

Dr. Wei-Li Hong
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Baltic Sea Fellow, ***Baltic Sea Centre, Stockholm University***
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PERSONAL

Date of Birth: October 12, 1982
Place of Birth: Taipei, Taiwan
Citizenship: Taiwan
Google Scholar profile: https://goo.gl/5oDoLk
RG profile: https://www.researchgate.net/profile/Wei_Li_Hong2
Lab website: https://www.ocean-and-mud.com/

EDUCATION

Oregon State University
PhD in Chemical Oceanography (*March 2014)*
Dissertation: Application of Transport-Reaction Modeling to Constrain Biogeochemical Processes in Marine Sediments.
National Taiwan University
M. Sc (*June 2009)*
Thesis: Estimation of Methane Contribution from the Accretionary Prism in SW Taiwan
National Taiwan University
B. Sc (*June 2005)*

PAST EMPLOYMENT

Geological Survey of Norway
April, 2017 – Apr, 2020
Postdoc Researcher
- Geochemist under the NORCRUST project (funded by Norwegian Research Council)

CAGE, University of Tromsø, Norway
September, 2014 – March, 2017
Postdoc Researcher
- Geochemist in the Modern Seabed Group in CAGE (Centre for Arctic Gas Hydrate, Environment and Climate)

Oregon State University
April, 2014 - August, 2014
Postdoc Researcher
- Geochemist and numerical modeler

Oregon State University
June, 2009 - March, 2014
Graduate Research Assistant
- Geochemist and numerical modeler

SKILLS

Language - Fluent in Mandarin and English (writing/speaking/listening)
Computer Skills – Mathematica, MATLAB, CrunchFlow, and other document-editing and graphic software.

CRUISE/EXPEDITION EXPERIENCE

Work Package 3 leader during North of Greenland GEOEO expedition: 5 August – 17 September 2024

Organic Geochemist during IODP Exp 358: NanTroSEIZE Plate Boundary Deep Riser 4: Nankai Seismogenic/Slow Slip Megathrust: 15 Jan to 5 Feb 2019.

Porewater Geochemist during MeBo drilling MSM57: Gas Hydrates and seafloor dynamic West of Svalbard: 29 July to 07 September 2016

Organic Geochemist during IODP Exp 337: Deep Coalbed Biosphere off Shimokita: 27 July 2012 to 5 October 2012

Inorganic Geochemist for Ulleung Basin Gas Hydrate (UBGH2) research cruise: 27th Aug to 30 Sep 2010

Geotek employee for Ulleung Basin Gas Hydrate (UBGH2) research cruise (X-ray and Multi Senor Core Logger Lab): 8th Aug to 26th Aug 2010,

and other dozens of cruises with RV OR1 (Taiwan), RV OR3 (Taiwan), FF Helmer Hanssen (Norway), and G.O. Sars (Norway) since 2007

TEACHING EXPERIENCE

GG7033 Marine Geochemistry (2023-) *Primary teacher*
Master-level, Stockholm University
https://www.su.se/english/search-courses-and-programmes/gg7033-1.643000

GG4208 Sedimentary Systems (2022-) *Co-teach*
Bachelor-level, Stockholm University
https://www.su.se/english/search-courses-and-programmes/gg4208-1.411544

GG7009 Ocean-climate interaction through geologic time (2024-) *Co-teach*
Master-level, Stockholm University
https://www.su.se/sok-kurser-och-program/gg7009-1.673630

GG4090 Oceanography for geoscientists (2024-) *Co-teach*
Bachelor -level, Stockholm University
https://www.su.se/sok-kurser-och-program/gg4090-1.647699

GG4209 Global Geochemical Cycle (2021-2023) *Primary teacher*
Bachelor-level, Stockholm University
https://www.su.se/english/search-courses-and-programmes/gg4209-1.411545

PROJECTS

2025-2027 EU Water4All "Aquatic Ecosystem Services": SecuCoast
Granted for ca. 3,5 MSEK

2023-2028 ERC Consolidator Grant Silicate alteration in marine sediments: rate, pathway, and significance. *Granted for 1,999,780 Euro*

2022-2023 Swedish Foundations' Starting Grant- Ragnar Söderbergs stiftelse. Silicate alteration in marine sediments: rate, pathway, and significance. *Granted for 2,8 MSEK*

2022-2025 Swedish Research Council (VR) Starting Grant. Cryosphere-driven submarine groundwater discharge in the Arctic. Granted for *4 MSEK (2021-04962).*

2024-2027 STINT Mobility Grant Internationalization *Granted for 480 kSEK*

2023-2023 STINT Initiation Grant Cryosphere-driven submarine groundwater discharge across the Scandinavian peninsula since the Last Glacial Maximum. *Granted for 148 kSEK*

2020-2024 EEA Grant and Norway Grant (GRIEG: Polish-Norwegian research projects). Submarine Groundwater Discharge in a Changing Arctic: Scale and Biogeochemical impact (ArcticSGD) *Granted for €1,472,697 (2019/34/H/ST10/00645)*.

