

平成 24 年度 VBL の研究業績

学術論文・書籍関係

- 1) 原 基 (2012) : 熔融塩電析法による高耐酸化性コーティングの形成, 日本金属学会セミナー・テキスト (高温過酷環境を制する耐食材料/コーティングのさらなる挑戦 最近の耐食性理論と長寿命材料の開発・実用化), 日本金属学会, pp. 95-103.
- 2) 原 基 (2012) : 熔融塩電析による高耐酸化性コーティングの作製, ケミカルエンジニアリング, Vol. 57, No. 5, pp. 329-36.
- 3) 福本倫久, 原 基 (2012) : 熔融塩電析法による耐酸化 Ni アルミナイド・コーティング膜の形成, 材料と環境, Vol. 61, No. 3, pp. 80-4.
- 4) M. Fukumoto, C. Tachikawame, Y. Matsuzaka and M. Hara (2012) : Formation of Si diffusion layer on stainless steels and their high temperature corrosion resistance in molten salt, Corrosion Science, Vol. 56, pp. 105-13.
- 5) 福本倫久, 小寺正由紀, 横山健次, 原 基 (2012) : 熔融 Na_2SO_4 の電気分解を利用した Dy_2O_3 と Nd_2O_3 の溶解と Dy および Nd 金属の回収, 材料と環境, Vol. 61, No. 7, pp. 278-82.
- 6) 本間 朗, 佐藤芳幸, 原 基 (2012) : BaO_2 - BaO 中における SS400 および SUS304 鋼の高温腐食挙動, 材料と環境, Vol. 61, No. 11, pp. 443-9.
- 7) 藤井永人, 佐藤菜花, 原 基 (2013) : 熔融塩電析法による Y の含有深さを変えた Ni アルミナイド表面層の作製とその耐サイクル酸化性, 日本金属学会誌, Vol. 77, No. 5 (掲載予定)
- 8) 福本倫久, 力石 健, 杉田聖英, 原 基 (2013) : Hf を固溶させた NiAl 表面層の作製と耐サイクル酸化性, Vol. 77, No. 6 (掲載予定)
- 9) 原 基 (2012) : 熔融塩電析法による高耐酸化性コーティングの形成, 日本金属学会セミナー・テキスト (高温過酷環境を制する耐食材料/コーティングのさらなる挑戦 最近の耐食性理論と長寿命材料の開発・実用化), 日本金属学会, pp. 95-103.
- 10) 原 基 (2012) : 熔融塩電析による高耐酸化性コーティングの作製, ケミカルエンジニアリング, Vol. 57, No. 5, pp. 329-36.
- 11) 福本倫久, 原 基 (2012) : 熔融塩電析法による耐酸化 Ni アルミナイド・コーティング膜の形成, 材料と環境, Vol. 61, No. 3, pp. 80-4.
- 12) 藤井永人, 佐藤菜花, 原 基 (2013) : 熔融塩電析法による Y の含有深さを変えた Ni アルミナイド表面層の作製とその耐サイクル酸化性, 日本金属学会誌, Vol. 77, No. 5
- 13) 福本倫久, 力石 健, 杉田聖英, 原 基 (2013) : Hf を固溶させた NiAl 表面層の作製と耐サイクル酸化性, Vol. 77, No. 6

