CLS, Tokyo Tech. International Forum 2018
Redox regulation of protein functions, transcription, translation and folding

Tokyo Tech Campus Innovation Center

March 4-5, 2018

Program

March 4 (Sunday)

13:00-13:10 **Toru Hisabori (Tokyo Institute of Technology)**
Opening Remarks

Session I Chair: Toru Hisabori (Tokyo Institute of Technology)

13:10-13:40 **Mitsumasa Hanaoka (Chiba University)**
Nuclear gene regulation by retrograde redox signals

13:40-14:10 **Yukako Hihara (Saitama University)**
Identification of transcription factors interacting with thioredoxin in the cyanobacterium *Synechocystis* sp. PCC 6803

14:10-14:55 **Karl-Josef Dietz (Bielefeld University, Germany)**
Retrograde control of transcription and translation in the high light response

14:55-15:10 Coffee Break

Session II Chair: Mitsumasa Hanaoka (Chiba University)

15:10-15:55 **Thomas Pfanschumidt (Univ. Grenoble-Alpes, France)**
Photosynthetic redox control of transcription in plant cells

15:55-16:25 **Shigeki Ehira (Tokyo Metropolitan University)**
Redox regulation of cellular differentiation in cyanobacteria

16:25-16:55 **Yasuomi Tada (Nagoya University)**
Protein S-glutathionylation mediates systemic acquired resistance in

Arabidopsis

16:55-17:10 Coffee Break

17:10-18:30 Poster Session

18:40-20:40 Banquet

March 5 (Monday)

Session III Chair: Shigeki Ehira (Tokyo Metropolitan University)

9:30-10:00 **Shinji Masuda (Tokyo Institute of Technology)**
H_2S-dependent transcriptional control through polysulfidation of cystine residues: the role of reactive-sulfur species for signal sensing

10:00-10:30 **Yoshitaka Nishiyama (Saitama University)**
Redox regulation of translation and stress response of photosynthesis

10:30-10:40 Coffee Break

10:40-11:10 **Frederic Deschoenmaeker (Tokyo Institute of Technology)**
Proteomics can deeply unravel the Trx pathway and its specificity

11:10-11:55 **Jean-Pierre Jacquot (Université de Lorraine, France)**
Redox regulation of chloroplast enzymes: molecular and evolutionary aspects

11:55-12:00 Group Photo

12:00-13:10 Lunch Break

Session IV Chair: Kenji Inaba (Tohoku University)

13:10-13:40 **Yayoi Onda (Ehime University)**
Disulfide bond formation: redox-based regulation of organelle development in plant cells

13:40-14:10 **Ryo Ushioda (Kyoto Sangyo University)**
Maintenance of ER Homeostasis through Disulfide Reductase ERdj5

14:10-14:55 **Roberto Sitia (Università Vita Salute San Raffaele, Italy)**

Modulating redox signaling: a persulfidation-based redoxstat controls H_2O_2 transport via aquaporin 8

14:55-15:10 Coffee Break

Session V Chair: Yoshidata Nishiyama (Saitama University)

15:10-15:40 **Kenji Inaba (Tohoku University)**

Dynamic assembly and disassembly of protein disulfide isomerase in catalysis of oxidative protein folding

15:40-16:25 **Himadri Pakrasi (Washington University, USA)**

Redox modifications of proteins in cyanobacterial molecular machines

16:25-16:30 **Yoshitaka Nishiyama (Saitama University)**

Closing Remarks