MEMBERSHIP OF SCIENTIFIC COMMUNITY	**2017-** European Association of Geochemistry **2009-2013** American Geophysical Union
COMMISSIONS OF TRUST	**2024 –** Proposal reviewer for Portuguese Polar Program (PROPOLAR) Reviewer for scientific journals *Communications Earth & Environment, Marine and Petroleum Geology, Chemical Geology* **2023 –** Proposal reviewer for NCN Reviewer for scientific journals *Nature Geoscience, Marine Geology, Chemical Geology* **-** Goldschmidt Research Conference Session convener (13e) **2022 -** Proposal reviewer for DFG, SNSF **-** Reviewer for scientific journals *Communications Earth & Environment* and *Frontiers Earth Science*. **2021 -**Proposal reviewer: American Chemical Society (New Direction Grant), Swiss National Science Foundation, and EUTOPIA-SIF postdoctoral fellowship. Journal reviewer: Marine Pollution Bulletin, Biogeosciences, Frontiers in Earth Sciences. Earth and Planetary Science Letters, Environmental Science: Processes & Impacts, Global Biogeochemical Cycles **2020** -Reviewer for scientific journals *Marine and Petroleum Geology, Chemical Geology, Geophysical Research Letters* **2019 -**Goldschmidt Research Conference Session convener (10a) - Standard document editorial committee (SN/K 579 Porevannsundersøkelser). -International Ocean Discovery Program- Expedition 358 report editorial committee -Reviewer for scientific journals *Geochimica et Cosmochimica Acta, Deep-Sea research Part II, Geophysical Research Letters and more* **2018 -**Proposal reviewer for National Science Foundation (USA) -Reviewer for scientific journal *Marine and Petroleum Geology, Geochimica et Cosmochimica Acta, Biogeosciences* **2017 -**Proposal reviewer for Czech Science Foundation -Reviewer for scientific journals *Scientific Reports, Geochimica et Cosmochimica Acta, Deep-Sea research Part II* **2016 -**Reviewer for scientific journals *Limnology & Oceanography, Biogeosciences, Nature Communications, Deep-Sea research Part II* -Local committee for the international conference 13th *Gas in the Marine Sediments* (GIMS13) **2014 -**Reviewer for scientific journal *Marine and Petroleum Geology*
PUBLICATIONS	**77** papers from peer-reviewed SCI journals/books (19 papers as the first/corresponding author): h-index: 32, i10-index: 58. *Source: Google Scholar*) **+30** international conference presentation since 2005

FULL PUBLICATION (UP TO 2025)

- Peer-reviewed articles

2025

1. Phillips S. C., Johnson J. E., Clyde W. C., **Hong W-. L.**, Setera J. B. and Torres M. E. (2025) Tracking diagenetic alteration of magnetic susceptibility in thrust ridge and slope basin sediments of the Cascadia margin (ODP Sites 1249 and 1252; IODP Site U1325). Mar Geol 483, 107519.

2024

2. Saghravani S. R., Böttcher M. E., **Hong W-. L.**, Kuliński K., Lepland A., Sen A. and Szymczycha B. (2024) Distributions of in situ parameters, dissolved (in)organic carbon, and nutrients in the water column and pore waters of Arctic fjords (western Spitsbergen) during a melting season. Earth Syst Sci Data 16, 3419–3431.
3. Wasiljeff J., Salminen J. M., Roberts A. P., Hu P., Brown M., Kuva J., Lukkari S., Jolis E. M., Heinsalu A., **Hong W-. L.**, Lepland A., Suuroja S., Parkkonen J. and Virtasalo J. J. (2024) Morphology-Dependent Magnetic Properties in Shallow-Water Ferromanganese Concretions. Geochemistry, Geophysics, Geosystems 25, e2023GC011366.
4. Chen N. C., O'Regan M., **Hong W-. L.**, Andrén T., Rodellas V., Roth F., Mörth C. M., Regnéll C., Marxen H. S., ten Hietbrink S., Huang T. H., Gyllencreautz R., Stranne C., Linderholm A., Garcia-Orellana J., Humborg C. and Jakobsson M. (2024) Investigation of submarine groundwater discharge into the Baltic Sea through varved glacial clays. Cont Shelf Res 282, 105337.
5. **Hong W-. L.**, Lepland A., Crémière A., Kirsimäe K., Stüeken E. E., Dumont M., Block H. E. and Rae J. W. B. (2024) A Sequential Leaching Protocol for $\delta^{11}B$ and Trace Element Analyses of Multi-Phase Carbonate Rocks. Paleoceanogr Paleoclimatol 39, e2023PA004658.