- 14) "Synthesis of Hyperbranched Poly(l-lactide)s by Self-Polycondensation of AB₂ Macromonomers and Their Structural Characterization by Light Scattering Measurements", M. Jikei, M. Suzuki, K. Itoh, K. Matsumoto, Y. Saito, S. Kawaguchi, *Macromolecules*, 45, 8237-8244 (2012)
- 15) "Synthesis and properties of hyperbranched poly(ether sulfone)s prepared by self-polycondensation of novel AB₂ monomer" M. Jikei, D. Uchida, Y. Haruta, Y. Takahashi, K. Matsumoto, *J. Polym. Sci. Part A: Polym. Chem.*, 50, 3830-3839 (2012)
- 16) 「柔軟なポリ乳酸マルチブロック共重合体の合成と医療分野への応用」寺境光俊, *Polyfile*, 49, 15-17 (2012)
- 17) "Nonlinear Polycondensates", M. Jikei, *Polymer Science: A Comprehensive References*, K. Matyjaszewski, M. Möller eds., 5, 239-246 (2012)
- 18) Zhou, Y.; Xing, G.; Chen, H.; Ogawa, N.; Lin, J. M., Carbon nanodots sensitized chemiluminescence on peroxomonosulfate-sulfite- hydrochloric acid system and its analytical applications. *Talanta* 2012, 99, 471-477.
- 19) Tanno, T.; Oohashi, T.; Katsumata, I.; Katsumi, N.; Fujiwara, K.; Ogawa, N., Estimation of water content in coal using terahertz spectroscopy. *Fuel* 2013, 105, 769-770
- 20) Lin, Z.; Chen, H.; Zhou, Y.; Ogawa, N.; Lin, J. M., Self-catalytic degradation of ortho-chlorophenol with Fenton's reagent studied by chemiluminescence. *Journal of Environmental Sciences* 2012, 24 (3), 550-557.
- 21) Li, H.; Kikuchi, R.; Kumagai, M.; Amano, T.; Tang, H.; Lin, J. M.; Fujiwara, K.; Ogawa, N., Nondestructive estimation of strength deterioration in photovoltaic backsheets using a portable near infrared spectrometer. *Solar Energy Materials and Solar Cells* 2012, 101, 166-169.
- 22) Fujiwara, K.; Ogawa, N., Aggregate domain growth of gold nanoparticle on chemically modified glass surface. *Journal of Nanoscience and Nanotechnology* 2012, 12 (8), 6596-6598.
- 23) 別所昌彦, 西山孝: エネルギー・資源の動向と未来, 粉体技術, 第4巻, 6号, pp. 17-24, 2012
- 24) T. Wajima, K. Munakata: Synthesis of zeolitic material from paper sludge ash using diatomite, *Materials Transactions*, 53(4), 592-596 (2012)
- 25) T. Wajima, K. Munakata, T. Uda: Adsorption behavior of lithium from seawater using manganese oxide adsorbent, *Plasma and Fusion Research*, 7, 2405021 (2012)
- 26) T. Wajima, K. Munakata: Effect of alkali species on synthesis of K-F zeolitic materials from paper sludge ash for soil amendment", *Chemical Engineering Journal*, 207-208, 906-912 (2012)
- 27) T. Wajima: Ion exchange properties of Japanese natural zeolites in seawater,

- Analytical Sciences, 29, 139-141 (2013)
- 28) T. Wajima, J. F. Rakovan: Removal of fluoride ions using calcined paper sludge, Journal of Thermal Analysis and Calorimetry, Accepted (2013)
 - 29) T. Wajima, J. F. Rakovan: Removal behavior of phosphate from aqueous solution by calcined paper sludge”, Colloids and Surfaces A: Physicochemical and Engineering Aspects, Accepted (2013)
 - 30) T. Wajima: A novel adsorbent synthesized from blast furnace slag with phosphate sorption capacity, Proceedings of XXVI International Mineral Processing Congress (IMPC2012), p. 5757-5767 (2012)
 - 31) T. Wajima: Conversion of waste paper sludge into heavy metal adsorbent using sulfur impregnation, Advanced Materials Research, Accepted (2013)
 - 32) T. Wajima: Removing lead ions from aqueous solutions with sulfur-impregnated adsorbents, Advanced Materials Research, 684, 198-202 (2013)
 - 33) S. Hayashi, R. Kusamizu, F. Kagaya: Effects of different silica sol binders on properties of natural zeolite/silica sol deposits prepared by electrophoretic deposition, J. Ceram. Soc. Japan, 120(12), 584-588 (2012).
 - 34) Z. J. Yan, S. Takahashi, T. Hasegawa, S. Ishio, Y. Kondo, J. Ariake, D. S. Xue, Understanding magnetic properties of arrays of small FePt dots with perpendicular anisotropy, J. Magn. Magn. Mater., Vol. 324, pp. 3737-3740 (2012)
 - 35) T. Hasegawa and S. Ishio, Magnetic phase diagram and crystalline structure of polycrystalline FeMnPt films, FeMnPt 多結晶薄膜の結晶構造と磁気相図, Journal of the society of materials engineering for resources of Japan (素材物性学雑誌) , in press.
 - 36) T. Hasegawa, Y. Kondo, H. Yamane, S. Nagamachi, and S. Ishio, Ferromagnetic-paramagnetic patterning of FePtRh films by Fe ion implantation, IEEE Trans. Magn., in press.
 - 37) 長谷川 崇, 石尾 俊二, フラット・パターンニング法を用いて作製した $L1_0$ FePtRh 強磁性 - 反強磁性パターンにおける原子拡散幅の評価, 電子情報通信学会技術研究報告; 信学技報 (IEICE Technical Report) , Vol. 112, No. 249, pp. 49-52 (2012)
 - 38) 中村勇希, 近藤祐治, 山川清志, 有明順, 石尾 俊二, レーザ加熱機構を有する局所磁気光学カー効果計測技術の開発, 電子情報通信学会技術研究報告; 信学技報 (IEICE Technical Report) , Vol. 112, No. 249, pp. 31-35 (2012)
 - 39) Ryu Koide, Chiharu Tokoro, Shinsuke Murakami, Tsuyoshi Adachi and Akihiro Takahashi: ” A Model for Prediction of Neutralizer Usage and Sludge Generation in the Treatment of Acid Mine Drainage from Abandoned Mines: Case Studies in Japan” , Mine Water and the Environment, Vol. 31, No.4, pp. 287-296, 2012
 - 40) Soldering process and cutting performance of micro saw wire bonded with diamond

