DR PAULA KOELEMEIJER – CURRICULUM VITAE

Address: Department of Earth Sciences, University of Oxford, South Parks Road, Oxford, OX3 1AN, UK
Website: www.earth.ox.ac.uk/~univ4152, https://orcid.org/0000-0001-5153-3040 (ORCID)
Contact: paula.koelemeijer@earth.ox.ac.uk, +44 1865 272027 (work)

Research Interests

I am interested in diverse aspects of seismology ranging from global tomography and long period data for constraining deep Earth structure to seismic noise for studying human and animal behaviour. I work across disciplines, linking seismology with geodynamics and mineral physics, as well as combining insights with biologists. Much of my research is hypothesis driven, often combining data, forward and inverse modelling, with a particular emphasis on data uncertainties and resolution.

Academic employment

2022 – Present: **Tutorial Fellow in Earth Sciences**, Exeter College Oxford, UK
2022 – Present: **Associate Professor & Royal Society University Research Fellow**, University of Oxford, UK[1]
2019 – 2022: **Royal Society University Research Fellow & Proleptic lecturer**, Royal Holloway, UK[2]
2018 – 2019: **Royal Society University Research Fellow**, University College London, UK
2015 – 2018: **Junior Research Fellow**, University College, University of Oxford, UK
2014 – 2015: **Postdoctoral Fellow**, ETH Zurich, Switzerland

Education & further training

2019 – 2020: **Researchers Academy**, National Co-ordinating Centre for Public Engagement (NCCPE), UK
One-year programme aimed at developing public engagement skills.
2017 – 2018: **Enhancing Teaching Programme**, University of Oxford, UK
National teaching qualification to develop skills for higher education teaching.
2010 – 2014: **PhD in Seismology**, University of Cambridge, UK. Thesis: "Normal mode studies of long wavelength structures in Earth's lowermost mantle", supervised by Arwen Deuss.
2008 – 2010: **Master in Geophysics**, Utrecht University, NL *(cum laude)*
2005 – 2008: **Bachelor in Earth Sciences**, Utrecht University, NL *(cum laude)*

Awards

2021: **Philip Leverhulme Prize** by the Leverhulme Trust, awarded to early career researchers whose work has had international impact and whose future research career is exceptionally promising
2021: **Outstanding Reviewer** for Geophysical Research Letters
2018: **Doornbos Memorial Prize** by the Committee for the Study of Earth's Deep Interior (SEDI / IUGG) for outstanding work on the Earth's deep interior by an early career scientist

Selection of acquired funding (As PI unless indicated otherwise)

2025: **Co-I on UKRI Cross-Council**: Combined quantum-classical sensing (PI: Ulrich Schneider). £960k
2025: **Co-I on Cost Action:** Testing fundamental physics with seismology (PI: Aneta Wojnar). £480k
2024: **Co-I on NERC Capital Grant:** Seismic node equipment (PI: Prof. Nick Rawlinson). £646k
2024: **Royal Society URF renewal:** Mid mantle mysteries, 3 year salary + PhD funding. £636k
2023: **Royal Society ERE award:** Upper mantle anisotropy with full uncertainties, PDRA funding. £157k
2023: **Co-I on DFG Priority Programme DeepDyn Award:** Constraining absolute plate motions with normal modes and geodynamic modelling, PhD funding (PI: Dr Bernhard Schuberth). £131k
2021: **Royal Society ERE Award:** CMB topography using normal modes, PhD funding. £169k
2021: **Philip Leverhulme Prize:** Seismicity and background noise in London, PhD funding. £100k
2020: **Co-I on NERC Large Grant:** Constraining mantle circulation in 4D, PDRA + PhD funding (PI: Prof. Huw

[1] *Maternity leave taken from Dec 2022 to Sep 2023.*
[2] *Maternity leave taken from Jul 2020 to Apr 2021 with employment at 80 % FEC from Apr 2021 to May 2022.*

Davies). Total award £3.3m, with local component £164k

2018: **Royal Society Enhancement Award**: Lower mantle structure from normal modes, PhD funding. £71k

2018: **Royal Society URF (fellowship)**: The landscape of the core-mantle boundary, 5 year salary. £564k

2015: **University College JRF (fellowship):** Multi-scale topography of the CMB, 3 year salary. £76k

