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 on November 8, 2018.

Lecture Meeting

Eight general lectures and one special topic lecture were presented to 131 attendees in a hall of the Kyoto Tower Hotel. 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

- Psuedo-hydrogen signal in Gas-Chromatograph that is based on generation inside Gas-Chromatograph but is not intruded into steel ~Phosphate-coated steel~, by Dr.Yasuhide Ishiguro of JFE Steel Corporation.
- Nonlinear Analysis of Dynamics of Japanese Bows (Restoring Spring Characteristics and Dynamic Behavior), by Dr. Atsumi Ohtsuki of Meijo University.
- Effects of shot peening strength on eddy current response, by Mr. Yuichi Motoyama of National Institute of Advanced Industrial Science and Technology.
- 4. Deforming experiments of non-contact spiral spring, by Mr. Takuro Aiki of Hayamizu Hatsujo Co., Ltd..
- 5. Vibration Suppression of a Structural Object Using a Small Vibratory Device (Derivation of an Exact Algebraic Solution of an Optimal Double-Mass Dynamic Vibration Absorber), by Dr.Toshihiko Asami, Professor of University of

Hyogo.

- 6. A Young's modulus measurement methot based on approximate polynomial of large deflection of beams (cantilever and three point bending), by Dr.Tadashi Horibe of Ibaraki University.
- Increasing quenching severity, improving mechanical properties and decreasing quenching distortion by austempering with water-added molten salt, by Mr. Youichi Watanabe of Nihon Parkerizing Co., Ltd.
- 8. Effect of shot peening on hydrogen entry into tempered martensitic steel, by Mr. Makoto Kawamori of Kobe Steel, Ltd.



Special Topic Lecture

Title: Internal-combustion engine efforts for next generation in Mazda.

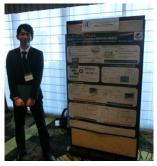
Lecturer: Mr. Katsunobu Miyagoshi, Program Manager of Mazda Motor Corporation.

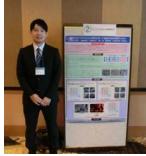


Mr. Katsunobu Miyagoshi

Poster Session

Seven 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.





Mr. Yuta Kogishi

Mr. Kazuki Kajita

The First Place Poster:

Fatigue strength improvement of an aluminum alloy with a crack-like surface defect using laser peening, by Mr. Yuta Kogishi of Yokohama National University, et al.

The Second Place Poster:

Study on Automatic Fractographical Feature Distinction by means of Materials Informatics Technology, by Mr. Kazuki Kajita of Ritsumeikan 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):

Fatigue Property of High Strength Steel with Artificial Defects under Cyclic Torsion with a Shear Stress Ratio of 0.1, by Mr. Mamoru Hayakawa, Mr. Shinya Teramoto, Mr. Shuji Kozawa, Mr. Yutaka Neishi and Mr. Taizo Makino of Nippon Steel & Sumitomo Metal Corp.

Gijutu-prize, (among other papers or articles)

1) Prediction of fracture strength for ceramics

- containing a surface defect with arbitrary shape, by Ms. Nanako Sato and Dr. Koji Takahashi of Yokohama National University.
- 2) Hydrogen uptake in high-strength steel corroded in actual use environment and in laboratory corrosion condition. and of diffusive interpretation hydrogen in Thermal-Desorption-Spectroscopy-based Gas Chromatograph, by Dr. Yasuhide Ishiguro, Mr. Kazuki Fujimura, Mr. Shinji Ootsuka and Mr. Akio Kobayashi of JFE Steel Corporation.
- 3) The effect of carbide precipitation on mechanical properties of tempered martensitic Si-added high carbon steels, by Mr. Shinya Teramoto, Mr. Manabu Kubota and Mr. Jun Takahashi of Nippon Steel & Sumitomo Metal Corporation.

Koseki-prize, (among honorable achievements)

Mr. Toshio Kazama (NHK Spring Co., Ltd.)

Mr. Takashi Goto (Chuo Spring Co., Ltd.)

Dr. Kazuhiro Kawasaki (Neturen Co., Ltd.)

Mr. Tsutomu Kato (PIOLAX, Inc.)

Dr. Wataru Nakao (Yokohama National University)

Mr. Tatsuro Ochi (Nippon Steel & Sumikin SG Wire Co., Ltd.)



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.

Mr. Toshio Kazama, Vice-Chairperson of JSSE and Executive Corporate Officer of NHK Spring Co., Ltd. made an opening speech. This was followed by the guest speech by Mr. Masahiko Nakatani, Executive Director of Japan Spring Manufacturers Association (JSMA.)



Mr. Toshio Kazama



Mr. Masahiko Nakatani

Mr. Susumu Yamamoto, 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. Susumu Yamamoto



Guest Speech by Mr. Mamoru Hayakawa

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. Kouji Tsutsumi, Director of JSSE and of Suncall Corporation.



Mr. Kouji Tsutsumi