



Sidonie REVILLON

PROFILE

Geochemistry

Geology, Elemental and Isotope
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PROFESSIONAL EXPERIENCES

2014 – | CEO AND FOUNDER | SEDISOR | PLOUZANE

SEDISOR is a company specialised in elemental and isotope geochemistry providing analytical services and collaborative research expertise

2006-2013 | RESEARCHER | IUEM and IFREMER | PLOUZANE

Academic Researcher in geochemistry (ANR, EU, CNRS projects). Affiliation: Geosciences Marines, IFREMER; Domaines Océaniques, CNRS, UBO; EDYTEM, Université de Savoie; ISTO, Université d'Orléans

2001-2003 | RESEARCHER | SOUTHAMPTON OCEANOGRAPHY CENTRE

Post-doctoral researcher funded by a EU Marie Curie Fellowship

2000-2001 | TEMPORARY LECTURER | GRENOBLE

1999-2000 | RESEARCHER | LEICESTER

Post-doctoral researcher at the University of Leicester, funded by NERC

EDUCATION

1996-1999 | PhD EARTH SCIENCES | University of Rennes I

Van Straelen 2001 prize Geological Society of France

1995-1996 | DEA | University of Rennes I

ADMINISTRATIVE DUTIES

Management board Technopôle Brest Iroise, Brest, France

Governance board Campus Mondial de la Mer, Brest, France

Award panel « Géologie et Entreprise », Société Géologique de France

Organising committee ASF Brest 2022, Sea Tech Week 2022

PhD student referee GEO-OCEAN Department

ANALYTICAL SKILLS

Q-ICP-MS: VG Elemental PlasmaQuad PQ2+, X-Serie II

HR-ICP-MS: HR-Element 2, HR-Element XR

TIMS: MAT261, MAT262, TRITON, Micromass Sector 54

IRMS VG SIRA-10®, GEO 20-20, DeltaV+, MAT 253

MC ICP-MS: Micromass Isoprobe, Neptune

ICP-AES: Jobin-Yvon JY2000, Ultima 2

Electron microprobe: CAMECA SX 50, SX 100, JEOL 8600

XRF Core Scanner: Avaatech

XRF and XRD

FIELD/SEA EXPERIENCES

SCRATCH (2021, 22 days), R/V Marion Dufresne, Indian Ocean, Coring and Dredging

SMARTIES (2019, 46 days), R/V Pourquoi pas ?, Equatorial Atlantic, geophysics and Nautilite dives

STORM (2015, 35 days), R/V L'Atalante, Antarctic Sea, geophysics and dredging

RHOSOS (2008, 14 days.), seismic and coring, R/V Le Suroît, Gulf of Lion.

ODP Leg 203 (2002, 38 days.), R/V Joides Resolution, Pacifique. In charge of « Petrology and Geochemistry » sections.

ODP Leg 197 (2001, 58 days.), R/V Joides Resolution, Pacifique. In charge of « Alteration and Weathering » sections

Gorgona Island, Colombia (1998, 9 days.), mapping and sampling.

Foundation Hot Line (1997, 48 days.), geophysics and dredging R/V Atalante, Pacific.

Fuerteventura, Canary islands, Spain (1995, 27 days.), mapping and sampling.

BIBLIOMETRY AND PUBLICATION LIST

(5 LAST YEARS ONLY)

Number of publications: 52

Citation index: 1765

H index: 21

- **Révilleon, S.**, Guillou, H., Maury, R.C., Chauvel, C., Aslanian, D., Pelleter, E., Scao, V., Loubrieu, B., Patriat, M. Young Marquesas volcanism finally located. (2017) *Lithos*, 294-295, pp. 356-361.
- Shen, X., Wan, S., France-Lanord, C., Clift, P.D., Tada, R., **Révilleon, S.**, Shi, X., Zhao, D., Liu, Y., Yin, X., Song, Z., Li, A. History of Asian eolian input to the Sea of Japan since 15 Ma: Links to Tibetan uplift or global cooling? (2017) *Earth and Planetary Science Letters*, 474, pp. 296-308.