- grains *The International Journal of Modern Physics : Conference Series*, 6, (2012), pp.491-496 Osamu Kamiya, Yasuyuki Miyano, Mamoru Takahashi, Yuichi Oga, Zhan Wen Chen, Kenji Funaoka
- 41) 膜厚制御型試料を利用した銅の抗菌性発現最小量評価法の開発
銅と銅合金 (発行: 日本伸銅協会 銅および銅技術研究会誌), 5, (2012), pp. 168-174. 宮野泰征, 本城国明, 神谷修, 木内正人
 - 42) 廃棄小型電気製品を対象とした有価資源 (貴金属・レアメタル) リサイクル 家庭科, 5, 2013, pp. 1-4.
 - 43) 村上賢治, 加藤貴宏, 菅原勝康: スギの低温触媒ガス化による水素製造, *Journal of the Japan Institute of Energy*, 92, 313-318 (2013)
 - 44) Kenji Murakami, Shinichi Watanabe, Takahiro Kato, Katsuyasu Sugawara : Transition temperature control of adsorption-desorption property of PNIPAM/mesoporous silica composite by addition of crosslinking agent, *Colloids and Surfaces A*, 419, 223-227 (2013)
 - 45) 加藤貴宏, 村上賢治, 菅原勝康: 石膏の炭素還元におけるカルシウムと水銀の動的挙動, *Journal of the Japan Institute of Energy*, 92, 157-163 (2013)
 - 46) Takahiro Kato, Kenji Murakami, Katsuyasu Sugawara : Carbon reduction of gypsum produced from flue gas desulfurization, *Chemical Engineering Transactions*, 29, pp. 805-810 (2012)
 - 47) 佐藤洋, 泰良知, 菅原勝康: 液相法による積層セラミックコンデンサー用銅ならびにニッケル膜の調製, *化学工学論文集*, 38 (2), pp. 117-122 (2012)
 - 48) Kenji Murakami, Xue Yu, Takahiro Kato, Yukihiko Inoue, Katsuyasu Sugawara : Synthesis of temperature-responsive anion exchanger via click reaction, *Journal of Colloid and Interface Science*, 376, pp. 189-195 (2012)
 - 49) Kenji Murakami, Masahiko Sato, Takahiro Kato, Katsuyasu Sugawara : Influence of difference in chemical compositions of rice straw on hydrogen formation in nickel-catalyzed steam gasification, *Fuel Processing Technology*, Vol. 95, p. 78-83 (2012)
 - 50) Kenji Murakami, Kengo Kasai, Takahiro Kato, Katsuyasu Sugawara : Conversion of rice straw into valuable products by hydrothermal treatment and steam gasification, *Fuel*, Vol. 93, p. 37-43 (2012)
 - 51) Yutaka Tsujiuchi, Hiroshi Masumoto, Takashi Goto “Study on hydrogenated amorphous silicon film for effective fabrication of composite thin film of bio molecule and fluorescent molecule” *Annual Report on Collaborative Researches Advanced Research Center of Metallic Glasses, Institute for Materials Research, Tohoku University*, pp. 32-33, 2012.
 - 52) M. Takahashi, M. Sugawara, O. Kamiya and T. Ohyoshi (2012): Synthesis of Nanocrystalline Diamond Films on Molybdenum Substrate by Flame Combustion