2023

6. Akam S. A., Swanner E. D., Yao H., **Hong W-. L.** and Peckmann J. (2023) Methane-derived authigenic carbonates – A case for a globally relevant marine carbonate factory. Earth Sci Rev 243, 104487.
7. Chen N. C., Yang T. F., Liou Y. H., Lin H. T. T., **Hong W-. L.**, Lin S., Su C. C., Lin L. H. and Wang P. L. (2023) Controlling factors on patterns of dissolved organic carbon and volatile fatty acids in a submarine mud volcano offshore southwestern Taiwan. Front Earth Sci (Lausanne) 11, 1210088.
8. Diak M., Böttcher M. E., Ehlert von Ahn C. M., **Hong W-. L.**, Kędra M., Kotwicki L., Koziorowska-Makuch K., Kuliński K., Lepland A., Makuch P., Sen A., Winogradow A., Silberberger M. J. and Szymczycha B. (2023) Permafrost and groundwater interaction: current state and future perspective. Front Earth Sci (Lausanne) 11, 1254309.
9. Huang T. H.*, Sun X., Somelar P., Kirsimäe K., Pickering R. A., Kim J. H., Kielman-Schmitt M. and **Hong W-. L.**± (2023) Separating Si phases from diagenetically-modified sediments through sequential leaching. Chem Geol 637, 121681. **Supervised PhD student* ±*Corresponding author*
10. Luo M., **Hong W-. L.**, Torres M. E., Kutterolf S., Pank K., Hopkins J. L., Solomon E. A., Wang K. L. and Lee H. Y. (2023) Volcanogenic aluminosilicate alteration drives formation of authigenic phases at the northern Hikurangi margin: Implications for subseafloor geochemical cycles. Chem Geol 619, 121317.
11. Middleton J. T., **Hong W-. L.**, Paytan A., Auro M. E., Griffith E. M. and Horner T. J. (2023) Barium isotope fractionation in barite–fluid systems at chemical equilibrium. Chem Geol 627, 121453.
12. Sen A., Andersen L. W., Kjeldsen K. U., Michel L. N., **Hong W-. L.**, Choquet M. and Rasmussen T. L. (2023) The phylogeography and ecology of Oligobrachia frenulate species suggest a generalist chemosynthesis-based fauna in the arctic. Heliyon 9.
13. Sinner M., **Hong W-. L.**, Michel L. N., Vadakkepuliyambatta S., Knies J. and Sen A. (2023) Lack of detectable chemosynthesis at a sponge dominated subarctic methane seep. Front Earth Sci (Lausanne) 11, 1203998.

2022

14. Stranne C., O'Regan M., **Hong W-. L.**, Brüchert V., Ketzer M., Thornton B. F. and Jakobsson M. (2022) Anaerobic oxidation has a minor effect on mitigating seafloor methane emissions from gas hydrate dissociation. Commun Earth Environ 3, 163.
15. Kim J. H., Ryu J. S., **Hong W-. L.**, Jang K., Joo Y. J., Lemarchand D., Hur J., Park M. H., Chen M., Kang M. H., Park S., Nam S. Il and Lee Y. K. (2022) Assessing the impact of freshwater discharge on the fluid chemistry in the Svalbard fjords. Science of The Total Environment 835, 155516.
16. **Hong W-. L.**, Lepland A., Kirsimäe K., Crémière A. and Rae J. W. B. (2022) Boron concentrations and isotopic compositions in methane-derived authigenic carbonates: Constraints and limitations in reconstructing formation conditions. Earth Planet Sci Lett 579, 117337.

2021

17. **Hong W-. L.**, Pape T., Schmidt C., Yao H., Wallmann K., Plaza-Faverola A., Rae J. W. B., Lepland A., Bünz S. and Bohrmann G. (2021) Interactions between deep formation fluid and gas hydrate dynamics inferred from pore fluid geochemistry at active pockmarks of the Vestnesa Ridge, west Svalbard margin. Mar Pet Geol 127, 104957.
18. Kim J. H., **Hong W-. L.**, Torres M. E., Ryu J. S., Kang M. H., Han D., Nam S. Il, Hur J., Koh D. C., Niessen F., Lee D. H., Jang K., Rae J. W. B. and Chen M. (2021) A Pulse of Meteoric Subsurface Fluid Discharging Into the Chukchi Sea During the Early Holocene Thermal Maximum (EHTM). Geochemistry, Geophysics, Geosystems 22, e2021GC009750.

19. Blättler C. L., **Hong W-. L.**, Kirsimäe K., Higgins J. A. and Lepland A. (2021) Small calcium isotope fractionation at slow precipitation rates in methane seep authigenic carbonates. Geochim Cosmochim Acta 298, 227–239.
20. Klasek S. A., **Hong W-. L.** ±, Torres M. E., Ross S., Hostetler K., Portnov A., Gründger F. and Colwell F. S. (2021) Distinct methane-dependent biogeochemical states in Arctic seafloor gas hydrate mounds. Nature Communications 2021 12:1 12, 1–13. ±*Corresponding author*
21. Sauer S., **Hong W-. L.**, Yao H., Lepland A., Klug M., Eichinger F., Himmler T., Crémière A., Panieri G., Schubert C. J. and Knies J. (2021) Methane transport and sources in an Arctic deep-water cold seep offshore NW Svalbard (Vestnesa Ridge, 79°N). Deep Sea Res 1 Oceanogr Res Pap 167, 103430.

