

## Prof. Dr. Adrien Mestrot

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Born 23.02.1984

Married, two children (06.01.2018 and 30.08.2020)

Nationality: French

### Employment History:

<b>Since 02.2022</b>	<b>Leader Soil Science Unit</b> , Associate Professor (AOP) for Soil Science, University of Bern, CH.
<b>01.2019/01.2022</b>	<b>Leader Soil Science Unit</b> , Assistant Professor Tenure-Track for Soil Science, University of Bern, CH.
<b>06.2016/05.2020</b>	<b>SNSF Professor</b> , University of Bern, CH.
<b>06.2013/01.2016</b>	<b>Marie Curie Fellow</b> , Soil Science Group, University of Bern, CH.
<b>03.2012/05.2013</b>	<b>Research Assistant</b> , Soil Science Group, University of Bern, CH.
<b>11.2010/10.2011</b>	<b>Research Assistant</b> , Chemistry Dept. and Plant and Soil Dept. University of Aberdeen, UK.
<b>03.2011/06.2011</b>	<b>Research Assistant</b> , Institute for Urban Environment, Chinese Academy of Science (IUE-CAS). Xiamen, China.

### Education:

<b>09.2007/08.2011</b>	<b>PhD</b> : Marie Curie R.T.N. "AquaTRAIN" (from 01.09.2007 to 31.08.2010) (University of Aberdeen, U.K. University of Girona, Spain. Utrecht University, Netherlands).
<b>09.2006/06.2007</b>	<b>Research Master (Master 2) in Environmental Chemistry</b> , U.F.R Sciences et Techniques, Université de Pau et des Pays de l'Adour (UPPA), France.
<b>09.2004/06.2006</b>	<b>Licence 3 / Master 1, Assessment, Management and Treatment of Pollutions</b> , U.F.R. Sciences et Techniques, Université de Pau et des Pays de l'Adour (UPPA), France.
<b>09.2002/06.2004</b>	<b>University Institute of Technology (I.U.T.) of Physico-Chemical Measurements</b> , I.U.T. « A » Paul SABATIER Université Toulouse 3, France.

### Approved Research Funding:

<b>2023</b>	<b>Swiss Federal Office for the Environment</b> , OESG expert to prepare the effectiveness evaluation of the Minamata Convention: <u>46'368 CHF</u>
<b>2021</b>	<b>Swiss National Science Foundation</b> , R'équip Grant for a HPLC-ICP-QQQ-MS: <u>203'820 CHF</u>
<b>2021</b>	<b>Media Lab of the GIUB (mLAB)</b> , art-research residency: <u>6000 CHF</u>
<b>2020</b>	<b>Swiss National Science Foundation</b> , Project Funding, Release, biomethylation and biovolatilisation of antimony in soils: <u>711'354 CHF</u>
<b>2020</b>	<b>Swiss Federal Office for Agriculture</b> , Black goes green: Einfluss von Pflanzenkohle auf den Bodenwasserhaushalt und die chemische Bodenqualität (Co-PI): <u>350'000 CHF</u>
<b>2020</b>	<b>SELFrag AG</b> , Antimony characterization in incinerator bottom ash - Part 2: <u>25'069 CHF</u>

