

## JSSE holds Autumn Lecture Meeting

Nov. 4, 2016

The Japan Society of Spring Engineers (JSSE) held its semiannual Lecture Meeting, including a poster session, and a ceremony of JSSE Awards at Kyoto Tower Hotel in Kyoto on November 4, 2016.

### Lecture Meeting

Eight general lectures and one special topic lecture were presented to 145 attendees in a hall of the Kyoto Tower Hotel. The opening speech was presented by Mr. Haruhiko Shiba, a vice-chairperson of JSSE in charge of events and a Managing Officer Member of the Board of Chuo Spring Co., Ltd.



Mr. Haruhiko Shiba

### Titles of General Lectures and Presenters

1. Possible application of titanium spring for wave-induced vibration power generator, by Shigeo Kotake of Mie University.
2. Vibration reduction of unbalanced rotors supported by gas bearings (Characteristics under the gas supply pressure control), by Tomohiko Ise of Toyohashi University of Technology.
3. Visualization of local hydrogen distribution of tempered martensitic steel using SIMS, by Satoshi Yabu of KOBELCO Research Institute. INC.
4. The mechanical property of duplex stainless steels after cold drawing, by Shota Yamasaki of Nippon Steel & Sumikin Stainless Steel Corporation.
5. Fatigue Property of High Strength Steel with Artificial Defects under Cyclic Torsion, by Mamoru Hayakawa of Nippon Steel & Sumitomo Metal Corporation.

6. Tensile strain induced Nonlinear Acoustic Evolutions in a Low Carbon, by Hiroataka Ishikawa of Shonan Institute of Technology.
7. Elasto-plasticity Behavior of Copper Alloy Sheets and Prediction of Spring Properties of their Press-formed Products, by Yasuhiro Hattori of AutoNetworks Technologies, Ltd.
8. Large Deformations of Flexible Elastic Beam in a Rigid Channel, by Atsumi Ohtsuki of Meijo University.



### Special Topic Lecture

The special topic lecture was about the importance of reduction of damage due to earthquake disaster including tsunami according to the inspection of durability of current infrastructure and historical review of earthquake during thousands of years. Title (Japanese): Rekishi ni manabi gendai wo tenken shi daishinsai ni sonaeru.

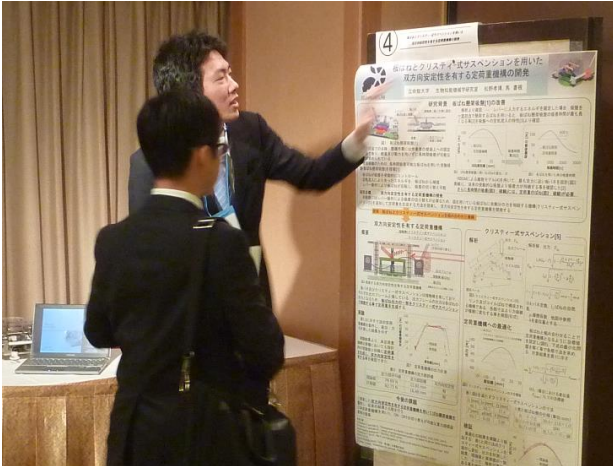
Lecturer: Dr. Nobuo Fukuwa, Professor and Director of Disaster Mitigation Research Center of Nagoya University.



Dr. Nobuo Fukuwa

## Poster Session

Six technical posters were displayed in a meeting room of the hotel. A brief explanation was given by a representative for each of the posters on the speaker's platform for the lecture meeting, followed by Question and Answer session at the posters. The top two posters were selected based on the participants' voting.



Mr. Takahiro Matsuno



Mr. Yuto Saeki

### The First Place Poster:

Development of a bi-stable constant force mechanism with plate spring and Christie suspension, by Takahiro Matsuno of Ritsumeikan University, et al

### The Second Place Poster:

Fatigue strength improvement of pure titanium by micro-shot peening and ultrasonic shot peening, by Yuto Saeki of University of Hyogo, et al.

## Ceremony of JSSE Awards

The awarding ceremony was held prior to the afternoon session of the lecture meeting and *Ronbun-prize*, *Gijutu-prize* and *Koseki-prize* were given to the winners.

### *Ronbun-prize*, (among papers submitted to JSSE):

- 1) Evaluation of Susceptibility to Hydrogen Embrittlement for Vanadium Added Spring Steel with Tensile Strength of 2 GPa Class, by Masao Hayakawa, Hiroyuki Mizuno, Takeshi Suzuki, Atsushi Sugimoto, Minoru Honjo, Hiroyuki Ohishi, Kazutoshi Sakakibara, Hidekazu Ito, Satoru Kondo and Shinsaku Matsuyama
- 2) Evaluation of Small Fatigue Crack Initiation in Type 316 Stainless Steel by Positron Annihilation Spectroscopy, by Yoshihiko Uematsu, Kanehira Hattori, Toshifumi Kakiuchi, Naoya Uesugi and Fumiya Nakano

### *Gijutu-prize*, (among other papers or articles)

- 1) Analysis of Nonlinear Deformations in Coiled Wave Springs (CWS), by Atsumi Ohtsuki and Shingo Sakurayama
- 2) Development of Heat-Resistant Stainless Steel with Excellent Spring Properties for Exhaust Gasket, by Yuichi Fukumura, Masayuki Shibuya and Yasutaka Shintani
- 3) Technology of CAE and Shape Measurement for Spiral Spring, by Madoka Kuno, Kazuyoshi Nono, Toshinori Imai and Shoji Ichikawa
- 4) Synthesis of Carbon Nanocoil and its Mechanical Property, by Yoshiyuki Suda, Yasushi Nakamura, Hirofumi Takikawa, Hitoshi Ue, Umeda Yoshito and Hiroyuki Shima

### *Koseki-prize*, (among honorable achievements)

- Mr. Satoshi Suzuki (Chuo Spring Co.,Ltd)  
Dr. Atsumi Ohtsuki (Meijo University)  
Dr. Koji Takahashi (Yokohama National University)  
Dr. Noritoshi Nakagawa (retired from Hiroshima University)  
Dr. Katsuji Toshi (former JSSE chairperson and an adviser to JSSE)  
Mr. Shohei Yoshida (Tokaiwane MFG. Co., Ltd.)



Recipients of the Certificates



Mr. Masahiko Nakatani



Closing Speech by Dr. Nakasone, JSSE Chairperson



### Reception

A reception was held after the closing speech presented by Dr. Yuji Nakasone, JSSE President and a professor of Tokyo University of Science, in another banquet hall.

Mr. Toshio Kazama, a vice-chairperson of JSSE in charge of general affairs and a managing officer of NHK Spring Co., Ltd. made the opening speech, followed by the guest speech by Mr. Masahiko Nakatani, a Executive Director of Japan Spring Manufacturers Association (JSMA.)

Mr. Susumu Yamamoto, an honorary member of JSSE, made a toast to the development of the spring industry and the participants' health followed by Dr. Katsuji Tosha, a former JSSE chairperson and an adviser to JSSE, made a speech on behalf of recipients of the certificates.

As time passed with active information exchange and chatting, the reception was over with "iccho-jime," a vibration consists of a single clap in unison.



Mr. Toshio Kazama



Mr. Susumu Yamamoto