2020

22. Luo M., Torres M. E., **Hong W-. L.**, Pape T., Fronzek J., Kutterolf S., Mountjoy J. J., Orpin A., Henkel S., Huhn K., Chen D. and Kasten S. (2020) Impact of iron release by volcanic ash alteration on carbon cycling in sediments of the northern Hikurangi margin. Earth Planet Sci Lett 541, 116288.
23. **Hong W-. L.**, Latour P., Sauer S., Sen A., Gilhooly W. P., Lepland A. and Fouskas F. (2020) Iron cycling in Arctic methane seeps. Geo-Marine Letters 40, 391–401.
24. **Hong W-. L.** Torres M. E. and Kutterolf S. (2020) Towards a global quantification of volcanogenic aluminosilicate alteration rates through the mass balance of strontium in marine sediments. Chem Geol 550, 119743.
25. Dessandier P. A., Borrelli C., Yao H., Sauer S., **Hong W-. L.** and Panieri G. (2020) Foraminiferal $\delta^{18}O$ reveals gas hydrate dissociation in Arctic and North Atlantic ocean sediments. Geo-Marine Letters 40, 507–523.
26. Klasek S., Torres M. E., Bartlett D. H., Tyler M., **Hong W-. L.** and Colwell F. (2020) Microbial communities from Arctic marine sediments respond slowly to methane addition during ex situ enrichments. Environ Microbiol.
27. Torres M. E., **Hong W-. L.**, Solomon E. A., Milliken K., Kim J. H., Sample J. C., Teichert B. M. A. and Wallmann K. (2020) Silicate weathering in anoxic marine sediment as a requirement for authigenic carbonate burial. Earth Sci Rev 200, 102960.
28. Chen N. C., Yang T. F., **Hong W-. L.**, Yu T. L., Lin I. T., Wang P. L., Lin S., Su C. C., Shen C. C., Wang Y. and Lin L. H. (2020) Discharge of deeply rooted fluids from submarine mud volcanism in the Taiwan accretionary prism. Scientific Reports 2020 10:1 10, 1–12.
29. Pape T., Bünz S., **Hong W-. L.**, Torres M. E., Riedel M., Panieri G., Lepland A., Hsu C.-W. W., Wintersteller P., Wallmann K., Schmidt C., Yao H., Bohrmann G (2020) Origin and Transformation of Light Hydrocarbons Ascending at an Active Pockmark on Vestnesa Ridge, Arctic Ocean. J Geophys Res Solid Earth 125.
30. Pape Thomas, Ruffine L., **Hong W-. L.**, Sultan N., Riboulot V., Peters C. A., Kölling M., Zabel M., Garziglia S. and Bohrmann G. (2020) Shallow Gas Hydrate Accumulations at a Nigerian Deepwater Pockmark-Quantities and Dynamics. J Geophys Res Solid Earth 125.

2019

31. Yao H., **Hong W-. L.**, Panieri G., Sauer S., Torres M. E., Lehmann M. F., Gründger F. and Niemann H. (2019) Fracture-controlled fluid transport supports microbial methane-oxidizing communities at Vestnesa Ridge. Biogeosciences 16, 2221–2232.
32. Sen A., Chitkara C., **Hong W-. L.**, Lepland A., Cochrane S., Di Primio R. and Brunstad H. (2019a) Image based quantitative comparisons indicate heightened megabenthos diversity and abundance at a site of weak hydrocarbon seepage in the southwestern Barents Sea. PeerJ 2019, e7398.
33. Sen A., Himmler T., **Hong W-. L.**, Chitkara C., Lee R. W., Ferré B., Lepland A. and Knies J. (2019b) Atypical biological features of a new cold seep site on the Lofoten-Vesterålen continental margin (northern Norway). Sci Rep 9.
34. **Hong W-. L.**, Lepland A., Himmler T., Kim J., Chand S., Sahy D., Solomon E. A., Rae J. W. B., Martma T. and Nam S. (2019) Discharge of meteoric water in the eastern Norwegian Sea since the last glacial period. Geophys Res Lett 46, 8194–8204.
35. Berndt C., Planke S., Teagle D., Huismans R., Torsvik T., Frieling J., Jones M. T., Jerram D. A., Tegner C., Inge Faleide J., Coxall H. and **Hong W-. L.** (2019) Northeast Atlantic breakup volcanism and consequences for Paleogene climate change-MagellanPlus Workshop report. Scientific Drilling 26, 69–85.

2018

36. Phillips S. C., **Hong W-. L.**, Johnson J. E., Fahnestock M. F. and Bryce J. G. (2018) Authigenic carbonate formation influenced by freshwater inputs and methanogenesis in coal-bearing strata offshore Shimokita, Japan (IODP site C0020). Mar Pet Geol 96, 288–303.
37. Sen A., Åström E. K. L., **Hong W-. L.**, Portnov A., Waage M., Serov P., Carroll M. L. and Carroll J. (2018) Geophysical and geochemical controls on the megafaunal community of a high Arctic cold seep. Biogeosciences 15, 4533–4559.
38. **Hong W-. L.**, Torres M. E., Portnov A., Waage M., Haley B. and Lepland A. (2018) Variations in Gas and Water Pulses at an Arctic Seep: Fluid Sources and Methane Transport. Geophys Res Lett 45, 4153–4162.
39. McVeigh D., Skarke A., Dekas A. E., Borrelli C., **Hong W-. L.**, Marlow J. J., Pasulka A., Jungbluth S. P., Barco R. A. and Djurhuus A. (2018) Characterization of benthic biogeochemistry and ecology at three methane seep

sites on the Northern U.S. Atlantic margin. Deep Sea Research Part II: Topical Studies in Oceanography 150, 41–56.
40. Wallmann K., Riedel M., **Hong W-. L.**, Patton H., Hubbard A., Pape T., Hsu C. W., Schmidt C., Johnson J. E., Torres M. E., Andreassen K., Berndt C. and Bohrmann G. (2018) Gas hydrate dissociation off Svalbard induced by isostatic rebound rather than global warming. Nat Commun 9, 1–9.