<b>2020</b>	<b>Leading House Latin American Region — Seed Money Grant (SERI), Assessing geogenic arsenic and other potentially toxic trace elements in groundwater resources of the Bolivian Amazon:</b> <u>22'403 CHF</u>
<b>2019</b>	<b>SELFrag AG</b> , Antimony characterization in incinerator bottom ash – Part 1: <u>29'844 CHF</u>
<b>2019</b>	<b>Swiss Federal Office for the Environment</b> , Funding for a new mercury analyzer: <u>40'417 CHF</u>
<b>2019</b>	<b>Swiss National Science Foundation, SNSF Professorship (extension)</b> , Biomethylation and biovolatilisation of arsenic, antimony and mercury: <u>115'092 CHF.</u>
<b>2018</b>	<b>Swiss Federal Office for the Environment</b> , Enrichment of mercury in food chains: <u>240'000 CHF.</u>
<b>2018</b>	<b>Swiss Federal Office for the Environment</b> , Mobility of antimony in shooting ranges backstops: <u>24'858 CHF.</u>
<b>2017</b>	<b>UNIBE Interfaculty Research Cooperation Grant (IRC)</b> , One Health: Cascading and microbiome-dependent effects on multitrophic health (Co-PI): <u>5'999'023 CHF</u> (sub project: arsenic speciation, microbiome interactions and health impact: <u>411'357 CHF</u> with Dr. Bigalke).
<b>2017</b>	<b>Swiss Federal Food Safety and Veterinary Office</b> , Microbial transformation of arsenic from rice in the gut (Co-PI): <u>35'520 CHF</u> (shared with Prof. Bernier –Latmani, EPFL and Prof. Hapfelmeyer, UniBern).
<b>2016</b>	<b>Environmental Protection Agency of the Canton Valais (CH)</b> , Tracing nickel sources using heavy stable isotopes and measuring methylmercury in the Grossgrund Canal: <u>27'520 CHF.</u>
<b>2016</b>	<b>Swiss National Science Foundation, SNSF Professorship</b> , Biomethylation and biovolatilisation of arsenic, antimony and mercury: <u>1'579'894 CHF.</u>
<b>2015</b>	<b>Swiss Federal Office for the Environment</b> , Biomethylation of mercury in a contaminated floodplain: <u>20'000 CHF.</u>
<b>2014</b>	<b>Swiss Federal Office for the Environment/armasuisse</b> , Biomethylation and biovolatilisation of antimony in shooting range soils: <u>15'000 CHF.</u>
<b>2014</b>	<b>UniBern Initiator Grant</b> , Biomethylation of mercury and antimony in Swiss soils: <u>20'000 CHF.</u>
<b>2013</b>	<b>UniBern Forschungsstiftung</b> , Project LICHAS, arsenic biovolatilisation by lichens: <u>4'000 CHF.</u>

### **Prizes, Awards and Fellowships**

<b>2013</b>	<b>EU Marie Curie IEF Fellowship</b> , University of Bern CH, FP7-PEOPLE-2012-326736: "BIOMETA": <u>220'000 CHF.</u>
<b>2009</b>	<b>Early Career Researcher Award</b> of the International Association of Geoanalysts (IAG), Goldschmidt Conference, Davos, 21-26 June 2009.

### **Outreach:**

<b>2022</b>	<b><u>Elusive Exposures</u></b> , Science-Art residency and exhibition at GIUB, Bern, Switzerland
<b>12.2014/present</b>	Member of the <b>Matura Project</b> initiative organised by the SCNAT. Supervise 1-2 Matura student per year in the laboratory.
<b>2014 &amp; 2017</b>	Participation to the " <b>Researchers Night</b> " organised by the University of Bern.
<b>11.2004/11.2007</b>	<b>Creation of a non-profit Student Association on Environmental Issues Awareness</b> , Pau, France. Vice-President twice and President once over 3 years. <b>Organisation of yearly outreach events</b> (National Environmental

Week), **workshops**, **school interventions**, **lobbying** for recycling and sustainability at the University of Pau and throughout the city. Up to 8000€ of funding collected as an association between 2004 and 2007.

### **Community Services and Reviewing Activities:**

- 10.2022/present** Commission member – Bernese Award for Environmental Research. Representative for the Faculty of Sciences
- 06.2022/present** Member (nominated by the FOEN) of the **Open-Ended Scientific Group (OESG) of the UN Minamata Convention**. Leader of the “Small Group Other Matrices” (Soils, Sediments, Water).
- 06.2022/present** Member of the **International Panel on Chemical Pollution (IPCP)**. An international network of researchers aiming to provide leadership in identifying priority topics of concern and bridging the gap between science, policy and the public.
- 04.2022/present** Member of the **UN FAO International Network on Soil Pollution (INSOP)**. Its mission is to support and facilitate joint efforts towards reducing the risks of soil pollution and effectively remediate already polluted areas.
- 09.2020/present** Member of the **COST Action 19116 PLANTMETALS**. Host lab for STSMs.
- 12.2019/present** **ROTAGEO**: Round table on research infrastructures in Geosciences. Working group “Earth Surface”.
- 07.2018/present** Associate Editor, Biogeochemical Dynamics section, Frontiers in Environmental Sciences.
- 10.2017/present** Work Package Leader (pollutants) and Education Officer (organisation of Young Researchers Meetings and Summer Schools) within consortium UNIBE-IRC One Health.
- 01.2014/01.2020** Training & Outreach Committee Member: European Association of Geochemistry (EAG). Promotion of early career scientists. Awarding travel grants.

