSF2022-F08] EFFECT OF FLOW CONFINEMENT ON THE HYDRODYNAMIC PERFORMANCE OF A FULLY-PASSIVE OSCILLATING-FOIL TURBINE
*Sierra Mann¹, Guy Dumas², Peter Oshkai¹ (1. University of Victoria (Canada), 2. Université Laval (Canada))

General Session | Track-G

(7) Novel Flow Measurement Techniques

Professor Hitoshi Ishikawa

(Tokyo University of Science, Japan)

[ICJWSF2022-G01] NOVEL FLOW ANALYSIS METHOD AROUND 2D AIRFOIL
USING PHYSICS-INFORMED NEURAL NETWORK

*Keita Hatanaka¹, Hiroki Fujinaga¹ (1. Mitsubishi Heavy Industries, Ltd.
(Japan))

[ICJWSF2022-G02] Wind Tunnel Test Method Using a 1-m Magnetic Suspension
and Balance System for Measuring Aerodynamic Force Acting
on Rotating Sphere

*Hiroyuki Okuizumi¹, Hideo Sawada¹, Yasufumi Konishi¹, Shigeru Obayashi¹,
Keisuke Asai¹ (1. Tohoku University (Japan))

[ICJWSF2022-G03] BEHAVIOR OF VORTEX CONNECTIONS IN THE WAKE BEHIND
A CIRCULAR DISK

*Shuya Kudo¹, Yuta Shibasaki¹, Hitoshi Ishikawa² (1. Graduate School of
Engineering, Tokyo University of Science (Japan), 2. Faculty of Engineering of
Engineering, Tokyo University of Science (Japan))

[ICJWSF2022-G04] Suppression of Flow Separation by Multi Wavy Plasma
Actuator with Different Amplitude

*Hinako Furuse¹, Masaki Nishibayashi¹, Hitoshi Ishikawa² (1. Graduate School
of Engineering, Tokyo University of Science (Japan), 2. Department of
Mechanical Engineering, Tokyo University of Science (Japan))

(8) Industrial Complex Flows and Applications

Professor Shoichiro Iio

(Shinshu University, Japan)

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- [ICJWSF2022-H01] Identification of wake vortices using a simplified automobile model under parallel running and crosswind conditions
*Yusuke Nakamura¹, Takuji Nakashima¹, Keigo Shimizu², Takenori Hiraoka², Takahide Nouzawa¹, Taiga Kanehira¹, Hidemi Mutsuda¹ (1. Hiroshima Univ. (Japan), 2. Mazda Motor Corporation (Japan))
- [ICJWSF2022-H02] Aerodynamic Prediction of the 30P30N High-Lift Configuration Airfoil using a Wall Stress Model with the Cartesian Cut-Cell Method
*Yuki Takeda¹, Kazuyuki Ueno¹, Tatsuya Ishikawa¹, Yuta Takahashi¹ (1. Iwate Univ. (Japan))
- [ICJWSF2022-H03] Characteristics of a Cavitating Jet through a Small Rectangular Orifice with Different Aspect Ratios
*Hironori Takei¹, Terakawa Kohei¹, Shouichiro Iio¹, Kotaro Takamura², Tomomi Uchiyama², Futoshi Yoshida³ (1. Shinshu Univ. (Japan), 2. Nagoya Univ. (Japan), 3. KYB Corp. (Japan))
- [ICJWSF2022-H04] Performance of a submerged impulse turbine under various jet nozzle conditions
*Takahiro Saito¹, Serene Hui Sze Ong¹, Shouichiro Iio¹, Daisuke Tsunashima² (1. Shinshu Univ. (Japan), 2. Chuetsu Kogyo Inc. (Japan))
- [ICJWSF2022-H05] Effect of flow inlet condition on flow field and performance of cross-flow hydraulic turbine
*Takashi Kamijo¹, Naoto Ogawa¹, Yoshikazu Hayashi¹, Shouichiro Iio¹, Takaya Kitahora², Young-Do Choi³, Morihito Inagaki⁴ (1. Department of Mechanical System Engineering, Shinshu University (Japan), 2. Shonan Institute of Technology (Japan), 3. Mokpo National University (Korea), 4. JSE Co., Ltd (Japan))
- [ICJWSF2022-H06] Cross wind on a bridge with wind barriers
*Chin-Chen Chou¹, Cheng-Yeng Chung¹, Kung-Ming Chung¹ (1. National Cheng Kung University (Taiwan))

