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Research interest: Isotope Geochemistry, Low-temperature earth surface processes, Marine Chemistry, Isotope Analytical Methodology and Application

### [Education] 學歷

Ph. D., Earth Sciences, National Cheng Kung University, Taiwan, 2014 國立成功大學地球科學所博士

M. Sc., Earth Sciences, National Cheng Kung University, Taiwan, 2005 國立成功大學地球科學所碩士

B. Sc., Earth Sciences, National Cheng Kung University, Taiwan, 2003 國立成功大學地球科學系學士

### [Experience] 經歷

Postdoctoral Fellow, Institute of Earth Sciences, Academia Sinica (Oct., 2017 – present) 迄今, 中央研究院地球科學所 博士後研究

Postdoctoral Fellow, Institute of Geochemistry and Petrology, ETH Zürich (Aug., 2016 – Sep., 2017) Institute of Geochemistry and Petrology, ETH Zürich 博士後研究

Postdoctoral Fellow, Institute of Earth Sciences, Academia Sinica (Aug., 2014– July, 2016) 中央研究院地球科學所 博士後研究

Postdoctoral Fellow, Earth Dynamic System Research Center, NCKU (Jan., 2014–July, 2014) 國立成功大學地球動力系統研究中心 博士後研究

Visiting Doctoral student, Scripps Institution of Oceanography, UCSD (July, 2011–July, 2012) Scripps Institution of Oceanography, UCSD 訪問博士生

Research assistant, Department of Earth Sciences, NCKU (Aug., 2005–Aug., 2006) 國立成功大學地球科學系 研究助理

### [Publications]

#### Journal paper 期刊論文:

Lemaitre, N., de Souza, G.F., Archer, C., **Wang, R.M.**, Planquette, H., Sarthou, G. and Vance, D. (2020) Pervasive sources of isotopically light zinc in the North Atlantic Ocean. *Earth and Planetary Science Letters*, 539, 116216.

**Wang, R.M.**, Archer, C., Bowie, A.R. and Vance, D. (2019) Zinc and nickel isotopes in seawater from the Indian Sector of the Southern Ocean: The impact of natural iron fertilization versus Southern Ocean hydrography and biogeochemistry. *Chemical Geology*, 511, 452-464.

**Wang, R.M.** and You, C.F. (2013) Uranium and strontium isotopic evidence for strong submarine groundwater discharge in an estuary of a mountainous island: A case study in the Gaoping River Estuary, Southwestern Taiwan. *Marine Chemistry* 157, 106–116.

**Wang, R.M.** and You, C.F. (2013) Precise determination of U isotopic compositions in low concentration carbonate samples by MC-ICP-MS. *Talanta* 107, 67–73.

Liu, Y.C., You, C.F., Huang, K.F., **Wang, R.M.**, Chung, C.H. and Liu, H.C. (2012) Boron sources and transport mechanisms in river waters collected from southwestern Taiwan: Isotopic evidence. *Journal of Asian Earth Sciences*, 58, 16-

- Huang, K.F., You, C.F., Liu, Y.H., **Wang, R.M.**, Lin, P.Y., and Chung, C.H. (2010) Low-memory, small sample size, accurate and high-precision determinations of lithium isotopic ratios in natural materials by MC-ICP-MS. *Journal of Analytical Atomic Spectrometry*, 25, 1019-1024, doi: 10.1039/b926327f.
- Wang, R.M.**, You, C.F., Chu, H.Y. and Hung, J.J. (2009) Seasonal variability of dissolved major and trace elements in the Gaoping (Kaoping) River Estuary, Southwestern Taiwan. *Journal of Marine Systems* 76, 4, 444-456.
- Li, H.C., You, C.F., Ku, T.L., Xu, X.M., Buchheim, H., Wan, N.J., **Wang, R.M.**, Shen, M.L. (2008) Isotopic and geochemical evidence of palaeoclimate changes in Salton Basin, California, during the past 20 kyr: 2.  $^{87}\text{Sr}/^{86}\text{Sr}$  ratio in lake tufa as an indicator of connection between Colorado River and Salton Basin. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 259, 2-3, 198-212.
- Li, H.C., Ku, T.L., Yuan, D.X., Wan N.J., Ma, Z.B., Zhang, P.Z., Bar-Matthews, M., Ayalon, A., Liu, Z.H., Zhang, M.L., Zhu, Z.Y. and **Wang, R.M.** (2007) Stable isotopic compositions of waters in the karst environments of China: Climatic implications. *Applied Geochemistry*, 22, 8, 1748-1763.

