

# ポスターセッション（学術展示発表） Poster sessions

## 討論時間 Discussion Time

5月31日(水) 16:00 ~ 18:00

ポスター・展示会場 (Poster・Exhibition hall)

16:00 ~ 17:00 (演題番号末尾奇数)

Presenters due for odd number posters

17:00 ~ 18:00 (演題番号末尾偶数)

Presenters due for even number posters

**P\_I-01** 16:00 ~ 17:00

### 新しいLV(低真空)-Cryoプロセスの検討とその応用I

Study of new LV ( Low Vacuum ) Cryo process and its applications I

中山 智香子<sup>1</sup>, 中嶋 香織<sup>1</sup>, 服部 隆<sup>1</sup>, 鈴木 俊明<sup>1</sup>  
(<sup>1</sup>日本電子株式会社)

Chikako Nakayama<sup>1</sup>, Kaori Nakajima<sup>1</sup>,  
Takashi Hattori<sup>1</sup>, Toshiaki Suzuki<sup>1</sup>  
(<sup>1</sup>JEOL Ltd)

**P\_I-02** 17:00 ~ 18:00

### 新しいLV(低真空)-Cryoプロセスの検討とその応用II

Study of new LV-Cryo process and its applications II

中嶋 香織<sup>1</sup>, 中山 智香子<sup>1</sup>, 西山 多江子<sup>2</sup>,  
野畑 靖浩<sup>2</sup>, 川出 元洋<sup>2</sup>, 鈴木 俊明<sup>1</sup>  
(<sup>1</sup>日本電子株式会社, <sup>2</sup>伯東株式会社)

Kaori Nakajima<sup>1</sup>, Chikako Nakayama<sup>1</sup>,  
Taeko Nishiyama<sup>2</sup>, Yasuhiro Nohata<sup>2</sup>,  
Motohiro Kawade<sup>2</sup>, Toshiaki Suzuki<sup>1</sup>  
(<sup>1</sup>JEOL Ltd., <sup>2</sup>Hakuto Ltd.)

**P\_I-03** 16:00 ~ 17:00

### Suggestion of aberration corrected SEM using double micro-mirror

Hideto Dohi<sup>1</sup>, Pieter Kruit<sup>2</sup>  
(<sup>1</sup>Hitachi High-Technologies Corporation, <sup>2</sup>Delft University of Technology)

**P\_I-04** 17:00 ~ 18:00

### A Novel N-SYLC Model for Correcting Higher Order Geometrical Aberrations

Shahedul Hoque<sup>1,2</sup>, Hiroyuki Ito<sup>1</sup>, Ryuji Nishi<sup>2</sup>,  
Akio Takaoka<sup>2</sup>  
(<sup>1</sup>Hitachi High-Technologies Corp., <sup>2</sup>Osaka University)

**P\_I-05** 16:00 ~ 17:00

### Recent Trends in Energy- and Angular- Filtration of SEs in SEM

Šárka Mikmeková<sup>1</sup>, Takano Masahiro<sup>1</sup>, Ryoko Arai<sup>1</sup>,  
Daisuke Tsukiori<sup>1</sup>, Masayasu Nagoshi<sup>1</sup>, Haruo Nakamichi<sup>1</sup>  
(<sup>1</sup>JFE Steel Corporation)

**P\_I-06** 17:00 ~ 18:00

### FE-SEMによる高空間分解能ワイドレンジEDS分析の試み

High Spatial Resolution and Wide Range EDS analysis with FE-SEM

竹内 秀一<sup>1</sup>, 橋本 陽一朗<sup>1</sup>, 笹島 正弘<sup>1</sup>,  
細谷 幸太郎<sup>1</sup>, 檀 紫<sup>1</sup>, 宮坂 真太郎<sup>2</sup>, 山口 晋<sup>3</sup>  
(<sup>1</sup>日立ハイテクノロジーズ, <sup>2</sup>堀場製作所, <sup>3</sup>オックスフォード・インストゥルメンツ)

Shuichi Takeuchi<sup>1</sup>, Yoichiro Hashimoto<sup>1</sup>,  
Masahiro Sasajima<sup>1</sup>, Kotaro Hosoya<sup>1</sup>, Yukari Dan<sup>1</sup>,  
Shintaro Miyasaka<sup>2</sup>, Susumu Yamaguchi<sup>3</sup>  
(<sup>1</sup>Hitachi High-Technologies, <sup>2</sup>HORIBA, Ltd., <sup>3</sup>Oxford Instruments)

**P\_I-07** 16:00 ~ 17:00

### SEM-EDS 元素マッピングを用いた電圧コントラスト画像の取得

The voltage contrast image using SEM-EDS element mapping

高橋 昭治<sup>1</sup>, 牧田 憲吾<sup>1</sup>, 田中 かをり<sup>2</sup>  
(<sup>1</sup>株式会社リコー, <sup>2</sup>カールツァイスマイクロコピー株式会社)

Shoji Takahashi<sup>1</sup>, Kengo Makita<sup>1</sup>, Kawori Tanaka<sup>2</sup>  
(<sup>1</sup>RICOH COMPANY,LTD., <sup>2</sup>Carl Zeiss Microscopy Co.,LTD)

**P\_I-08** 17:00 ~ 18:00

### ET-SE2検出器のプレフィルタリング特性を用いたSEM画像の取得

SEM image using pre-filtering characteristics on the ET-SE2 detector

高橋 昭治<sup>1</sup>, 牧田 憲吾<sup>1</sup>, 田中 かをり<sup>2</sup>  
(<sup>1</sup>株式会社リコー, <sup>2</sup>カールツァイスマイクロコピー株式会社)

Shoji Takahashi<sup>1</sup>, Kengo Makita<sup>1</sup>, Kawori Tanaka<sup>2</sup>  
(<sup>1</sup>RICOH COMPANY,LTD., <sup>2</sup>Carl Zeiss Microscopy Co.,LTD)

**P\_I-09** 16:00 ~ 17:00

### 高バイアス電圧印加法のFE-SEMへの適用

Implementation of high voltage decelerating system for FE-SEM

江見 恵子<sup>1</sup>, 岡田 聡<sup>1</sup>, 山澤 雄<sup>1</sup>, 森下 英郎<sup>2</sup>,  
揚村 寿英<sup>1</sup>, 伊藤 寛征<sup>1</sup>  
(<sup>1</sup>株式会社日立ハイテクノロジーズ, <sup>2</sup>株式会社日立製作所)

Keiko Emi<sup>1</sup>, Satoshi Okada<sup>1</sup>, Yu Yamazawa<sup>1</sup>,  
Hideo Morishita<sup>2</sup>, Toshihide Agemura<sup>1</sup>, Hiroyuki Ito<sup>1</sup>  
(<sup>1</sup>Hitachi High-Technologies Corporation, <sup>2</sup>Hitachi, Ltd.)

**P\_I-10** 17:00 ~ 18:00

### トナー表面の低加速電圧SEM観察

Imaging of toner surface using low-voltage scanning electron microscope

太田 啓介<sup>1</sup>  
(<sup>1</sup>リコー)

Keisuke Ohta<sup>1</sup>  
(<sup>1</sup>Ricoh)

**P\_I-11** 16:00 ~ 17:00

### FE-SEMによる非導電性試料の極低照射電圧観察

Non-conductive sample observation at ultra low landing voltage with FE-SEM

竹内 秀一<sup>1</sup>, 橋本 陽一朗<sup>1</sup>, 笹島 正弘<sup>1</sup>, 檀 紫<sup>1</sup>  
(<sup>1</sup>日立ハイテクノロジーズ)

Shuichi Takeuchi<sup>1</sup>, Yoichiro Hashimoto<sup>1</sup>,  
Masahiro Sasajima<sup>1</sup>, Yukari Dan<sup>1</sup>  
(<sup>1</sup>Hitachi High-Technologies)

**P\_I-12** 17:00 ~ 18:00

### 絶縁体の極低加速二次放出係数測定およびSEM像観察

Ultralow voltage SEEC measurement and SEM image for insulating material

備前 大輔<sup>1</sup>, 横須賀 俊之<sup>1</sup>, 津野 夏規<sup>1</sup>, 榎原 慎<sup>1</sup>,  
数見 秀之<sup>2</sup>  
(<sup>1</sup>日立製作所, <sup>2</sup>日立ハイテクノロジーズ)

Daisuke Bizen<sup>1</sup>, Toshiyuki Yokosuka<sup>1</sup>, Natsuki Tsuno<sup>1</sup>,  
Makoto Sakakibara<sup>1</sup>, Hideyuki Kazumi<sup>2</sup>  
(<sup>1</sup>Hitachi, Ltd., <sup>2</sup>Hitachi High-Technologies Corp.)

**P\_I-13** 16:00 ~ 17:00

### 冷却ステージとイオン液体を使用した含水試料の簡便で忠実なSEM観察

Easy true figure imaging of the wet sample using SEM with ionic liquid and cooling stage.

坂上 万里<sup>1</sup>, 塩野 正道<sup>1</sup>, 安島 雅彦<sup>2</sup>  
(<sup>1</sup>株式会社日立ハイテクノロジーズ アプリケーション開発部, <sup>2</sup>株式会社日立ハイテクノロジーズ 電子顕微鏡第二設計部)

Mari Sakaue<sup>1</sup>, Masamichi Shiono<sup>1</sup>, Masahiko Ajima<sup>2</sup>  
(<sup>1</sup>Hitachi High-Technologies Corporation, Application Development Dept., <sup>2</sup>Hitachi High-Technologies Corporation, Electron Microscope Systems Design 2nd Dept.)

**P\_I-14** 17:00 ~ 18:00

### グラファイト分散高分子のSEM観察用試料調製手法

Cross Sectional SEM Sample Preparation for Polymer Containing Graphite Particles

横江 大作<sup>1</sup>, 濱中 忠<sup>1</sup>, 加藤 丈晴<sup>1</sup>, 平山 司<sup>1</sup>  
(<sup>1</sup>非営利・一般財団法人 ファインセラミックスセンター)

Daisaku Yokoe<sup>1</sup>, Tadashi Hamanaka<sup>1</sup>, Takeharu Kato<sup>1</sup>,  
Tsukasa Hirayama<sup>1</sup>  
(<sup>1</sup>Japan Fine Ceramics Center)

**P\_I-15** 16:00 ~ 17:00

### 二次電子像を用いた磁区コントラスト観察条件の最適化

Optimization of magnetic domain contrast in a commercial SEM

小田 武秀<sup>1</sup>, 佐藤 馨<sup>1</sup>, 北原 保子<sup>1</sup>, 櫻田 委大<sup>1</sup>  
(<sup>1</sup>JFE テクノリサーチ株式会社)

Takehide Oda<sup>1</sup>, Kaoru Sato<sup>1</sup>, Yasuko Kitahara<sup>1</sup>,  
Tsuguo Sakurada<sup>1</sup>  
(<sup>1</sup>JFE Techno-Reserch Corporation)

**P\_I-16** 17:00 ~ 18:00

### FIB-SEMと和集合演算を用いた画像解析法による全固体リチウムイオン電池の複合電極材の内部のボイドの比較

Comparison of internal voids between composite electrodes of all-solid-state lithium-ion battery employing FIB-SEM and union operation image processing

山本 悠太<sup>1</sup>, 入山 恭寿<sup>2,3</sup>, 武藤 俊介<sup>1,4</sup>

(<sup>1</sup>名古屋大学 未来材料・システム研究所 超高压電子顕微鏡施設, <sup>2</sup>名古屋大学大学院 材料工学専攻, <sup>3</sup>JST-ALCA, <sup>4</sup>名古屋大学 未来材料・システム研究所 高度計測技術実践センター)

Yuta Yamamoto<sup>1</sup>, Yasutoshi Iriyama<sup>2,3</sup>, Shunsuke Muto<sup>1,4</sup>

(<sup>1</sup>High Voltage Electron Microscope Laboratory, Institute of Materials and Systems for Sustainability, Nagoya University, <sup>2</sup>Department of Materials, Physics, and Energy Engineering, Nagoya University, <sup>3</sup>JST-ALCA, <sup>4</sup>Advanced Measurement Technology Center, Institute of Materials and Systems for Sustainability, Nagoya University)

**P\_I-17** 16:00 ~ 17:00

### インレンズFE-SEMによる最先端材料解析への試み

The trial of analysis cutting-edge materials using in-lens FE-SEM

山澤 雄<sup>1</sup>, 岡田 聡<sup>1</sup>, 竹内 秀一<sup>1</sup>, 砂押 毅志<sup>1</sup>, 橋本 陽一郎<sup>1</sup>, 鍛示 和利<sup>1</sup>  
(<sup>1</sup> 株式会社日立ハイテクノロジーズ)

Yu Yamazawa<sup>1</sup>, Satoshi Okada<sup>1</sup>, Shuichi Takeuchi<sup>1</sup>, Takeshi Sunaoshi<sup>1</sup>, Yoichiro Hashimoto<sup>1</sup>, syuhunotomo

Kazutoshi Kaji<sup>1</sup>

(<sup>1</sup>Hitachi High-Technologies Corp.)

**P\_I-18** 17:00 ~ 18:00

### 検出器選択による高精度なFIB加工位置決定

Accurate FIB Positioning by Multiple Detectors

水野 謙覚<sup>1</sup>, 加藤 大樹<sup>1</sup>, 加賀谷 裕介<sup>1</sup>, 松島 英輝<sup>1</sup>, 鈴木 俊明<sup>1</sup>  
(<sup>1</sup> 日本電子株式会社)

Noriaki Mizuno<sup>1</sup>, Hiroki Kato<sup>1</sup>, Yusuke Kagaya<sup>1</sup>, Hideki Matsushima<sup>1</sup>, Toshiaki Suzuki<sup>1</sup>

(<sup>1</sup>JEOL Ltd.)

**P\_I-19** 16:00 ~ 17:00

### クロスセクションポリッシャ™による大面積加工

Large cross section area for the Cross Section Polisher

片岡 翔吾<sup>1</sup>, 小塚 心尋<sup>1</sup>, 香川 亨<sup>1</sup>, 轟 弘樹<sup>1</sup>, 朝比奈 俊輔<sup>2</sup>, 根岸 勉<sup>1</sup>, 松下 光英<sup>1</sup>

(<sup>1</sup> 日本電子株式会社 IB 事業ユニット, <sup>2</sup> 日本電子株式会社 SM 事業ユニット)

Shogo Kataoka<sup>1</sup>, Munehiro Kozuka<sup>1</sup>, Toru Kagawa<sup>1</sup>, Koji Todoroki<sup>1</sup>, Shunsuke Asahina<sup>2</sup>, Tsutomu Negishi<sup>1</sup>, Mitsuhide Matsushita<sup>1</sup>

(<sup>1</sup>IB Business Unit, JEOL Ltd., <sup>2</sup>SM Business Unit, JEOL Ltd.)