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- Zhao, D., Wan, S., Toucanne, S., Cliff, P.D., Tada, R., **Révilleon, S.**, Kubota, Y., Zheng, X., Yu, Z., Huang, J., Jiang, H., Xu, Z., Shi, X., Li, A. Distinct control mechanism of fine-grained sediments from Yellow River and Kyushu supply in the northern Okinawa Trough since the last glacial. (2017) *Geochemistry, Geophysics, Geosystems*, 18 (8), pp. 2949-2969.
 - Courgeon, S., Jorry, S.J., Jouet, G., Camoin, G., BouDagher-Fadel, M.K., Bachèlery, P., Caline, B., Boichard, R., **Révilleon, S.**, Thomas, Y., Thereau, E., Guérin, C. Impact of tectonic and volcanism on the Neogene evolution of isolated carbonate platforms (SW Indian Ocean). (2017) *Sedimentary Geology*, 355, pp. 114-131
 - Pasquier, V., Sansjofre, P., Rabineau, M., **Revilleon, S.**, Houghton, J., Fike, D.A. Pyrite sulfur isotopes reveal glacial-interglacial environmental changes. (2017) *Proceedings of the National Academy of Sciences of the United States of America*, 114 (23), pp. 5941-5945.
 - Boulart, C., Briais, A., Chavagnac, V., **Révilleon, S.**, Ceuleneer, G., Donval, J.-P., Guyader, V., Barrere, F., Ferreira, N., Hanan, B., Hémond, C., Macleod, S., Maia, M., Maillard, A., Merkurjev, S., Park, S.-H., Ruellan, E., Schohn, A., Watson, S., Yang, Y.-S. Contrasted hydrothermal activity along the South-East Indian Ridge (130°E–140°E): From crustal to ultramafic circulation. (2017) *Geochemistry, Geophysics, Geosystems*, 18 (7), pp. 2446-2458.
 - Pichat, A., Hoareau, G., Callot, J.-P., Legeay, E., Kavak, K.S., **Révilleon, S.**, Parat, C., Ringenbach, J.-C. Evidence of multiple evaporite recycling processes in a salt-tectonic context, Sivas Basin, Turkey. (2018) *Terra Nova*, 30 (1), pp. 40-49.
 - Courgeon, S., Bachèlery, P., Jouet, G., Jorry, S.J., Bou, E., BouDagher-Fadel, M.K., **Révilleon, S.**, Camoin, G., Poli, E. The offshore east African rift system: new insights from the Sakalaves seamounts (Davie Ridge, SW Indian Ocean) (2018) *Terra Nova*, 30 (5), pp. 380-388.
 - Zhao, D., Wan, S., Jiang, S., Shen, S., Ren, X., **Révilleon, S.**, Zhai, L., Dong, J., Zhang, J., Shi, X., Li, A. Quaternary sedimentary record in the northern Okinawa Trough indicates the tectonic control on depositional environment change (2019) *Palaeogeography, Palaeoclimatology, Palaeoecology*, 516, pp. 126-138.
 - Pasquier, V., Toucanne, S., Sansjofre, P., Dixit, Y., **Revilleon, S.**, Mokeddem, Z., Rabineau, M. Organic matter isotopes reveal enhanced rainfall activity in Northwestern Mediterranean borderland during warm substages of the last 200 kyr (2019) *Quaternary Science Reviews*, 205, pp. 182-192.
 - Nizou, J., Dennielou, B., **Révilleon, S.**, Bassetti, M.-A., Jouet, G., Berné, S., Liorzou, C. (2019). Records of Holocene climatic fluctuations and anthropogenic lead input in elemental distribution and radiogenic isotopes (Nd and Pb) in sediments of the Gulf of Lions (Southern France). *The Holocene*, 29(8), 1292–1304. <https://doi.org/10.1177/0959683619846973>
 - Pasquier, V. ; **Revilleon, S.** ; Leroux, E.; Mollieux, S. ; Moccochain, L. ; Rabineau, M. (2019) Quantifying biogenic versus detrital carbonates on marine shelf: an isotopic approach , *Frontiers in Earth Science*, section Sedimentology, Stratigraphy and Diagenesis, 03 July 2019