#### Conference paper 研討會摘要:

- Wang, R.M.**, Huang, K.F. and Shih, Y.T. (2020) Influence of landslide on weathering processes in the mountainous river catchment of Taiwan by isotopic approach. Geological Annual Congress, Taiwan.
- Wang, R.M.** and Huang, K.F. (2019) Effect of landslide weathering on water chemistry in the mountainous river catchment of Taiwan. AGU Fall Meeting, USA.
- Wang, R.M.**, Archer, C., Bowie, A.R. and Vance D. (2017) Variations of zinc and nickel isotopes in a natural iron fertilized region around Kerguelen Island, Southern Ocean. Goldschmidt conference, Paris.
- Wang, R.M.**, Huang, K.F., Huang, J.C., Chen, P.H. and Shih, Y.T. (2016) The influence of weathering processes on riverine uranium isotopes in small mountainous rivers of Taiwan. Goldschmidt conference, Japan.
- Wang, R.M.**, You, C.F., Chen, C.T. and Peng, T.R. (2015) Using uranium isotopes to trace groundwater discharge activity in the southwestern Taiwan. Oceanographic Annual Congress, Taiwan.
- Wang, R.M.** and You, C.F. (2014) Uranium and strontium isotopic evidence for strong submarine groundwater discharge in an estuary of a mountainous island: A case study in the Gaoping River Estuary, Southwestern Taiwan. Oceanographic Annual Congress, Taiwan.
- Wang, R.M.** and You, C.F. (2011) Distribution of Uranium Isotopes in the Kaoping River Estuary, Southwestern Taiwan. AGU Fall Meeting, USA.
- Wang, R.M.**, You, C.F. and Hung, J.J. (2011) Distribution of Uranium Isotopes in the Kaoping River Estuary, Southwestern Taiwan. Oceanographic Annual Congress, Taiwan.
- Wang, R.M.** and You, C.F. (2010) Uranium isotopic variation in mountainous rivers –An example from the Kaoping river in Southwestern Taiwan. Geological Annual Congress, Taiwan.
- Wang, R.M.**, You, C.F. and Huang, K.F. (2009) Seasonal Weathering Effects on Riverine Uranium and Uranium Isotopes: A Case Study in the Kaoping River. Oceanographic Annual Congress, Taiwan.
- Wang, R.M.**, You, C.F., Lee, S.P., Huang, W.S., Lin, T.C. and Tsai, H. (2008) Trace Elements Distributions and Chemical Weathering in the Soil Profiles from the Pakua Tableland, Central Taiwan. Geological Annual Congress, Taiwan.
- Wang, R.M.**, You, C.F. and Lee, S.P. (2008) Uranium Isotopic Fractionation in Soil Extractions. AGU Fall Meeting, USA.
- Wang, R.M.** and You, C.F. (2007) The behavior of uranium concentration and isotopic composition in the Kaoping River estuary. Oceanographic Annual Congress, Taiwan.

- Wang, R.M.,** You, C.F., Chu, H.Y. and Hung, J.J. (2006) Seasonal variability of dissolved major and trace elements in the Kao-ping estuary, Southwestern Taiwan. AGU Fall Meeting, USA.
- Wang, R.M.,** You, C.F., Huang, K.F. and Li, M.D. (2005) Precise Determination of Trace Metals (U, Pb, Cd) in Seawater Using Chelex-100 and ICP-MS Mass Spectrometry. Oceanographic Annual Congress, Taiwan.
- Wang, R.M.,** You, C.F. and Li, M.D. (2004) Precise Determination of Trace Uranium in Seawater Using Chelex-100 and ICP-MS Mass Spectrometry. Oceanographic Annual Congress, Taiwan.