

ISABMEC 2012

Taipei, Howard Civil Service International House, Taipei
August 25-28, 2012

Date	From - To			
Aug. 25 PM	15:00 - 18:00	REGISTRATION Conference Room (1F)		
	18:00 -	WELCOME RECEPTION Yueshiang Restaurant (2F)		
Aug. 26 AM	8:30 - 8:40	Opening: S. Ito (Chair of ISABMEC2012)		
	8:40 - 9:20	KS01	T. Goto (Invited) Bacterial locomotion in an infinite liquid medium and in the presence of a nearby surface.	
	9:20 - 9:35	S01	T. Nakai, I. Shihira-Ishikawa, A. Miyawaki & T. Goto Boundary Element Analysis and Three-Dimensional Observation of Propulsive Force and Torque of a Dinoflagellate Symbiodinium	
	9:35 - 10:15	KS02	H. Oku (Invited) Dynamic imaging based on high-speed optical components.	
	10:15 - 10:30	S02	D. Miyashiro, Y. Wada, I. Shihira-Ishikawa, A. Miyawaki & S. Kamimura Direct imaging of the world of low Reynolds' number hydrodynamics	
	10:30 - 10:50	Coffee break		
	10:50 - 11:30	KS03	R. Dudley (Invited) Animal Aloft: The Origins of Aerial Behavior.	
	11:30 - 11:45	S03	K. Yasuda & A. Azuma Mechanical Characteristics of Hornbilled Puffin Cerorhinca monocerata Flying in Air and Water	
	11:45 - 12:00	S04	A. Iida & H. Yokoyama Effects of turbulence on aerodynamic force of insect flight	
	12:00 - 13:30	LUNCH Garden Restaurant (1F)		
	Aug. 26 PM	13:30 - 14:10	KS04	C.-C. Chang (Invited) Analyzing unsteady aerodynamics of insect wings from the perspective of a force element theory.
		14:10 - 14:25	S05	T. Kuroki, M. Fuchiwaki, K. Tanaka & T. Tabata Prediction of a Dynamic Lift Generated by a Butterfly
		14:25 - 14:40	S06	M. Fuchiwaki, T. Kawahara, K. Tanaka & T. Tabata A Pair of Vortex behind a Free Flight Butterfly
14:40 - 14:55		S07	D. Kolomenskiy, T. Engels & K. Schneider Numerical modelling of flexible heaving foils	
14:55 - 15:10		S08	R. Noda, M. Maeda, N. Gao & H. Liu Effect of Passive Body Deformation of Hawkmoth in Trimmed Hover Flight	

Date	From - To			
Aug. 26 PM	15:10 - 15:30			Coffee break
	15:30 - 15:45	S09	T. Amano & S. Sudo	Mechanical aspects in the relation between locomotive organs and behavior of beach flea
	15:45 - 16:00	S10	S. Sudo, M. Shiono, A. Shirai & T. Hayase	The Jump of Globular Springtail and Jumping Mechanism Worked by a Spring
	16:00 - 16:15	S11	Y. Kumon & M. Ohtsuka	Development of Electric Fan Propeller Featuring Chestnut Tiger Butterfly Wing Characteristics
	16:15 - 16:30	S12	Y. Inada, D. Watanabe & J. Kurihara	Effect of Gap between Primary Feathers in a Bird-like Assembled Wing
	16:30 - 16:45	S13	K. Kudo, K. Suzuki, H. Takanobu & H. Miura	Study on Resonant-Driven Flapping-Wing Robot
	16:45 - 17:00	S14	A. Nakamura, S. Ito, K. Kudo & K. Suzuki	Aerodynamic characteristics of the wings of a robot dragonfly in flight conditions
	17:00 - 17:20			Coffee break
	17:20 - 18:00	KS05	H. Ishida (Invited)	New trend of Technologies and Lifestyles learning from Nature, Nature Technology.
	18:00 - 18:15	S15	Y. Kawamura	Study on the free flight system for the flapping micro air vehicles in a low speed wind tunnel
	18:15 - 18:30	S16	S. Srigrarom & W.-L. Chan	Comparison of spanwise and chordwise flapping motions of micro air vehicles
DINNER Yueshiang Restaurant (2F)				
Aug. 27 AM	8:30 - 9:10	KS06	J.-T. Yang (Invited)	Keynote of biophysics and biomechanics of hovering Passerines
	9:10 - 9:25	S17	W. Hu & Y. Wang	Numerical study on the performance of leading edge tubercles in pitching wings
	9:25 - 9:40	S18	F.-C. Chiu, Y.-T. Chien & W.-C. Tiao	Hydrodynamic Characteristics of an Oscillating Foil with Leading Edge Vortex Generator
	9:40 - 9:55	S19	K. Kikuchi, Y. Uehara, Y. Kubota & O. Mochizuki	Fluid dynamics on fish's tail fin
	9:55 - 10:10	S20	G. Li, H. Liu, U. Müller & J. van Leeuwen	Pectoral fin motions affect hydrodynamics of undulatory swimming in fish larvae: a computational study
	10:10 - 10:30			Coffee break

