

*Symposium on Applications of Advanced Measurement Technologies SAAMT2018*  
*Post-ASLIBS2017 International Symposium*  
*September 22, 2018, Sendai, Japan*

# **Proceedings**

## ***Symposium on Applications of Advanced Measurement Technologies SAAMT2018***

**&**

## ***Post-ASLIBS2017 International Symposium***

**Supported by**

**Japanese LIBS Society, Japan**

**The Iron and Steel Institute of Japan**

Division of Process Evaluation and Material Characterization, Japan

**The Japan Society of Mechanical Engineers,**

Chugoku-Shikoku Branch, Japan

**Tokushima University,**

Industry-University R&D Startup Leading Institute, Japan

Research Cluster Development of Advanced Laser Measurement Technology for  
Industrial Applications



**September 22<sup>nd</sup>, 2018**

**Venue : Sendai, Japan**

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**Program at a glance**

Date	Time	Presentation	Remarks
Sep. 22 <sup>nd</sup> (Saturday)	8:50-9:00	Opening Remarks(開会式)	Key note speech
		Session1 Chairperson : Ikuo Wakaida	20min. Presentation
	9:00~9:25	Key note speech 1(基調講演 1)	4 min. Q and A
	9:25~9:50	Key note speech 2(基調講演 2)	1 min. Preparation
	9:50~10:15	Key note speech 3(基調講演 3)	
	10:15~10:40	Key note speech 4(基調講演 4)	Oral Presentation of Posters
	10:40~11:05	Key note speech 5(基調講演 5)	5 min. Presentation
	10:05~11:20	Coffee	
		Session2 Chairperson : Shunsuke Kashiwakura	
	11:20~11:50	Oral Presentation of Posters	
	11:50~12:45	Lunch	
	12:45~13:35	Poster Presentation	
	13:35~13:45	Coffee	
		Session3 Chairperson : Takashi Fujii	
	13:45~14:10	Key note speech 6(基調講演 6)	
	14:10~14:35	Key note speech 7(基調講演 7)	
	14:35~15:00	Key note speech 8(基調講演 8)	
	15:00~15:25	Key note speech 9(基調講演 9)	
	15:25~15:50	Key note speech 10(基調講演 10)	
	15:50~16:05	Coffee	
		Session4 Chairperson : Yoshihiro Deguchi	
	16:05~16:30	Key note speech 11(基調講演 11)	
	16:30~16:55	Key note speech 12(基調講演 12)	
16:55~17:20	Key note speech 13(基調講演 13)		
17:20~17:55	Key note speech 14(基調講演 14)		
17:55~18:00	Break		
18:00~18:10	Award Ceremony		
18:10~18:20	Closing Remarks(閉会式)		
19:00~21:00	Party		

## Program

### Key note speech

Key note speech 1:K01(基調講演 1)

Lanxiang Sun(Chinese Academy of Sciences), Peng Zhang, Haibin Yu

“LIBS spectral line correction method combining plasma image information”

Key note speech 2:K02 (基調講演 2)

Hwan Hong Lim(Institute for Molecular Science) , Takunori Taira

“Mechanism of pulse width scaling law of laser induced breakdown threshold in air”

Key note speech 3:K03 (基調講演 3)

Zhenzhen Wang(Xi'an Jiaotong University), Minchao Cui, Ruomu Hu, Wangzheng Zhou, Fujita

Yuki, Seiya Tanaka, Jiping Liu, Junjie Yan, Yoshihiro Deguchi

“Quantitative analysis of underwater measurement using long-short double-pulse LIBS”

Key note speech 4:K04 (基調講演 4)

Jin Yu(Shanghai Jiao Tong University)

“Evolution and Transformation of Laser-Induced Plasma in Ambient Gasas the Emission Source for LIBS”

Key note speech 5:K05 (基調講演 5)

Zhe Wang (Tsinghua University)

“Impacts of a collection system on laser-induced breakdown spectroscopy signal detection”

Key note speech 6:K06 (基調講演 6)

Yoshihiro Deguchi(Tokushima University), Zhenzhen Wang, Minchao Cui, Yuki Fujita, Seiya

Tanaka, Ryo Furukawa

“Improvement of Quantitative Mn and C measurements in steel materials sing long and short DP-LIBS”

Key note speech 7:K07 (基調講演 7)

Koji Tamura(National Institutes for Quantum and Radiological Science and Technology), Hironori

Ohba, Morihisa Saeki, Tomitsugu Taguchi, Hwan Hong Lim, Takunori Taira, Ikuo Wakaida

“Study of Microchip Laser Properties for the Remote Inspection using Laser-Induced Breakdown spectroscopy”

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Key note speech 8:K08 (基調講演 8)