- Method, *International Journal of Modern Physics: Conference Series*, Vol. 6, No. 1, p. 485-490.
- 53) T. Takeguchi, H. Watanabe, T. Murayama, H. Takahashi, and W. Ueda, *Chem. Lett.*, 42, 124 (2013).
- 54) M. Taguchi, H. Takahashi, and S. Nakajima, *Mater. Trans.*, Published (2013).
- 55) M. Taguchi, H. Takahashi, M. Nagai, T. Aichi, and R. Sato, *Hydrometallurgy*, Accepted (2013).
- 56) Manabu Yamada, Yuji Ootashiro, Yoshihiko Kondo, Fumio Hamada, “A 3D supramolecular network assembly based on thiacalix[4]arene by halogen-halogen, CH-Br, CH- π , and S- π interactions”, *Tetrahedron Lett.*, 54, 1510-1514 (2013). (DOI:org/10.1016)
- 57) 2) Munkhtuya Ulzii, Yoshihiko Kondo, Manabu Yamada, and Fumio Hamada, “Metal Extraction capability for hybrid polymers consisted of β -cyclodextrin and diatomite”, *Int. J. of the Soc. of Mat. Eng. for Resources*, in press.
- 58) Ma L, Koyota S, Myoen Y, Yamashita T, Yatabe N, Koizumi Y, Aosasa M, Nishimichi N, Matsuda H, Sugiyama T. (2012) Generation of intracellular single-chain antibodies directed against polypeptide GalNAc-transferase using a yeast two-hybrid system. *Biochem. Biophys. Res. Commun.*, 418, 628-633.
- 59) 2. Imai K, Minamiya Y, Koyota S, Ito M, Saito H, Sato Y, Motoyama S, Sugiyama T, Ogawa J. (2012) Inhibition of dendritic cell migration by transforming growth factor- β 1 increases tumor-draining lymph node metastasis. *J. Exp. Clin. Cancer Res.*, 31, 3-11.
- 60) 3. Qiao Z, Koizumi Y, Zhang M, Natsui M, Flores MJ, Gao L, Yusa K, Koyota S, Sugiyama T. (2012) Anti-Melanogenesis Effect of *Glechoma hederacea* L. Extract on B16 Murine Melanoma Cells. *Biosci. Biotech. Biochem.*, 76. 1877-1883.
- 61) 4. Fujisawa M, Morimoto (Yamashita) Y, Tatsuyama (Nagayama) S, Sugiyama T, Arany S, Kitamura C, Shibukawa Y, Tokuda M, Torii M. (2012) Hyperosmotic stress Induces Cell death in an Odontoblast-lineage Cell Line. *J. Endod.*, 38, 931-935.
- 62) 5. Yoshino K, Motoyama S, Koyota S, Shibuya K, Sato Y, Sasaki T, Wakita A, Saito H, Minamiya Y, Sugiyama T, Ogawa J. (2012) Identification of insulin-like growth factor 2 mRNA-binding protein 3 as a radioresistance factor in squamous esophageal cancer cells. *Dis. Esophagus.*, DOI: 10.1111/j.1442-2050.2012.01415.x
- 63) 6. Sone M, Nishikawa Y, Nagahama Y, Kumagai E, Doi Y, Omori Y, Yoshioka T, Tokairin T, Yoshida M, Sugiyama T, Enomoto K. (2012) Recovery of Mature Hepatocytic Phenotype following Bile Ductular Transdifferentiation of Rat Hepatocytes in Vitro. *Am. J. Pathol.*, 181, 2094-2104.

