

## Workshop program

June 11 (Thu)

IFS 1st Bldg., 2nd Floor, Multi-purpose room and Café room

17:00-19:00 Registration and Welcome Party

June 12 (Fri)

Room: IFS 1st Bldg. 2nd Floor, Meeting Room

8:30-9:00 Registration

9:00-9:10 Opening (Prof. Sato & Prof. Wu)

Session 1 (Chair: Y. Minamitani)

9:10-9:35 J.-S. Wu (National Chiao Tung University) *Invited*

Development of a Portable Cold Plasma Jet Device for Biomedical Application

9:35-10:00 Toshiro Kaneko (Tohoku University, Japan) *Invited*

Synergy Effects of Physical and Chemical Stimulations on Cell Membrane

Transport Using Non-Equilibrium Atmospheric Pressure Plasma

10:00-10:25 K.-C. Leou (National Tsin Hua University) *Invited*

Microwave Based Sensors for Process Monitoring and Feedback Control of Plasma Processing Tools

10:25-10:45 Coffee Break

Session 2 (Chair: J.-S. Wu)

10:45-11:25 C.-C. Jerry Hsu ((National Taiwan University) *Plenary*

Recent Progress on Atmospheric Pressure Plasma Development: From Ultra-Rapid Processing to Portable and Disposable Plasma Generation Devices

11:25-11:50 Kohki Satoh (Muroran Institute of Technology) *Invited*

Examining and Estimating Collision Cross Section Set of H<sub>2</sub>O Vapour for Reliable Plasma Simulation.

11:50-12:50 Lunch

Session 3 (Chair: K. Takaki)

12:50-13:15 Yasushi Minamitani (Yamagata University, Japan) *Invited*

Investigation of Difference of Origin of ROS Generated in a Cell by Frequency Components of Pulsed Electric Field

13:15-13:40 Yun-Chien Cheng (National Chiao Tung University) *Invited*

Effects of Cold Plasma on Human Dental Pulp Stem Cells

13:40-14:05 Hiroyuki Yoshiki (National Institute of Technology, Tsuruoka College) *Invited*

Inner Surface Treatment of Sealed Microchannels by Cold Microplasmas

14:05-14:25 Coffee Break

14:25-16:10 Poster Session (Chair: T.-C. Wei)

(2.5 minutes short oral presentation per poster, Presentation are scored by core members to choose Best Poster Awards)

16:30-18:30 Lab tour in IFS (Sato Lab and Shockwave center) and Kaneko Lab.

19:00-21:30 Banquet (Biwane)

June 13 (Sat)

Room: IFS 1st Bldg. 2nd Floor, Meeting Room

8:40-9:00 Registration

Session 4 (Chair: K.-C. Leou)

9:00-9:25 Koichi Takaki (Iwate University, Japan) *Invited*

Conformational Change of Bovine Serum Albumin by AC Electric Field for Keeping Freshness of Marine Products

9:25-9:50 Jang-Hsing Hsieh (Min Chi University of Technology) *Invited*

Mechanical properties, biocompatibility and antibacteria behaviors of TaO<sub>0.4</sub>N<sub>0.8</sub> and TaO<sub>0.4</sub>N<sub>0.8</sub>-Ag thin films

9:50-10:10 Coffee Break

Session 5 (Chair: T. Kaneko)

10:10-10:50 Koichi Sasaki (Hokkaido University, Japan) *Plenary*

Phenomena Observed Around the Interface Between DC Helium Glow Plasma and NaCl Solution

10:50-11:15 Ta-Chin Wei (Chung-Yuan Christian University) *Invited*

Modification of PVDF Membranes with Mixed-charge Copolymers by Atmospheric-Pressure Plasmas for Mitigation of Biofouling

11:15-11:40 Takehiko Sato (Tohoku University, Japan) *Invited*

Responses of HeLa Cells Exposed to a Medium Treated by a Plasma Flow at Atmospheric Pressure

11:40-11:50 Award Ceremony

11:50-12:00 Closing

12:00-12:45 Lunch

Excursion

Tour in Matsushima Bay and Sushi Restaurant

12:45-21:00

\*Please feel free to contact us if you have food allergies and other requests.

# Excursion

## Tour in Matsushima Bay and Sushi Restaurant

Let's enjoy one of the best 3 views of Japan and culture!



松島島巡り観光船企業組合ホームページ  
<http://www.matsushima.or.jp/route/>

### Matsushima Bay Cruising (Boat)

Matsushima bay is one of the best 3 views of Japan.



食べログ  
<http://tabelog.com/miyagi/A0404/A040404/4001724/>

### Matsushima Kanran-tei (Built in 16th century)

Matsushima view and traditional green tea with Japanese-style confection



すし哲ホームページ  
<http://www.shiogama-sushitetsu.com/shiogama/index.html>

### Dinner: Sushi restaurant (Sushi Tetsu)

You can enjoy delicious Sushi dinner.

#### Schedule:

- 13:00-13:30 move to JR Aoba-Dori station by walk
  - 13:50-14:30 move to JR Matsushima-Kaigan station by train
  - 15:00-16:00 Matsushima Bay Cruising (Boat)
  - 16:00-16:30 Matsushima-Kanran-tei
  - 17:12-17:21 move to JR Hon-Shiogama station
  - 17:30-19:30 Dinner: Sushi Restaurant (Sushi Tetsu in Shiogama)
  - 20:09-20:39 move to JR Aoba-Dori station
- \*Please let me know if you have food allergies.

## Information

June 11 (Thu)

14:35 Arrival at Sendai Airport

After arriving at the airport, please move to the JR Sendai Station by train. The train fee is 650JPY.

Students will guide you to the accommodation (Hotels/Tohoku University Katahira Guest House).

Tohoku University Katahira Guest House is a 10-minute walk away from the Workshop venue and a downtown area of Sendai. The details of accommodation for Tohoku University Katahira Guest House are as follows.

Room rate: 2,520JPY per a night (single room)

Check-in date: June 11 (Thu.)

Check-out date: June 14 (Sun.)

LAN (cable) is available in each room.

Please contact Ms. Akama ([akama@plasma.ifs.tohoku.ac.jp](mailto:akama@plasma.ifs.tohoku.ac.jp)) to book the house.

\*Students are not available.

Hotels: The price is generally from 4,000JPY to 10,000JPY for a single room per night. Please contact to Ms. Akama ([akama@plasma.ifs.tohoku.ac.jp](mailto:akama@plasma.ifs.tohoku.ac.jp)), if you need help to book hotels.