**P\_I-20** 17:00 ~ 18:00

### 金属ホウ化物による熱陰極の低仕事関数化に関する研究

Experimental studies on lowering work function cathode by metal boride

小林 敬也<sup>1</sup>, 鳥居 夏平<sup>1</sup>, 村田 英一<sup>1</sup>, 六田 英治<sup>1</sup>, 下山 宏<sup>1</sup>, 安田 洋<sup>2</sup>, 原口 岳士<sup>2</sup>

(<sup>1</sup> 名城大学 理工学部, <sup>2</sup> 株式会社PARAM)

Takaya Kobayashi<sup>1</sup>, Natsuhei Torii<sup>1</sup>, Hidekazu Murata<sup>1</sup>, Eiji Rokuta<sup>1</sup>, Hiroshi Shimoyama<sup>1</sup>, Hiroshi Yasuda<sup>2</sup>, Takeshi Haraguchi<sup>2</sup>

(<sup>1</sup>Meijo University Faculty of Science and Technology, <sup>2</sup>PARAM Corporation)

**P\_I-21** 16:00 ~ 17:00

### 電界レンズによる球面収差補正器の基本特性

Optical properties of an electrostatic correcting system

小國 宏樹<sup>1</sup>, 児玉 哲司<sup>1</sup>, 川崎 忠寛<sup>2</sup>, 生田 孝<sup>3</sup>  
(<sup>1</sup> 名城大学, <sup>2</sup> ファインセラミックスセンター, <sup>3</sup> 大阪電気通信大学)

Hiroki Oguni<sup>1</sup>, Tetsuji Kodama<sup>1</sup>, Tadahiro Kawasaki<sup>2</sup>, Takashi Ikuta<sup>3</sup>

(<sup>1</sup>Meijo University, <sup>2</sup>Japan Fine Ceramics Center, <sup>3</sup>Osaka Electro-Communication University)

**P\_I-22** 17:00 ~ 18:00

### STEM-HAADF/EF同時取得像でのデバイス測長精度向上

Development of measurement accuracy of device dimensions with simultaneously acquired STEM-HAADF/EF images

田中 洋毅<sup>1</sup>, 宍戸 将之<sup>1</sup>, 藤島 達也<sup>1</sup>, 伊藤 俊彦<sup>1</sup>, 竹野 史郎<sup>1</sup>

(<sup>1</sup> 株式会社東芝)

Hiroki Tanaka<sup>1</sup>, Masayuki Shishido<sup>1</sup>, Tatsuya Fujishima<sup>1</sup>, Toshihiko Ito<sup>1</sup>, Shiro Takeno<sup>1</sup>

(<sup>1</sup>Toshiba Corporation)

**P\_I-23** 16:00 ~ 17:00

**S/TEM-APT一貫解析における原子レベル元素分布分析精度・再現性向上の試み**

Feasibility study of S/TEM-APT sequential procedure for improving quantification and repeatability of APT

太期 由貴子<sup>1</sup>, 田中 洋毅<sup>2</sup>, 関 春海<sup>2</sup>, 志摩 会実佳<sup>1</sup>, 間山 憲仁<sup>1</sup>, 佐々木 智一<sup>1</sup>, 福嶋 豊<sup>1</sup>  
(<sup>1</sup> 東芝ナノアナリシス株式会社, <sup>2</sup> 株式会社東芝)

**Yukiko Daigo**<sup>1</sup>, Hiroki Tanaka<sup>2</sup>, Harumi Seki<sup>2</sup>, Amika Shima<sup>1</sup>, Norihito Mayama<sup>1</sup>, Tomokazu Sasaki<sup>1</sup>, Yutaka Fukushima<sup>1</sup>  
(<sup>1</sup>Toshiba Nanoanalysis Corporation, <sup>2</sup>Toshiba Corporation)

**P\_I-24** 17:00 ~ 18:00

**STEM-EBACシステムの開発と応用**

Development of Electron Beam Absorbed Current imaging system using Scanning Transmission Electron Microscope and its application

鈴木 裕也<sup>1</sup>, 松本 弘昭<sup>1</sup>, 田中 弘之<sup>1</sup>, 影山 晃<sup>1</sup>, 長久保 康平<sup>1</sup>, 中村 邦康<sup>1</sup>, 水野 貴之<sup>1</sup>  
(<sup>1</sup> 株式会社日立ハイテクノロジーズ)

**YuYa Suzuki**<sup>1</sup>, Hiroaki Matsumoto<sup>1</sup>, Hiroyuki Tanaka<sup>1</sup>, Akira Kageyama<sup>1</sup>, Yasuhira Nagakubo<sup>1</sup>, Kuniyasu Nakamura<sup>1</sup>, Takayuki Mizuno<sup>1</sup>  
(<sup>1</sup>Hitachi High-Technologies Corporation)

**P\_I-25** 16:00 ~ 17:00

**ADF-STEM像コントラストの検出角依存性**

Dependence of Detection Angle on ADF-STEM image contrast

治田 充貴<sup>1</sup>, 富崎 友里子<sup>1</sup>, 根本 隆<sup>1</sup>, 倉田 博基<sup>1</sup>  
(<sup>1</sup> 京都大学)

**Mitsutaka Haruta**<sup>1</sup>, Yuriko Tomisaki<sup>1</sup>, Takashi Nemoto<sup>1</sup>, Hiroki Kurata<sup>1</sup>  
(<sup>1</sup>Kyoto University)

**P\_I-26** 17:00 ~ 18:00

**球面収差補正STEMを用いたネオジム磁石の構造解析**

Structural analysis of Nd-Fe-B permanent magnets using aberration-corrected STEM

白井 学<sup>1</sup>, 渡邊 慶太郎<sup>1</sup>, 松本 弘昭<sup>1</sup>, 稲田 博美<sup>1</sup>, 四辻 貴文<sup>1</sup>  
(<sup>1</sup> 株式会社日立ハイテクノロジーズ)

**Manabu Shirai**<sup>1</sup>, Keitaro Watanabe<sup>1</sup>, Hiroaki Matsumoto<sup>1</sup>, Hiromi Inada<sup>1</sup>, Takafumi Yotsuji<sup>1</sup>  
(<sup>1</sup>Hitachi High-Technologies Corporation)

**P\_I-27** 16:00 ~ 17:00

**スルーフォーカスHAADF-STEM法によるCa- $\alpha$ -SiAlON中Eu原子の3次元分布解析**

Three-dimensional analysis of Eu atoms in Ca- $\alpha$ -SiAlON via through-focus HAADF-STEM

齊藤 元貴<sup>1</sup>, 八巻 風太<sup>1</sup>, 國貞 雄治<sup>1</sup>, 坂口 紀史<sup>1</sup>  
(<sup>1</sup> 北海道大学大学院工学研究院)

**Genki Saito**<sup>1</sup>, Huuta Yamaki<sup>1</sup>, Yuji Kunisada<sup>1</sup>, Norihito Sakaguchi<sup>1</sup>  
(<sup>1</sup>Hokkaido University, Faculty of Engineering)

**P\_I-28** 17:00 ~ 18:00

**中国レス中の土壌化起源磁性ナノ粒子の電子顕微鏡観察**

TEM observations of pedogenic nanoparticles causing magnetic enhancement in Chinese loess deposits

松本 恵<sup>1</sup>, 瀬戸 雄介<sup>1</sup>, 佐野 拓郎<sup>1</sup>, 兵頭 政幸<sup>1</sup>, 三宅 亮<sup>2</sup>  
(<sup>1</sup> 神戸大学, <sup>2</sup> 京都大学)

**Megumi Matsumoto**<sup>1</sup>, Yusuke Seto<sup>1</sup>, Takuroh Sano<sup>1</sup>, Masayuki Hyodo<sup>1</sup>, Akira Miyake<sup>2</sup>  
(<sup>1</sup>Kobe University, <sup>2</sup>Kyoto University)

**P\_I-29** 16:00 ~ 17:00

**マルチエミッタ評価装置によるボルケーノ構造スピント型エミッタの観察及び電流測定**

Observation and measurement of emission current from volcano-structured Spindt-type field emitter arrays using evaluation instrument for multi-emitters

田口 広大<sup>1</sup>, 村田 英一<sup>1</sup>, 六田 英治<sup>1</sup>, 下山 宏<sup>1</sup>, 長尾 昌善<sup>2</sup>, 村上 勝久<sup>2</sup>  
(<sup>1</sup> 名城大学, <sup>2</sup> 産総研)

**Kodai Taguchi**<sup>1</sup>, Hidekazu Murata<sup>1</sup>, Eiji Rokuta<sup>1</sup>, Hiroshi Shimoyama<sup>1</sup>, Masayoshi Nagao<sup>2</sup>, Katsuhisa Murakami<sup>2</sup>  
(<sup>1</sup>Meijo University, <sup>2</sup>AIST)

**P\_I-30** 17:00 ~ 18:00

**Temperature Measurement in a TEM using Electron Diffraction of Amorphous Films**

**Misa Hayashida**<sup>1</sup>, Kai Cui<sup>1</sup>, Marek Malac<sup>1,2</sup>  
(<sup>1</sup>National Institute for Nanotechnology, <sup>2</sup>Department of Physics, University of Alberta)

**P\_I-31** 16:00 ~ 17:00

**120 kV TEMを用いた液中観察と画像改善技法の検討**

Study of observation in liquid using 120 kV TEM and its image quality improvement method

和山 真里奈<sup>1</sup>, 大南 祐介<sup>1</sup>, 矢口 紀恵<sup>1</sup>, 許斐 麻美<sup>1</sup>  
(<sup>1</sup> 株式会社日立ハイテクノロジーズ)

**Marina Wayama**<sup>1</sup>, Yusuke Ominami<sup>1</sup>, Toshie Yaguchi<sup>1</sup>, Mami Konomi<sup>1</sup>  
(<sup>1</sup>Hitachi High-Technologies Corporation.)

**P\_I-32** 17:00 ~ 18:00  
**ナノキュベットを用いたTEM液中観察**  
Nanocuvette : A Functional Ultrathin Liquid Container for TEM

Carl Wadell<sup>1</sup>, 稲垣 諭<sup>1</sup>, 史 蹟<sup>1</sup>, 中村 吉男<sup>1</sup>,  
三宮 工<sup>1</sup>  
(<sup>1</sup>東京工業大学)

Carl Wadell<sup>1</sup>, Satoshi Inagaki<sup>1</sup>, Ji Shi<sup>1</sup>,  
Yoshio Nakamura<sup>1</sup>, **Takumi Sannomiya**<sup>1</sup>  
(<sup>1</sup>Tokyo Institute of Technology)

**P\_I-33** 16:00 ~ 17:00  
**高精細自己相関関数による電子顕微鏡のスポットオートフォーカス及びオートスティグマ**  
Spot auto-focus and spot auto-stigma of electron microscope with the high definition auto-correlation function

天野 純平<sup>1</sup>, 坂本 祥平<sup>1</sup>, 手塚 聖貴<sup>1</sup>, 馬場 美鈴<sup>2</sup>,  
久保 貴<sup>3</sup>, 砂子沢 成人<sup>3</sup>, 馬場 則男<sup>1</sup>  
(<sup>1</sup>工学院大学院 情報学専攻, <sup>2</sup>工学院大学 総合研究所, <sup>3</sup>日立ハイテクノロジーズ)

**Jumpei Amano**<sup>1</sup>, Shohei Sakamoto<sup>1</sup>, Shoki Tezuka<sup>1</sup>,  
Misuzu Baba<sup>2</sup>, Takashi Kubo<sup>3</sup>, Shigeto Isakozawa<sup>3</sup>,  
Norio Baba<sup>1</sup>  
(<sup>1</sup>Major of Informatics, Graduate School, Kogakuin University, <sup>2</sup>Research Institute for Science and Technology, Kogakuin University, <sup>3</sup>NakaDivision, Hitachi High-Technologies Corporation)

**P\_I-34** 17:00 ~ 18:00  
**JXA-8530FPlusにおける微量分析の感度向上**  
Improvement of microanalysis sensitivity for JXA-8530FPlus

土門 武<sup>1</sup>, 森 憲久<sup>1</sup>, 高倉 優<sup>1</sup>, 加藤 尚樹<sup>1</sup>,  
塚本 一徳<sup>1</sup>, 能登谷 智史<sup>1</sup>  
(<sup>1</sup>日本電子株式会社 SA 事業ユニット)

**Takeru Doman**<sup>1</sup>, Norihisa Mori<sup>1</sup>, Masaru Takakura<sup>1</sup>,  
Naoki Kato<sup>1</sup>, Kazunori Tsukamoto<sup>1</sup>, Satoshi Notoya<sup>1</sup>  
(<sup>1</sup>JEOL Ltd. SA Business Unit)

**P\_I-35** 16:00 ~ 17:00  
**EPMAを用いた高速クラスター分析システムの開発**  
Development of high-speed cluster analysis system by EPMA

加藤 尚樹<sup>1</sup>, 森 憲久<sup>1</sup>, 森田 正樹<sup>1</sup>  
(<sup>1</sup>日本電子株式会社)

**Naoki Kato**<sup>1</sup>, Norihisa Mori<sup>1</sup>, Masaki Morita<sup>1</sup>  
(<sup>1</sup>JEOL Ltd.)

**P\_I-36** 17:00 ~ 18:00  
**大面積カソードルミネッセンスイメージング装置の開発**  
Development of Large Area Cathodoluminescence Imaging System

樋口 誠司<sup>1</sup>, 秋山 久<sup>1</sup>, 堀川 祥一<sup>1</sup>, 館野 宏志<sup>1</sup>  
(<sup>1</sup>堀場製作所)

**Seiji Higuchi**<sup>1</sup>, Hisashi Akiyama<sup>1</sup>, Shoichi Horikawa<sup>1</sup>,  
Hiroshi Tateno<sup>1</sup>  
(<sup>1</sup>HORIBA, Ltd.)

**P\_I-37** 16:00 ~ 17:00  
**固体酸化物形燃料電池その場観察のための三端子試料ホルダーの開発**  
Development of a specimen holder with three electrodes for in-situ observation of solid oxide fuel cells

廣嶋 秀斗<sup>1</sup>, 石田 高史<sup>2,3</sup>, 丹司 敬義<sup>2,3</sup>, 富田 正弘<sup>4</sup>,  
樋口 公孝<sup>2</sup>, 齋藤 晃<sup>2</sup>  
(<sup>1</sup>名古屋大学, <sup>2</sup>名古屋大学未来研, <sup>3</sup>ナノ材料科学研究拠点, <sup>4</sup>真空デバイス)

**Hideto Hiroshima**<sup>1</sup>, Takahumi Ishida<sup>2,3</sup>,  
Takayoshi Tanji<sup>2,3</sup>, Masahiro Tomita<sup>4</sup>,  
Kimitaka Higuchi<sup>2</sup>, Koh Saitoh<sup>2</sup>  
(<sup>1</sup>Nagoya University, <sup>2</sup>Institute of Materials and Systems for Sustainability, Nagoya University, <sup>3</sup>GREEN, <sup>4</sup>Vacuum Device Inc.)

**P\_I-38** 17:00 ~ 18:00  
**ガス導入試料ホルダによる試料近傍ガス圧力分布の測定**  
Gas pressure measurement at the specimen area using a local pressure measurement holder

長久保 康平<sup>1</sup>, 矢口 紀恵<sup>1</sup>, 渡部 明<sup>1</sup>,  
和久井 亜希子<sup>1</sup>, 上野 武夫<sup>2</sup>  
(<sup>1</sup>株式会社 日立ハイテクノロジーズ, <sup>2</sup>山梨大学)

**Yasuhira Nagakubo**<sup>1</sup>, Toshie Yaguchi<sup>1</sup>,  
Akira Watabe<sup>1</sup>, Akiko Wakui<sup>1</sup>, Takeo Kamino<sup>2</sup>  
(<sup>1</sup>Hitachi High-Technologies Corporation, <sup>2</sup>University of Yamanashi)

**P\_I-39** 16:00 ~ 17:00  
**フレーム間の位置ずれ補正による原子カラムマップの鮮鋭化**  
Sharpening of atom column map by offset correction between frames.

森田 正樹<sup>1</sup>, 安原 聡<sup>1</sup>, 大西 市朗<sup>1</sup>  
(<sup>1</sup>日本電子(株))

**Masaki Morita**<sup>1</sup>, Akira Yasuhara<sup>1</sup>, Ichiro Ohnishi<sup>1</sup>  
(<sup>1</sup>JEOL Ltd.)



**P\_I-40** 17:00 ~ 18:00

### インレンズFE-SEMとEELS分光器による酸化アルミニウムの結合状態分析

The trial of Alumina EELS analysis using in-lens FE-SEM

砂押 毅志<sup>1</sup>, 白井 学<sup>1</sup>, 松本 弘昭<sup>1</sup>, 岡田 聡<sup>1</sup>,  
山澤 雄<sup>1</sup>, ヤセンジャン ゴリフマ<sup>1</sup>, 鍛示 和利<sup>1</sup>  
(<sup>1</sup> 株式会社日立ハイテクノロジーズ)

**Takeshi Sunaoshi**<sup>1</sup>, Manabu Shirai<sup>1</sup>,  
Hiroaki Matsumoto<sup>1</sup>, Satoshi Okada<sup>1</sup>, Yu Yamazawa<sup>1</sup>,  
Zulihuma Yasenjiang<sup>1</sup>, Kazutoshi Kaji<sup>1</sup>  
(<sup>1</sup>Hitachi High-Technologies Corporation)

**P\_I-41** 16:00 ~ 17:00

### 位置分解型EELS法と画像処理を用いた高精度・高分解能スペクトル計測

High accuracy and high-resolution spectrum measurement using SR-EELS and image processing

佐藤 岳志<sup>1</sup>, 谷垣 俊明<sup>2</sup>, 相澤 由花<sup>1</sup>, 佐藤 高広<sup>1</sup>,  
三浦 勝哉<sup>3</sup>, 早川 純<sup>2</sup>, 松本 弘昭<sup>1</sup>, 谷口 佳史<sup>1</sup>  
(<sup>1</sup> 日立ハイテクノロジーズ, <sup>2</sup> 日立製作所 R&D CER, <sup>3</sup> 日立製作所 R&D CTI)

**Takeshi Sato**<sup>1</sup>, Toshiaki Tanigaki<sup>2</sup>, Yuka Aizawa<sup>1</sup>,  
Takahiro Sato<sup>1</sup>, Katsuya Miura<sup>3</sup>, Jun Hayakawa<sup>2</sup>,  
Hiroaki Matsumoto<sup>1</sup>, Yoshifumi Taniguchi<sup>1</sup>  
(<sup>1</sup>Hitachi High-Technologies Corp., <sup>2</sup>Hitachi, Ltd.,  
<sup>3</sup>Hitachi, Ltd.)