### **Organisation of Scientific Events:**

- 11.2022** Session 4: Environmental Biogeochemistry of Trace Elements, SGM, Lausanne, Switzerland
- 11.2021** Session 4: Environmental Biogeochemistry of Trace Elements, SGM, Geneva, Switzerland
- 08.2021** Session 3.11: Trace elements and their species in soils: detection, transformation processes, and fate in the critical zone, EUROSOL 21 (*ONLINE*)
- 06.2021** Local Organisation Committee, 2nd International Conference on Contaminated Sediments CONTASED 2021, Bern, Switzerland (*ONLINE*)
- 11.2020** Session 4: Environmental Biogeochemistry of Trace Elements, SGM, Zurich, Switzerland (*ONLINE*)
- 11.2019** Session 14: Environmental Biogeochemistry of Trace Elements, SGM, Fribourg, Switzerland
- 08.2019** K II S1.2 – Detection, fate, and effects of pollutants in soils 2. German and Swiss Soil Societies Joint Annual Meeting, Bern, Switzerland.
- 08.2019** Session 13f: Trace Elements Speciation: Novel Methodologies and Insights into Transformations Influencing their Global Biogeochemical Cycle. Goldschmidt, Barcelona, Spain.
- 05.2019** Symposium 8: Methylation and demethylation of trace elements. ICOBTE, Nanjing, China.
- 12.2018** Swiss Geoscience Meeting (SGM), Bern, Switzerland

<b>02.2017</b>	Swiss Soil Science Society Meeting, Bern, Switzerland
<b>12.2017</b>	Session 14: Environmental Biogeochemistry of Trace Elements, SGM, Davos, Switzerland
<b>06.2016</b>	Session 15c: Microbiological and Geochemical Controls on Trace Metal Speciation, Transformation and Transport, Goldschmidt, Yokohama, Japan

**Institutional Responsibilities at the GIUB, UNIBE:**

<b>03.2022/present</b>	Head of the House Commission
<b>01.2022/present</b>	Head of the Finance Commission
<b>10.2019/present</b>	Member of the Institutes Management (Institutsleitung)
<b>01.2019/present</b>	Member of the Faculty Council
<b>12.2017/12.2022</b>	Member of the Commission for Equal Opportunities
<b>03.2017/present</b>	Member of the Measuring Instruments Commission
<b>09.2016/present</b>	Member of the Institutes Council (Institutsrat)
<b>02.2013/present</b>	Member of the Laboratory Commission

**Memberships** American Chemical Society, Geochemical Society, International Association of Geochemistry, International Association of Environmental Analytical Chemistry, International Society of Trace Element Biogeochemistry.

**Reviewing** Nature Geoscience, Environmental Science & Technology, Environmental Science & Technology Letters, Science of the Total Environment, Geochimica and Cosmochimica Acta, Geoderma, Chemosphere, Environmental Pollution, Analytical Chemistry, Environmental Research, Environmental Toxicology and Chemistry, Water Air & Soil Pollution, Environmental Science and Pollution Research, International Journal of Environmental Analytical Chemistry, Journal of Environmental Management, Food Chemistry. National Science Foundation (USA), Geobiology and Low-Temperature Geochemistry Program.

