

JSSE holds Autumn Lecture Meeting

Dec. 10, 2014

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 Nov. 7, 2014.

Lecture Meeting

Eight general lectures and one special topic lecture were presented to 131 attendees in a banquet hall of the hotel. The opening speech was presented by Mr. Satoshi Suzuki, a vice-chairperson of JSSE in charge of events and a director of Chuo Spring Co., Ltd.



Mr. Suzuki

Titles of General Lectures and Presenters

1. Fatigue Characteristics of Cylindrical Compression Coil Springs with Bending Deformation, by Mr. Ryouichi Kariya of Suncall Corporation
2. Evaluation of Fatigue Damage in Type 316 Stainless Steel, by Fumiya Nakao of Gifu University
3. Evaluation of Residual Stress of Stainless Steel Springs by X-ray 2D Method, by Shunji Nakashima of NHK Spring Co., Ltd.
4. Nonlinear Spring Characteristic of Foldable Structures and its Application to Engineering, by Sachiko Ishida of Meiji University
5. Observation of Vacancies Involved in Hard Drawn Typed High-carbon Steel Wire by Positron Annihilation Method, by Kenichi Shimizu of Sumitomo Electric Industries, Ltd.

6. Shape Memory Effect and Elastic Recovery of Fe-Ni Shape Memory Alloy Coated by Al Hot Dipping, by Yuta Maruyama of Meiji University
7. Vibration Response Analysis of System Supported by Air Spring with Small Pipe, by Toshihiko Asami of University of Hyogo
8. Innovative Method for Measuring Young's Modulus of Thin Flexible Ring by Utilizing Own-weight Deformation, by Atsumi Ohtsuki of Meijo University



Special Topic Lecture

Title: Global Automobile Industry in New Stage of Competition

Lecturer: Mr. Tetsuo Kubo, Vice-president and Director of Fourin, Inc.



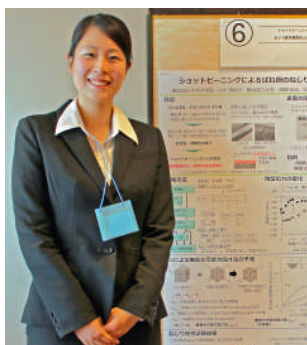
Mr. Kubo

Poster Session

Seven 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.

The First Place Poster:

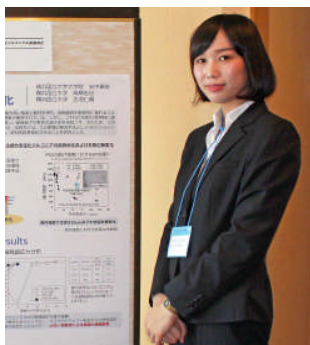
Making Surface Defects Harmless and Improving Torsional Fatigue Strength of Spring Steel by Shotpeening, Makiko Nakagawa of Yokohama University, et al.



Ms. Nakagawa

The Second Place Poster:

Improvement of Fatigue Strength of Partially-stabilized Zirconia by Shotpeening, by Kae Iwanaka of Yokohama University, et al.



Ms. Iwanaka

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:

Practical Formulation for Constant-force Spiral Spring, by Takuro Aiki and Kazumasa Iida of Hayamizu Hatsujo Co., Ltd. and Masayoshi Shimoseki of Nihon University

Gijutu-prize

- 1) Surface Characteristics and Bending Fatigue Limit of Carburized Steel treated by Double Shot Peening using Centrifugal Force type equipments, by Katsuyuki Matsui and Yoshitomi Yamada of Isuzu Motors Ltd., Tadao Irei of Dowa Thermoengineering Co., Ltd. and Yasuyuki Jin of Nissin Kinzoku Co., Ltd.
- 2) Experimental Study on the Effect of Coil Spring Reaction Force Vector on Suspension System Characteristics, by Shinichi Nishizawa and Takahiro Nakamura of NHK International Corporation, and Kazuo Furukawa, Senri Moriyama and Ryuichi Sato of NHK Spring Co., Ltd.

Koseki-prize

Dr. Motoaki Osawa (Tokyo Denki University)

Dr. Toshio Hamano (NHK Spring Co., Ltd.)

Mr. Yoshihiro Hayasaka (Mitsubishi Steel

Manufacturing Co., Ltd.)

Dr. Ichie Nomura (Aichi Steel Corporation)



JSSE President and Prize Winners

Presentation Ceremony of Certificates of Spring Technological Heritage

Six certificates of Spring Technological Heritage were presented to one university and three spring and/or parts manufacturers to express JSSE's appreciation for their preservation of machines of historical value. The six machines and their owners are as follows:

- 1) Spring Tester made by Tokyo Optomechanical Device Co., Ltd. (Nippon Institute of Technology)
- 2) Both Ends Supporting Type Spring Limit Tester made by Siemens Co., Ltd. (Nippon Bell Parts Co., Ltd.)

- 3) Moment Type Spring Limit Tester made by Akashi Manufacturing Co., Ltd. (Nippon Bell Parts Co., Ltd.)
- 4) Repeating-deflection Type Spring Limit Tester made by Akashi Manufacturing Co., Ltd. (Nippon Bell Parts Co., Ltd.)
- 5) SG-1 Spring Generator made by Asahi Seiki Manufacturing Co., Ltd. (Akatsubo Spring Ltd.)
- 6) CM-200CNC Coiling Machine made by Okuno Machine Co., Ltd. (Tama Spring Co., Ltd.)

Dr. Akira Tange, an advisor to JSSE, made a toast to the development of the spring industry and the participants' health.



JSSE President and Recipients of the Certificates



Mr. Otani

Mr. Kishigami

Dr. Tange

Reception

A reception was held after the closing speech presented by Dr. Katsuji Tosha, JSSE President and a professor of Meiji University, in another banquet hall.

Mr. Isao Otani, 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. Kazunori Kishigami, a vice-chairperson of Japan Spring Manufacturers Association (JSMA) and the president of Koyo Co., Ltd.