**P\_I-42** 17:00 ~ 18:00

### サイト選択的EELS分析による梯子型超伝導体のホール分布評価の試み

Hole Distribution in Spin-Ladder Superconducting Materials by Site-Selective EELS

桑野 紘希<sup>1</sup>, 大塚 真弘<sup>1</sup>, 武藤 俊介<sup>2</sup>, Ognjen Milat<sup>3</sup>  
(<sup>1</sup> 名古屋大学 工学研究科, <sup>2</sup> 名古屋大学 未来材料・システム研究所, <sup>3</sup> クロアチア物理学研究所)

**Hiroki Kumeno**<sup>1</sup>, Masahiro Ohtsuka<sup>1</sup>,  
Shunsuke Muto<sup>2</sup>, Ognjen Milat<sup>3</sup>  
(<sup>1</sup>Graduate School of Engineering, Nagoya University,  
<sup>2</sup>Institute of Materials & Systems for Sustainability,  
Nagoya University, <sup>3</sup>Institute of Physics, Croatia)

**P\_I-43** 16:00 ~ 17:00

### ζ-factor法を用いた鉱物のTEM-EDS定量分析

Quantitative TEM-EDS analysis of mineral using the ζ-factor method

三宅 亮<sup>1</sup>, 伊神 洋平<sup>1</sup>, 渡辺 万三志<sup>2</sup>  
(<sup>1</sup> 京都大学, <sup>2</sup> Lehigh University)

**Akira Miyake**<sup>1</sup>, Yohei Igami<sup>1</sup>, Masashi Watanabe<sup>2</sup>  
(<sup>1</sup>Kyoto University, <sup>2</sup>Lehigh University)

**P\_I-44** 17:00 ~ 18:00

### 低加速TEM-XEDSによるシリコン中の微量リンの検出

Detection of Phosphorus doped in Silicon using Low-kV TEM-XEDS

工藤 昌輝<sup>1</sup>, 鳥山 誉亮<sup>1</sup>, 松村 晶<sup>1</sup>  
(<sup>1</sup> 九州大学 超顕微解析研究センター)

**Masaki Kudo**<sup>1</sup>, Takaaki Toriyama<sup>1</sup>, Syo Matsumura<sup>1</sup>  
(<sup>1</sup>The Ultramicroscopy Research Center, Kyushu University)

**P\_I-45** 16:00 ~ 17:00

### 統計的ALCHEMI法を用いたK<sub>1-x</sub>Na<sub>x</sub>NbO<sub>3</sub>系無鉛圧電材料の添加元素置換サイト解析

Quantitative analysis of dopant occupation sites in K<sub>1-x</sub>Na<sub>x</sub>NbO<sub>3</sub>-based lead-free piezoelectric materials by statistical ALCHEMI method

大塚 真弘<sup>1</sup>, 山田 嗣人<sup>2</sup>, 大林 和重<sup>2</sup>, 武藤 俊介<sup>3</sup>  
(<sup>1</sup> 名古屋大学 工学研究科, <sup>2</sup> 日本特殊陶業株式会社,  
<sup>3</sup> 名古屋大学 未来材料・システム研究所)

**Masahiro Ohtsuka**<sup>1</sup>, Hideto Yamada<sup>2</sup>,  
Kazushige Ohbayashi<sup>2</sup>, Shunsuke Muto<sup>3</sup>  
(<sup>1</sup>Graduate School of Engineering, Nagoya University,  
<sup>2</sup>NGK Spark Plug Co., Ltd., <sup>3</sup>Institute of Materials and Systems for Sustainability, Nagoya University)

**P\_I-46** 17:00 ~ 18:00

### 原子面分解能電子磁気円二色性を用いた定量的ナノ磁性測定を試み

Quantitative magnetic measurements with atomic-plane resolution EMCD

成瀬 太介<sup>1</sup>, 武藤 俊介<sup>2</sup>, 大塚 真弘<sup>1</sup>, Ján Ruzs<sup>3</sup>,  
Jakob Spiegelberg<sup>3</sup>  
(<sup>1</sup> 名古屋大学 工学研究科, <sup>2</sup> 名古屋大学 未来材料・システム研究所, <sup>3</sup> ウプサラ大学 物理・天文学科)

**Daisuke Naruse**<sup>1</sup>, Shunsuke Muto<sup>2</sup>,  
Masahiro Ohtsuka<sup>1</sup>, Ján Ruzs<sup>3</sup>, Jakob Spiegelberg<sup>3</sup>  
(<sup>1</sup>Graduate School of Engineering, Nagoya University,  
<sup>2</sup>Institute of Materials and Systems for Sustainability, Nagoya University, <sup>3</sup>Department of Physics and Astronomy, Uppsala University)

**P\_I-47** 16:00 ~ 17:00

### **OIST – ホログラフィー型低加速電子顕微鏡の研究開発2: イメージング**

OIST R&D for low energy diffraction-holography microscope toward non-destructive single biomolecule imaging II: Imaging

安谷屋 秀仁<sup>1</sup>, Martin Cheng<sup>1</sup>, 山下 真夫<sup>1</sup>,  
白澤 克年<sup>1</sup>, 南 純一郎<sup>1</sup>, 藤田 純<sup>1</sup>, Cathal Cassidy<sup>1</sup>,  
武部 英樹<sup>1</sup>, 新竹 積<sup>1</sup>  
(<sup>1</sup> 沖縄科学技術大学院大学)

Hidehito Adaniya<sup>1</sup>, Martin Cheng<sup>1</sup>,  
Masao Yamashita<sup>1</sup>, Katsutoshi Shirasawa<sup>1</sup>,  
Jyunichiro Minam<sup>1</sup>, Jyun Fujita<sup>1</sup>, Cathal Cassidy<sup>1</sup>,  
Hideki Takebe<sup>1</sup>, Tsumoru Shintake<sup>1</sup>  
(<sup>1</sup>Okinawa Institute of Science and Technology University)

**P\_I-48** 17:00 ~ 18:00

### **反復最適化手法による定量的な波動場再構成の試み**

Quantitative Wave Field Reconstruction by Iterative Optimization Method

田村 孝弘<sup>1</sup>, 木村 吉秀<sup>1</sup>, 高井 義造<sup>1</sup>  
(<sup>1</sup> 大阪大学大学院 工学研究科 生命先端工学専攻)

Takahiro Tamura<sup>1</sup>, Yoshihide Kimura<sup>1</sup>, Yoshizo Takai<sup>1</sup>  
(<sup>1</sup>Department of Material and Life Science, Graduate School of Engineering, Osaka University)

**P\_I-49** 16:00 ~ 17:00

### **コントラスト最大化STEMの試み：シミュレーションとデバイス作製**

Attempt for Contrast-maximized STEM: Simulation and device fabrication

富田 雅人<sup>1</sup>, 永谷 幸則<sup>1</sup>, 新井 善博<sup>2</sup>, 村田 和義<sup>1</sup>  
(<sup>1</sup> 自然科学研究機構 生理学研究部, <sup>2</sup> テラベース株式会社)

Masato Tomita<sup>1</sup>, Yukinori Nagatani<sup>1</sup>, Yoshihiro Arai<sup>2</sup>,  
Kazuyoshi Murata<sup>1</sup>  
(<sup>1</sup>National Institute for Physiological Sciences, <sup>2</sup>Tera-base Inc.)

**P\_I-50** 17:00 ~ 18:00

### **ダンマン渦回折格子をもちいた軌道角運動量の測定**

Measurement of orbital angular momentum using dammann vortex grating

野口 雄紀<sup>1</sup>, 齋藤 晃<sup>2</sup>, 内田 正哉<sup>3</sup>  
(<sup>1</sup> 名古屋大学結晶材料工学専攻, <sup>2</sup> 名古屋大学未来材料システム研究所, <sup>3</sup> 埼玉工業大学先端科学研究所)

Yuuki Noguchi<sup>1</sup>, Koh Saitoh<sup>2</sup>, Masaya Uchida<sup>3</sup>  
(<sup>1</sup>Department of Crystalline Material Science, Nagoya University, <sup>2</sup>IMaSS, Nagoya University, <sup>3</sup>ASRL, Saitama Institute of Technology)

**P\_I-51** 16:00 ~ 17:00

### **水素吸着したPt電極に生じる電位勾配の定量解析**

Potential gradient on Pt induced by hydrogen adsorption

高橋 由夫<sup>1</sup>, 宇佐川 利幸<sup>1</sup>, 葛西 裕人<sup>1</sup>  
(<sup>1</sup> 株式会社日立製作所 研究開発グループ)

Yoshio Takahashi<sup>1</sup>, Toshiyuki Usagawa<sup>1</sup>,  
Hirotoshi Kasai<sup>1</sup>  
(<sup>1</sup>Hitachi, Ltd., R&D Group)

**P\_I-52** 17:00 ~ 18:00

### **電子顕微鏡画像処理プラットフォームEos/Zephyr/VEM/WITs/pioneの進展と将来**

Progress and future of an image analysis platform of electron micrographs, Eos/Zephyr/VEM/WITs/pione

安永 卓生<sup>1,2</sup>, 飛松 亜美<sup>1</sup>, 平田 健悟<sup>1</sup>, 岩崎 彩夏<sup>1</sup>,  
塚本 崇文<sup>1</sup>  
(<sup>1</sup>九州工業大学, <sup>2</sup>JST, SENTAN)

Takuo Yasunaga<sup>1,2</sup>, Ami Tobimatsu<sup>1</sup>, Kengo Hirata<sup>1</sup>,  
Ayaka Iwasaki<sup>1</sup>, Takafumi Tsukamoto<sup>1</sup>  
(<sup>1</sup>Kyushu Institute of Technology, <sup>2</sup>JST, SENTAN)

**P\_I-53** 16:00 ~ 17:00

### **機械学習による電子顕微鏡像のセグメンテーション及び輪郭線抽出手法の提案**

Segmentation and contour extraction from electron microscope images with machine learning

前田 元<sup>1</sup>, 手塚 聖貴<sup>1</sup>, 坂本 祥平<sup>1</sup>, 馬場 美鈴<sup>2</sup>,  
馬場 則男<sup>1</sup>  
(<sup>1</sup> 工学院大学大学院 情報学専攻, <sup>2</sup> 工学院大学 総合研究所)

Gen Maeda<sup>1</sup>, Shoki Tezuka<sup>1</sup>, Shohei Sakamoto<sup>1</sup>,  
Misuzu Baba<sup>2</sup>, Norio Baba<sup>1</sup>  
(<sup>1</sup>Major of Informatics, Graduate School, Kogakuin University, <sup>2</sup>Research Institute for Science and Technology, Kogakuin University)

**P\_I-54** 17:00 ~ 18:00

### **汎用マイクロCTの材料開発への適用とその可能性(2)**

Application and its potential to the material development of general-purpose micro-CT (2)

青島 利裕<sup>1</sup>, 菊池 亮太<sup>1</sup>  
(<sup>1</sup>TOTO 株式会社)

Toshihiro Aoshima<sup>1</sup>, Ryota Kikuchi<sup>1</sup>  
(<sup>1</sup>TOTO LTD.)

**P\_I-55** 16:00 ~ 17:00

### SBF-SEM法とCL検出による蛍光体の三次元分散状態の可視化

3D visualization of dispersion state for phosphor by SBF-SEM and CL detection

森川 晃成<sup>1</sup>, 嶋守 智子<sup>1</sup>, 細谷 幸太郎<sup>1</sup>, 小柏 剛<sup>1</sup>  
(<sup>1</sup>株式会社日立ハイテクノロジーズ)

Akinari Morikawa<sup>1</sup>, Tomoko Shimamori<sup>1</sup>,  
Kotaro Hosoya<sup>1</sup>, Takeshi Ogashiwa<sup>1</sup>  
(<sup>1</sup>Hitachi High-Technologies Corporation)

**P\_I-56** 17:00 ~ 18:00

### STEMトモグラフィーによる規則合金ドメインの3次元観察

Three-dimensional observation of domain structures in ordering alloys using scanning transmission electron microscopic tomography

坂井 裕貴<sup>1</sup>, 齊藤 光<sup>1</sup>, 波多 聰<sup>1</sup>  
(<sup>1</sup>九州大学)

Hiroataka Sakai<sup>1</sup>, Hikaru Saito<sup>1</sup>, Satoshi Hata<sup>1</sup>  
(<sup>1</sup>Kyushu University)

**P\_I-57** 16:00 ~ 17:00

### EDSトモグラフィによるコアシェル型量子ドット粒子の3次元組成分析

3D composition analysis of Core-Shel Quantum Dot by EDS Tomography

宮崎 吉宣<sup>1</sup>, 根本 善弘<sup>1</sup>, 竹口 雅樹<sup>1</sup>, イ ジョンホ<sup>2</sup>,  
パク ギョンス<sup>2</sup>  
(<sup>1</sup>物質材料研究機構, <sup>2</sup>サムスン電子)

Yoshinobu Miyazaki<sup>1</sup>, Yoshihiro Nemoto<sup>1</sup>,  
Masaki Takeguchi<sup>1</sup>, Junho Lee<sup>2</sup>, Gyeong Su Park<sup>2</sup>  
(<sup>1</sup>National Institute for Materials Science, <sup>2</sup>Samsung Electronics)

**P\_I-58** 17:00 ~ 18:00

### Diffraction imageデータへの最小二乗スペクトル分解の適用

An alternating least square multivariate curve resolution for Diffraction image data

上杉 文彦<sup>1</sup>, 越谷 翔悟<sup>1</sup>, 三石 和貴<sup>1</sup>, 木本 浩司<sup>1</sup>  
(<sup>1</sup>国立研究開発法人物質・材料研究機構)

fumihio uesugi<sup>1</sup>, shogo koshiya<sup>1</sup>,  
kazutaka mitsuishi<sup>1</sup>, koji kimoto<sup>1</sup>  
(<sup>1</sup>National institute of materials science)

**P\_I-59** 16:00 ~ 17:00

### フェムト秒電子線パルスによる超高速電子線回折装置の開発

Ultrafast Electron Diffraction using Femtosecond Electron Pulses

浅川 稜<sup>1</sup>, 楊 金峰<sup>1</sup>, 谷村 克己<sup>1</sup>, 吉田 陽一<sup>1</sup>  
(<sup>1</sup>大阪大学産業科学研究所)

Ryo Asakawa<sup>1</sup>, Jinfeng Yang<sup>1</sup>, Katsumi Tanimura<sup>1</sup>,  
Yoichi Yoshida<sup>1</sup>  
(<sup>1</sup>The Institute of Scientific and Industrial Research, Osaka University)

**P\_I-60** 17:00 ~ 18:00

### 電子らせん波をもちいた結晶のキラリティー判別の検証

CBED studies of the chirality determination of crystals using electron vortex beams

中山 翔太<sup>1</sup>, 齋藤 晃<sup>1,2</sup>  
(<sup>1</sup>名古屋大学工学研究科, <sup>2</sup>名古屋大学未来材料システム研究所)

Shota Nakayama<sup>1</sup>, Koh Saitoh<sup>1,2</sup>  
(<sup>1</sup>Graduate school of Engineering, Nagoya University, <sup>2</sup>Institute of Materials and Systems for Sustainability, Nagoya University)

**P\_M-01** 16:00 ~ 17:00

### トリプルビーム<sup>®</sup>機能を用いた金属材料の低損傷TEM試料作製

High quality TEM lamella preparation of metal using Triple Beam<sup>®</sup> system

佐藤 高広<sup>1</sup>, 伊井 由花<sup>1</sup>, 松本 弘昭<sup>1</sup>, 西川 翔太<sup>2</sup>,  
中谷 郁子<sup>2</sup>, 清原 正寛<sup>2</sup>  
(<sup>1</sup>株式会社日立ハイテクノロジーズ, <sup>2</sup>株式会社日立ハイテクサイエンス, <sup>3</sup>京都工芸繊維大学)

Takahiro Sato<sup>1</sup>, Yuka Ii<sup>1</sup>, Hiroaki Matsumoto<sup>1</sup>,  
Shota Torikawa<sup>2</sup>, Ikuko Nakatani<sup>2</sup>, Masahiro Kiyohara<sup>2</sup>  
(<sup>1</sup>Hitachi High-Technologies Corporation, <sup>2</sup>Hitachi High-Tech Science Corporation, <sup>3</sup>Kyoto Institute of Technology)

**P\_M-02** 17:00 ~ 18:00

### AlCoCrFeNi<sub>2.1</sub>共晶型ハイエントロピー合金の凝固組織

Solidification microstructure of AlCoCrFeNi<sub>2.1</sub> eutectic high entropy alloys (EHEAs)

