

## JSSE holds Autumn Lecture Meeting

Nov. 22, 2017

The Japan Society of Spring Engineers (JSSE) held its semiannual Lecture Meeting, including a poster session, and a ceremony of JSSE Awards at Winc Aichi in Nagoya on November 22, 2017.

### Lecture Meeting

Eight general lectures and one special topic lecture were presented to 129 attendees in a hall of the Winc Aichi in Nagoya. An opening speech was delivered by Mr. Haruhiko Shiba, Vice-Chairperson of JSSE and Managing Officer, Member of the Board of Chuo Spring Co., Ltd.

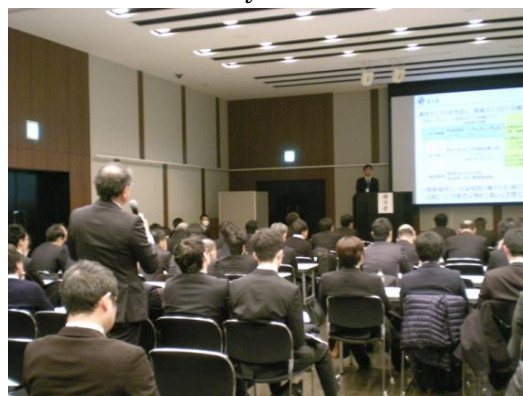


Mr. Haruhiko Shiba

### Titles of General Lectures and Presenters

1. Internal friction during restoring process explained from interaction between dislocation and magnetic wall, by Dr. Shigeo Kotake, Associate Professor of Mie University.
2. Effect of oxygen to rust (iron oxide)-based hydrogen generation by using modified TDS by gas-chromatography, by Dr. Yasuhide Ishiguro of Steel Research Laboratory, JFE Steel Corporation.
3. Development of High Corrosion Resistance Rust Preventive Oil for Thin Plate Springs after Austempering Treatment, by Mr. Kazutoshi Sakakibara of Togo Seisakusyo Corporation.
4. An Innovative Method for Measuring Young's Modulus in a Thin Flexible Multi-layered Materials (Own-weight Circular Ring Method), by Dr. Atsumi Ohtsuki of Meijo University.
5. Stress Intensity Factors of Surface Cracks in Anisotropic Tension Coil Springs, by Dr. Yuji Nakasone, Professor of Tokyo University of Science.

6. Influence of ultrasonic-shot peening on fatigue properties of TiNi shape memory alloy wire, by Dr. Kohei Takeda of Aichi Institute of Technology.
7. Effects of stress and plastic strain on eddy current response for nondestructive testing of shot-peened metals, by Mr. Yuichi Motoyama of National Institute of Advanced Industrial Science and Technology (AIST).
8. Development of Compact Real-time X-ray Residual Stress Measurement System using SOI Pixel Detector, by Dr. Shingo Mitsui of Kanazawa University.



### Special Topic Lecture

Title: Developing of C-HR and TNGA (Toyota New Global Architecture.)

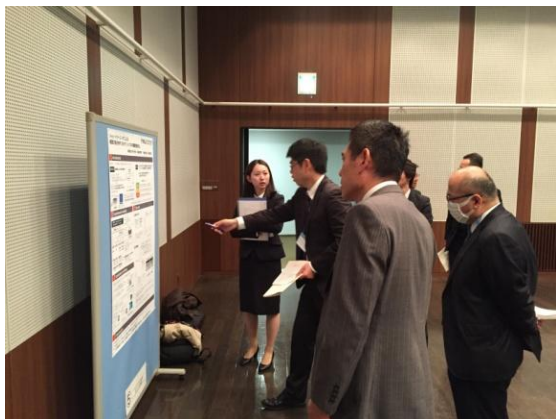
Lecturer: Mr. Hiroyuki Koba, Project General Manager of Toyota Motor Corporation.



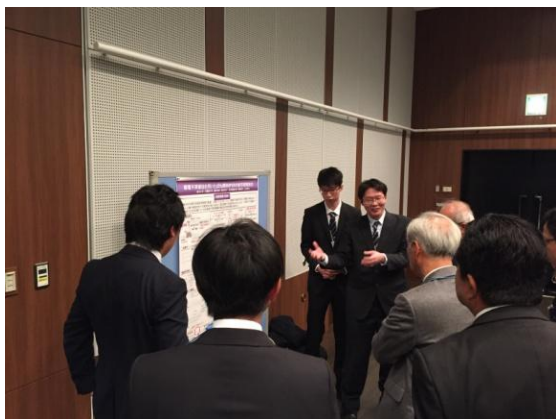
Mr. Hiroyuki Koba

## Poster Session

Five technical posters were displayed in another hall. 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.



Ms. Nanako Sato



Mr. Hiroyuki Nishikori

### The First Place Poster:

Improvement of fracture strength by shot peening for ceramics with a surface defect, by Ms. Nanako Sato of Yokohama National University, et al.

### The Second Place Poster:

Fatigue Damage Detection in Spring Steel SUP10 using Positron Annihilation Method, by Mr. Hiroyuki Nishikori of Faculty of Engineering and Graduate School of Engineering of Gifu University, et al

## Ceremony of JSSE Awards

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

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

Hydrogen Entry into a High Strength Steel with Tribocorrosion in Acidic Solution, by Mr. Kotaro Doi of National Institute for Materials Science and Dr. Eiji Akiyama, Professor of Tohoku University.

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

1) Study on Fractographical Feature Extraction for Distinguishing Fracture Surface Morphology, by Mr. Akira Ueno, Mr. Taku Miura, Dr. Takayuki Sakakibara and Mr. Shingo Miura.

2) FEM Analyses of Stress Intensity Factors for Surface Cracks in Tension Coil Springs, by Dr. Yuji Nakasone and Mr. Kazunori Muranushi.

3) Improvement of torsional fatigue limit by shot peening for high strength steel containing surface defect, by Dr. Koji Takahashi, Mr. Jun Yasuda, Dr. Hitonobu Koike and Dr. Hideki Okada.

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

Mr. Masao Hayakawa (National Institute for Materials Science)

Mr. Satoru Kondo (Togo Seisakusyo Corporation)

Mr. Masami Abe (Murata Spring Co., Ltd.)

Dr. Takayuki Sakakibara (Chuo Spring Co., Ltd.)

Mr. Mamoru Oshida (Former Secretary of JSSE)



Winners of the Prizes



Closing Speech by Dr. Nakasone, JSSE Chairperson

### Reception

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

Dr. Masao Hayakawa, Vice-Chairperson of JSSE and Head Researcher of National Institute for Materials Science made an opening speech. This was followed by the guest speech by Mr. Masahiko Nakatani, Executive Director of Japan Spring Manufacturers Association (JSMA.)



Dr. Masao Hayakawa



Mr. Masahiko Nakatani

Mr. Kinji Kato, Honorary Member of JSSE, made a toast to the development of the spring industry and the participants' good health. This was followed by the guest speeches delivered by the winners of the prizes.



Mr. Kinji Kato



Guest Speech by Mr. Satoru Kondo

After plenty of mingling and exchanging of information, the reception was over with "iccho-jime," a vibration consists of a single clap in unison led by Mr. Shuzo Ichi, Director of JSSE and of Togo Seisakusyo Corporation.



Mr. Shuzo Ichi