**Supervision/mentoring of junior researchers**

<b>03.2022/05.2023</b>	Dr. Teresa González de Chávez-Capilla, Head of the lab & Interim lecturer
<b>09.2021/present</b>	Samuel Schlichenmeier, PhD Black Goes Green project, co-supervised with Dr. Steffens, FiBL
<b>09.2021/11.2022</b>	Dr. Caroline de Meyer, postdoc, Seed Money Grant, Arsenic pollution in Bolivian Amazon
<b>09.2021/present</b>	Dr. Eric Pinto, postdoc fellow, SNSF Bridge Proof of Concept, Bio-based methods for soil quality
<b>04.2021/present</b>	Ursina Morgenthaler, PhD, SNSF Antimony project
<b>04.2021/02.2023</b>	Dr. Karen Viacava, postdoc, SNSF Antimony project
<b>05.2019/02.2022</b>	Dr. Teresa González de Chávez-Capilla, postdoc, IRC One Health
<b>02.2019/present</b>	Sabnam Mahat, PhD, FOEN: mercury in the food chain
<b>08.2018/08.2022</b>	Mohana Mukherjee, PhD, IRC ONE Health, co-supervised with Prof. Hapfelmeier, IFIG, University of Bern
<b>06.2018/09.2022</b>	Hang Guan, PhD, IRC One Health
<b>01.2018/10.2019</b>	Miquel Coll-Crespi, PhD, IRC One Health (left for a job in industry)
<b>04.2017/12.2022</b>	Jaime Caplette, PhD, SNSF Professorship
<b>12.2016/present</b>	Lorenz Gfeller, PhD, SNSF Professorship
<b>07.2016/06.2020</b>	Karen Viacava, PhD, co-supervised with Prof. Bernier-Latmani, EPFL
<b>06.2016/12.2018</b>	Dr. Deonarine Amrika, postdoc, mercury in soils

## **Teaching Activities at University of Bern**

<b>10.2017/present</b>	<b>Education Officer of the IRC One Health - organization of Young Researchers Meetings and International Summer Schools (PhD/postdocs and BSc-MSc)</b>
<b>Lectures</b>	Soil Biogeochemistry (MSc) HS22, HS20, HS14, HS12 Challenges in Geography (MSc) FS20, FS19, FS18, FS17 Soil Science I (BSc) HS23, HS22, HS20 Propaedeutic course (BSc) FS22, FS21, HS18, HS17
<b>Seminars</b>	Soil Science Seminar FS23, HS21, HS19, HS17
<b>Laboratory Courses</b>	Soil Biogeochemistry FS22, HS18, HS17, HS14, HS12 Soil Science II FS14, FS12

## **Publications in international peer-reviewed scientific journals:**

[Google Scholar](#)

OrcID: [0000-0002-4387-3886](#)

1. Sabin L., Komposh N. & **Mestrot A.** (2023) Exhibiting toxicity: sprayed strawberries and geographies of hope. *Cultural Geographies*, *in press*
2. Liu X., Huang Y., Guan H., Wiggenhauser M., Caggia V., Schlaeppi K., **Mestrot A.** & Bigalke M. (2023) Soil (microbial) disturbance affect the zinc isotope biogeochemistry but has little effect on plant zinc uptake. *Science of the Total Environment*, 875, p. 162490, [10.1016/j.scitotenv.2023.162490](https://doi.org/10.1016/j.scitotenv.2023.162490)
3. Gfeller L., Caplette J.N., Frossard A. & **Mestrot A.** (2022). Organo-mercury species in a polluted agricultural flood plain: Combining speciation methods and polymerase chain reaction to investigate pathways of contamination. *Environmental Pollution*, 311, p. 119854, [10.1016/j.envpol.2022.119854](https://doi.org/10.1016/j.envpol.2022.119854)
4. **Mestrot A.**, Gfeller L., Steiner T., Feldmann J., Villa I.M. & Rast-Eicher A. (2022). Les textiles de la tombe La Tène ancienne d'Altrier. Contribution 4: Isotopes and rare earth elements as tools to unravel a 2500-year-old mystery. *Bulletin de la Société Préhistorique Luxembourgeoise*, 41, pp. 143-154.
5. Caplette J.N., Gfeller L., Lei D., Liao J., Xia J., Zhang H., Feng X. & **Mestrot A.** (2022). Antimony release and volatilization from rice paddy soils: Field and microcosm study. *Science of the total environment*, 842, p. 156631, [10.1016/j.scitotenv.2022.156631](https://doi.org/10.1016/j.scitotenv.2022.156631)
6. Müller V., Chávez-Capilla T., Feldmann J. & **Mestrot A.** (2022). Increasing temperature and flooding enhance arsenic release and biotransformations in Swiss soils. *Science of the Total Environment*, 838, p. 156049, [10.1016/j.scitotenv.2022.156049](https://doi.org/10.1016/j.scitotenv.2022.156049)
7. Hu L., Wu Z., Robert C.A.M., Ouyang X., Züst T., **Mestrot A.**, Xu J. & Erb M. (2021). Soil chemistry determines whether defensive plant secondary metabolites promote or suppress herbivore growth. *Proceedings of the National Academy of Sciences of the United States of America - PNAS*, 118(43), [10.1073/pnas.2109602118](https://doi.org/10.1073/pnas.2109602118)
8. Caplette J.N., Grob M. & **Mestrot A.** (2021). Validation and deployment of a quantitative trapping method to measure volatile antimony emissions. *Environmental Pollution*, 289, [10.1016/j.envpol.2021.117831](https://doi.org/10.1016/j.envpol.2021.117831)
9. Langa X., Neuhaus P., Lains D., Stewart T., Borel N., Certal A.C., Monteiro J.F., Aleström P., Diaz E., Piragyte I., Bräutigam L., Vázquez R., Hlushchuk R., Gfeller L., **Mestrot A.**, Bigalke M., Varga Z.M. & Mercader N. (2021). A Systematic Analysis of Metal and Metalloid Concentrations in Eight Zebrafish Recirculating Water Systems. *Zebrafish*, 18(4), pp. 252-264. [10.1089/zeb.2020.1970](https://doi.org/10.1089/zeb.2020.1970)
10. Gfeller L., Weber A., Worms I., Slaveykova V.I. & **Mestrot A.** (2021). Mercury mobility, colloid formation and methylation in a polluted Fluvisol as affected by manure application and flooding-draining cycle. *Biogeosciences*, 18(11), pp. 3445-3465. [10.5194/bg-18-3445-2021](https://doi.org/10.5194/bg-18-3445-2021)