永瀬 丈嗣<sup>1</sup>, 武村 守<sup>2</sup>, 松室 光昭<sup>2</sup>, 丸山 徹<sup>3</sup>  
(<sup>1</sup>大阪大学, <sup>2</sup>大阪府立産業技術総合研究所, <sup>3</sup>関西大学)

Takeshi Nagase<sup>1</sup>, Mamoru Takemura<sup>2</sup>,  
Mitsuaki Matsumuro<sup>2</sup>, Toru Maruyama<sup>3</sup>  
(<sup>1</sup>Osaka University, <sup>2</sup>Technology Research Institute of Osaka Prefecture, <sup>3</sup>Kansai University)



**P\_M-03** 16:00 ~ 17:00

### GdBa<sub>2</sub>Cu<sub>3</sub>O<sub>7-x</sub>超電導線材へのナノAgペーストを用いた低抵抗接合領域の微構造観察

Microstructural Characterization of Low Resistance Joints Using Pastes Including Nanometer Sized Ag Particles for GdBa<sub>2</sub>Cu<sub>3</sub>O<sub>7-x</sub> Coated Conductors

加藤 智広<sup>1</sup>, 町 敬人<sup>2</sup>, 横江 大作<sup>1</sup>, 吉田 竜視<sup>1</sup>,  
加藤 丈晴<sup>1</sup>, 平山 司<sup>1</sup>, 和泉 輝郎<sup>2</sup>, 塩原 融<sup>2</sup>  
(<sup>1</sup>ファインセラミックスセンター, <sup>2</sup>産業技術総合研究所)

Tomohiro kato<sup>1</sup>, Takato Machi<sup>2</sup>, Daisaku Yokoe<sup>1</sup>,  
Ryuji Yoshida<sup>1</sup>, Takeharu Kato<sup>1</sup>, Tsukasa Hirayama<sup>1</sup>,  
Teruo Izumi<sup>2</sup>, Yoh Siohara<sup>2</sup>  
(<sup>1</sup>Japan Fine Ceramics Center, <sup>2</sup>Advanced Industrial Science and Technology)

**P\_M-04** 17:00 ~ 18:00

### イオン液体中での電子線照射によるCuワイヤーの作製

Fabrication of Cu wires in an ionic liquid by using electron beam irradiation

河野 航至<sup>1</sup>, 椎井 大翔<sup>1</sup>, 下条 雅幸<sup>1</sup>  
(<sup>1</sup>芝浦工業大学)

Koji Kawaano<sup>1</sup>, Taisho Shii<sup>1</sup>, Masayuki Shimojo<sup>1</sup>  
(<sup>1</sup>Shibaura Institute of Technology)

**P\_M-05** 16:00 ~ 17:00

### 透過型電子顕微鏡によるMg-Y-Sc合金の時効析出組織観察

TEM observation of aging behavior in Mg-Y-Sc alloys

平木 智也<sup>1</sup>, 李 昇原<sup>2</sup>, 池野 進<sup>3</sup>, 松田 健二<sup>2</sup>  
(<sup>1</sup>富山大(院), <sup>2</sup>富山大院, <sup>3</sup>富山大学名誉教授)

Tomoya Hiragi<sup>1</sup>, Seungwon Lee<sup>2</sup>, Susumu Ikeno<sup>3</sup>,  
Kenji Matsuda<sup>2</sup>  
(<sup>1</sup>Graduate School of Science and Engineering for Education, University of Toyama, <sup>2</sup>Graduate School of Science and Engineering for Research, University of Toyama, <sup>3</sup>Prof. emeritus University of Toama)

**P\_M-06** 17:00 ~ 18:00

### TEM-ACOMによる伸線パーライト鋼のナノ組織解析

Nanostructural analysis of drawn pearlitic steel wires using transmission electron microscopy-automated crystal orientation mapping(TEM-ACOM)

朝日 健太<sup>1</sup>, ムスタパヌル ワヒダ<sup>1</sup>, 斉藤 光<sup>1</sup>,  
波多 聡<sup>1</sup>, 平上 大輔<sup>2</sup>, 潮田 浩作<sup>2</sup>  
(<sup>1</sup>九州大学, <sup>2</sup>新日鐵住金)

Kenta Asahi<sup>1</sup>, Nur Wahidah Mustapa<sup>1</sup>, Hikaru Saito<sup>1</sup>,  
Satoshi Hata<sup>1</sup>, Daisuke Hirakami<sup>2</sup>, Kosaku Ushioda<sup>2</sup>  
(<sup>1</sup>Kyushu University, <sup>2</sup>NSSMC)

**P\_M-07** 16:00 ~ 17:00

### 磁気光学測定とFIB-SEMによる細線化された超電導線材の複合評価

Combined Analysis for Scribed Coated Conductors Using Magneto-Optic and FIB-SEM System

加藤 丈晴<sup>1</sup>, 町 敬人<sup>2</sup>, 横江 大作<sup>1</sup>, 吉田 竜視<sup>1</sup>,  
加藤 智広<sup>1</sup>, 和泉 輝郎<sup>2</sup>, 平山 司<sup>1</sup>, 塩原 融<sup>3</sup>  
(<sup>1</sup>ファインセラミックスセンター, <sup>2</sup>産業技術総合研究所, <sup>3</sup>産業用超電導線材・機器技術研究組合(元))

Takeharu Kato<sup>1</sup>, Takato Machi<sup>2</sup>, Daisaku Yokoe<sup>1</sup>,  
Ryuji Yoshida<sup>1</sup>, Tomohiro Kato<sup>1</sup>, Izumi Teruo<sup>2</sup>,  
Tsukasa Hirayama<sup>1</sup>, Yuh Shiohara<sup>3</sup>  
(<sup>1</sup>Japan Fine Ceramics Center, <sup>2</sup>National Institute of Advanced Industrial Science and Technology, <sup>3</sup>Industrial Superconductivity Technology Research Association (Former))

**P\_M-08** 17:00 ~ 18:00

### ミラー電子顕微鏡によるCMP加工SiC基板の潜傷検出とSEM, AFM, FIB-STEMによる構造評価

Detection of damaged layers induced during CMP process and analyses of the structure of the damaged layer by MPJ, SEM, AFM, and FIB-STEM

一色 俊之<sup>1</sup>, 佐藤 高広<sup>1,2</sup>, 長谷川 正樹<sup>2</sup>,  
伊与木 誠人<sup>2</sup>, 山岡 武博<sup>2</sup>, 小貫 勝則<sup>2</sup>, 小林 健二<sup>2</sup>  
(<sup>1</sup>京都工芸繊維大学, <sup>2</sup>日立ハイテクノロジーズ)

Toshiyuki Isshiki<sup>1</sup>, Takahiro Sato<sup>1,2</sup>,  
Masaki Hasegawa<sup>2</sup>, Masato Iyoki<sup>2</sup>, Takehiro Yamaoka<sup>2</sup>,  
Katsunori Onuki<sup>2</sup>, Kenji Kobayashi<sup>2</sup>  
(<sup>1</sup>Kyoto Institute of Technology, <sup>2</sup>Hitachi High-Tech-nologies)

**P\_M-09** 16:00 ~ 17:00

### 階段状組成傾斜SiGe/Si(110)のSTEMモアレ観察

STEM Moiré Observations of Step-Graded SiGe/Si(110)

山中 淳二<sup>1</sup>, 山本 千綾<sup>1</sup>, 白倉 麻依<sup>1</sup>, 佐藤 圭<sup>2</sup>,  
山田 崇峰<sup>2</sup>, 原 康祐<sup>2</sup>, 有元 圭介<sup>2</sup>, 中川 清和<sup>2</sup>  
(<sup>1</sup>山梨大学 機器分析センター, <sup>2</sup>山梨大学 クリスタル科学研究センター)

Junji Yamanaka<sup>1</sup>, Chiaya Yamamoto<sup>1</sup>, Mai Shirakura<sup>1</sup>,  
Kei Sato<sup>2</sup>, Takane Yamada<sup>2</sup>, Kosuke Hara<sup>2</sup>,  
Keisuke Arimoto<sup>2</sup>, Kiyokazu Nakagawa<sup>2</sup>  
(<sup>1</sup>Center for Instrumental Analysis, University of Yamanashi, <sup>2</sup>Center for Crystal Science and Technology, University of Yamanashi)

**P\_M-10** 17:00 ~ 18:00

### 3d遷移金属添加AlN薄膜の結晶学的特性とバンド構造の相関の解明

Study of the Correlation between Crystallographic Properties and Band Structure of 3d-transition-metal doped AlN Films

立溝 信之<sup>1</sup>, 今田 早紀<sup>1</sup>, 三浦 良雄<sup>1</sup>, 西尾 弘司<sup>1</sup>,  
一色 俊之<sup>1</sup>

(<sup>1</sup>京都工芸繊維大学)

Nobuyuki Tatemizo<sup>1</sup>, Saki Imada<sup>1</sup>, Yoshio Miura<sup>1</sup>,  
Koji Nishio<sup>1</sup>, Toshiyuki Isshiki<sup>1</sup>

(<sup>1</sup>Kyoto Institute of Technology)

**P\_M-11** 16:00 ~ 17:00

### GaN結晶における機械研磨のみを用いた大面積TEM試料の作製

Fabrication of the large area TEM sample only using mechanical polishing for GaN crystal

北住 幸介<sup>1</sup>, 堀渕 嘉代<sup>1</sup>, 片岡 恵太<sup>1</sup>, 磯村 典武<sup>1</sup>,  
木本 康司<sup>1</sup>

(<sup>1</sup>株式会社 豊田中央研究所)

Kousuke Kitazumi<sup>1</sup>, Kayo Horibuchi<sup>1</sup>,  
Keita Kataoka<sup>1</sup>, Noritake Isomura<sup>1</sup>, Yasuji Kimoto<sup>1</sup>

(<sup>1</sup>Toyota Central R&D Labs., Inc.)

**P\_M-12** 17:00 ~ 18:00

### 透過性パルスレーザにより改質されたSi内部損傷のTEM解析

TEM analysis of Si crystal modified by permeable pulse laser

岩田 博之<sup>1</sup>, 坂 公恭<sup>1</sup>, 河口 大祐<sup>2</sup>, 奈良 康永<sup>2</sup>  
(<sup>1</sup>愛知工業大学, <sup>2</sup>浜松ホトニクス)

Hiroyuki Iwata<sup>1</sup>, Hiroyasu Saka<sup>1</sup>,  
Daisuke Kawaguchi<sup>2</sup>, Yasunaga Nara<sup>2</sup>  
(<sup>1</sup>Aichi Institute of Technology, <sup>2</sup>Hamamatsu Photonics)

**P\_M-13** 16:00 ~ 17:00

### 高濃度Cr添加窒化アルミニウムスパッタ膜の構造評価

Structure Evaluation of Heavily Cr-doped AlN Film Prepared by Sputtering

高井 祥裕<sup>1</sup>, 富永 盾<sup>1</sup>, 立溝 信之<sup>1</sup>, 西尾 弘司<sup>1</sup>,  
今田 早紀<sup>1</sup>, 一色 俊之<sup>1</sup>

(<sup>1</sup>京都工芸繊維大学)

Yoshihiro Takai<sup>1</sup>, Jun Tominaga<sup>1</sup>,  
Nobuyuki Tatemizo<sup>1</sup>, Koji Nishio<sup>1</sup>, Saki Imada<sup>1</sup>,  
Toshiyuki Isshiki<sup>1</sup>

(<sup>1</sup>Kyoto Institute of Technology)

**P\_M-14** 17:00 ~ 18:00

### ルチル型TiO<sub>2</sub>単結晶メモrista微細素子における抵抗変化領域の結晶構造解析

Crystal Structure Analysis of Resistive Switching Region in Rutile-TiO<sub>2</sub> Single Crystal Memristor

村上 弘弥<sup>1</sup>, 山口 賢吾<sup>1</sup>, 清水 拓磨<sup>1</sup>, 竹内 正太郎<sup>1</sup>,  
酒井 朗<sup>1</sup>

(<sup>1</sup>大阪大学)

Hiroya Murakami<sup>1</sup>, Kengo Yamaguchi<sup>1</sup>,  
Takuma Shimizu<sup>1</sup>, Shotaro Takeuchi<sup>1</sup>, Akira Sakai<sup>1</sup>

(<sup>1</sup>Osaka University)

**P\_M-15** 16:00 ~ 17:00

### CaGe<sub>2</sub>中に生成させた多層ゲルマネンの構造

Structure of Multilayer Germanenes Formed in CaGe<sub>2</sub>

八百川 律子<sup>1</sup>, 大砂 哲<sup>1</sup>, 早坂 祐一郎<sup>2</sup>, 中野 秀之<sup>1,3</sup>  
(<sup>1</sup>株式会社豊田中央研究所, <sup>2</sup>東北大学, <sup>3</sup>JST さきがけ)

Ritsuko Yaokawa<sup>1</sup>, Tetsu Ohsuna<sup>1</sup>, Yuichiro Haya-  
saka<sup>2</sup>, Hideyuki Nakano<sup>1,3</sup>

(<sup>1</sup>TOYOTA CENTRAL R&D LABS., INC., <sup>2</sup>Tohoku University, <sup>3</sup>JST PRESTO)

**P\_M-16** 17:00 ~ 18:00

### 熱履歴を加えたEr<sub>2</sub>O<sub>3</sub>-Y<sub>2</sub>O<sub>3</sub>膜の微細組織観察

Microstructure observation of Er<sub>2</sub>O<sub>3</sub> thin film with Y<sub>2</sub>O<sub>3</sub> buffer layer after thermal cycling

田中 優貴<sup>1</sup>, 李 昇原<sup>2</sup>, 松田 健二<sup>2</sup>, 菱沼 良光<sup>3</sup>,  
田中 照也<sup>3</sup>, 室賀 健夫<sup>3</sup>, 池野 進<sup>4</sup>

(<sup>1</sup>富山大(院), <sup>2</sup>富山大院, <sup>3</sup>核融合科学研究所,  
<sup>4</sup>富山大学名誉教授)

Masaki Tanaka<sup>1</sup>, Seungwon Lee<sup>2</sup>, Kenji Matsuda<sup>2</sup>,  
Yoshimitsu Hishinuma<sup>3</sup>, Teruya Tanaka<sup>3</sup>,  
Takeo Muroga<sup>3</sup>, Susumu Ikeno<sup>4</sup>

(<sup>1</sup>Graduate School of Science and Engineering for Education, University of Toyama, <sup>2</sup>Graduate School of Science and Engineering for Research, University of Toyama, <sup>3</sup>National Institute of Fusion Science, <sup>4</sup>Prof. emeritus University of Toama)

**P\_M-17** 16:00 ~ 17:00

### GdBaFe<sub>2</sub>O<sub>5</sub>における電荷秩序逐次相転移に伴う結晶構造と組織変化の観察

Observation of Crystal Structure and Texture depending on Successive Charge Ordering Transition in GdBaFe<sub>2</sub>O<sub>5</sub>

松村 知輝<sup>1</sup>, 漆原 大典<sup>1</sup>, 浅香 透<sup>1</sup>, 福田 功一郎<sup>1</sup>, 小西 伸弥<sup>2</sup>, 田中 勝久<sup>2</sup>, 安倍 友啓<sup>3</sup>, 水流 大地<sup>3</sup>, 森吉 千佳子<sup>3</sup>, 黒岩 芳弘<sup>3</sup>  
(<sup>1</sup>名古屋工業大学大学院, <sup>2</sup>京都大学大学院, <sup>3</sup>広島大学)

Tomoki Matsumura<sup>1</sup>, Daisuke Urushihara<sup>1</sup>, Toru Asaka<sup>1</sup>, Koichiro Fukuda<sup>1</sup>, Shinya Konishi<sup>2</sup>, Katsuhisa Tanaka<sup>2</sup>, Tomohiro Abe<sup>3</sup>, Daichi Tsuru<sup>3</sup>, Chikako Moriyoshi<sup>3</sup>, Yoshihiro Kuroiwa<sup>3</sup>  
(<sup>1</sup>Nagoya Institute of Technology, <sup>2</sup>Kyoto University, <sup>3</sup>Hiroshima University)

**P\_M-18** 17:00 ~ 18:00

### 透過電子顕微鏡を用いたBa<sub>3</sub>W<sub>2</sub>O<sub>9</sub> 高圧相の結晶構造の決定

Structure determination of the high-pressure phase of Ba<sub>3</sub>W<sub>2</sub>O<sub>9</sub> by transmission electron microscopy

漆原 大典<sup>1</sup>, 浅香 透<sup>1</sup>, 福田 功一郎<sup>1</sup>, 櫻井 裕也<sup>2</sup>  
(<sup>1</sup>名古屋工業大学, <sup>2</sup>物質・材料研究機構)

Daisuke Urushihara<sup>1</sup>, Toru Asaka<sup>1</sup>, Koichiro Fukuda<sup>1</sup>, Hiroya Sakurai<sup>2</sup>  
(<sup>1</sup>Nagoya Institute of Technology, <sup>2</sup>National Institute for Materials Science)