(9) Multiphase Flows

Associate Professor Tatsuro Wakimoto
(Osaka City University, Japan)

- [ICJWSF2022-I01] Experimental study on turbulence characteristics in wake of two-dimensionally fluidized spherical particles
*Michihiro Miyashita¹, Shogo Hashi¹, Takashi Noguchi¹, Katsuya Hirata¹ (1. Doshisha University (Japan))
- [ICJWSF2022-I02] Prevention Effect for Choking of Dense-Phase Pneumatic Conveying in Bend Pipe with Ultrasonic Vibration
*Masashi Harada¹, Kenji Kofu² (1. Nihon Univ. (Japan), 2. Nihon Univ. (Japan))
- [ICJWSF2022-I03] Exfoliation Effect of Adhesion Powder WITH Ultrasonic Vibration
*Tomoya Abe¹, Kenji Kofu¹ (1. Nihon University (Japan))
- [ICJWSF2022-I04] Development of a cleaning device for fine particles on a solid surface using a supersonic jet
*Koshiro Tanimoto¹, Kazuhiko Soemoto², Tatsuro Wakimoto¹, Kenji Katoh¹ (1. Osaka City Univ. (Japan), 2. Shinko Co. Ltd. (Japan))
- [ICJWSF2022-I05] VISUALIZATION OBSERVATION OF PLUG FLOW IN ABRASIVE SUPPLY TUBE FOR ABRASIVE INJECTION WATER JET
*Yasuyuki Oguma¹, Yujiro Kobayashi¹, Guoyi Peng¹ (1. Department of Mechanical Engineering, College of Engineering, Nihon University (Japan))
- [ICJWSF2022-I06] Identification of Flow Regime in Transition Region of High-Pressure Gas-Liquid Two-Phase Flow Using Image Reconstruction and Machine Learning
*Naoto Shibata^{1,3}, Shuichiro Miwa², Kazuhiro Sawa³, Masahiro Takahashi¹, Tetsuro Murayama¹, Norio Tenma⁴ (1. Mitsui E&S Machinery Co., Ltd. (Japan), 2. The University of Tokyo (Japan), 3. Hokkaido University (Japan), 4. National Institute of Advanced Industrial Science and Technology (Japan))
- [ICJWSF2022-I07] NUMERICAL STUDY ON AIRBORNE DROPLETS USING TWO-FLUID MODELLED MULTIPHASE FLOW SIMULATIONS
*Junya AONO¹, Keiichi KITAMURA¹, Taro SHIMIZU² (1. Yokohama National University (Japan), 2. Japan Aerospace Exploration Agency (Japan))
- [ICJWSF2022-I08] Estimation of a water mass entrained by water exit of a sphere
*Kotaro Takamura¹, Tomomi Uchiyama¹ (1. Nagoya University (Japan))

(10) Flow Induced Noise

Professor Yasumasa Suzuki

(Nihon University, Japan)

Associate Professor Soichi Sasaki

(Nagasaki University, Japan)

[ICJWSF2022-J01] Perception and emission of sounds generated by animals

*Kazuki Sugiyama¹, Yoshihiro Kubota¹, Osamu Mochizuki¹ (1. Toyo University (Japan))

[ICJWSF2022-J02] The analysis of jet flow and sound generation of the reed-type artificial vocal fold