富田英生(名古屋大学), Volker Sonnenschein, 寺林稜平, 加藤修介, 武田晨, 齊藤圭亮,  
山中真仁, 西澤典彦, 井口哲夫, 吉田賢二

“中赤外キャビティーリングダウン分光に基づく微量ガス分析法の開発”

Key note speech 9:K9 (基調講演 9)

富田英生(名古屋大学), Volker Sonnenschein, 加藤弘太郎, 大橋雅也, 鈴木颯, 松井良樹,  
井口哲夫, 坂本哲夫, 森田真人, 河合利秀, 奥村丈夫, 若井田育夫, 佐藤志彦, 宮部昌文

“レーザー共鳴イオン化を用いた多元素・同位体分析法の開発”

Key note speech 10:K10 (基調講演 10)

森田真人(工学院大), 坂本哲夫, 富田英生, Volker Sonnenschein, 大橋雅也, 加藤弘太郎,  
井口哲夫, 河合利秀, 奥村丈夫, 佐藤志彦, 若井田育夫

“共鳴イオン化 SNMS 法の開発と放射性微粒子分析への応用”

Key note speech 11:K11 (基調講演 11)

若井田育夫(日本原子力研究開発機構), 宮部昌文, 赤岡克昭, 大場弘則, 平等拓範

“福島第一原子力発電所燃料デブリ分析への取り組みと基礎基盤研究”

Key note speech 12:K12 (基調講演 12)

大場弘則(日本原子力研究開発機構), 田村 浩司, 佐伯 盛久, 田口 富嗣,  
イム ファンホン, 平等 拓範, 若井田 育夫

“セラミックマイクロレーザーを用いたファイバー伝送 LIBS 計測”

Key note speech 13:K13 (基調講演 13)

柏倉俊介(東北大学)

“パルス分布解析法を用いた鉄鋼試料中の銅の分布測定”

Key note speech 14:K14 (基調講演 14)

藤井 隆(電力中央研究所), 屋地 康平

“LIBS を用いた懸垂がいし付着塩分遠隔計測における上下面比較”

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## Poster

Poster 1:P1

木村恒毅(京都大学), 天野健一, 西直哉, 作花哲夫

“水中レーザー誘起プラズマ中のトリカーボンの発光スペクトルによる分析”

Poster 2:P2

Min-Chao Cui(Xi'an Jiaotong University), Yoshihiro Deguchi, Seiya Tanaka, Fujita Yuki,

Zhenzhen Wang, Shengdun Zhao

“Characteristics of plasma generated by long-short double pulse laser-induced breakdown spectroscopy”

Poster 3:P3

Yuki Fujita(Tokushima University), Yoshihiro Deguchi, Minchao Cui, Seiya Tanaka, Ryo Furukawa, Zhenzhen Wang

“Real-time measurement of steel materials under water using long and short DP-LIBS”

Poster 4:P4

Seiya Tanaka(Tokushima University), Yoshihiro Deguchi, Minchao Cui, Yuki Fujita, Ryo Furukawa,

Zhenzhen Wang

“Study on real-time measurement by Remote open-path Long-short double pulse LIBS for steel materials”

Poster 5:P5

Ryo Furukawa(Tokushima University), Yoshihiro Deguchi, Yuki Fujita, Seiya Tanaka, Minchao Cui,

Zhenzhen Wang

“Development of remote LIBS for the manganese measurement”

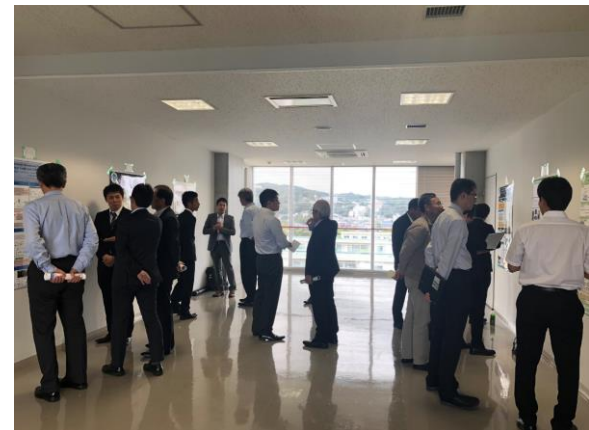
Poster 6:P6

柴田卓弥(日本原子力研究開発機構), 大場弘則, 瀬古典明, 若井田育夫

“LIBS 分析と放射線グラフト重合材を融合した遠隔その場溶液分析手法の開発”

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**Pictures**



**Chairperson(SAAMT2018) :**

**Ikuo Wakaida                      Japan Atomic Energy Agency, Japan**

**Chairperson(Post-ASLIBS2017) :**

**Yoshihiro Deguchi              Tokushima University, Japan**

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