- 64) 7. Yoshida T, Kumashiro Y, Iwata T, Ishihara J, Umemoto T, Shiratsuchi Y, Kawashima N, Sugiyama T, Yamato M, Okano T. (2012) Requirement of integrin $\beta 3$ for iron transportation during enamel formation. *J. Dent. Res.*, 91, 1154-1159.
- 65) 8. 吉田倫子, 篠原ひとみ, 兒玉英也, 成田好美, 杉山俊博 (2012) 味覚センサを用いた乳腺炎による母乳の味の変化の分析. *母性衛生* 52, 472-480.
- 66) 9. 増田 豊, 杉山俊博 (2012) 行動変容をもたらす血中複合糖質の構造主義的検討. *秋田県医師会雑誌* 63, 8-19.
- 67) 10. 上村佐知子, 右川智子, 木村陽香, 畠 巖, 越前屋 優, 神林 崇, 杉山俊博 (2012) 人工炭酸泉浴は湯冷めしにくいのか?—人工炭酸泉浴その生理学的変化—. *秋田理学療法* 20, 7-13.
- 68) 11. Nishikawa Y, Sone M, Nagahama Y, Kumagai E, Doi Y, Omori Y, Yoshioka T, Tokairin T, Yoshida M, Yamamoto Y, Ito A, Sugiyama T, Enomoto K. (2013) Tumor necrosis factor- α promotes bile ductular transdifferentiation of mature rat hepatocytes in vitro *J. Cell. Biochem.*, 114, 831-843.
- 69) 12. Hirose N, Shimazu A, Watanabe M, Tanimoto K, Koyota S, Sugiyama T, Uchida T, Tanne K (2013) Ameloblastin in Hertwig's epithelial root sheath regulates tooth root formation and development. *PLOS ONE*, Volume 8(1): e54449.
- 70) 13. Masuda Y, Sugiyama T (2013) Humoral glycolipid is associated with mouse memory impairment caused by lipopolysaccharide. *Biomed. Res.*, (in press)
- 71) Investigation of Thermal Conductivity and Heat Characteristics of Oil Sands Using Ultrasound Irradiation for Shortening the Preheating Time, *Jpn J. Appl. Phys.*, S. Kamagata, Y. Kawamura, H. Okawa, K. Mizutani, 51 07GE03 (2012)
- 72) Removal of Arsenic from Sulfuric Acid Solutions Using Jarosite and Sonication, *Jpn J. Appl. Phys.*, R. Hosokawa, H. Okawa, 51 07GD14 (2012)
- 73) Influence of Air Humidity and Water Particles on Dust Control Using Ultrasonic Atomization, *Jpn J. Appl. Phys.*, H. Okawa, K. Nishi, D. Shindo, Y. Kawamura, 51 07GE06 (2012)
- 74) Redetermination of the low-temperature polymorph of $\text{Li}_2\text{MnSiO}_4$ from single-crystal X-ray data, *Acta*
- 75) *Crystallographica Section E*, M. Sato, T. Ishigaki, K. Uematsu, K. Toda, H. Okawa, Vol. E68, i68 (2012)
- 76) 高周波数および低周波数超音波を用いたオイルサンドからのビチューメン分離効果, *石油技術協会誌*, 齊藤知直, 大川浩一, *タイフーン ババダグリ*, Vol. 77, No. 5, 394 (2012)
- 77) 高周波の超音波を用いたオイルサンドからのビチューメンの分離, *ケミカルエンジニアリング*, 大川浩一, 齊藤知直, Vol. 57 No. 7 6 (2012)
- 78) 超音波化学反応を用いたリチウムイオン電池用鉄系正極材料の合成, *超音波テク*