2014: **ETH Zurich Postdoctoral Fellowship**: Imaging of the Earth across the scales, 2 year salary. £146k

Supervising and mentoring

Postdocs:
- Dr Franck Latallerie (2023 – 2025, Oxford): 3D finite frequency surface wave tomography
- Dr Joseph Asplet (2025, Oxford): Background seismicity and seismic noise in London
- Dr Augustin Marignier (2025 – 2027, Oxford): Illuminating the Earth's inner core with AI

PhD students: ***Primary supervisor of 7 PhD students (5 ongoing in Oxford, 1 completed at RHUL)***
- Jasmina Rai (2025 – 2029, Oxford): Mid mantle structure and mineralogy
- Manuel Mojica-Boada (2024 – 2028, Oxford): Subduction zone structure and seismicity
- Sixtine Dromigny (2023 – 2027, Oxford): Ambient seismic noise for detecting fluids
- Adrian Mag (2022 – 2026, Oxford): Backus-Gilbert inferences of CMB topography
- Sam Scivier (2022 – 2026, Oxford): Probabilistic and multi-scale seismic hazard assessment
- Miguel Pinto-Ward (2022 – 2024, Oxford): Background seismicity and noise in London
- Dr Federica Restelli (2019 – 2023, RHUL): Normal mode BG tomography of Earth's mantle

Co-supervisor of 10 PhD students (8 ongoing, 2 completed) at Oxford, LMU and Strasbourg
- Orchis Zhang (2025 – 2029, Oxford): Machine learning for earthquake detection
- Jamie Chow (2024 – 2028, Oxford): Joint geophysical inversions for geothermal energy
- Lara Boudinot (2023 – 2027, Oxford): Anthropogenic seismic noise effect on large mammals
- Kris Ad Astra (2023 – 2027, Oxford): Stress drop estimates in crustal earthquakes
- Anna Schneider (2023 – 2027, LMU Munich): Absolute plate motions from normal modes
- Emile Serra (2023 – 2026, Strasbourg): Mantle transition zone structure using SOLA
- Fatme Ramadan (2022 – 2026, Oxford): Physics-based ground shaking using ML
- Justin Leung (2022 – 2026, Oxford). Temperature and composition of the lower mantle
- Dr Viktoria Trautner (2021 – 2025, Oxford): Iron spin crossover in ferropericlase
- Dr Harriet Godwin (2016 – 2020, Oxford): Multi-scale structure of the deep mantle

MSc students: Supervisor of 8 undergraduate research project students (all completed) at Oxford and UCL

Teaching

Qualification: SEDA PDF Descriptor 2 Award: National qualification for Higher Education in the UK (2018)

Lecturing:
- "Structure & Dynamics of the Earth's mantle" (4th year option, Oxford, since 2024).
- "Geophysics of the deep Earth" (3rd year option, Oxford, since 2024).
- "Planet Earth: Seismology & Geophysics" (1st year module, Oxford, since 2023).
- "Mathematics for Earth Sciences" (1st year module, Oxford, since 2023).
- "Global seismology & Earth structure" (3rd year option, Oxford, 2022).
- "Planetary Geology & Geophysics" (2nd/3rd year option, RHUL, 2022).
- "Formation of the continental crust" (4th year option, RHUL, 2021).
- "Geophysical methods" (2nd year module, Oxford, 2016).
- "Great papers in seismology" (MSc / PhD module, ETH Zurich, 2015).

Graduate: Sessions on deep Earth (NERC DTP, since 2023) and ML in seismology (NERC CDT, since 2024)

Tutoring:
- Personal tutor for Earth Sciences students at Exeter College (since 2022)
- Tutor for mathematics and geophysics (Oxford, 2015 – 2018, 2022 – present)
- Personal tutor for 3rd year students (RHUL, 2021 – 2022)
- Tutor for 1st year module in geology (Cambridge, 2010)

Field teaching:
- 1st year Pembrokeshire field trip (RHUL, 2022, 6 days; Oxford, 4 days, 2016)
- 3rd year Refraction seismic field class (ETH Zurich, 3 days, 2015)
- 1st year Arran field trip (Cambridge, 8 days, 2010, 2011, 2014)

Examining: Final year research projects (Oxford, since 2024), undergraduate exams, PhD committee of Dr Fred Dubois (Strasbourg, 2020), annual internal review of PhD students (since 2020)

