

# Cold-Water Corals in Gas Hydrate Drilling Cores from the South China Sea: Occurrences, Geochemical Characteristics and Their Relationship to Methane Seepages

Yinan Deng <sup>1,2,3,†</sup>, Fang Chen <sup>1,3,\*</sup>, Niu Li <sup>3,4,5,\*†</sup>, Meng Jin <sup>4,6</sup>, Jun Cao <sup>1,3</sup>, Hong Chen <sup>1</sup>, Yang Zhou <sup>1</sup>, Cong Wu <sup>1</sup>, Chang Zhuang <sup>1</sup>, Yi Zhao <sup>1</sup> and Sihai Cheng <sup>1</sup>

<sup>1</sup> MNR Key Laboratory of Marine Mineral Resources, Guangzhou Marine Geological Survey, Guangzhou 510075, China; dengyinan@126.com (Y.D.); caojun\_031051@126.com (J.C.); chen hong@gmgs.cn (H.C.); zhouyang@gmgs.cn (Y.Z.); gzdiatom@163.com (C.W.); zhchdatou@126.com (C.Z.); liniu@mail.sysu.edu.cn (Y.Z.); chengsihai@163.com (S.C.)

<sup>2</sup> Research Center for Earth System Science, Yunnan University, Kunming 650091, China

<sup>3</sup> Southern Marine Science and Engineering Guangdong Laboratory (Guangzhou), Guangzhou 511458, China

<sup>4</sup> CAS Key Laboratory of Ocean and Marginal Sea Geology, South China Sea Institute of Oceanology, Chinese Academy of Sciences, Guangzhou 510301, China; jinmeng@scsio.ac.cn

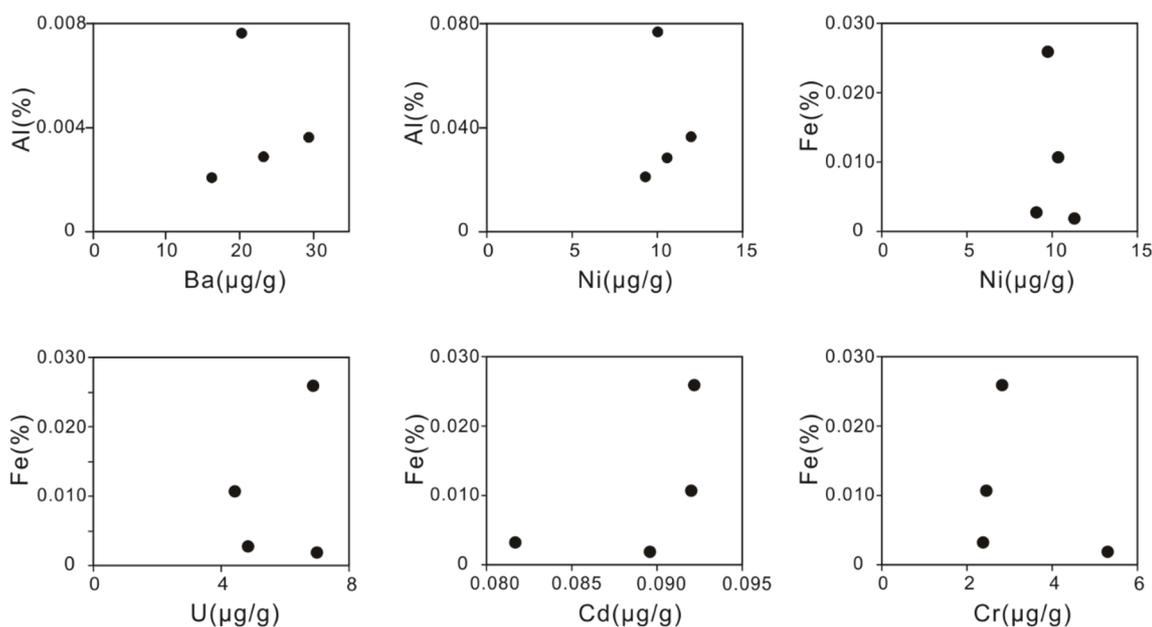
<sup>5</sup> Innovation Academy of South China Sea Ecology and Environmental Engineering, Chinese Academy of Sciences Guangzhou, Guangzhou 510301, China

<sup>6</sup> University of Chinese Academy of Sciences, Beijing 100049, China

\* Correspondence: Zhchenfang66@21cn.com (F.C.), liniu@scsio.ac.cn (N.L.)

† Both authors should be regarded as joint first authors.

Received: 1 November 2019; Accepted: 27 November 2019; Published: 29 November 2019



**Figure S1.** The relationship between Fe, Al, U, Cr and Cd of cold-water coral samples from the South China Sea.