2017

41. Chen N.-C., Yang T. F., **Hong W-. L.**, Chen H.-W., Chen H.-C., Hu C.-Y., Huang Y.-C., Lin S., Lin L.-H., Su C.-C., Liao W.-Z., Sun C.-H., Wang P.-L., Yang T., Jiang S.-Y., Liu C.-S., Wang Y. and Chung S.-H. (2017) Production, consumption, and migration of methane in accretionary prism of southwestern Taiwan. Geochemistry, Geophysics, Geosystems 18, 2970–2989.
42. Crémière A., Strauss H., Sebilo M., **Hong W-. L.**, Gros O., Schmidt S., Tocny J., Henry F., Gontharet S. and Laverman A. M. (2017) Sulfur diagenesis under rapid accumulation of organic-rich sediments in a marine mangrove from Guadeloupe (French West Indies). Chem Geol 454, 67–79.
43. **Hong W-. L.**, Torres M. E., Carroll J., Crémière A., Panieri G., Yao H. and Serov P. (2017) Seepage from an arctic shallow marine gas hydrate reservoir is insensitive to momentary ocean warming. Nat Commun 8, 1–14.
44. Panieri G., Bünz S., Fornari D. J., Escartin J., Serov P., Jansson P., Torres M. E., Johnson J. E., **Hong W-. L.**, Sauer S., Garcia R. and Gracias N. (2017) An integrated view of the methane system in the pockmarks at Vestnesa Ridge, 79°N. Mar Geol 390, 282–300.
45. Plaza-Faverola A., Vadakkepuliyambatta S., **Hong W-. L.**, Mienert J., Bünz S., Chand S. and Greinert J. (2017) Bottom-simulating reflector dynamics at Arctic thermogenic gas provinces: An example from Vestnesa Ridge, offshore west Svalbard. J Geophys Res Solid Earth 122, 4089–4105.
46. Sample J. C., Torres M. E., Fisher A., **Hong W-. L.**, Destrigneville C., Defliese W. F. and Tripati A. E. (2017) Geochemical constraints on the temperature and timing of carbonate formation and lithification in the Nankai Trough, NanTroSEIZE transect. Geochim Cosmochim Acta 198, 92–114.

2016

47. Sauer S., **Hong W-. L.**, Knies J., Lepland A., Forwick M., Klug M., Eichinger F., Baranwal S., Crémière A., Chand S. and Schubert C. J. (2016) Sources and turnover of organic carbon and methane in fjord and shelf sediments off northern Norway. Geochemistry, Geophysics, Geosystems 17, 4011–4031.
48. Chen M., Kim J.-H., Nam S.-I., Niessen F., **Hong W-. L.**, Kang M.-H. and Hur J. (2016) Production of fluorescent dissolved organic matter in Arctic Ocean sediments. Sci Rep 6.
49. **Hong W-. L.**, Sauer S., Panieri G., Ambrose W. G., James R. H., Plaza-Faverola A. and Schneider A. (2016) Removal of methane through hydrological, microbial, and geochemical processes in the shallow sediments of pockmarks along eastern Vestnesa Ridge (Svalbard). Limnol Oceanogr 61, S324–S343.
50. Kim J.-H., Torres M. E., Haley B. A., Ryu J.-S., Park M.-H., **Hong W-. L.** and Choi J. (2016) Marine silicate weathering in the anoxic sediment of the Ulleung Basin: Evidence and consequences. Geochemistry, Geophysics, Geosystems 17, 3437–3453.
51. Peszynska M., **Hong W-. L.**, Torres M. E. and Kim J.-H. (2016) Methane Hydrate Formation in Ulleung Basin Under Conditions of Variable Salinity: Reduced Model and Experiments. Transp Porous Media 114.

2015

52. Peszynska M., Medina F. P., **Hong W-. L.** and Torres M. E. (2015) Reduced Numerical Model for Methane Hydrate Formation under Conditions of Variable Salinity. Time-Stepping Variants and Sensitivity. Computation 2016, Vol. 4, Page 1 4, 1.
53. Inagaki F., Hinrichs K.-U., Kubo Y., Bowles M. W., Heuer V. B., **Hong W-. L.**, Hoshino T., Ijiri A., Imachi H., Ito M., Kaneko M., Lever M. A., Lin Y.-S., Methé B. A., Morita S., Morono Y., Tanikawa W., Bihan M., Bowden S. A., Elvert M., Glombitza C., Gross D., Harrington G. J., Hori T., Li K., Limmer D., Liu C.-H., Murayama M., Ohkouchi N., Ono S., Park Y.-S., Phillips S. C., Prieto-Mollar X., Purkey M., Riedinger N., Sanada Y., Sauvage J., Snyder G., Susilawati R., Takano Y., Tasumi E., Terada T., Tomaru H., Trembath-Reichert E., Wang D. T. and Yamada Y. (2015) Exploring deep microbial life in coal-bearing sediment down to ?2.5 km below the ocean floor. Science (1979) 349, 420–424.
54. Moen N.*, **Hong W-. L.** and Haley B. (2015) Data report: 87Sr/86Sr in pore fluids off Shimokita, Japan. In Proc. IODP| Volume p. 2. **Supervised master student*
55. Torres M. E., Cox T., **Hong W-. L.**, Mcmanus J., Sample J. C., Destrigneville C., Gan H. M., Gan H. Y. and Moreau J. W. (2015) Crustal fluid and ash alteration impacts on the biosphere of Shikoku Basin sediments, Nankai Trough, Japan. Geobiology 13, 562–580.