Date	From - To			
Aug. 27 AM	10:30 - 10:45	S21	L. Li, G. Li & H. Liu	A Numerical Study of Hydrodynamics and Maneuverability in pufferfish Swimming
	10:45 - 11:00	S22	R. Akaiwa, H. Fujii & Y. Hagiwara	Direct Numerical Simulation on Turbulent Flow along Wavy Surfaces Mimicking Folded Skins of Swimming Dolphins
	11:00 - 11:15	S23	T. Akiba, S. Kojima, H. Ishii & Y. Tanaka	Swimming behavior of a scyphomedusa <i>Chrysaora pacifica</i>
	11:15 - 11:30	S24	T. Akiba & Y. Tanaka	Characteristics of swimming balance of <i>Oithona davisae</i> in foraging and escape reaction
	11:30 - 11:45	S25	A. Ito, T. Hirai & M. Kawamata	Some Advanced Works Done by <i>A. Daphnia magna</i> as A Living Micromachine
	11:45 - 12:00	S26	X. Sun & N. Kato	Three-dimensional Hydrodynamic Analysis of The Forelimb Propulsion of Sea Turtle With Prosthetic Flippers
	12:00 - 13:30	LUNCH Garden Restaurant (1F)		
Aug. 27 PM	13:30 - 14:10	KS07	M. Hubbard (Invited)	Ice surface shapes and their safety effects.
	14:10 - 14:25	S27	M. Nakashima, G. Hatakeyama, M. Homma & K. Ito	Simulation Analysis of Lift in Synchronized Swimming
	14:25 - 14:40	S28	C. Chung & M. Nakashima	Measurement System of Fluid Force in Human Swimming Using a Swimming Humanoid Robot
	14:40 - 14:55	S29	Y. Kawabata, H. Yamada, T. Sato, M. Kobayashi, K. Okuzawa & K. Asami	Functions of pelvic fins during the fast escape response in a teleost fish
	14:55 - 15:10	S30	H. Morikawa, Y. Fukuda, M. Nakashima, S. Ito, K. Ueda & K. Tokutake	Measurement on impact force by beating tail flukes of dolphin
	15:10 - 15:30	Coffee break		
	15:30 - 16:10	KS08	K. Sato (Invited)	Do animals hesitate to do their best?
	16:10 - 16:25	S31	T. Noda, Y. Kawabata, N. Arai, H. Mitamura & S. Watanabe	Utilization of animal-attached inertial sensors for monitoring fast-start performance of fish in the field
	16:25 - 16:40	S32	S. Ito & A. Konno	Why do sparrows hop and doves walk?
	16:40 - 17:00	Coffee break		
	17:00 - 17:15	S33	H. Sumoto	Development of Shellfish Like Waterjet Device Using SMA Type Artificial Muscle
	17:15 - 17:30	S34	A. Konno, Y. Ohkubo, N. Ono, Y. Suzuki & S. Ito	Development and preliminary study of experimental system of swarm formation by underwater robots

Date	From - To			
Aug. 27 PM	17:30 - 17:45	S35	S. Kobayashi, H. Soyano & K. Takahashi	Bio-inspired Aquatic Propulsion Mechanism Using Variable Stiffness Fin with Torsional Elastic Rectangular Plates
	17:45 - 18:00	S36	D. Martinez Sierra & J. Guo	Swimming of a Two-dimensional Oscillating Plate near a Solid Boundary
	18:00 - 18:15	S37	M. Kawabe, M. Takagi, A. Fujita, A. Yimit, Y. Hagihara & T. Miyoshi	Yaw torque generation using the asymmetry control of the wing stroke amplitudes
	18:15 - 18:30	S38	B. Nagai	Tenth Anniversary of a Finding Truth About Vortex Flow Theory And Declaration of the Solution of Gray's Paradox
19:00 -	SYMPOSIUM BANQUET Conference Room (14F)			

Aug. 28 AM	8:50 - 9:30	KS09	J.-H. Guo (Invited)	Wall Position Estimation by Measuring Pressure Using an Artificial Lateral Line for a Biomimetic Underwater Vehicle.
	9:30 - 9:45	S39	W.-K. Yen & J.-H. Guo	Synchronizing the Motion of a Robotic Fish with Human Breathing Cycle
	9:45 - 10:00	S40	M. M. Rahman, H. Miki, S. Sugimori, Y. Sanada & Y. Toda	Development of a Real Time Simulator Based on the Analysis of 6-Degrees of Freedom Motion of a Biomimetic Robot with Two Undulating Side Fins
	10:00 - 10:15	S41	Y. Takada, T. Ochiai, N. Fukuzaki, T. Tajiri, T. Omichi & T. Wakisaka	Analysis for Flow around a Fish Robot by Three-dimensional Fluid-structure Simulation and Evaluation of the Propulsive Performance
	10:15 - 10:30	S42	X. Sun, N. Kato & H. Li	Effect of flexibility of pectoral fins on the swimming performance of biomimetic underwater vehicle
	10:30 - 10:45	S43	C. D. Trieu, R. Yamasaki & Y. Hagiwara	Reductions of Pressure-drag Increase and Friction-drag by a Wavy Plate with Symmetrical Ridgelines Simulating Folded Skins of Dolphins
10:45 - 11:05	Coffee break			
11:05 - 11:45	KS10	A. Azuma (Invited)	Mechanical Characteristics of Creature's Wings.	
11:45 - 12:00	Closing remarks			
12:00 - 13:30	LUNCH Garden Restaurant (1F)			
13:30 -	CULTURE TOUR Starting at the Hotel Lobby (1F)			

Rm 101 (1F) Speaker's Preparation Room

Rm 101 (1F) ISABMEC Secretariat Office

Rm 201 (2F) ISABMEC Committee Room