Selected media and outreach activities

Training:	NCCPE Researchers Academy (2019/2020), Royal Society Media Skills training (2020)
Events:	Developed hands-on activities and materials, featured at Earth Day (Oxford, 2024), Royal Society Summer Exhibition Discovery Hub (2019), Royal Society Lates "Science Fiction" (2020)
Schools:	Participated in "I'm a Scientist StayatHome" (2020), Lecture for "LearnWithUs" series (RHUL, 2020), prepared teaching materials for GeoBus (UCL, 2020), STEM career visits (since 2020)
Open days:	Taster lectures and stands during open days (Oxford / RHUL, since 2020), sessions for UNIQ and MPLS bridging programmes to facilitate transition to university (Oxford, since 2023)
Media:	Youtube videos on Greenland paper (2024) and Covid lockdown paper (2020), animation "Journey to the centre of the Earth" in collaboration with BBC Ideas (2023), Futurum Careers animation (2022), articles for *The Conversation* (2017 – 2020), *PintOfScience* podcast (2020)
Interviews:	Regular commentaries and interviews with international radio and newspapers (e.g. BBC, NY Times, El Pais, Sunday Times, Temblor, BBC Radio 4, Wired)
Materials:	Seismology resources for secondary school in collaboration with Futurum Careers (2022)
3D printing:	Developed open-source methodology to 3D print globes for explaining geophysical concepts, detailed in an invited conference poster (2019) and article in *Frontiers in Earth Science* (2021)

Service to scientific community

Societies:	Secretary for the British Geophysical Association (since 2024) Executive Committee of the International Seismological Centre (starting Sept 2025)
Editing:	Editor for *Geophysical Journal International* (since January 2024) Handling editor for diamond open-access journal *Seismica* (since 2022) Guest editor for special issues in *EGU Solid Earth* and *Frontiers in Earth Science* (2020-2021)
Reviewing:	Journal reviewer for e.g. *JGR, TSR*, *EPSL*, *GJI*, *GRL*, *G-cubed*, *Nature Comm*. (since 2016) Proposal reviewer for NERC, German DFG, French ANR, Leverhulme Trust (since 2018)
Conferences:	Sole organiser of MODES 2025 workshop (Oxford), organising committee of UK-SEDI 2019 (UCL) and BGA PGRiP 2013 (Cambridge) meetings. SEDI session organiser (2018 and 2022).
Convening:	Organised and convened > 10 sessions in seismology (3x AGU, 2x EGU), mantle structure and dynamics (2x AGU, 1x EGU) and 3D printing for education and outreach (1x AGU, 1x EGU) Judge for Outstanding Student Awards at EGU and AGU (since 2016)
Memberships:	European Geosciences Union (since 2020), British Geophysical Association (since 2013), Royal Astronomical Society (since 2010), American Geophysical Union (since 2010)
ECR support:	Sharing experiences with funding and fellowship applications in annual events (since 2018)

Invited research seminars and conference presentations

Keynote:	Inge Lehmann Symposium (2025), ANU 50 year Symposium (*unable to travel due to childcare*, 2023), Ada Lovelace workshop (*unable to attend due to leave*, 2022), BGA PGRiP (2018)
Conferences:	BSM (2022), UKSEDI (2021), SSA (2020), EGU (2020, 2018), AGU (2x 2019, 2018, 2016, 2014)
Universities:	RHUL (2025); Liverpool, Leeds, Yale, ETH Zurich (2022); Imperial, Cambridge (2020); Birmingham, LMU Munich, (2019); Oxford, Bristol (2018); Leeds, Princeton, Maryland (2017); EOST Strasbourg, Lyon (2016); Oslo (2015); UCL, Imperial, Michigan (2014); Scripps, LMU Munich, Utrecht, Geoazur (2013)

Evolving track record of research dissemination

- Citations according to Google Scholar (18th December 2025): 1487, h-index of 16, i10 index of 20.
- 28 peer-reviewed publications in e.g., Science, Nature Comm., Sci. Reports, EPSL, PEPI, GRL, GJI
- 26 invited research seminars at universities and 15 invited conference presentations
- >30 regular oral presentations (>20 as 1st author) and >60 poster presentations (>30 as 1st author)