2014

56. **Hong W-. L.**, Solomon E. A. and Torres M. E. (2014) A kinetic-model approach to quantify the effect of mass transport deposits on pore water profiles in the Krishna-Godavari Basin, Bay of Bengal. Mar Pet Geol 58, 223–232.
57. **Hong W-. L.**, Torres M. E., Kim J.-H., Choi J. and Bahk J.-J. (2014) Towards quantifying the reaction network around the sulfate–methane-transition-zone in the Ulleung Basin, East Sea, with a kinetic modeling approach. Geochim Cosmochim Acta 140, 127–141.

58. Rose K. K., Johnson J. E., Torres M. E., **Hong W-. L.**, Giosan L., Solomon E. A., Kastner M., Cawthern T., Long P. E. and Todd Schaef H. (2014) Anomalous porosity preservation and preferential accumulation of gas hydrate in the Andaman accretionary wedge, NGHP-01 site 17A. Mar Pet Geol 58, 99–116.

Prior than 2013

59. Choi J., Kim J.-H., Torres M. E., **Hong W-. L.**, Lee J.-W., Yi B. Y., Bahk J.-J. and Lee K. E. (2013) Gas origin and migration in the Ulleung Basin, East Sea: Results from the Second Ulleung Basin Gas Hydrate Drilling Expedition (UBGH2). Mar Pet Geol 47, 113–124.
60. **Hong W-. L.**, Etiope G., Yang T. F. and Chang P.-Y. (2013) Methane flux from miniseepage in mud volcanoes of SW Taiwan: Comparison with the data from Italy, Romania, and Azerbaijan. J Asian Earth Sci 65, 3–12.
61. **Hong W-. L.**, Torres M. E., Kim J.-H., Choi J. and Bahk J.-J. (2013) Carbon cycling within the sulfate-methane-transition-zone in marine sediments from the Ulleung Basin. Biogeochemistry 115, 129–148.
62. **Hong W-. L.**, Etiope G., Yang T. F. and Chang P.-Y. (2013) Methane flux from miniseepage in mud volcanoes of SW Taiwan: Comparison with the data from Italy, Romania, and Azerbaijan. J Asian Earth Sci 65, 3–12.
63. Kim J.-H., Torres M. E., **Hong W-. L.**, Choi J., Riedel M., Bahk J.-J. and Kim S.-H. (2013a) Pore fluid chemistry from the Second Gas Hydrate Drilling Expedition in the Ulleung Basin (UBGH2): Source, mechanisms and consequences of fluid freshening in the central part of the Ulleung Basin, East Sea. Mar Pet Geol 47, 99–112.
64. Kim J.-H., Torres M. E., Lee J. Y., **Hong W-. L.**, Holland M., Park M.-H., Choi J. and Kim G.-Y. (2013b) Depressurization experiment of pressure cores from the central ulleung basin, east sea: Insights into gas chemistry. Org Geochem 62, 86–95.
65. Kim J.-H., Torres M. E., Choi J., Bahk J.-J., Park M.-H. and **Hong W-. L.** (2012) Inferences on gas transport based on molecular and isotopic signatures of gases at acoustic chimneys and background sites in the Ulleung Basin. Org Geochem 43, 26–38.
66. Walia V., Lin S. J., Fu C. C., Yang T. F., **Hong W-. L.**, Wen K.-L. and Chen C.-H. (2010) Soil-gas monitoring: A tool for fault delineation studies along Hsinhua Fault (Tainan), Southern Taiwan. Applied Geochemistry 25, 602–607.
67. **Hong W-. L.**, Yang T. F., Walia V., Lin S.-J., Fu C.-C., Chen Y.-G., Sano Y., Chen C.-H. and Wen K.-L. (2010) Nitrogen as the carrier gas for helium emission along an active fault in NW Taiwan. Applied Geochemistry 25, 593–601.
68. Chuang P., Yang T. F., **Hong W-. L.**, Lin S., Sun C., Lin A. T., Chen J., Wang Y. and Chung S. (2010) Estimation of methane flux offshore SW Taiwan and the influence of tectonics on gas hydrate accumulation. Geofluids 10, 497–510.
69. Chang P.-Y., Yang T.-Y., Chyi L. L. and **Hong W-. L.** (2010) Electrical resistivity variations before and after the pingtung earthquake in the wushanting mud volcano area in Southwestern Taiwan. J Environ Eng Geophys 15, 219–231.
70. Walia V., Lin S. J., **Hong W-. L.**, Fu C. C., Yang T. F., Wen K. L. and Chen C.-H. (2009a) Continuous temporal soil-gas composition variations for earthquake precursory studies along Hsincheng and Hsinhua faults in Taiwan. Radiat Meas 44, 934–939.
71. Walia V., Yang T. F., **Hong W-. L.**, Lin S. J., Fu C. C., Wen K.-L. and Chen C.-H. (2009b) Geochemical variation of soil-gas composition for fault trace and earthquake precursory studies along the Hsincheng fault in NW Taiwan. Applied Radiation and Isotopes 67, 1855–1863.
72. Chuang P.-C., Yang T. F., Lin S., Lee H.-F., Lan T. F., **Hong W-. L.**, Liu C.-S., Chen J.-C. and Wang Y. (2006) Extremely high methane concentration in bottom water and cored sediments from offshore southwestern Taiwan. Terrestrial, Atmospheric and Oceanic Sciences 17, 903–920.
73. Löwemark L., **Hong W-. L.**, Yui T.-F. and Hung G.-W. (2005) A test of different factors influencing the isotopic signal of planktonic foraminifera in surface sediments from the northern South China Sea. Mar Micropaleontol 55, 49–62.