11. Schneider T., Musa Bandowe B.A., Bigalke M., **Mestrot A.**, Hampel H., Mosquera P.V., Fränkl L., Wienhues G., Vogel H., Tylmann W. & Grosjean M. (2020) 250-year records of mercury and trace element deposition in two lakes from Cajas National Park, SW Ecuadorian Andes. *Environmental Science and Pollution Research*, 28(13), pp. 16227-16243.
12. Hossain M., **Mestrot A.**, Norton G.J., Deacon C., Islam M.R. & Meharg A.A. (2021) Arsenic dynamics in paddy soil under traditional manuring practices in Bangladesh, *Environmental Pollution*, 268, 115821
13. Viacava K., Lederballe Meibom K., Ortega D., Dyer S., Gelb A., Falquet L., Minton N.P., **Mestrot A.** & Bernier-Latmani R. (2020) Variability in arsenic methylation efficiency across aerobic and anaerobic microorganisms, *Environmental Science & Technology*, 54(22), pp. 14343-1435.
14. Brantschen J., Gygax S., **Mestrot A.** & Frossard A. (2020) Soil Hg contamination impact on earthworms' gut microbiome. *Applied Sciences*, 10(7), pp. 2565.
15. Gygax S., Gfeller L., Wilcke W.W. & **Mestrot A.** (2019) Emerging investigator series: mercury mobility and methylmercury formation in a contaminated agricultural flood plain: influence of flooding and manure addition. *Environmental science: processes & impacts*, 21, pp. 2008-2019.
16. Shetaya W. H., Huang J-H., Osterwalder S., **Mestrot, A.** Bigalke M. & Alewell C. (2019) Sorption kinetics of isotopically labelled divalent mercury ( $^{196}\text{Hg}^{2+}$ ) in soil. *Chemosphere*, 221, pp. 193-202.
17. Lombardo U., Ruiz-Pérez, J., Rodrigues L., **Mestrot A.**, Mayle F., Madella M., Szidat S. & Veit H. (2019) Holocene land cover change in south-western Amazonia inferred from paleoflood archives. *Global and Planetary Change*, 174, pp. 105-114.
18. Grob M.; Wilcke W. & **Mestrot A.** (2018) Release and biomethylation of antimony in shooting range soils upon flooding. *Soil Systems*, 2(2), 34.
19. Frossard A., Donhauser J., **Mestrot A.**, Gygax S., Bååth E. & Frey B. (2018) Long- and short-term effects of mercury pollution on the soil microbiome. *Soil Biology and Biochemistry*, 120, pp. 191-199.
20. Ji Y., **Mestrot A.**, Schulin R. & Tandy S. (2018) Uptake and transformations of methylated and inorganic antimony in plants. *Frontiers in Plant Sciences – Plant Traffic and Transport*, 9, 140.
21. Henne P.D., Bigalke M., Büntgen U., Colombaroli D., Conedera M., Feller U., Frank D., Fuhrer J., Grosjean M., Heiri O., Luterbacher J., **Mestrot A.**, Rigling A., Rössler O., Rohr C., Rutishauser T., Schwikowski M., Stampfli A., Szidat S., Theurillat J., Weingartner R., Wilcke W. & Tinner W. (2018) An empirical perspective for understanding climate change impacts in Switzerland, *Regional Environmental Change*, 18(1), pp. 205-221.
22. Shetaya W. H., Osterwalder S., Bigalke M., **Mestrot A.**, Huang J.H., Alewell C. (2017). An Isotopic Dilution Approach for Quantifying Mercury Lability in Soils. *Environmental Science & Technology Letters*, 4(12), pp. 556-561.
23. Bont Z., Arce C., Huber M., Huang W., **Mestrot A.**, Sturrock C.J. & Erb M. (2017) A herbivore tag-and-trace system reveals contact- and density-dependent repellence of a root toxin, *Journal of Chemical Ecology*, 43(3), pp. 295-306.
24. **Mestrot A.**, Ji Y., Tandy S. & Wilcke W. (2016) A novel method to determine trimethylantimony concentrations in plant tissue, *Environmental Chemistry*, 13(6), pp. 919-926.
25. Norton G.J., Deacon C.M., **Mestrot A.**, Feldmann J., Jenkins P., Baskaran C. & Meharg A.A. (2015) Cadmium and lead in vegetable and fruit produce selected from specific regional areas of the UK, *Science of The Total Environment*, 533, pp 520-527.
26. Lemos Batista B., Nigar M., **Mestrot A.**, Alves Rocha B., Barbosa Júnior F., Price A.H., Raab A. & Feldmann J. (2014) Identification and quantification of phytochelatins in roots of rice to long-term exposure: evidence of individual role on arsenic accumulation and translocation. *Journal of Experimental Botany*, 65(6), pp. 1467-1479.