**P\_M-19** 16:00 ~ 17:00

### HARECXS 法を用いた鉱物のサイト占有率の定量解析

Quantitative analysis of site occupancy in minerals using HARECXS method

伊神 洋平<sup>1</sup>, 藤 昇一<sup>2</sup>, 三宅 亮<sup>1</sup>  
(<sup>1</sup>京都大学, <sup>2</sup>福岡大学)

Yohei Igami<sup>1</sup>, Shoichi Toh<sup>2</sup>, Akira Miyake<sup>1</sup>  
(<sup>1</sup>Kyoto University, <sup>2</sup>Fukuoka University)

**P\_M-20** 17:00 ~ 18:00

### ミシン目割断法による平坦な薄膜断面形成に関する研究

Preparation of flat cross section of thin films by perforation fracture method

坂元 尚紀<sup>1</sup>, 島本 彩加<sup>1</sup>, 宮崎 智史<sup>1</sup>, 笠見 航平<sup>1</sup>, 川口 昂彦<sup>1</sup>, 脇谷 尚樹<sup>1</sup>, 鈴木 久男<sup>1</sup>  
(<sup>1</sup>静岡大学)

Naonori Sakamoto<sup>1</sup>, Ayaka Shimamoto<sup>1</sup>, Satoshi Miyazaki<sup>1</sup>, Kohei Kasami<sup>1</sup>, Takahiko Kawaguchi<sup>1</sup>, Naoki Wakiya<sup>1</sup>, Hisao Suzuki<sup>1</sup>  
(<sup>1</sup>Shizuoka University)

**P\_M-21** 16:00 ~ 17:00

### 九州黒瀬川帯に産するPolygonal SerpentineのTEM観察

TEM observations of Polygonal Serpentine from Kurosegawa belt, Kyushu, Japan

延寿 里美<sup>1</sup>, 上原 誠一郎<sup>1</sup>  
(<sup>1</sup>九州大学理学府地球惑星科学専攻)

Satomi Enju<sup>1</sup>, Seiichiro Uehara<sup>1</sup>  
(<sup>1</sup>Department of Earth and Planetary Sciences, Faculty of Science, Kyushu University)

**P\_M-22** 17:00 ~ 18:00

### セルロース繊維のSTEM観察

STEM observation of cellulose fibers

乙部 博英<sup>1</sup>  
(<sup>1</sup>旭化成(株) 研究・開発本部 基盤技術研究所)

Hirohide Otobe<sup>1</sup>  
(<sup>1</sup>Asahi kasei Corporation Technology Group Analysis Simulation Center)

**P\_M-23** 16:00 ~ 17:00

### DPC-STEM法によるM型ヘキサフェライトにおけるBloch lineの直接観察

Direct observation of Bloch lines in an M-type barium hexaferrite by differential phase contrast scanning transmission electron microscopy (DPC-STEM).

久留島 康輔<sup>1</sup>, 中島 宏<sup>2</sup>, 森 茂生<sup>2</sup>  
(<sup>1</sup>(株)東レリサーチセンター, <sup>2</sup>大阪府立大学)

Kosuke Kurushima<sup>1</sup>, Hiroshi Nakajima<sup>2</sup>, Shigeo Mori<sup>2</sup>  
(<sup>1</sup>Toray Research Center, Inc., <sup>2</sup>Osaka Prefecture University)

**P\_M-24** 17:00 ~ 18:00

### 拡張統計アルケミ法によるW型フェライト磁石中の添加Zn置換サイト計測

Measurement of dopant site occupancies in Zn doped W-type ferrite magnets using extended statistical ALCHEMI method

阿南 義弘<sup>1</sup>, 小林 義徳<sup>2</sup>, 大塚 真弘<sup>3</sup>, 武藤 俊介<sup>4</sup>  
(<sup>1</sup>(株)日立製作所 研開 Gr, <sup>2</sup>日立金属(株) 磁性材料研究所, <sup>3</sup>名古屋大学 工学研究科, <sup>4</sup>名古屋大学 未来材料・システム研究所)

Yoshihiro Anan<sup>1</sup>, Yoshinori Kobayashi<sup>2</sup>, Masahiro Ohtsuka<sup>3</sup>, Shunsuke Muto<sup>4</sup>  
(<sup>1</sup>Research & Development Gr., Hitachi Ltd., <sup>2</sup>Magnetic Materials Research Lab., Hitachi Metals Ltd., <sup>3</sup>Graduate School of Eng., Nagoya University, <sup>4</sup>IMaSS, Nagoya University)

**P\_M-25** 16:00 ~ 17:00

**ZrO<sub>2</sub>超薄膜の結晶構造に対するドーパント効果**

Dopant Effect on Crystal Structure of ZrO<sub>2</sub> Ultrathin Film

チェ スジン<sup>1</sup>, 白石 貴久<sup>2</sup>, 木口 賢紀<sup>2</sup>, 今野 豊彦<sup>2</sup>  
(<sup>1</sup>東北大学工学研究科, <sup>2</sup>東北大学金属材料研究所)

**Sujin Choi**<sup>1</sup>, Takahisa Shiraishi<sup>2</sup>, Takanori Kiguchi<sup>2</sup>,  
Toyohiko Konno<sup>2</sup>  
(<sup>1</sup>School of Engineering Tohoku University, <sup>2</sup>Institute for Material Research Tohoku University)

**P\_M-26** 17:00 ~ 18:00

**強誘電体HfO<sub>2</sub>基超薄膜のドメイン構造評価**

Domain structure analysis of ferroelectric HfO<sub>2</sub>-based ultrathin films

白石 貴久<sup>1</sup>, チェ スジン<sup>2</sup>, 木口 賢紀<sup>1</sup>, 今野 豊彦<sup>1</sup>  
(<sup>1</sup>東北大学金属材料研究所, <sup>2</sup>東北大学工学研究科)

**Takahisa Shiraishi**<sup>1</sup>, Sujin Choi<sup>2</sup>, Takanori Kiguchi<sup>1</sup>,  
Toyohiko Konno<sup>1</sup>  
(<sup>1</sup>Institute for materials research, Tohoku university, <sup>2</sup>School of engineering, Tohoku university)

**P\_M-27** 16:00 ~ 17:00

**YbFe<sub>2</sub>O<sub>4</sub>におけるイオン欠損と結晶構造の関係**

Relationship between ion-deficiencies and the crystal structure in YbFe<sub>2</sub>O<sub>4</sub>

早川 達也<sup>1</sup>, 漆原 大典<sup>1</sup>, 松村 知輝<sup>1</sup>, 浅香 透<sup>1</sup>,  
福田 功一郎<sup>1</sup>, 小西 伸弥<sup>2</sup>, 田中 勝久<sup>2</sup>  
(<sup>1</sup>名古屋工業大学, <sup>2</sup>京都大学)

**Tatsuya Hayakawa**<sup>1</sup>, Daisuke Urushihara<sup>1</sup>,  
Tomoki Matsumura<sup>1</sup>, Toru Asaka<sup>1</sup>, Koichiro Fukuda<sup>1</sup>,  
Shinya Konishi<sup>2</sup>, Katsuhisa Tanaka<sup>2</sup>  
(<sup>1</sup>NI Tech, <sup>2</sup>Kyoto Univ.)

**P\_M-28** 17:00 ~ 18:00

**磁気キラリティを有するPt/Co/Ta多層膜ディスクの作製と顕微鏡学的磁気構造解析**

Fabrication and analysis of Pt/Co/Ta multilayer disks for investigating the magnetic chirality

鈴木 潤士<sup>1</sup>, 桑原 真人<sup>1,2</sup>, 石田 高史<sup>1,2</sup>, 長尾 全寛<sup>1,2</sup>,  
齋藤 晃<sup>1,2</sup>  
(<sup>1</sup>名古屋大学大学院工学研究科, <sup>2</sup>名古屋大学未来材料システム研究所)

**Hiroshi Suzuki**<sup>1</sup>, Makoto Kuwahara<sup>1,2</sup>,  
Takafumi Ishida<sup>1,2</sup>, Masahiro Nagao<sup>1,2</sup>, Koh Saitoh<sup>1,2</sup>  
(<sup>1</sup>Graduate School of Engineering, Nagoya University, <sup>2</sup>Institute of Materials and Systems for Sustainability, Nagoya University)

**P\_M-29** 16:00 ~ 17:00

**植物工場で使用される微細気泡含有養液の凍結切断レプリカTEM観察**

TEM observations on freeze-fracture replica of the medium including fine bubbles in the plant factory

内田 努<sup>1</sup>, 西川 仁<sup>2</sup>, 櫻井 伸樹<sup>2</sup>, 浅野 正志<sup>3</sup>,  
野田 直喜<sup>2</sup>  
(<sup>1</sup>北海道大学大学院工学研究院, <sup>2</sup>JNC (株)水俣研究所, <sup>3</sup>JNC (株)事業化推進室)

**Tsutomu Uchida**<sup>1</sup>, Hitoshi Nishikawa<sup>2</sup>,  
Nobuki Sakurai<sup>2</sup>, Masashi Asano<sup>3</sup>, Naoki Noda<sup>2</sup>  
(<sup>1</sup>Faculty of Engineering, Hokkaido University, <sup>2</sup>Minamata Research Center, JNC Co., <sup>3</sup>Business Promotion Office, JNC Co.)

**P\_M-30** 17:00 ~ 18:00

**電子照射を用いたAuナノ粒子の固定における基板の材質の検討**

Effect of substrate material in fixing gold particles using electron irradiation

築田 大輝<sup>1</sup>, 能勢 智裕<sup>1</sup>, 森岡 大地<sup>1</sup>, 三石 和貴<sup>2</sup>,  
下条 雅幸<sup>1</sup>  
(<sup>1</sup>芝浦工業大学, <sup>2</sup>物質・材料研究機構)

**Taiki Chikuta**<sup>1</sup>, Takahiro Nose<sup>1</sup>, Daichi Morioka<sup>1</sup>,  
Kazutaka Mitsuishi<sup>2</sup>, Masayuki Shimojo<sup>1</sup>  
(<sup>1</sup>Shibaura Institute of Technology, <sup>2</sup>National Institute for Materials Science)

**P\_M-31** 16:00 ~ 17:00

**衝撃圧縮による黒鉛-ダイヤモンド変換のレーザー顕微鏡による観察**

Observation of transformation from graphite to diamond by laser microscopes

庭瀬 敬右<sup>1</sup>, 中村 一隆<sup>2</sup>, 岩田 忠夫<sup>3</sup>  
(<sup>1</sup>兵庫教育大学, <sup>2</sup>東京工業大学, <sup>3</sup>日本原子力研究所)

**Keisuke Niwase**<sup>1</sup>, Kazutaka G. Nakamura<sup>2</sup>,  
Tadao Iwata<sup>3</sup>  
(<sup>1</sup>Hyogo University of Teacher Education, <sup>2</sup>Tokyo Institute of Technology, <sup>3</sup>JAERI)

**P\_M-32** 17:00 ~ 18:00

**種々のポリオキシエチレン系非イオン界面活性剤が形成する分子集合体のナノ構造**

Nano-Structure of Molecular Assemblies for Various Polyoxyethylene-Type Nonionic Surfactants

矢田 詩歩<sup>1</sup>, 吉村 倫一<sup>1</sup>  
(<sup>1</sup>奈良女子大学)

**Shiho Yada**<sup>1</sup>, Tomokazu Yoshimura<sup>1</sup>  
(<sup>1</sup>Nara Women's University)



**P\_M-33** 16:00 ~ 17:00

**イオン照射によるヘテロ構造SiCナノチューブと新奇構造カーボンナノチューブの創製**

Synthesis of heterostructured SiC nanotubes and new-structured carbon nanotubes by ion irradiation-induced changes

田口 富嗣<sup>1</sup>, 山本 春也<sup>1</sup>, 大場 弘則<sup>1</sup>  
(<sup>1</sup>量子科学技術研究開発機構)

Tomitsugu Taguchi<sup>1</sup>, Shunya Yamamoto<sup>1</sup>,  
Hironori Ohba<sup>1</sup>

(<sup>1</sup>National Institutes for Quantum and Radiological Science and Technology)

**P\_M-34** 17:00 ~ 18:00

**Fe<sub>85.2</sub>Si<sub>1</sub>B<sub>9</sub>P<sub>4</sub>Cu<sub>0.8</sub> ナノ結晶軟磁性合金におけるCuクラスタ近傍でのbcc-Fe析出のTEM/STEMとXAFSによる研究**

Precipitation of bcc-Fe around Cu clusters in Fe<sub>85.2</sub>Si<sub>1</sub>B<sub>9</sub>P<sub>4</sub>Cu<sub>0.8</sub> nanocrystalline soft-magnetic alloy, studied by TEM/STEM and XAFS

西嶋 雅彦<sup>1</sup>, 竹中 佳生<sup>2</sup>, 松浦 真<sup>2</sup>, 竹内 章<sup>2</sup>,  
今野 豊彦<sup>3</sup>, 牧野 彰宏<sup>2</sup>  
(<sup>1</sup>東北大学研究教育基盤技術センター先端電子顕微鏡センター, <sup>2</sup>東北大学金属材料研究所超低損失ナノ結晶軟磁性材料研究開発センター, <sup>3</sup>東北大学金属材料研究所不定比化合物研究部門)

Masahiko Nishijima<sup>1</sup>, Kana Takenaka<sup>2</sup>,  
Makoto Matsuura<sup>2</sup>, Akira Takeuchi<sup>2</sup>, Toyohiko Konno<sup>3</sup>,  
Akihiro Makino<sup>2</sup>

(<sup>1</sup>The Electron Microscopy Centre, Technology Centre Research & Education Activities, Tohoku University, <sup>2</sup>Research & Development Centre for Ultra High Efficiency Nanocrystalline Soft Magnetic Material, Institute for Materials Research, Tohoku University, <sup>3</sup>Materials Science of Non-Stoichiometric Compounds, Institute for Materials Research, Tohoku University)

**P\_M-35** 16:00 ~ 17:00

**HR-TEM study of Sb single-crystal films grown on GaSb(111)A**

T.D. Mishima<sup>1</sup>, K.S. Wickramasinghe<sup>1</sup>  
(<sup>1</sup>University of Oklahoma)

**P\_M-36** 17:00 ~ 18:00

**長波長域でのZnOナノ粒子の蛍光発光**

ZnO nanoparticles with photoluminescence of long wavelength

奥山 哲也<sup>1</sup>, 中村 晃徳<sup>1</sup>, 山崎 有司<sup>1</sup>, 松山 清<sup>1</sup>,  
斎藤 光<sup>2</sup>  
(<sup>1</sup>久留米高専, <sup>2</sup>九州大学)

Tetsuya Okuyama<sup>1</sup>, Akinori Nakamura<sup>1</sup>,  
Yuji Yamasaki<sup>1</sup>, Kiyoshi Matsuyama<sup>1</sup>, Hikaru Saito<sup>2</sup>  
(<sup>1</sup>National College of Technology, Kurume College, <sup>2</sup>Kyushu University)

**P\_M-37** 16:00 ~ 17:00

**STEMトモグラフィによる有機薄膜太陽電池材料バルクヘテロ構造の3D評価**

Three dimensional analyses of organic solar cell by annular dark field STEM Tomography

村上 和歌子<sup>1</sup>  
(<sup>1</sup>株式会社リコー)

Wakako Murakami<sup>1</sup>  
(<sup>1</sup>Ricoh Co Ltd.)