Peer-reviewed books and book chapters

1. Plaza-Faverola, A., Vadakkepuliyambatta, S., Singhroha, S., **Hong, W-. L.**, Waghorn, K. A., Lasabuda, A. P., ... & Mienert, J. Gas Hydrate Related Bottom-Simulating Reflections Along the West-Svalbard Margin, Fram Strait. In World Atlas of Submarine Gas Hydrates in Continental Margins (pp. 225-235). Springer, Cham, 2022.
2. **Hong W-. L.** and Peszynska M. (2018) Geochemical Aspects. In Gas Hydrates 2 John Wiley & Sons, Inc., Hoboken, NJ, USA. pp. 219–241.
3. Bohrmann, G., Ahrlich, F., Bergenthal, M., Bünz, S., Düßmann, R., Ferreira, C., Freudenthal, T., Fröhlich, S., Hamann, K., **Hong, W.-L.**, Hsu, C.-W., Johnson, J., Kaszemeik, K., Kausche, A., Klein, T., Lange, M., Lepland, A., Malnati, J., Meckel, S., Meyer-Schack, B., Noorlander, K., Panieri, G., Pape, T., Reuter, M., Riedel, M., Rosiak, U., Schmidt, C., Schmidt, W., Seiter, C., Spagnoli, G., Stachowski, A., Stange, N., Wallmann, K., Wintersteller, P., Wunsch, D., and Yao, H.: R/V MARIA S. MERIAN Cruise Report MSM57, Gas Hydrate Dynamics at the Continental Margin of Svalbard, Reykjavik – Longyearbyen – Reykjavik, 29 July – 07 September 2016, Bremen, Cruise Report, 2017.

Selected Conference abstracts

2019

Hong, W.-L., Torres M, Wallmann K & Lepland, A. (2019) Quantification of Silicate Alteration Rates Through Porewater Strontium Profiles. Goldschmidt conference, Barcelona.

2018

Hong, W.-L., Rae, J.W.B., Cremiere, A. Lepland, A. (2018) Boron isotopes and trace element composition in authigenic carbonates: challenges in mineral phase separation. Goldschmidt conference, Boston.

2017

Hong, W.-L., C. Schmidt, H. Yao, K. Wallmann, J. Rae, A. Lepland, M. E. Torres, A. Plaza-Faverola, P. Latour, S. Bunz and G. Bohrmann (2017). Fracture-Induced Fluid Migration in an Arctic Deep Water Pockmark: Porewater Geochemistry from the MEBO Drilling (MSM57) in Vestnesa Ridge (Svalbard) Goldschmidt conference.

2016

Carroll, M., E. Åström, W. Ambrose, W. Locke, G. Oliver, W.-L. Hong and J. Carroll (2016). Shell growth and environmental control of methanophyllic Thyasirid bivalves from Svalbard cold seeps. EGU General Assembly Conference Abstracts.

Gründger, F., Svenning, M. M., Niemann, H., Silyakova, A., Serov, P., **Hong, W.-L.,** Wegener, G., Panieri, G., Carroll, J. Differential methane oxidation activity and microbial community composition at cold seeps in the Arctic off western Svalbard. EGU General Assembly 2016 2016-04-17 - 2016-04-22 2016.

Chen, N.-C., Yang, T. F., Chuang, P.-C., **Hong, W.-L.,** Chen, H.-W.; Lin, S., Lin, L.-H., Mastumoto, R., Hiruta, A., Sun, C.-H., Wang, P.-L., Yang, T., Jiang, S.-Y., Wang, Y.-s., Chung, S.-H., Chen, C.-H. Methane flux in potential hydrate-bearing sediments offshore southwestern Taiwan. EGU General Assembly 2016-04-17 - 2016-04-22 2016.