DR PAULA KOELEMEIJER – LIST OF PUBLICATIONS

‡ = PDRA, ** = PhD student, * = MSc student, under my (co-)supervision

In preparation

- Boudinot, L.A.**, T. Lecocq, **P. Koelemeijer,** R.A. Montgomery & B. Mortimer. Exploring the link between anthropogenic seismic vibrations and large mammal behaviour. *In preparation for Scientific Reports.*
- Trautner, V.E.**, **P. Koelemeijer**, J. Ritsema & H. Marquardt. Seismic signal of the iron spin crossover in travel-time data. *Submitted to Geophys. Res. Lett.*
- Serra, E.**, C. Zaroli, S. Lambotte & **P. Koelemeijer**. Probabilistic interpretations of Vp/Vs variations from dlnVp and dlnVs tomographies at comparable resolution. *In preparation for submission to JGR Solid Earth*

Under consideration

- Boudinot, L.A.**, **P. Koelemeijer**, R.A. Montgomery & B. Mortimer. Terrestrial animal behavioral responses to seismic waves and anthropogenic seismic noise. *Under consideration at Nature Reviews Biodiversity*
- Latallerie, F.‡, **P. Koelemeijer**, A. Walker, S. Lambotte, A. Maggi & C. Zaroli. Lithosphere cooling: New insights from surface-wave tomography. *Under consideration at Geophys. Res. Lett.*
- Dromigny, S.**, A. Curtis & **P. Koelemeijer**. Marginalisation over nuisance parameters in Variational Inference and its impact on posterior solution. *In revision for Geophys. J. Int.*
- Ramadan, F.**, B. Fry, **P. Koelemeijer** & T. Nissen-Meyer. PGVnet: a machine-learning framework for the generation of rapid, physics-consistent PGV maps. *Revised manuscript submitted to Geophys. J. Int.*

Peer-reviewed book chapters

B1. **Koelemeijer, P.** (2021). "Towards consistent seismological models of the core-mantle boundary landscape". In: *"Mantle upwellings and surface expressions", AGU Monograph edited by Marquardt, Ballmer, Cottaar & Konter*, Chapter 9, pp. 229-255, doi:10.1002/9781119528609.ch9

Peer-reviewed extended abstracts

A1. Scivier, S.**, T. Nissen-Meyer, **P. Koelemeijer** & A.G. Baydin (2024). Gaussian processes for probabilistic estimates of earthquake ground shaking: a 1-D proof-of-concept. *Peer-reviewed conference paper for ML4PS workshop at NeurIPS 2024*, available via arXiv, doi:10.48550/arXiv.2412.03299

Peer-reviewed articles

26. Serra, E.**, C. Zaroli, S. Lambotte & **P. Koelemeijer**. Inference of the S- to P-wave velocity ratio and its uncertainty with an application to South-East Asia. *Geophys. J. Int.,* Vol. 244 (1), ggaf468, doi:10.1093/gji/ggaf468
25. Leung, J.**, A.M. Walker, **P. Koelemeijer**, F. Restelli** & D.R. Davies. Quantitative assessment of tomographic proxies for lowermost mantle composition and mineralogy. *PEPI (SEDI special issue)*, vol. 368, 107423, doi:10.1016/j.pepi.2025.107423
24. Latallerie, F.‡, C. Zaroli, S. Lambotte, A. Maggi, A. Walker & **P. Koelemeijer**. Finite-frequency 3D surface-wave SOLA tomography: a synthetic study. *Seismica*, Vol. 4(2), doi:10.26443/seismica.v4i2.1407
23. Davies, J.H., J. Panton, (...), **P. Koelemeijer**, F. Latallerie‡, et al. (2025). How to assess similarities and differences between mantle circulation models and Earth using disparate independent observations. *In press, Proc. Roy. Soc. A.,* doi:10.1098/rspa.2024.0827
22. Mag, A.M.**, C. Zaroli & **P.Koelemeijer** (2025). Bridging the gap between SOLA and Deterministic Linear Inferences in the context of seismic tomography. *Geophys. J. Int.*, vol. 242(1), ggaf131, doi:10.1093/gji/ggaf131
21. Panton, J., J.H. Davies, **P. Koelemeijer**, J. Ritsema & R. Myhill (2025). Unique composition and evolutionairy histories of large low velocity provinces. *Scientific Reports*, vol. 15, 4466, doi:10.1038/s41598-025-88931-3
20. Svennevig, K., S.P. Hicks, (…), **P. Koelemeijer**, C. Ebeling, A. Cannata, W.D. Harcourt et al. (2024). A rockslide-generated tsunami in a Greenland fjord rang Earth for 9 days. *Science*, vol. 385, is. 6714, pp.