27. **Mestrot A.**, Planer-Friedrich B. & Feldmann J. (2013) Biovolatilisation: a poorly studied pathway of As biogeochemical cycle. *Environmental Science: Processes & Impacts*, 15, pp. 1639-1651.
28. Norton G.J., Deacon C.M., **Mestrot A.**, Feldmann J., Jenkins P., Baskaran C. & Meharg A.A. (2013) Arsenic speciation and localization in horticultural produce grown in a historically impacted mining region. *Environmental Science & Technology*, 47(12), pp. 6164–6172.
29. **Mestrot A.**, Xie W.Y., Xue X. & Zhu Y.G. (2013) Arsenic volatilization in model anaerobic digesters. *Applied Geochemistry*, 33, pp. 294-297.
30. Moreno-Jimenez E., Clemente R., **Mestrot A.** & Meharg A.A. (2013) Arsenic and selenium mobilization from organic matter treated mine spoil with and without inorganic fertilization. *Environmental Pollution*, 173, pp. 238-244.
31. Petursdottir A., Gunnlaugsdottir H., Jorundsdottir H., **Mestrot A.**, Krupp E. & Feldmann J. (2012) HPLC-HG-ICP-MS a sensitive and selective method for inorganic arsenic in seafood. *Analytical & Bioanalytical Chemistry*, 404(8) pp.2185-2191.
32. Hossain M.S., Williams P.N., **Mestrot A.**, Norton G.J., Deacon C.M. & Meharg A.A. (2012) Spatial heterogeneity and kinetic regulation of arsenic dynamics in mangrove sediments: the Sundarbans, Bangladesh. *Environmental Science & Technology*, 46, pp. 8645-8652.
33. **Mestrot A.**, Merle J.K., Broglia A., Feldmann J. & Krupp E.M. (2011) Atmospheric stability of Arsine and Methylarsines. *Environmental Science & Technology*, 45(9), pp. 4010-4015.
34. **Mestrot A.**, Feldmann J., Krupp E.M., Hossain M., Roman-Ross G. & Meharg A.A. (2011) Field Fluxes and Speciation of Arsines Emanating from Soils. *Environmental Science & Technology*, 45(5), pp. 1798-1804.
35. Tabouret H., Bareille G., **Mestrot A.**, Caill-Milly N., Budzinski H., Peluhet L., Prouzet P. & Donard O.F.X. (2011) Heavy metals and organochlorinated compounds in the European eel (*Anguilla anguilla*) from the Adour estuary and associated wetlands (France). *Journal of Environmental Monitoring*, 13(5), pp. 1446-1456.
36. Krupp E.M., **Mestrot A.**, Wielgus J., Meharg A.A. & Feldmann J. (2009) The molecular form of mercury in biota: Identification of novel mercury peptide complexes in plants. *Chemical Communications*, 28, pp. 4257-4259.
37. **Mestrot A.**, Plantevin T., Uroic M.K., Islam R., Krupp E.M., Feldmann J. & Meharg A.A. (2009) Quantitative and Qualitative Trapping of Arsines Deployed to Assess Loss of Volatile Arsenic from Paddy Soil. *Environmental Science and Technology*, 43(21) pp. 8270-8275.
38. Krupp E.M., Milne B.F., **Mestrot A.**, Meharg A.A. & Feldmann J. (2008) Investigation into mercury bound to biothiols: Structural identification using ESI-ion-trap MS and introduction of a method for their HPLC separation with simultaneous detection by ICP-MS and ESI-MS. *Analytical and Bioanalytical Chemistry*, 390(7), pp. 1753-1764.