**P\_M-38** 17:00 ~ 18:00

**電子線トモグラフィによる量子ドット集合組織における励起エネルギー移動反応の実空間解析**

Real-space investigation of excitation energy transfer in quantum dot assembly using electron tomography

秋田 郁美<sup>1</sup>, 石田 洋平<sup>1</sup>, 米澤 徹<sup>1</sup>  
(<sup>1</sup>北海道大学大学院工学院)

Ikumi Akita<sup>1</sup>, Yohei Ishida<sup>1</sup>, Tetsu Yonezawa<sup>1</sup>  
(<sup>1</sup>Faculty of Engineering, Hokkaido University)

**P\_M-39** 16:00 ~ 17:00

**BaTiO<sub>3</sub> 薄膜の界面近傍におけるドメイン構造解析**

Structural analysis of the domain structure around an interface in BaTiO<sub>3</sub> film

小林 俊介<sup>1</sup>, 井上 和俊<sup>2</sup>, 加藤 丈晴<sup>1</sup>, 幾原 雄一<sup>1,2,3</sup>,  
山本 剛久<sup>1,4</sup>  
(<sup>1</sup>ファインセラミックスセンター, <sup>2</sup>東北大学, <sup>3</sup>東京大学, <sup>4</sup>名古屋大学)

Shunsuke Kobayashi<sup>1</sup>, Kazutoshi Inoue<sup>2</sup>,  
Takeharu Kato<sup>1</sup>, Yuichi Ikuhara<sup>1,2,3</sup>,  
Takahisa Yamamoto<sup>1,4</sup>  
(<sup>1</sup>Japan Fine Ceramics Center, <sup>2</sup>Tohoku University, <sup>3</sup>The University of Tokyo, <sup>4</sup>Nagoya University)

**P\_M-40** 17:00 ~ 18:00

**サファイア基板上に成長したZnO薄膜のTEMによる結晶構造解析**

TEM analysis of ZnO thin films grown on sapphire substrates

落合 彩人<sup>1</sup>, 蓮池 紀幸<sup>1</sup>, 播磨 弘<sup>1</sup>, 西尾 弘司<sup>1</sup>,  
一色 俊之<sup>1</sup>  
(<sup>1</sup>京都工芸繊維大学)

Saito Ochiai<sup>1</sup>, Noriyuki Hasuike<sup>1</sup>, Hiroshi Harima<sup>1</sup>,  
Nishio Koji<sup>1</sup>, Toshiyuki Isshiki<sup>1</sup>  
(<sup>1</sup>Kyoto Institute Technology)



**P\_M-41** 16:00 ~ 17:00

### イオン照射したSi単結晶表面の形態変化とEBSDによる残留歪み評価

Morphology change of Si single crystal surface after ion irradiation and evaluation of residual strain by EBSD

武田 陽佑<sup>1</sup>, 関口 亮<sup>1</sup>, ウエイケン<sup>2</sup>, 石岡 準也<sup>2</sup>, 柴山 環樹<sup>2</sup>, 近藤 創介<sup>3</sup>, 檜木 達也<sup>3</sup>  
(<sup>1</sup>北海道大学大学院工学院, <sup>2</sup>北海道大学大学院工学研究院, <sup>3</sup>京都大学エネルギー理工学研究所)

Yosuke Takeda<sup>1</sup>, Ryo Sekiguchi<sup>1</sup>, Ruixuan Yu<sup>2</sup>, Junya Ishioka<sup>2</sup>, Tamaki Shibayama<sup>2</sup>, Sosuke Kondo<sup>3</sup>, Tatsuya Hinoki<sup>3</sup>  
(<sup>1</sup>Graduate school of Engineering, Hokkaido University, <sup>2</sup>Faculty of Engineering, Hokkaido University, <sup>3</sup>Institute of Advanced Energy, Kyoto University)

**P\_M-42** 17:00 ~ 18:00

### 接着用前処理が樹脂表面の構造に及ぼす効果の白金レプリカ膜を用いた透過電子顕微鏡による評価

Morphological analysis of plastic surfaces pre-treated for adhesive bonding by using replica techniques in transmission electron microscopy

堀内 伸<sup>1,2</sup>, 川崎 一則<sup>3</sup>, 伯川 秀樹<sup>1,2</sup>, 秋山 陽久<sup>2,4</sup>  
(<sup>1</sup>産総研ナノ材料研究部門, <sup>2</sup>産総研接着・界面現象ラボ, <sup>3</sup>産総研バイオメディカル研究部門, <sup>4</sup>産総研機能化学研究部門)

Shin Horiuchi<sup>1,2</sup>, Kazunori Kawasaki<sup>3</sup>, hideki Haku-kawa<sup>1,2</sup>, Haruhisa Akiyaya<sup>2,4</sup>  
(<sup>1</sup>AIST, Nanomaterial Res., <sup>2</sup>AIST, AIRL, <sup>3</sup>AIST, Bio-Medical, <sup>4</sup>AIST, Chemical Res.)

**P\_M-43** 16:00 ~ 17:00

### ビスマス系超伝導体薄膜におけるうろこ状層構造の界面TEM観察

HRTEM observations of interfaces between scaly layers of Bi-based superconductor

伊藤 真弓<sup>1</sup>, 毛利 存<sup>2</sup>, 小林 祥子<sup>1</sup>, 東嶺 孝一<sup>1</sup>, 大島 義文<sup>1</sup>  
(<sup>1</sup>北陸先端科学技術大学院大学, <sup>2</sup>熊本高専)

Mayumi Ito<sup>1</sup>, Zon Mori<sup>2</sup>, shoko Kobayashi<sup>1</sup>, Koichi Higashimine<sup>1</sup>, Yoshifumi Oshima<sup>1</sup>  
(<sup>1</sup>Japan Advanced Institute of Science and Technology, <sup>2</sup>Kumamoto National College of Technology)

**P\_M-44** 17:00 ~ 18:00

### バインダーフリー鱗片状シリコン負極のオペランドSEM観察—イオン液体電解液の違いが電極挙動に与える影響—

Operando SEM observation of silicon leaf powder anode - Electrode behavior in different ionic liquid electrolytes -

上平 峻己<sup>1</sup>, 佐野 輝樹<sup>1</sup>, 津田 哲哉<sup>1</sup>, 陳 致堯<sup>1</sup>, 春田 正和<sup>2</sup>, 土井 貴之<sup>2</sup>, 稲葉 稔<sup>2</sup>, 桑畑 進<sup>1</sup>  
(<sup>1</sup>大阪大学, <sup>2</sup>同志社大学)

Toshiki Kamidaira<sup>1</sup>, Teruki Sano<sup>1</sup>, Tetsuya Tsuda<sup>1</sup>, Chih-Yao Chen<sup>1</sup>, Masakazu Haruta<sup>2</sup>, Takayuki Doi<sup>2</sup>, Minoru Inaba<sup>2</sup>, Susumu Kuwabata<sup>1</sup>  
(<sup>1</sup>Osaka University, <sup>2</sup>Doshisha University)

**P\_M-45** 16:00 ~ 17:00

### InSiO非晶質薄膜の加熱結晶化プロセスのIn-situ SEM観察

In situ SEM observation for crystallization process of amorphous InSiO film

重藤 訓志<sup>1</sup>, 木津 たきお<sup>2</sup>, 塚越 一仁<sup>2</sup>, 生田目 俊秀<sup>2</sup>  
(<sup>1</sup>日立ハイテクノロジーズ, <sup>2</sup>NIMS MANA)

Kunji Shigeto<sup>1</sup>, Takio Kizu<sup>2</sup>, Kazuhito Tsukagoshi<sup>2</sup>, Toshihide Nabatame<sup>2</sup>  
(<sup>1</sup>Hitachi High-Technologies, <sup>2</sup>NIMS MANA)

**P\_M-46** 17:00 ~ 18:00

### 高圧凍結法およびcryo FIB-SEMを用いたエマルションの凍結断面観察

Cross-section observation of Emulsion by cryo FIB-SEM using high pressure freezing system

久保 潤 啓<sup>1</sup>, 吉川 徳信<sup>1</sup>, 西居 加奈<sup>1</sup>, 西野 有里<sup>2</sup>, 宮澤 淳夫<sup>2</sup>  
(<sup>1</sup>資生堂グローバルイノベーションセンター, <sup>2</sup>兵庫県立大学)

Kei Kubobuchi<sup>1</sup>, Norinobu Yoshikawa<sup>1</sup>, Kana Nishii<sup>1</sup>, Yuri Nishino<sup>2</sup>, Atsuo Miyazawa<sup>2</sup>  
(<sup>1</sup>Shiseido Global Innovation Centre, <sup>2</sup>University of Hyogo)

**P\_M-47** 16:00 ~ 17:00

### 次世代電池への応用を志向した金属負極反応のin situ TEM観察

In situ TEM study on metallic anodes for next-generation secondary batteries

陳 致堯<sup>1</sup>, 津田 哲哉<sup>1</sup>, 大島 義文<sup>2</sup>, 桑畑 進<sup>1</sup>  
(<sup>1</sup>大阪大学, <sup>2</sup>北陸先端科学技術大学院大学)

Chih-Yao Chen<sup>1</sup>, Tetsuya Tsuda<sup>1</sup>, Yoshifumi Oshima<sup>2</sup>, Susumu Kuwabata<sup>1</sup>  
(<sup>1</sup>Osaka University, <sup>2</sup>Japan Advanced Institute of Science and Technology)

**P\_M-48** 17:00 ~ 18:00

### 複合量子ビーム超高压電子顕微鏡によるレーザー照射誘起金ナノ構造構築その場観察とその表面プラズモン特性

In-situ Observation of Nanostructure Formation on Au thin film/Glass Substrate by Multi-Quantum-Beam High Voltage Electron Microscope and Their Surface Plasmon Properties

ウエイケン<sup>1</sup>, 石岡 準也<sup>1</sup>, 大久保 賢二<sup>1</sup>, 谷岡 隆志<sup>1</sup>, 大多 亮<sup>1</sup>, 柴山 環樹<sup>1</sup>, 渡辺 精一<sup>1</sup>  
(<sup>1</sup>北海道大学)

Ruixuan Yu<sup>1</sup>, Junya Ishioka<sup>1</sup>, Kenji Ohkubo<sup>1</sup>, Takashi Tanioka<sup>1</sup>, Ryou Oota<sup>1</sup>, Tamaki Shibayama<sup>1</sup>, Seiichi Watanabe<sup>1</sup>  
(<sup>1</sup>Hokkaido University)

**P\_M-49** 16:00 ~ 17:00

### 隔膜密閉型水封入セルにおける酸化亜鉛ナノ粒子群の光照射反応の複合量子ビーム超高压電子顕微鏡その場観察

In-situ Observation of Photo-Chemical Reaction of ZnO and water sealed in SiN membrane Using Multi-Quantum-Beam High Voltage Electron Microscope

石岡 準也<sup>1</sup>, 大藤 功将<sup>1</sup>, 五十嵐 直也<sup>1</sup>, 大久保 賢二<sup>1</sup>, 谷岡 隆志<sup>1</sup>, 柴山 環樹<sup>1</sup>, 渡辺 精一<sup>1</sup>  
(<sup>1</sup>北海道大学)

Junya Ishioka<sup>1</sup>, Kousuke Ofuji<sup>1</sup>, Naoya Igarashi<sup>1</sup>, Kenji Okubo<sup>1</sup>, Takashi Tanioka<sup>1</sup>, Tamaki Shibayama<sup>1</sup>, Seiichi Watanabe<sup>1</sup>  
(<sup>1</sup>Hokkaido University)

**P\_M-50** 17:00 ~ 18:00

### 焼結を考えるための電子顕微鏡加熱その場観察

In-situ TEM observations for investigation of particle sintering

米澤 徹<sup>1</sup>, 塚本 宏樹<sup>1</sup>  
(<sup>1</sup>北海道大学)

Tetsu Yonezawa<sup>1</sup>, Hiroki Tsukamoto<sup>1</sup>  
(<sup>1</sup>Hokkaido University)

**P\_M-51** 16:00 ~ 17:00

### ヒーター式加熱炉型ホルダーによる原子分解能その場観察

Key Factors for Dynamical Atomic Resolution on the Heater Type Heating Holder

嶋田 雄介<sup>1</sup>, 吉田 健太<sup>1</sup>, 山本 俊之<sup>2</sup>, 永井 康介<sup>1</sup>, 今野 豊彦<sup>1</sup>  
(<sup>1</sup>東北大学, <sup>2</sup>日本電子株式会社)

Yusuke Shimada<sup>1</sup>, Kenta Yoshida<sup>1</sup>, Toshiyuki Yamamoto<sup>2</sup>, Yasuyoshi Nagai<sup>1</sup>, Toyohiko Konno<sup>1</sup>  
(<sup>1</sup>Tohoku University, <sup>2</sup>JEOL Ltd.)

**P\_M-52** 17:00 ~ 18:00

### 触媒材料観察のその場観察のためのTEM試料ホルダーシステムの開発II

Development of a Specimen Holder for In-situ Observation of Catalytic Materials II

橋本 綾子<sup>1,2</sup>, 秋元 創<sup>1,2</sup>, 竹口 雅樹<sup>1</sup>  
(<sup>1</sup>物質・材料研究機構, <sup>2</sup>筑波大学大学院)

Ayako Hashimoto<sup>1,2</sup>, Hajime Akimoto<sup>1,2</sup>, Masaki Takeguchi<sup>1</sup>  
(<sup>1</sup>National Institute for Materials Science, <sup>2</sup>University of Tsukuba)

**P\_M-53** 16:00 ~ 17:00

### Addressing *In-Situ* TEM Challenges Using Integrated Hardware and Software

Benjamin K. Miller<sup>1</sup>, Stephen Mick<sup>1</sup>  
(<sup>1</sup>Gatan Inc.)

**P\_M-54** 17:00 ~ 18:00

### Cryo-TEMによる燃料電池触媒インク中の白金担持カーボンへのアイオノマ吸着状態の観察

Observation of ionomer on platinum-supported carbon in fuel cell catalyst ink by cryo-TEM

犬塚 郷子<sup>1</sup>, 波多野 和宏<sup>1</sup>, 宮澤 敦夫<sup>2</sup>, 西野 有里<sup>2</sup>, 伊藤 喜子<sup>3</sup>, 垣花 大<sup>1</sup>, 菅田 裕之<sup>1</sup>, 前川 諒介<sup>1</sup>, 駒林 健太郎<sup>1</sup>  
(<sup>1</sup>トヨタ自動車株式会社, <sup>2</sup>兵庫県立大学, <sup>3</sup>ライカマイクروسテムズ株式会社)

Satoko Inuzuka<sup>1</sup>, Kazuhiro Hatano<sup>1</sup>, Atsuo Miyazawa<sup>2</sup>, Yuri Nishino<sup>2</sup>, Yoshiko Itou<sup>3</sup>, Masaru Kakinohana<sup>1</sup>, Hiroyuki Sugata<sup>1</sup>, Ryosuke Maekawa<sup>1</sup>, Kentaro Komabayashi<sup>1</sup>  
(<sup>1</sup>Totota Motor Corporation, <sup>2</sup>University of Hyogo, <sup>3</sup>Leica Microsystems)

**P\_B-01** 16:00 ~ 17:00

### 光顕-電顕相関観察システム MirrorCLEM

Correlative light and electron microscopic imaging system MirrorCLEM

前田 躍<sup>1</sup>, 羽根田 茂<sup>1</sup>, 星野 吉延<sup>1</sup>, 許斐 麻美<sup>1</sup>, 川俣 茂<sup>1</sup>, 成川 苗子<sup>2</sup>, 佐藤 繭子<sup>2</sup>, 豊岡 公德<sup>2</sup>  
(<sup>1</sup>日立ハイテクノロジーズ, <sup>2</sup>理化学研究所 環境資源科学研究センター)

Yaku Maeda<sup>1</sup>, Shigeru Haneda<sup>1</sup>, Yoshinobu Hoshino<sup>1</sup>, Mami Konomi<sup>1</sup>, Shigeru Kawamata<sup>1</sup>, Naeko Narikawa<sup>2</sup>, Mayuko Sato<sup>2</sup>, Kiminori Toyooka<sup>2</sup>  
(<sup>1</sup>Hitachi High-Technologies Corporation, <sup>2</sup>RIKEN CSRS)

**P\_B-02** 17:00 ~ 18:00

### Open cell environmental TEM for wet biological specimens

**Cathal Cassidy**<sup>1</sup>, Masao Yamashita<sup>1</sup>, Martin Cheung<sup>1</sup>, Ryusuke Kuwahara<sup>1</sup>, Ankur Dhar<sup>1</sup>, Hidehito Adaniya<sup>1</sup>, Tsumoru Shintake<sup>1</sup>  
(Quantum Wave Microscopy (Shintake) unit)

**P\_B-03** 16:00 ~ 17:00

### 自己符号化器の改良と事前学習の効率を上げるHOG特徴解析法による粒子自動抽出

Biological particle collection method with HOG feature analysis for pre-learning in an improved auto-encoder.