1196-1205, doi:10.1126/science.adm9247
19. Restelli, F.**, C. Zaroli & **P. Koelemeijer** (2023). Robust estimates of the ratio between S- and P-wave velocity anomalies in the Earth's mantle using normal modes. *Phys. Earth. Planet. Int.,* vol. 347, 107135, doi:10.1016/j.pepi.2023.107135
18. Trautner**, V.E., S. Stackhouse, A. Turner*, **P. Koelemeijer**, D.R. Davies, A.S.J. Mendez, N. Satta, A. Kurnosov, H.-P. Liermann & H. Marquardt (2023). Compressibility of ferropericlase at high-temperature: evidence for the iron spin crossover in seismic tomography. *Earth Planet. Sci. Lett.*, vol. 618, 119296, doi:10.1016/j.epsl.2023.118296
17. Richards, F.D., M.J. Hoggard, S. Ghelichkhan, **P. Koelemeijer** and H.C.P. Lau (2023). "Geodynamic, geodetic and seismic constraints favour deflated and dense-cored LLVPs". *Earth Planet. Sci. Lett.*, vol. 602, 117964, doi: 10.1016/j.epsl/2022/117964
16. Restelli, F.**, **P. Koelemeijer** & A. Ferreira (2022). "Normal mode observability of radial anisotropy in the Earth's mantle". *Geophys. J. Int.*, vol. 233, is. 1, 663-679, doi:10.1093/gji/ggac474
15. Ringler, A.T., R E. Anthony, (…), **P. Koelemeijer**, H.C P. Lau, V. Lekic, et al. (2022). Achievements and Prospects of Global Broadband Seismographic Networks after 30 Years of Continuous Geophysical Observations. *Reviews of Geophysics*, doi:10.1029/2021RG000749
14. Robson, A.J.S., H.C.P. Lau, **P. Koelemeijer** & B. Romanowicz (2022). An analysis of core-mantle boundary Stoneley mode sensitivity and sources of uncertainty. *Geophys. J. Int.*, Vol. 228(3), 1962-1974, doi:10.1093/gji/ggab448
13. **Koelemeijer, P**. and J. Winterbourne (2021). "3D printing the world: developing geophysical teaching materials and outreach packages". *Front. Earth Sci.*, Vol. 9, p 297, doi:10.3389/feart.2021.669095
12. Chaves, C.A.M., **P. Koelemeijer** and J. Ritsema (2021). "Comparing ray-theoretical and finite-frequency teleseismic traveltimes: implications for constraining the ratio of S-wave to P-wave velocity variations in the lower mantle". *Geophys. J. Int.*, Vol. 224(3), 1540-1552, doi:10.1093/gij/ggaa534
11. Lecocq, T., S.P. Hicks, K. Van Noten, K. van Wijk, **P. Koelemeijer**, R.S.M De Plaen, F. Massin, G. Hillers et al. (2020). "Global quieting of high-frequency seismic noise due to COVID-19 pandemic lockdown measures". *Science*, Vol. 369(6509), 1338-1343, doi:10.1126/science.abd2438
10. Jones, T., R. Maguire, P. van Keken, J. Ritsema and **P. Koelemeijer** (2020). "Subducted oceanic crust as the origin of seismically slow lower mantle structures". *Progress in Earth and Planetary Science,* **7**(17), doi:10.1186/s40645-020-00327-1
9. **Koelemeijer, P.**, B.S.A. Schuberth, D.R. Davies, A. Deuss and J. Ritsema (2018). "Constraints on the presence of post-perovskite in Earth's lowermost mantle from tomographic-geodynamic model comparisons", *Earth Planet. Sci. Lett.,* **494**, 226-238, doi:10.1016/j.epsl.2018.04.056
8. Mortimer, B., W.L. Rees *, **P. Koelemeijer** and T. Nissen-Meyer (2018). "Classifying elephant behaviour through seismic vibrations", *Current Biology,* **28**, R547-R548, doi:10.1016/j.cub.2018 .03.062
7. Zaroli, C., **P. Koelemeijer** and S. Lambotte (2017). "Toward seeing the Earth's interior through unbiased tomographic glasses", *Geophys. Res. Lett.,* **44**, doi:10.1002/2017GL074996
6. **Koelemeijer, P.**, A. Deuss, and J. Ritsema (2017). "Density structure of Earth's lowermost mantle from Stoneley mode splitting observations", *Nature Comm*., **8**, 15241, doi:10.1038/ncomms15241
5. **Koelemeijer, P.,** J. Ritsema, A. Deuss and H.-J. van Heijst (2016). "SP12RTS: a degree-12 model of shear- and compressional-wave velocity for the Earth's mantle", *Geophys. J. Int.*, **204** (2)**,** 1024–1039, doi:10.1093/gji/ggv481
4. **Koelemeijer, P**., A. Deuss, and J. Ritsema (2013). "Observations of core-mantle boundary Stoneley modes", *Geophys. Res. Lett*., **40** (11), 2557–2561, doi:10.1002/grl.50514
3. Soldati, G., **P. Koelemeijer**, L. Boschi and A. Deuss (2013). "Constraints on core-mantle boundary topography from normal mode splitting", *G-cubed*, **14**(5), 1333–1342, doi:10.1002/ggge.20115
2. **Koelemeijer, P.J.**, A. Deuss and J. Trampert (2012). "Normal mode sensitivity to Earth's D'' layer and topography on the core-mantle boundary: What we can and cannot see", *Geophys. J. Int.*, **190** (1), 553–568, doi:10.1111/j.1365-246X.2012.05499.x
1. **Koelemeijer, P.J**., C.J. Peach and C.J. Spiers (2012). "Surface diffusivity of cleaved NaCl crystals as a function of humidity: Impedance spectroscopy measurements and implications for crack healing in rocksalt", *J. Geophys. Res.*, **117**, B01205, 15 pp. doi:10.1029/2011JB008627