## Other publications

1. Sigmund G., Diamond M.L, Vlahos P., Ågerstrand M., Alo B., Backhaus T., Castillo Castillo A., Ford A.T., Groh K.J., Grimalt J.O., Guida Y., Kumar N., Lohmann R., Mestrot A., Molander S., Soehl A., Suzuki N., Schaeffer A., Torres J.P.M., Venier M., Wagner M., Wang M. & Scheringer M. (2022) IPCP White Paper on the scope and functions of the future science-policy panel to contribute further to the sound management of chemicals, waste, and to prevent pollution. [Link](#).
2. Viacava K., Weber A., Stanisic L., Pfister S., Bergamaschi P., **Mestrot A. (2021)** Arsenic contamination in soils and maize plants in Liesberg (BL). Final report for the Canton of Basel-Landschaft.
3. Eugster, W; Baumgartner, LP; Bachmann, O; Baltensperger, U; Dèzes, P; Dubois, N; Foubert, A; Heitzler, M; Henggeler, K; Hetényi, G; Hurni, L; Müntener, O; Nenes, A; Reymond, C; Röösli, C; Rothacher, M; Schaub, M; Steinbacher, M; Vogel, H and RoTaGeo, team (2021). [Geosciences](#)

*Roadmap for Research Infrastructures 2025–2028 by the Swiss Geosciences Community* (Swiss academies reports 16 (4)). Swiss Academy of Sciences (SCNAT) [10.5281/zenodo.4588881](https://doi.org/10.5281/zenodo.4588881)

4. Caplette, Jaime N.; Mestrot, Adrien (2021). *Chapter 11 Biomethylation and biovolatilization of antimony.* In: Filella, Montserrat (ed.) Antimony (pp. 251-274). De Gruyter [10.1515/9783110668711-011](https://doi.org/10.1515/9783110668711-011)
5. Stanisic L., Pfister S., Caplette J. & **Mestrot A.** (2020) Antimony Mobility in Bullet Traps and Conclusions for Investigation and Remediation Measures in Shooting Facilities. Final Report to the Federal Office for Environment.
6. Bernier-Latmani R., **Mestrot A.**, Deonarine A., Coll-Crespi M., Hapfelmeier S. (2019) Microbial transformation of arsenic from rice in the gut. Final Report to the Federal Office of Food Safety and Veterinary Affairs.
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## **Remarks**

<b>04.2021/present</b>	Decrease of working time to 80% for family care duties.
<b>01.2018/09.2019</b>	Decrease of working time to 80% for 18 months for family care duties.