**手塚 聖貴**<sup>1</sup>, 前田 元<sup>1</sup>, 馬場 美鈴<sup>2</sup>, 馬場 則男<sup>1</sup>  
(<sup>1</sup>工学院大学大学院情報学専攻, <sup>2</sup>工学院大学総合研究所)

**Shoki Tezuka**<sup>1</sup>, Gen Maeda<sup>1</sup>, Misuzu Baba<sup>2</sup>, Norio Baba<sup>1</sup>  
(<sup>1</sup>Major in Informatics, Graduate School, Kogakuin University, <sup>2</sup>Research Institute for Science and Technology)

**P\_B-04** 17:00 ~ 18:00

### 光学顕微鏡下で精密トリミングを可能にするブレードホルダーの開発

Development of blade holder for precisely trimming under the light microscope

**菌村 貴弘**<sup>1</sup>, 藤原 多喜夫<sup>2</sup>  
(<sup>1</sup>朝日大学, <sup>2</sup>株式会社ヒューテック)

**TaKahiro SoNomura**<sup>1</sup>, Takio Fujiwara<sup>2</sup>  
(<sup>1</sup>Asahi University, <sup>2</sup>Fu-tech)

**P\_B-05** 16:00 ~ 17:00

### 導電性コーティング剤BEL-1を使用した導電染色法と免疫SEM法への応用

Effect of Conductive Coating Solution, BEL-1, on the Conductive Staining Method and Immuno-Gold Method for SEM

**佐々木 千鶴子**<sup>1</sup>, 夏木 靖典<sup>1</sup>, 四戸 歩<sup>1</sup>, 高木 正之<sup>1</sup>, 大沼 繁子<sup>2</sup>, 鈴木 英紀<sup>3</sup>  
(<sup>1</sup>聖マリアンナ医科大学 大学院電子顕微鏡研究施設, <sup>2</sup>聖マリアンナ医科大学 病理学教室, <sup>3</sup>日本医科大学 研究部 共同研究施設形態解析研究室)

**Chizukio Sasaki**<sup>1</sup>, Yasunori Natsuki<sup>1</sup>, Ayumi Sinohe<sup>1</sup>, Masayuki Takagi<sup>1</sup>, Sigeko Onuma<sup>2</sup>, Hidenori Suzuki<sup>3</sup>  
(<sup>1</sup>St. Marianna University School of Medicine, Post-graduate School, Institute for Ultrastructural Morphology, <sup>2</sup>St. Marianna University School of Medicine, Department of Pathology, <sup>3</sup>Division of Morphological and Biomolecular Research, Graduate School of Medicine, Nippon Medical School)

**P\_B-06** 17:00 ~ 18:00

### 電子顕微鏡試料作製へのエレクトロスプレー真空蒸着法の応用

Application of electrospray vacuum deposition for electron microscopy specimen preparation

**山下 真生**<sup>1</sup>, 藤田 潤<sup>1</sup>, 新竹 積<sup>1</sup>  
(<sup>1</sup>沖縄科学技術大学院大学)

**Masao Yamashita**<sup>1</sup>, Jun Fujita<sup>1</sup>, Tsumoru Shintake<sup>1</sup>  
(<sup>1</sup>Okinawa Institute of Science and Technology Graduate University)

**P\_B-07** 16:00 ~ 17:00

### マルチスケールで評価する軟硬組織同時観察に向けた試料処理法の検討ー石灰質有孔虫を例としてー

Examination of sample preparation for soft and hard tissue simultaneous observation to evaluate multi-scale - Example of calcareous foraminifera

**植松 勝之**<sup>1</sup>, 長井 裕季子<sup>2,3</sup>, 豊福 高志<sup>2</sup>  
(<sup>1</sup>㈱マリン・ワーク・ジャパン, <sup>2</sup>国立研究開発法人 海洋研究開発機構, <sup>3</sup>横浜国立大学)

**Katsuyuki Uematsu**<sup>1</sup>, Yukio Nagai<sup>2,3</sup>, Takashi Toyofuku<sup>2</sup>  
(<sup>1</sup>Marine Works Japan LTD., <sup>2</sup>JAMSTEC, <sup>3</sup>Yokohama National University)

**P\_B-08** 17:00 ~ 18:00

### 消化管パネート細胞分泌顆粒Zn元素分析

Elemental analysis of Zn in Paneth cells of digestive tissues

**亀谷 清和**<sup>1</sup>  
(<sup>1</sup>信州大学基盤研究支援センター)

**Kiyokazu Kametani**<sup>1</sup>  
(<sup>1</sup>Research Center for Supports to Advanced Science, Shinshu University)

**P\_B-09** 16:00 ~ 17:00

### 相関顕微鏡法を用いたnAChRクラスターの分子局在解析

Molecular localization of nAChR cluster by correlative light-electron microscopy

**野間 有加里**<sup>1</sup>, 西野 有里<sup>1</sup>, 宮澤 淳夫<sup>1</sup>  
(<sup>1</sup>兵庫県立大学)

**Yukari Noma**<sup>1</sup>, Yuri Nishino<sup>1</sup>, Atsuo Miyazawa<sup>1</sup>  
(<sup>1</sup>University of Hyogo)

**P\_B-10** 17:00 ~ 18:00

### 小中学生の電子顕微鏡体験における試料作製の必要性

Necessity of the self sample preparation at the EM educational session for young-teenagers

高瀬 弘嗣<sup>1</sup>, 尾坂 知江子<sup>2</sup>  
(<sup>1</sup>名古屋市立大学, <sup>2</sup>名古屋市科学館)

Hiroshi Takase<sup>1</sup>, Chieko Ozaka<sup>2</sup>  
(<sup>1</sup>Nagoya City University, <sup>2</sup>Nagoya City Science Museum)

**P\_B-11** 16:00 ~ 17:00

### エマルションをクライオSEMで観察するために最適な急速凍結法の検討

Examination of the most suitable rapid freezing method to observe emulsions by cryo-SEM

宮崎 加奈子<sup>1</sup>, 西野 有里<sup>1</sup>, 貝瀬 瑞穂<sup>1</sup>, 久保 渕 啓<sup>2</sup>,  
西井 加奈<sup>2</sup>, 吉川 徳信<sup>2</sup>, 宮澤 淳夫<sup>1</sup>  
(<sup>1</sup>兵庫県立大学, <sup>2</sup>資生堂グローバルイノベーションセンター)

Kanako Miyazaki<sup>1</sup>, Yuri Nishino<sup>1</sup>, Mizuho Kaise<sup>1</sup>,  
Kei Kubobuchi<sup>2</sup>, Kana Nishii<sup>2</sup>, Norinobu Yoshikawa<sup>2</sup>,  
Atsuo Miyazawa<sup>1</sup>  
(<sup>1</sup>University of Hyogo, <sup>2</sup>Shiseido Global Innovation Center)

**P\_B-12** 17:00 ~ 18:00

### SEM-EDSによるエビ触角の観察及び元素分析

Observation and elemental analysis of the shrimp antenna by SEM and SEM-EDS

寺林 賢吾<sup>1</sup>, 三輪 昶司<sup>1</sup>, 大森 誠一<sup>1</sup>, 吉田 裕<sup>1</sup>,  
柴野 純一<sup>1</sup>  
(<sup>1</sup>北見工業大学)

Kengo Terabayashi<sup>1</sup>, Takeshi Miwa<sup>1</sup>, Seiichi Omori<sup>1</sup>,  
Yutaka Yoshida<sup>1</sup>, Jun-ichi Shibano<sup>1</sup>  
(<sup>1</sup>Kitami institute of Technology)

**P\_B-13** 16:00 ~ 17:00

### ZIO染色を施したGolgi装置の超高压電顕と連続断面SEMを用いた観察

3-D ultrastructure of ZIO-stained Golgi apparatus by HVEM and serial block-face SEM

白田 信光<sup>1</sup>, 大野 伸彦<sup>2</sup>, 森山 陽介<sup>1</sup>, 深澤 元晶<sup>1</sup>,  
村田 和義<sup>2</sup>, 野田 亨<sup>3</sup>  
(<sup>1</sup>藤田保健衛生大学, <sup>2</sup>生理学研究所, <sup>3</sup>藍野大学)

Nobuteru Usuda<sup>1</sup>, Nobuhiko Ohno<sup>2</sup>,  
Yousuke Moriyama<sup>1</sup>, Motoaki Fukasawa<sup>1</sup>,  
Kazuyoshi Murata<sup>2</sup>, Toru Noda<sup>3</sup>  
(<sup>1</sup>Fujita Health University, <sup>2</sup>National Institute for Physiological Sciences, <sup>3</sup>Aino University)

**P\_B-14** 17:00 ~ 18:00

### FIB/SEM tomographyを用いた歯根膜細胞の3次元形態計測

Histomorphometric analysis of the periodontal ligament cells using FIB/SEM tomography

平嶋 伸悟<sup>1</sup>, 太田 啓介<sup>1,2</sup>, 金澤 知之進<sup>1</sup>,  
都合 亜記暢<sup>2</sup>, 岡山 聡子<sup>1</sup>, 中村 桂一郎<sup>1</sup>  
(<sup>1</sup>久留米大学医学部解剖学講座 顕微解剖・生体形成部門, <sup>2</sup>久留米大学 電子顕微鏡室)

Shingo Hirashima<sup>1</sup>, Keisuke Ohta<sup>1,2</sup>,  
Tomonoshin Kanazawa<sup>1</sup>, Akinobu Togo<sup>2</sup>,  
Ssatoko Okayama<sup>1</sup>, Kei-ichiro Nakamura<sup>1</sup>  
(<sup>1</sup>Division of Microscopic and Developmental Anatomy, Department of Anatomy, Kurume University School of Medicine, <sup>2</sup>Electron Microscopic Laboratory, Central Research Unit of Kurume University)

**P\_B-15** 16:00 ~ 17:00

### FIB/SEMを用いて解析した分裂期染色体の三次元構造

Three-dimensional structure of mitotic chromosomes visualized by FIB / SEM tomography

稲賀 すみれ<sup>1</sup>, 中山 祐二<sup>2</sup>, 伊藤 勝治<sup>3</sup>, 白井 学<sup>3</sup>,  
許斐 麻美<sup>3</sup>, 中澤 英子<sup>3</sup>, 亀家 俊夫<sup>1</sup>, 中根 裕信<sup>1</sup>,  
海藤 俊行<sup>1</sup>  
(<sup>1</sup>鳥取大学医学部, <sup>2</sup>鳥取大学, <sup>3</sup>日立ハイテクノロジーズ)

Sumire Inaga<sup>1</sup>, Yuji Nakayama<sup>2</sup>, Katsuji Ito<sup>3</sup>,  
Manabu Shirai<sup>3</sup>, Mami Konomi<sup>3</sup>, Eiko Nakazawa<sup>3</sup>,  
Toshio Kameie<sup>1</sup>, Hironobu Nakane<sup>1</sup>, Toshiyuki Kaidoh<sup>1</sup>  
(<sup>1</sup>Tottori University, Faculty of Medicine, <sup>2</sup>Tottori University, <sup>3</sup>Hitachi High-technologies Corporation)

**P\_B-16** 17:00 ~ 18:00

### クライオ位相差電子顕微鏡による腸内連鎖球菌V-ATPase単粒子構造解析

Single particle analysis of *EhV*-ATPase by phase contrast electron cryo-microscopy

角田 潤<sup>1,2</sup>, ソン チホン<sup>2</sup>, 薬師寺 Lica Fabiana<sup>3</sup>,  
村田 武士<sup>3</sup>, 上野 博史<sup>4</sup>, 宮崎 直幸<sup>5</sup>, 岩崎 憲治<sup>5</sup>,  
高木 淳一<sup>5</sup>, 飯野 亮太<sup>6</sup>, 村田 和義<sup>1,2</sup>  
(<sup>1</sup>総研大, <sup>2</sup>生理研, <sup>3</sup>千葉大・理, <sup>4</sup>東大・院工, <sup>5</sup>蛋白研, <sup>6</sup>岡崎統合バイオ/分子研)

Jun Tsunoda<sup>1,2</sup>, Chihong Song<sup>2</sup>,  
Fabiana Lica Yakushiji<sup>3</sup>, Takeshi Murata<sup>3</sup>,  
Hiroshi Ueno<sup>4</sup>, Naoyuki Miyazaki<sup>5</sup>, Kenji Iwasaki<sup>5</sup>,  
Junichi Takagi<sup>5</sup>, Ryota Iino<sup>6</sup>, Kazuyoshi Murata<sup>1,2</sup>  
(<sup>1</sup>SOKENDAI, <sup>2</sup>NIPS, <sup>3</sup>Dept.Chem., Chiba Univ.,  
<sup>4</sup>Dept. Appl. Chem., Sch. Eng., Univ. Tokyo, <sup>5</sup>IPR,  
<sup>6</sup>OIIB/IMS)



**P\_B-17** 16:00 ~ 17:00

### **SBF-SEMを利用した骨格筋のミトコンドリアの三次元構造解析**

Three-dimensional structural analysis of mitochondria of skeletal muscle using SBF-SEM

**渡邊 敬文**<sup>1</sup>, 亀谷 清和<sup>2</sup>, 大野 伸彦<sup>3</sup>, 平松 浩二<sup>1</sup>  
(<sup>1</sup>信州大学農学部動物生体機構学研究室, <sup>2</sup>信州大学基盤研究支援センター機器分析部門, <sup>3</sup>自然科学研究機構生理学研究所分子神経生理研究部門)

**Takafumi Watanabe**<sup>1</sup>, Kiyokazu Kametani<sup>2</sup>, Nobuhiko Ohno<sup>3</sup>, Kohzy Hiramatsu<sup>1</sup>  
(<sup>1</sup>Laboratory of Animal Functional Anatomy, Faculty of Agriculture, Shinshu University, <sup>2</sup>Research Center for Supports to Advanced Sciences, Shinshu University, <sup>3</sup>Division of Neurobiology and Bioinformatics, National Institute for Physiological Sciences)

**P\_B-18** 17:00 ~ 18:00

### **c-Kit シグナル異常を持つマウスにおける小腸カハール介在細胞の発生**

Interstitial cells of Cajal (ICC) in small intestine in c-kit signal abnormal mice

**飯野 哲**<sup>1</sup>, 堀口 里美<sup>1</sup>, 堀口 和秀<sup>1</sup>, 橋本 隆<sup>1</sup>  
(<sup>1</sup>福井大学医学部)

**Satoshi Iino**<sup>1</sup>, Satomi Horiguchi<sup>1</sup>, Kazuhide Horiguchi<sup>1</sup>, Takashi Hashimoto<sup>1</sup>  
(<sup>1</sup>University of Fukui, School of Medical Sciences)

**P\_B-19** 16:00 ~ 17:00

### **骨格筋損傷部位における酸化タンパク質の組織化学染色**

Histochemical staining of the oxidized proteins in skeletal muscle injury site

**岩崎 智仁**<sup>1</sup>, 川原井 圭<sup>1</sup>, 田上 貴祥<sup>2</sup>, 長谷川 靖洋<sup>1</sup>  
(<sup>1</sup>酪農学園大学, <sup>2</sup>北海道大学)

**Tomohito Iwasaki**<sup>1</sup>, Kei Kawarai<sup>1</sup>, Takayoshi Tagami<sup>2</sup>, Yasuhiro Hasegawa<sup>1</sup>  
(<sup>1</sup>Rakuno Gakuen University, <sup>2</sup>Hokkaido University)

**P\_B-20** 17:00 ~ 18:00

### **先天性異常ヒト血小板の電顕的解析**

Electron Microscopic Analysis of Abnormal Human Platelets

**鈴木 英紀**<sup>1</sup>  
(<sup>1</sup>日本医科大学 共同研究施設 形態解析研究室)

**Hidenori Suzuki**<sup>1</sup>  
(<sup>1</sup>Division of Morphological and Biomolecular Research, Graduate School of Medicine, Nippon Medical School)

**P\_B-21** 16:00 ~ 17:00

### **パイエル板M細胞の成熟過程の可視化**

Visualization of the entire differentiation process of murine M cell

**木村 俊介**<sup>1</sup>, 武藤 麻未<sup>2</sup>, 岩永 敏彦<sup>1</sup>  
(<sup>1</sup>北海道大学大学院医学研究科組織細胞学分野, <sup>2</sup>北海道大学大学院歯学研究科口腔機能学講座歯科矯正学教室)

**Shunsuke Kimura**<sup>1</sup>, Mami Mutoh<sup>2</sup>, Toshihiko Iwanaga<sup>1</sup>  
(<sup>1</sup>Laboratory of Histology and Cytology, Hokkaido University Graduate School of Medicine, <sup>2</sup>Department of Orthodontics, Hokkaido University Graduate School of Dental Medicine)

**P\_B-22** 17:00 ~ 18:00

### **軟質培養容器で伸展培養したマウス筋芽細胞の透過型電子顕微鏡観察**

Transmission electron microscopy of C2C12 cells stretched on a soft-material culture dish

**今安 正樹**<sup>1</sup>, 高瀬 弘嗣<sup>2</sup>  
(<sup>1</sup>株式会社メニコン総合研究所, <sup>2</sup>名古屋市立大学大学院医学研究科共同研究教育センター)

**Masaki Imayasu**<sup>1</sup>, Hiroshi Takase<sup>2</sup>  
(<sup>1</sup>Menicon Co., Ltd., <sup>2</sup>Core Laboratory, Nagoya City University Graduate School of Medical Sciences)