Non-peer reviewed publications

2. Cottaar, S. and **P. Koelemeijer** (2021). "The interior of Mars revealed" (Perspective), *Science*, Vol. 373(6553), 388-389, doi:10.1126/science.abj8914
1. Kyriakopoulos, C., N. Barth, **P. Koelemeijer**, J. Winterbourne and R. Toussaint (2021). "3D Printing in Geology and Geophysics: Overview and Thoughts on Current Applications", *Front. Earth. Sci.*, Vol. 9, p 610, editorial article, doi:10.3389/feart.2021.734291

Outreach and other written work

6. **Koelemeijer, P.** and S.P. Hicks (2020). "Coronavirus lockdown reduced seismic activity around the world", *The Conversation.* https://bit.ly/3rjxAT4
5. **Koelemeijer, P.** (2018). "Curious Kids: what would happen if the Earth's core went cold?", *The Conversation,* https://bit.ly/3v4yftV
4. **Koelemeijer, P.** (2017). "Challenging core beliefs", *The Martlet, University College Oxford*
3. **Koelemeijer, P.** (2017). "A giant lava lamp inside the Earth might be flipping the planet's magnetic field", *The Conversation,* https://bit.ly/3v1Xq0a
2. **Koelemeijer, P.J.** (2013). "Robert Stoneley and core-mantle boundary Stoneley modes", *Pembroke College Cambridge Society, Annual Gazette, September 2013*
1. Gregorian, P. and **P.J. Koelemeijer** (2008). "Travertine", in: The Aliaga fieldwork special projects, June 2006: *Transactions of the Utrecht University Geological Survey*

Theses / portfolios

4. **Koelemeijer, P.** (2018). "Balancing different perspectives in teaching within the Earth Sciences", *Portfolio (11,843 words) compiled for the Enhancing Teaching Programme in the Sciences, University of Oxford*
3. **Koelemeijer, P.J.** (2014). "Normal mode studies of the long wavelength structures in Earth's lowermost mantle", *PhD Thesis, 58,557 words, University of Cambridge*
2. **Koelemeijer, P.J.** (2010). "Normal mode study of the D'' region and core-mantle boundary topography", *MSc Thesis, 51,582 words, Utrecht University*
1. **Koelemeijer, P.J.** (2008). "Determination of the surface diffusivity of cleaved NaCl crystals in humid environments by impedance spectroscopy", *BSc Thesis, 15,145 words, Utrecht University*