Yao, H.**, Hong, W.-L.,** Niemann, H., Panieri, G. A Tale of …Two Gas Hydrate Reservoirs in the Arctic. Gordon Research Conferences, Natural Gas Hydrate Systems. 2016-02-28 - 2016-03-04 2016.

Hong, W.-L., Torres, M. E., Carroll, J., Crémière, A., Panieri, G., Serov, P. Methane discharge from Arctic gas hydrates: warming or natural ventilation?. Gordon Research Conferences, Natural Gas Hydrate Systems. 2016-02-28 - 2016-03-04 2016.

Yang, T. F., T. Lan, H.-F. Lee, C.-C. Fu, P.-C. Chuang, W.-L. Hong, V. Walia, H.-W. Chen, H.-Y. Wen and A.-T. Chen (2016). Research of Helium Isotopes in Taiwan: The Legacy of Dr. Tsanyao Frank Yang. EGU General Assembly Conference Abstracts.

2015

Panieri, G., Lepland, Ai., Graves, C., Schneider, A., Consolaro, C., **Hong, W.-L.,** James, R., Mienert, J. Fossil bioarchives to discover and track methane releases in the Arctic. 7th International Conference on Arctic Margins 2015-06-02 - 2015-06-05 2015.

Rose, K., M. Torres, J. Johnson, W. Hong, L. Giosan, E. Solomon, M. Kastner, T. Cawthern, P. Long and T. Schaef (2015). Preferential accumulation of gas hydrate in the Andaman accretionary wedge and relationship to anomalous porosity preservation. AGU Fall Meeting Abstracts.

2013

Hong, W., N. Moen and B. Haley (2013). Fluid source inferred from strontium isotopes in pore fluid and carbonate recovered during Expedition 337 off Shimokita, Japan. AGU Fall Meeting Abstracts.

2012

Hong, W.-L., Spinelli, G. A., and Torres, M. E. (2012) Sediment-pore water interactions controlling cementation in the NanTroSEIZE drilling transects. *American Geophysical Union Fall Meeting*

Hong, W., G. Spinelli and M. Torres (2012). Sediment-pore water interactions controlling cementation in the NanTroSEIZE drilling transects. AGU Fall Meeting Abstracts.

2011

Hong, W.-L., Torres, M.E., Kim, J.-H., Choi, J., Bahk, J.-J., Ryu, B.-J. (2011) Carbon cycling around sulfate methane transition zone in the Ulleung Basin: How much methane is actually coming up? *American Geophysical Union Fall Meeting*

2010

Hong, W.-L., Torres, M.E., Johnson, J.E., Melgar, E.P., and Rose, K. (2010) Quantifying Long-term Methane Flux Change by Coupling Authigenic Mineral Distribution and Kinetic Modeling at Southern Hydrate Ridge, Oregon. *American Geophysical Union Fall Meeting*

Johnson, J., M. Torres, W. Hong, C. Disenhof, E. Miranda and K. Rose (2010). Slope failure records in gas hydrate bearing regions of the Cascadia margin. AGU Fall Meeting Abstracts.

2008

Hong, W.-L., Yang, T.F., Chuang, P.C., Chen, N.C., Chen, H.C., Wallmann, K., Lin, S. (2008) Confirming Carbon Cycling near the SMI by Kinetic Modeling: Evidence from CH4 and DIC Isotopes in Taiwan. *American Geophysical Union Fall Meeting*

Chen, N., T. Yang, W. Hong, P. Chuan, H. Chen, R. Matsumoto, A. Hiruta and S. Lin (2008). The carbon isotopes of DIC and methane gas from gas hydrate potential area offshore SW Taiwan. AGU Fall Meeting Abstracts.

Hong, W., T. Yang, P. Chuang, N. Chen, H. Chen, K. Wallmann and S. Lin (2008). Estimation of Methane Concentration by Kinetic Modeling and Its Implication for the Top of Gas Hydrate Depth. AGU Fall Meeting Abstracts.

2007

Hong, W.-L., Yang, T.F., Walia, V., Lin, S.J., Fu, C.C., Chen, C.C., and Wen, K.L. (2007) Evidences support Nitrogen as carrier gas of helium along Hsincheng fault, NW Taiwan. *9th Intentional Conference on Gas Geochemistry*, Taipei, Taiwan.

2006

Hong, W.-L., and Yang, T.F. (2006) Methane Flux from Accretionary Prism through Mud Volcano area in Taiwan-From Present to the Past. *American Geophysical Union Fall Meeting*

Chuang, P., T. Yang, S. Lin, H. Lee, T. Lan, W. Hong, C. Sun, Y. Chen, J. Chen and Y. Wang (2006). Gas geochemistry study in gas hydrate potential area offshore SW Taiwan. AGU Fall Meeting Abstracts.

Yang, T., P. Chuang, W. Hong, S. Lin, J. Chen and Y. Wang (2006). Dissolved Methane Gases in Water Column and Bottom Water from Offshore SW Taiwan. AGU Fall Meeting Abstracts.

2005

Hong, W.-L., Lin, S.J., Walia, V., Fu, C.C. and Yang, T.F. (2005). Soil gas variations across a neotectonic fault in Northern Taiwan. *European Geosciences Union annual meeting*.