 - Charles, C., Pelleter, E., **Révilleon, S.**, Nonnotte, P., Jorry, S.J., Kluska, J.-M. Intermediate and deep ocean current circulation in the Mozambique Channel: New insights from ferromanganese crust Nd isotopes (2020) *Marine Geology*, 430, art. no. 106356
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- Leroux, E., Counts, J.W., Jorry, S.J., Jouet, G., **Révilleon, S.**, BouDagher-Fadel, M.K., Courgeon, S., Berthod, C., Ruffet, G., Bachèlery, P., Grenard-Grand, E. Evolution of the Glorieuses seamount in the SW Indian Ocean and surrounding deep Somali Basin since the Cretaceous (2020) *Marine Geology*, 427, art. no. 106202, .
 - Gardes, T., Debret, M., Copard, Y., Coynel, A., Deloffre, J., Fournier, M., **Revillon, S.**, Nizou, J., Develle, A.-L., Sabatier, P., Marcotte, S., Patault, E., Faivre, Q., Portet-Koltalo, F. Flux estimation, temporal trends and source determination of trace metal contamination in a major tributary of the Seine estuary, France (2020) *Science of the Total Environment*, 724, art. no. 138249
 - Gay, A., Favier, A., Potdevin, J.-L., Lopez, M., Bosch, D., Tribovillard, N., Ventalon, S., Cavailles, T., Neumaier, M., **Revillon, S.**, Travé, A., Bruguier, O., Delmas, D., Nevado, C. Poly-phased fluid flow in the giant fossil pockmark of Beauvoisin, SE basin of France (2020) *BSGF - Earth Sciences Bulletin*, 191, art. no. 35.
 - Song, Z., Wan, S., Colin, C., Yu, Z., **Révilleon, S.**, Jin, H., Zhang, J., Zhao, D., Shi, X., Li, A. Paleoenvironmental evolution of South Asia and its link to Himalayan uplift and climatic change since the late Eocene (2021) *Global and Planetary Change*, 200, art. no. 103459, DOI: 10.1016/j.gloplacha.2021.103459
 - Motte, G., Hoareau, G., Callot, J.-P., **Révilleon, S.**, Piccoli, F., Calassou, S., Gaucher, E.C. Rift and salt-related multi-phase dolomitization: example from the northwestern Pyrenees (2021) *Marine and Petroleum Geology*, 126, art. no. 104932, DOI:10.1016/j.marpetgeo.2021.104932
 - Roche, V., Leroy, S., Guillocheau, F., **Revillon, S.**, Ruffet, G., Watremez, L., et al. (2021). The Limpopo magma-rich transform margin, South Mozambique – part 2: Implications for the Gondwana breakup. *Tectonics*, 40, e2021TC006914. <https://doi.org/10.1029/2021TC006914>
 - Couderc, F., Bordas, F., Gomez de Soto, J., Le Carlier de Veslud, C., Milcent, P.Y., **Révilleon S.**(2021) À la charnière des espaces médio- et ibéro-atlantiques et continentaux : l'ensemble métallique du Bronze final atlantique 3 ancien d'Hourtin (Gironde, France) / Between medio and ibero atlantic and continental areas: the Early Atlantic Late Bronze Age 3 set of Hourtin (Gironde, France), *Bulletin de la Société Préhistorique Française* T118-3 pp. 519-568.
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 - Berthod, C., Bachèlery, P., Jorry, S.J., Pitel-Roudaut, M., Ruffet, G., **Revillon, S.**, Courgeon, S., Doucelance, R. First characterization of the volcanism in the southern Mozambique Channel: Geomorphological and structural analyses (2022) *Marine Geology*, 445, art. no. 106755.
 - Roche, V., Leroy, S., **Revillon, S.**, Guillocheau, F., Ruffet, G., Vétel, W. Gondwana break-up controlled by tectonic inheritance and mantle plume activity: Insights from Natal rift development (South Mozambique, Africa) (2022) *Terra Nova*, .
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