- ノ, 大川浩一, Vol.24 No.4, 20 (2012)
- 79) Z. Li, K. Hatakeyama, G. Egawa, S. Yoshimura, and H. Saito, “Stroboscopic imaging of an alternating magnetic field from a perpendicular magnetic recording head by frequency-modulated magnetic force microscopy”, Applied Physics Letter, Vol. 100, p. 222405 (2012).
- 80) J. Lu, Y. Kinoshita, G. Egawa, S. Yoshimura, H. Asano, and H. Saito, “Alternating electric force microscopy: static electric field gradient imaging in an air atmosphere for Ba_{0.7}Sr_{0.3}TiO₃ ferroelectric thin film”, Journal of Applied Physics, Vol. 112, p. 124110 (2012).
- 81) L. Zhang, Z. Li, X. Liu a, J. Bai, S. Yoshimura, H. Saito, F. Wei, “Investigation on the microstructure and magnetic properties of FePt films prepared by sequentially sputtering”, Materials Letters, Vol. 79, pp. 235–237 (2012).
- 82) S. Yoshimura, S. Yasui, G. Egawa, Y. Kinoshita, and H. Saito, “AC magnetic field imaging for current perpendicular magnetic writing head by frequency-modulated magnetic force microscopy (FM-MFM) –Suppression of image distortion by using cone shaped FePt-based high-coercivity MFM tips–”, IEICE Technical Report, Vol. 112, No. 249, p. 53–58 (2012). (in Japanese)
- 83) “Synthesis of Novel Hybrid Type Porous Materials”, Watabe, M., Kuroda, R., Ushio, M., Ogasawara, M., Nakata, S., Haruyama, T., J. Jpn. Petrol. Inst., 55, pp.332–338 (2012). (in Japanese with English summary).
- 84) “Preparation and NO reduction property of Apatite-type ALa₉Si₆O₂₆ (A = Li, Na, K) supported Pt catalyst”, Ono, A., Kato, S., Narumi, T., Adachi, Y., Ogasawara, M., Wakabayashi, T., Nakahara, Y., Nakata, S., J. Ceram. Soc. Jpn., 121(2), pp.169–175 (2013)
- 85) 松田 充, 徳重英信, 川上 洵, 鈴木弘実: 吸光度と RGB 値を用いた天然ゼオライト 混和ポーラスコンクリートのメチレンブルー吸着特性の評価, セメント・コンクリート 論文集, No.66, pp.259–265 (2013)
- 86) Ogawa, Y., Ishiyama, D., Shikazono, N., Iwane, K., Kajiwara, M. Tsuchiya, N. (2012): The role of hydrous ferric oxide precipitation in the fractionation of arsenic, gallium, and indium during the neutralization of acidic hot spring water by river water in the Tama River watershed, Japan. *Geochem. Cosmochim. Acta*, vol. 86, 367–383.
- 87) Yamaoka, K., Ishikawa, T., Matsubaya, O., Ishiyama, D., Nagaishi, K., Hiroyasu, Y., Chiba, H. and Kawahata, H. (2012): Boron and oxygen isotope systematics for a complete section of oceanic crustal rocks in the Oman ophiolite. Vol. 84, 367–383.
- 88) 田中 良・石山大三・佐藤比奈子・水田敏夫 (2012):長野県天龍村神豊太陽タンク

ステン鉱床の地質と鉱化作用. 資源地質, vol. 62, 125-138.

- 89) Fukuyama, M., Ogasawara, M., Sato, H., Ishiyama, D., and Nishiyama, T. (2012): Accumulation of trace elements in vesuvianite during fluid-rock interaction: an example from a zoned skarn developed between a metamorphosed basic dike and marble in the Hirao Limestone, Fukuoka, Japan. *The Canadian Mineralogist*, v. 50, 821-834.
- 90) 吉村洋平・鹿野和彦・石山大三: 北海道奥尻島, 勝瀨山火山から噴出したガラス質流紋岩溶岩の産状と水和. *火山学会誌*, 2012, v. 57, No. 4, 159-176.
- 91) Ishiyama, D., Kawaraya, H., Sato, H., Obradovic, L., Blagojević, B., Petrovic, J., Gardic, V., Stevanovic, Z., Shibayama, A., Masuda, N. and Takasaki, Y. (2012): Geochemical Characteristics of Mine Drainage Water and River Water in the Bor Mining Area, Serbia: Results of Study in 2011. *Scientific and Technical Reports of Graduate School of Engineering and Resource Science, Akita University*, No. 33, 41-49.
- 92) 石山大三 (2012): 地球のめぐみ温泉の科学. *日本温泉気候物理医学会雑誌*, v. 76, No. 1, 12-14.
- 93) A. Hosoi, K. Hiruta, Y. Takasaki, A. Shibayama: Metal Recovery from Printed Circuit Board Waste by Chlorination-Volatilization and the Volatilization Behavior of Metals, *Nihonkinzokugakkaishi - c.*, Vol. 76, No. 2, (155-63), 2012
- 94) T. Wajima, K. Oya, A. Shibayama, K. Munakata: Preparation of Adsorbent with High Removal Ability for Phosphate Ion from Blast Furnace Slag using Alkali Fusion, *International Journal of the Society of Materials Engineering for Resources*, Vol. 18, No. 2, (59-63), 2012
- 95) K. Haga, W. Tongamp, A. Shibayama: Investigation of Flotation Parameters for Copper Recovery from Enargite and Chalcopyrite Mixed Ore, *Materials Transactions*, Vol. 53, No. 4, (707-15), 2012
- 96) J. P. Rabatho, W. Tongamp, Y. Takasaki, K. Haga, A. Shibayama: Recovery of Nd and Dy from rare earth magnetic waste sludge by hydrometallurgical process, *Journal of Material Cycles and Waste Mngement*, (in press)