*Tsukasa Yoshinaga¹, Takayuki Arai², Hiroshi Yokoyama¹, Akiyoshi Iida¹ (1. Toyohashi University of Technology (Japan), 2. Sophia University (Japan))

[ICJWSF2022-J03] Effect of tube pitch ratio on acoustic resonance and vortex shedding

Hiromitsu Hamakawa¹, *Hiroki HARADA¹, Hayato KOCHO¹, Kazuki SHIBAYAMA¹, Eru KURIHARA¹ (1. Oita University (Japan))

[ICJWSF2022-J04] EXPERIMENTAL STUDY ON AERODYNAMIC SOUND GENERATED FROM FLOW AROUND A FORWARD FASING STEP

*Yoshihiro Shirasu¹, Yasumasa SUZUKI², Chisachi KATO³ (1. Department of Mechanical Engineering, college of Science and Technology, Nihon University (Japan), 2. Department of Mechanical Engineering, Nihon University (Japan), 3. Center for Research on Innovative Simulation Software, Institute of Industrial Science, the University of Tokyo (Japan))

[ICJWSF2022-J05] Aerodynamic Sound Radiated From Delta Wing In The Flow With Karman Vortex Street

*Shigeru Ogawa¹, Harutaka Honda¹, Takahiro Nomura¹, Yuji Yamada¹ (1. National Institute of Technology, Kure College (Japan))

[ICJWSF2022-J06] A STUDY OF AERODYNAMIC SOUND GENERATED FROM AN AIRFOIL SUBJECTED TO CIRCULAR-CYLINDER

*Noriaki Kobayashi¹, Yasumasa Suzuki², Chisachi Kato³ (1. Osaka University (Japan), 2. Nihon University (Japan), 3. The University of Tokyo (Japan))

[ICJWSF2022-J07] Effect of computational domain size and grid resolution on airfoil flow and radiated sound by using large eddy simulation

*Yuya MIKI¹, Yasumasa Suzuki¹, Chisachi Kato² (1. Nihon University (Japan), 2. The University of Tokyo (Japan))

[ICJWSF2022-J08] NUMERICAL SIMULATION OF AERODYNAMIC SOUND GENERATED FROM WING-TIP AND VORTEX BEHAVIOR ON AN OSCILLATING AIRFOIL

*Yuichiro Watanabe¹, Chisachi Kato¹ (1. The University of Tokyo (Japan))

- [ICJWSF2022-J09] Numerical Simulation of Aerodynamic Sound Generated from a Box Fan using Computational Aeroacoustics
*Tomoki Oikawa¹, Chisachi Kato² (1. Graduate School, Tokyo Univ. (Japan), 2. Institute of Industrial Science, Tokyo Univ. (Japan))
- [ICJWSF2022-J10] A Study on Flow Structure and Noise Generation in a Separated-and-Reattaching Flow in Sirocco Fan
*Kosuke Seto¹, Koji Iwano¹, Yasumasa Ito¹, Yasuhiko Sakai², Masaharu Sakai³, Shuzo Oda³, Fumiya ishii³, Sho Kosaka³, Jun Yamaoka³ (1. Nagoya Univ. (Japan), 2. Nagoya Industrial Science Inst. (Japan), 3. DENSO Corp. (Japan))
- [ICJWSF2022-J11] PREDICTION METHODOLOGY OF BROADBAND NOISE GENERATED FROM A HORIZONTAL AXIS WIND TURBINE BASED ON BLADE ELEMENT MOMENTUM THEORY
*Soichi Sasaki¹ (1. Nagasaki University (Japan))
- [ICJWSF2022-J12] STUDY OF BROADBAND NOISE GENERATED FROM A LOW-PRESSURE FAN BASED ON PRESSURE POWER SPECTRUM DENSITY OF A FLAT PLATE
*Kodai TANAKA¹, Soichi Sasaki¹ (1. Nagasaki University (Japan))