**P\_B-23** 16:00 ~ 17:00

### **繊毛病関連遺伝子NPHPによる細胞小器官の形態制御**

Morphological control of organelles by cilia disease related gene NPHP

**奈良 隆亮**<sup>1</sup>, 茂田 昌樹<sup>2</sup>, 新竹 積<sup>1</sup>  
(<sup>1</sup>沖縄科学技術大学院大学, <sup>2</sup>京都府立医科大学)

**Ryusuke Kuwahara**<sup>1</sup>, Masaki Shigeta<sup>2</sup>, Tsumoru Shintake<sup>1</sup>  
(<sup>1</sup>Okinawa Institute of Science and Technology Graduate University, <sup>2</sup>Kyoto Prefectural University of Medicine)



**P\_B-24** 17:00 ~ 18:00

### 断髄したラット歯髄腔に移植した幹細胞の分化について

Differentiation of Mesenchymal Stem Cells Implanted into Rat Pulpotomized Pulp Chambers

金子 友厚<sup>1</sup>, 末山 有希子<sup>2</sup>, 顧 彬<sup>1</sup>, 興地 隆史<sup>1</sup>

(<sup>1</sup>東京医科歯科大学 (TMDU) 大学院医歯学総合研究科口腔機能再構築学講座歯髄生物学分野, <sup>2</sup>新潟大学大学院医歯学総合研究科口腔健康科学講座う蝕学分野)

**Tomoatsu Kaneko**<sup>1</sup>, Yukiko Sueyama<sup>2</sup>, Bin Gu<sup>1</sup>, Takashi Okiji<sup>1</sup>

(<sup>1</sup>Department of Pulp Biology and Endodontics, Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental University (TMDU), <sup>2</sup>Division of Cariology, Operative Dentistry and Endodontics, Niigata University Graduate School of Medical and Dental Sciences)

**P\_B-25** 16:00 ~ 17:00

### リポ多糖刺激を行ったラット歯髄の幹細胞に対する免疫二重染色法を用いた検索

Double Immunoperoxidase Labeling Analysis of Stem Cells in Lipopolysaccharide-Stimulated Rat Dental Pulp

末山 有希子<sup>1</sup>, 金子 友厚<sup>2</sup>, 興地 隆史<sup>2</sup>

(<sup>1</sup>新潟大学, <sup>2</sup>東京医科歯科大学)

**Yukiko Sueyama**<sup>1</sup>, Tomoatsu Kaneko<sup>2</sup>, Takashi Okiji<sup>2</sup>  
(<sup>1</sup>Niigata University, <sup>2</sup>Tokyo Medical and Dental University)

**P\_B-26** 17:00 ~ 18:00

### 歯髄組織再生初期におけるM1マクロファージの同定

Detection of M1 Macrophages in Early Stage of Engineered Dental Pulp Tissue

顧 彬<sup>1</sup>, 金子 友厚<sup>1</sup>, 末山 有希子<sup>2</sup>, ピョーピー ソウン<sup>1</sup>, スーイー ミョーゾー<sup>1</sup>, 興地 隆史<sup>1</sup>

(<sup>1</sup>東京医科歯科大学, <sup>2</sup>新潟大学)

**Bin Gu**<sup>1</sup>, Tomoatsu Kaneko<sup>1</sup>, Yukiko Sueyama<sup>2</sup>, Phyo Pyai Sone<sup>1</sup>, Su Yee Myo Zaw<sup>1</sup>, Takashi Okiji<sup>1</sup>  
(<sup>1</sup>Tokyo Medical and Dental University, <sup>2</sup>Niigata University)

**P\_B-27** 16:00 ~ 17:00

### 水生食虫植物ムジナモの捕虫葉閉合運動に関わる細胞構造変化

Structural changes during the rapid closure movement of carnivorous leaves of *Aldrovanda vesiculosa*, an aquatic carnivorous plant

鯨坂 瑞暉<sup>1</sup>, 厚沢 季美江<sup>1</sup>, 徳永 誠<sup>1</sup>, 金子 康子<sup>1</sup>  
(<sup>1</sup>埼玉大学)

**Mizuki Ajsaka**<sup>1</sup>, Kimie Atsuzawa<sup>1</sup>, Makoto Tokunaga<sup>1</sup>, Yasuko Kaneko<sup>1</sup>  
(<sup>1</sup>Saitama University)

**P\_B-28** 17:00 ~ 18:00

### 支持膜とグリッドの親水性の定量的測定

Quantitative Measurement of Hydrophilicity/Hydrophobicity of Support Films and Grids

山口 正視<sup>1</sup>, 青山 俊弘<sup>2</sup>, 山田 哲弘<sup>3</sup>, 丸田 節雄<sup>4</sup>, 知花 博治<sup>1</sup>

(<sup>1</sup>千葉大学・真菌医学研究センター, <sup>2</sup>鈴鹿工業高等専門学校, <sup>3</sup>千葉大学・教育学部, <sup>4</sup>日新 EM 株式会社)

**Masashi Yamaguchi**<sup>1</sup>, Toshihiro Aoyama<sup>2</sup>, Norihiro Yamada<sup>3</sup>, Setsuo Maruta<sup>4</sup>, Hiroji Chibana<sup>1</sup>  
(<sup>1</sup>Medical Mycology Research Center, Chiba University, Japan, <sup>2</sup>National Institute of Technology, Suzuka College, Japan, <sup>3</sup>Faculty of Education, Chiba University, Japan, <sup>4</sup>Nisshin EM Co. Ltd., Japan)

**P\_B-29** 16:00 ~ 17:00

### 培養マクロファージと貪食された酵母の微細形態を同時に観察するための方法について

Convenient Method for Better Preservation of Fine Structures of Cultured Macrophages and Engulfed Yeast Cells by Freeze-Substitution Fixation

山口 正視<sup>1</sup>, 相田 優子<sup>1</sup>, 高橋 梓<sup>1</sup>, 知花 博治<sup>1</sup>

(<sup>1</sup>千葉大学・真菌医学研究センター)

**Masashi Yamaguchi**<sup>1</sup>, Yuko Aida<sup>1</sup>, Azusa Takahashi<sup>1</sup>, Hiroji Chibana<sup>1</sup>  
(<sup>1</sup>Medical Mycology Research Center, Chiba University, Japan)

**P\_B-30** 17:00 ~ 18:00

### 糸状性細菌由来の自己組織化タンパク質の微細構造

Fine structure of a self-organizing protein secreted by a filamentous bacterium

菅 大介<sup>1</sup>, 黒崎 海志<sup>1</sup>, 河崎 雄太<sup>1</sup>, 佐藤 道夫<sup>2</sup>, 武田 稯<sup>1</sup>

(<sup>1</sup>横浜国立大学大学院 工学研究院, <sup>2</sup>明治大学大学院 農学研究科)

**Daisuke Kan**<sup>1</sup>, Kaishi Kurosaki<sup>1</sup>, Yuta Kawasaki<sup>1</sup>, Michio Sato<sup>2</sup>, Minoru Takeda<sup>1</sup>  
(<sup>1</sup>Graduate School of Engineering, Yokohama National University, <sup>2</sup>Graduate School of Agriculture, Meiji University)

**P\_B-31** 16:00 ~ 17:00

### クライオ電子顕微鏡単粒子解析によるマウスノロウイルスS7の構造解析

Capsid Structure of Murine Norovirus S7 revealed by cryo-electron microscopy

ソン チホン<sup>1</sup>, 宮崎 直幸<sup>2</sup>, 岩崎 憲治<sup>2</sup>, 三木 元博<sup>3,4</sup>, 高井一戸高 玲子<sup>3</sup>, 芳賀 慧<sup>5</sup>, 藤本 陽<sup>3</sup>, 片山 和彦<sup>5</sup>, 村田 和義<sup>1</sup>

(<sup>1</sup>生理学研究所, <sup>2</sup>大阪大学, <sup>3</sup>国立感染症研究所, <sup>4</sup>デンカ株式会社, <sup>5</sup>北里大学)

**Chihong Song**<sup>1</sup>, Naoyuki Miyazaki<sup>2</sup>, Kenji Iwasaki<sup>2</sup>, Motohiro Miki<sup>3,4</sup>, Reiko Takai-Todaka<sup>3</sup>, Kei Haga<sup>5</sup>, Akira Fujimoto<sup>3</sup>, Kazuhiko Katayama<sup>5</sup>, Kazuyoshi Murata<sup>1</sup>

(<sup>1</sup>National Institute for Physiological Sciences, <sup>2</sup>Osaka University, <sup>3</sup>National Institute of Infectious Diseases, <sup>4</sup>Denka Co., Ltd., <sup>5</sup>Kitasato University)

**P\_B-32** 17:00 ~ 18:00

### 大腸菌、抗酸菌、Myojin spiral bacteriaのストラクチャーデータ比較

Comparison of structome data obtained from *Escherichia coli*, mycobacteria and Myojin spiral bacteria

山田 博之<sup>1</sup>, 山口 正視<sup>2</sup>, 近松 絹代<sup>1</sup>, 青野 昭男<sup>1</sup>, 五十嵐 ゆり子<sup>1</sup>, 伊 麗娜<sup>1,3</sup>, 高木 明子<sup>1</sup>, 御手洗 聡<sup>1,3</sup>  
(<sup>1</sup>公益財団法人結核予防会結核研究所抗酸菌部, <sup>2</sup>千葉大学真菌医学研究センター, <sup>3</sup>長崎大学大学院医歯薬学総合研究科基礎抗酸菌症学)

**Hiroyuki Yamada**<sup>1</sup>, Masashi Yamaguchi<sup>2</sup>, kinuyo Chikamatsu<sup>1</sup>, Akio Aono<sup>1</sup>, Yuriko Igarashi<sup>1</sup>, Lina Yi<sup>1,3</sup>, Akiko Takaki<sup>1</sup>, Satoshi Mitarai<sup>1,3</sup>

(<sup>1</sup>Department of Mycobacterium Reference and Research, the Research Institute of Tuberculosis, Japan Anti-Tuberculosis Association, <sup>2</sup>Medical Mycology Research Center, Chiba University, <sup>3</sup>Nagasaki University Graduate School of Biomedical Sciences)

# 写真コンクール Photography contest

## PH\_01

### Withered Plant

松浦 友也<sup>1</sup>  
(<sup>1</sup>無所属)

Tomoya Matsuura<sup>1</sup>  
(<sup>1</sup>Freelance)

## PH\_02

### Withered Plant

松浦 友也<sup>1</sup>  
(<sup>1</sup>無所属)

Tomoya Matsuura<sup>1</sup>  
(<sup>1</sup>Freelance)

## PH\_03

### Withered Plant

松浦 友也<sup>1</sup>  
(<sup>1</sup>無所属)

Tomoya Matsuura<sup>1</sup>  
(<sup>1</sup>Freelance)

## PH\_04

### Withered Plant

松浦 友也<sup>1</sup>  
(<sup>1</sup>無所属)

Tomoya Matsuura<sup>1</sup>  
(<sup>1</sup>Freelance)

## PH\_05

### オリンピック新東京ドーム完成

山口 正視<sup>1</sup>  
(<sup>1</sup>千葉大学・真菌医学研究センター)

Masashi Yamaguchi<sup>1</sup>  
(<sup>1</sup>Medical Mycology Research Center, Chiba University, Japan)

## PH\_06

### ハートマーク

宮崎 伸介<sup>1</sup>, 権堂 貴志<sup>2</sup>, 宮崎 裕也<sup>2</sup>, 斉藤 光<sup>3</sup>,  
波多 聰<sup>3</sup>  
(<sup>1</sup>日本 FEI / Thermo Fisher Scientific, <sup>2</sup>株式会社メルビル, <sup>3</sup>九州大学 大学院総合理工学研究院)

Shinsuke Miyazaki<sup>1</sup>, Takashi Gondo<sup>2</sup>,  
Hiroya Miyazaki<sup>2</sup>, Hikaru Saito<sup>3</sup>, Satoshi Hata<sup>3</sup>  
(<sup>1</sup>FEI Japan / Thermo Fisher Scientific, <sup>2</sup>Mel-Build Corporation, <sup>3</sup>Department of Electrical and Materials Science, Kyushu University)

## PH\_07

### カビの分生子 アスペルギルス

福田 覚<sup>1</sup>, 鬼木 明弘<sup>2</sup>, 酒井 俊男<sup>2</sup>  
(<sup>1</sup>東京大学附属病院病理部電子顕微鏡室, <sup>2</sup>酒井電子顕微鏡研究所)

Satoru Fukuda<sup>1</sup>, Akihiro Oniki<sup>2</sup>, Tosio Sakai<sup>2</sup>  
(<sup>1</sup>University of Tokyo Hospital Lab. of Electron microscope, <sup>2</sup>Sakai Electron Microscopy Application Laboratory)

## PH\_08

### 流紋岩に咲いたハマナスの花

塩野 正道<sup>1</sup>, 坂上 万里<sup>1</sup>, 富田 真一<sup>2</sup>  
(<sup>1</sup>㈱日立ハイテクノロジーズ アプリケーション開発部, <sup>2</sup>㈱日立ハイテクノロジーズ 電子顕微鏡第二設計部)

Masamichi Shiono<sup>1</sup>, Mari Sakaue<sup>1</sup>, Shinichi Tomita<sup>2</sup>  
(<sup>1</sup>Hitachi High-Technologies Corporation Application Development Dept., <sup>2</sup>Hitachi High-Technologies Corporation Electron Microscope Systems Design 2 st Dept.)

## PH\_09

### さあ、あなたも「大人のSEM塗り絵」

西永 奨(故人)<sup>1</sup>, 大野 輝昭<sup>1</sup>  
(<sup>1</sup>株式会社 テクネックス工房)

Susumu Nishinaga<sup>1</sup>, Terauki Ohno<sup>1</sup>  
(<sup>1</sup>Technex Lab)

## PH\_10

### ハム ～脂肪球と筋繊維～

山崎 良樹<sup>1</sup>  
(<sup>1</sup>日本電子株式会社 アプリケーション統括室)

Yoshiki Yamasaki<sup>1</sup>  
(<sup>1</sup>JEOL Application Management Department)

## PH\_11

### ワサビダイコン いろいろ

岩田 博之<sup>1</sup>, 辻 篤志<sup>1</sup>, 坂 公恭<sup>1</sup>, 河口 大祐<sup>2</sup>  
(<sup>1</sup>愛知工業大学, <sup>2</sup>浜松ホトニクス)

Hiroyuki Iwata<sup>1</sup>, Atsushi Tsuji<sup>1</sup>, Hiroyasu Saka<sup>1</sup>,  
Daisuke Kawaguchi<sup>2</sup>  
(<sup>1</sup>Aichi Institute of Technology, <sup>2</sup>Hamamatsu Photonics)

## PH\_12

### マリンスノー

marine snow

森谷 ゆかり<sup>1</sup>, 井上 哲郎<sup>1</sup>

(<sup>1</sup>日本電子株式会社)

Yukari Moriya<sup>1</sup>, Teturo Inoue<sup>1</sup>

(<sup>1</sup>JEOL)

## PH\_13

### HeLa細胞の三次元構造

伊藤 勝治<sup>1</sup>, 白井 学<sup>1</sup>, 許斐 麻美<sup>1</sup>, 中澤 英子<sup>1</sup>,  
稲賀 すみれ<sup>2</sup>

(<sup>1</sup>株式会社 日立ハイテクノロジーズ, <sup>2</sup>鳥取大学)

Katsuji Ito<sup>1</sup>, Manabu Shirai<sup>1</sup>, Mami Konomi<sup>1</sup>,

Eiko Nakazawa<sup>1</sup>, Sumire Inaga<sup>2</sup>

(<sup>1</sup>Hitachi High-Technologies Corporation, <sup>2</sup>Tottori University)

## PH\_14

### 天の川(ビッグデータによるポリマー階層構造のシームレス観察)

須賀 三雄<sup>1</sup>, 中村 元弘<sup>1</sup>, 西岡 秀夫<sup>1</sup>, 樋口 剛志<sup>2</sup>,  
陣内 浩司<sup>2</sup>

(<sup>1</sup>日本電子, <sup>2</sup>東北大学 多元研)

Mitsuo Suga<sup>1</sup>, Motohiro Nakamura<sup>1</sup>,

Hideo Nishioka<sup>1</sup>, Takeshi Higuchi<sup>2</sup>, Hiroshi Jinnai<sup>2</sup>

(<sup>1</sup>JEOL, <sup>2</sup>IMRAM)

## PH\_15

### 高解像度SEMで撮影したラット前頭皮質の神経組織の構造

窪田 芳之<sup>1,2</sup>, ネーヤー ラルフ<sup>3</sup>

(<sup>1</sup>生理学研究所, <sup>2</sup>総合研究大学院大学, <sup>3</sup>カールツァイス)

Yoshiyuki Kubota<sup>1,2</sup>, Ralph Neujahr<sup>3</sup>

(<sup>1</sup>National Institute for Physiological Sciences, <sup>2</sup>SOK-ENDAI (The Graduate University for Advanced Studies), <sup>3</sup>Carl Zeiss Microscopy GmbH, ZEISS Group, Germany)