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EDUCATION

2011/10 – 2016/09 Ph.D. Natural Environmental Studies, Graduate School of Frontier Sciences, The University of Tokyo, Japan

2004/09 – 2006/08 M.S. Dept. of Geosciences, National Taiwan University, Taiwan

2001/09 – 2004/08 B.A. Dept. of Geology, Chinese Culture University, Taiwan

EMPLOYMENT

2022/04 – present Research Fellow RCEC, Academia Sinica, Taiwan

2020/04 – 2022/03 Research Fellow AORI, The University of Tokyo

2016/11 – 2020/03 Project researcher AORI, The University of Tokyo

RESEARCH AREA

Biogeochemistry, Analytical Chemistry, Marine Science, and Geology

AWARD and HONORS

2005 *Masterpiece*
10th Geology Forum of Young Geosciences, Dept. of Geoscience, NTU

2003 *Sinotech Engineering Consultants Inc. Scholarship*, SEC, Inc.

2003 *Hwa-Kang Scholarship*, Dept. of Geology, CCU

PUBLICATIONS

1. **Lu, C.-J.**, Benner, R., Fichot, C. G., Fukuda, H., Yamashita Y. and Ogawa, H. (2016) Sources and transformations of dissolved lignin phenols and chromophoric dissolved organic matter in Otsuchi Bay, Japan. *Front. Mar. Sci.* 3:85. doi:10.3389/fmars.2016.00085
2. Fichot, C. G., Benner, R., Kaiser, K., Shen, Y., Amon, R. M. W., Ogawa, H. and **Lu, C.-J.** (2016) Predicting dissolved lignin phenol concentrations in the coastal ocean from chromophoric dissolved organic matter (CDOM) absorption coefficients. *Front. Mar. Sci.*, 3:7. doi: 10.3389/fmars.2016.00007
3. Yamashita, Y., **Lu, C.-J.**, Ogawa, H., Nishioka, J., Obata, H. and Saito, H. (2015) Application of an in situ fluorometer to determine the distribution of fluorescent organic matter in the open ocean. *Mar. Chem.*, 177, 298-305
4. Lo, L., Shen, C.-C., **Lu, C.-J.**, Chen, Y.-C., Chang, C.-C., Wei, K.-Y., Qu, D. and Gagan, M.K. (2014) Determination of element/Ca ratios in foraminifera and corals using cold- and hot-plasma techniques in inductively coupled plasma sector field mass spectrometry. *J. Asian Earth Sciences*, 81, 115-122

5. **Lu, C.-J.**, Benner, R., Fichot, C.G., Fukuda, H., Yamashita Y. and Ogawa, H. (2016) The fate of terrigenous dissolved organic matter in Otsuchi Bay, Japan: the implication from a decomposition experiment. p49-50, in Marine ecosystems after great east Japan earthquake in 2011-our knowledge acquired by TEAMS-(Edited by Kazuhiro Kogure, Masato Hirose, Hiroshi Kitazato and Akihiro Kijima), Tokai University Press, Kanagawa, pp. 162.

CONFERENCE ABSTRACTS

1. **Lu, C.-J.** (2021) Optical characteristic of dissolved organic matter in a coastal ocean. IMBeR Group Online Seminar: Ocean Carbon Cycle Assessment (OCCAs) (Invited speaker)
2. Wiwit, Wong, K.H., **Lu, C.-J.**, Fukuda, H., Ogawa, H., Takeda, S., Takahashi, K., Mashio, A.S. and Obata, H. (2021) Copper-binding organic ligands and phytoplankton growth in Japanese coastal waters. ASM (Virtual meeting)
3. **Lu, C.-J.**, Fukuda, H., and Ogawa, H. (2019) Source characteristic and dynamics of terrigenous dissolved organic matter in the marine environment. LIPI/JSPS workshop (Palembang) (Oral)
4. **Lu, C.-J.**, Fukuda, H., and Ogawa, H. (2019) Source characteristics of terrestrial dissolved organic matter in Otsuchi Bay using fluorescent index. TEAMS International Symposium (Tokyo)
5. **Lu, C.-J.**, Ueno, M., Fukuda, H., and Ogawa, H. (2018) Optical properties of dissolved organic matter and humic substances in a river-influenced coastal environment. OSM (Oregon)
6. **Lu, C.-J.**, Ueno, M., Fukuda, H., and Ogawa, H. (2018) Characterizing humic substances in Otsuchi Bay, Japan using UV-Vis absorbance and fluorescence spectroscopy. IMBER/CJK symposium (Shanghai) (Oral)
7. **Lu, C.-J.**, Ueno, M., Fukuda, H., and Ogawa, H. (2018) Optical characteristics of dissolved organic matter and humic substances in Otsuchi Bay, Japan. TEAMS International Symposium (Sendai)
8. **Lu, C.-J.**, Ueno, M., Fukuda, H., and Ogawa, H. (2017) Optical properties and dynamic of dissolved organic matter in Otsuchi Bay using UV-Vis absorbance and fluorescence spectroscopy. TEAMS International Symposium (Sendai)
9. **Lu, C.-J.**, Benner, R., Fichot, C.G., Fukuda, H., Yamashita Y. and Ogawa, H. (2016) The fate of terrigenous dissolved organic matter in Otsuchi Bay, Japan: The implication from a decomposition experiment. TEAMS International Symposium (Tokyo)
10. **Lu, C.-J.**, Benner, R., Fichot, C.G., Fukuda, H. and Ogawa, H. (2014) The distribution of dissolved lignin as a tracer of terrigenous dissolved organic matter in Otsuchi Bay, Japan. OSM (Honolulu)
11. Ogawa, H., **Lu, C.-J.**, Nishioka, J., Yamashita, Y. and Benner, R. (2014) Distributions of dissolved lignin in the western north Pacific: implication for transportation of terrigenous dissolved organic matter accompanied with iron. OSM (Honolulu)
12. **Lu, C.-J.**, Benner, R., Fichot, C.G., Fukuda, H., Yamashita Y. and Ogawa, H. (2014) The study on terrigenous dissolved organic matter using lignin phenols and spectral characteristics in Otsuchi Bay, Japan. Fall meeting of JOS (Nagasaki) (Oral)
13. **Lu, C.-J.**, Benner, R., Fichot, C.G., Fukuda, H., Yamashita Y. and Ogawa, H. (2014) Study on terrigenous dissolved organic matter using lignin phenols and the spectral characteristics in Otsuchi Bay, Japan. TEAMS symposium (Sendai)
14. **Lu, C.-J.**, Benner, R., Fichot, C.G., Fukuda, H. and Ogawa, H. (2013) The distribution of dissolved lignin as a tracer of terrigenous dissolved organic matter in Otsuchi Bay, Japan. IMBER/CJK symposium (Tokyo) (Oral)

15. **Lu, C.-J.**, Benner, R., Fichot, C.G., Fukuda, H. and Ogawa, H. (2013) The distribution of dissolved lignin as a tracer of terrigenous dissolved organic matter in Otsuchi Bay. Fall meeting of JOS (Sapporo) (Oral)
16. **Lu, C.-J.**, Benner, R., Fichot, C.G., Fukuda, H., Yamashita Y. and Ogawa, H. (2013) The distribution of dissolved lignin as a tracer of terrigenous dissolved organic matter in Otsuchi Bay. TEAMS symposium (Sendai)