

# Mylene Receveur

PhD Candidate in Geology Geothermal Energy

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- French

## Languages

- French■ English■ German

## Hard Skills

- ★ Geology
- Geophysics
- Hydrogeology
- Geothermal reservoir engineering
- THM Modeling

#### Soft Skills -

- Proactive, Self-Motivated
- Conscientious, Persevering
- Flexible, Autonomous

### Business skills

- 💉 Project management, HSQE
- Applied Economy, Accounting

#### **Education**

Postgraduate Training

Currently **PhD Candidate in geology** University of Edinburgh Investigating geothermal heat resources of legacy mine workings:

why are some mine waters hotter than others?

Study

2016 – 2018 Master in Geology University of Iceland

Focus: Geothermal reservoir engineering – Continuum mechanics and Heat transfers – Measurements and models in Geodynamics -

**Geophysical Inversion** 

2018 Master Thesis - Geothermal Sciences

Ground deformation induced by geothermal utilization at Reykjanes, SW-Iceland, inferred from Interferometric analysis of Sentinel-1

Synthetic Aperture Radar images (InSAR).

2012 – 2017 Master in geology - Petroleum Geology UniLasalle Beauvais

Focus: Basin analysis - Sedimentology - Structural Geology - Sequential and Seismic Stratigraphy - Petrophysics - Reservoir modeling.

2015 Bachelor Thesis

Analysis of Plio-Quaternary deposits and tectono-stratigraphic architecture of the Salice area, Messina, Sicily, Italy: 1 month field work

and 8 month data / laboratory (SEM) analysis.

## **Working Experience**

**Professional Experience** 

May – Sept Geothermal reservoir Engineer
2019 3D modeling of the thermal breakthrough in the Dogger

3D modeling of the thermal breakthrough in the Dogger aquifer due to geothermal production at the Vigny geothermal doublet, using Marthe (BRGM) - Technical and economic feasibility study of the

BRGM, France

redeployment of oil and gas wells into geothermal wells.

June – Nov Intern in Hydrogeology BRGM, France 2015 Synthesis, processing and analysis of data from geothermal wells in

the Dogger aquifer, Paris Basin, France - Creation and development

of the "Dogger Database".

Academic work

Sept 2018 – Research Assistant University of Canterbury, New Zealand

May 2019 Study of the correlation between the co-seismic displacements during the 2016 Kaikoura Earthquake, South Island, New-Zealand, and

long-term topography changes in this area, using InSAR data.

2015-2016 Project based on IBA data (AAPG) UniLasalle Beauvais, France

Petroleum assessment of the Cooper and Eromanga Basins, Australia: Bibliographic review, synthesis of exploration and production data in ArcGIS - Seismic interpretation, play and prospect assessment,

well log analysis and 3D modeling (Petrel)

July 2016 Veolia Summer School Veolia Environment, France

Project management in multi-disciplinary and international teams for the implementation of smart and sustainable city (water, energy

and waste management)

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#### About Me

I graduated with a double Master's degree in Geology from the LaSalle Beauvais School (France) and from University of Iceland in 2018. In September 2019, I started a phD at the University of Edinburgh (Scotland). My project consists in modeling heat transfers in abandoned flooded coal mines in Scotland to evaluate their geothermal resource potential.

### Barskills -

- Geological / Structural mapping
- Geophysical data acquisition
- Well log analysis
- InSAR processing: ISCE, GMTSAR
- Remote sensing data processing
- Modeling: OGS, Marthe, Petrel
- S GIS: ArcGIS, OGIS, ENVI
- O Programming: Matlab, Python, Bash
- ◇ Vector edition: Illustrator, Inkscape

# Memberships



**European Geosciences Union** 

#### **Field Experience**

2018 **Drone image acquisition** University of Canterbury Acquisition of pictures of the beaches and cliffs in the Castelpoint

area, North Island, New Zealand, using the DJI Phantom 4 Pro drone

- 3D modeling using Agisoft (Photoscan).

2017 Structural mapping, Iceland (1 week) University of Iceland

Fracture inventory, mapping and realization of conceptual models of

groundwater flow.

2016 **Geophysical data acquisition, Iceland** University of Iceland

Refraction/reflection seismic, micro-gravity and TEM/MT resistivity surveys (5 days) - GPS-Geodesy data acquisition, time series analysis

and leveling (2 days).

2014 Geological mapping, Sicily (1 month) UniLasalle Beauvais

Mapping of the Graben of Salice - Realization of high-resolution cross-sections - Sedimentological and structural analysis of Late Secondary to Quaternary sequences - Paleontological and paleo-

current reconstitution.

2012 – 2016 Mapping Field Trips, France (4 months) UniLasalle Beauvais

Mapping in sedimentary areas (i.e. Vigny, Oise, Bretagne, Normandy, The Alps, Dignes-les-Bain) and in volcanic areas: La Bourboule (Cen-

tral Massif).

#### **Scientific Communication**

#### **Publications**

2019 Ground deformation due to steam cap processes at Reykjanes,

SW-Iceland: Effects of geothermal exploitation inferred from in-

terferometric analysis of Sentinel-1 images 2015-2017 Receveur, M., Sigmundsson, F., Drouin, V., Parks, M.

Geophys. J. Int, Vol 216 (3), 2183-2212

#### Conferences

Nov. 2018 Geoscience Society of New Zealand (GSNZ) Ora

InSAR monitoring of ground deformation induced by geothermal

production at Reykjanes, Iceland

Apr. 2018 Geothermal Cross-Over Technology Workshop, AAPG Poster

InSAR monitoring of ground deformation induced by geothermal

production at Reykjanes, Iceland **European Geosciences Union** 

Apr. 2018 **European Geosciences Union**Evaluation of the response to production of the Reykjanes high-

temperature geothermal reservoir, Iceland, using InSAR studies of

ground surface deformation

#### **Extra-Curricular Activities**

Sport Football, Hiking, Running

Travel Iceland, Italy, New Zealand, Great Britain, Netherlands, Poland,

Spain, Belgium

Music Piano, Guitar, singing

Association 2015: Vice-president of the student council (UniLaSalle Beauvais)

2014: Treasurer of Geode Association (UniLaSalle Beauvais)

#### references

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C. McDermott Professor in Hydrogeology University of Edinburgh

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