

Curriculum vitae – Isabelle Lecomte

PERSONAL INFORMATION

Family name, First name: Lecomte, Isabelle
 Date of birth: 04.01.1965
 Sex: Female
 Nationality: French
 Researcher unique identifiers: orcid.org/0000-0002-3316-535X
 URL for personal web site: <https://www.uib.no/en/persons/Isabelle.Lecomte>

EDUCATION

1990 **PhD**: Geophysics; Disputation date: 18.12.1990
 Université Louis Pasteur, Strasbourg 1, France
 1988 **Civ. Eng.** Geophysics
 Ecole de Physique du Globe de Strasbourg, France
 1987 **MSc.** Geophysics
 Université Louis Pasteur, Strasbourg 1, France

CURRENT AND PREVIOUS POSITIONS

2021-present **Professor**, Reservoir and Near-Surface Geophysics
 research group: “*Geodynamics and Basin Studies*” (**GBS**)
 Department of Earth Science (**GEO**), University of Bergen (**UiB**), Norway
 2021-present Visiting Professor, Seismic Modelling, NORSAR, Kjeller, Norway
 2016-2021 Associate Professor, Reservoir Geophysics
 research group: “*Basin and Reservoir Studies*”, then “*Geodynamics and Basin Studies*”
 Department of Earth Science (**GEO**), University of Bergen (**UiB**), Norway
 2016-2021 Visiting Associate Professor, Seismic Modelling
 NORSAR, Kjeller, Norway
 2012-2017 Associate Professor (adjunct), Near-Surface Geophysics
 Department of Geosciences, University of Oslo (**UiO**), Norway
 1993-2016 Principal Research Geophysicist, Seismic Modelling
 NORSAR, Kjeller, Norway

FELLOWSHIPS, AWARDS AND PRIZES

2014 *Norwegian Geophysical Award*, Norwegian Petroleum Society
 2001 *Loránd Eötvös (Best Paper) award*, Geophysical Prospecting, EAGE
 1992 NTN Postdoctoral fellowship, NORSAR, Kjeller, Norway
 1991 EU Postdoctoral fellowship, NORSAR, Kjeller, Norway
 1988-1990 PhD grant, IFREMER, Brest/Strasbourg, France
 1988 NATO Scientific Division, Young Researcher, Summer School, Les Houches, France

PROJECT MANAGEMENT EXPERIENCE

2017-2019 UiB/GEO project leader for UiB participation in “*Forecasting of architecture, seismic characteristics and flow behaviour in paleokarst reservoirs - FOPAK*”, NFR Petromaks2 contract 267634/E30, led by NORCE/CIPR, Jan Tveranger project leader
 2008-2010 Project leader of the NORSAR Innovation AS “*Fast Elastic Inversion of Multi-offset Prestack Depth Migrated Seismic Data*”, NFR Petromaks contract #187318/S30, in cooperation with the *Norwegian Computing Center*, O. Kolbjørnsen and colleagues, with ConocoPhillips and Statoil as industry partners

- 2007-2009 Project leader and grant owner of the NORSAR Strategic Institute Program “*Flexible local seismic imaging in an integrated dynamic modelling framework*”, NFR contract #181688/I30
- 2005-2012 Theme coordinator for “*Geophysics for Geohazards*” at the International Centre for Geohazards (ICG), NFR-funded Norwegian Research Centre of Excellence (SFF)

SUPERVISION OF GRADUATE STUDENTS AND RESEARCH FELLOWS

- 1999-present PhD/main supervisor (1 completed 2011-2014, UiO; 1 completed 2017-2021, UiB); PhD/co-supervisor/major cooperation (11 completed, 2 ongoing); MSc/Civ.Eng.: ~55, misc. universities; Postdocs (1 as main supervisor; cooperation with several over time).

TEACHING ACTIVITIES (complete pedagogy training UiO-UiB)

- 2017-present GEOV111, BSc, *geophysical methods*, responsible teacher, UiB, Norway.
- 2018-2022 AG-222: BSc, *Integrated Geological Methods: from outcrop to geomodel*, UNIS, Norway
- 2017-present Spain field course, *Reservoir Geophysics*, in coop. with UiB Prof. William Helland-Hansen.
- 2015+2017 Lecturer in AG-335/835, MSc/PhD, *arctic seismic exploration*, UNIS, Norway.
- 2012-2016 GEO4120, MSc, *Near-Surface Geophysics*, responsible teacher, UiO, Norway.
- 2015 GEO4260, MSc, *Reservoir Geophysics*, responsible teacher, UiO, Norway.
- 1995 GF281, MSc, *inverse metoder*, responsible teacher, UiO, Norway
- Lecturer in **UiO**: GEO4170 (2012), GEO4171 (2013), GEO4360 (2012-2014), GEO4620 (2013), GEO4181 (2015-2016) and GEO4240 (2016-2017). **UiB**: PTEK100 (2016-2019), GEOV272 (2016-present).
- 2005-2009 SVALEX: lectures/demos in *near-surface geophysics*; exercises in *reservoir geophysics*

ORGANISATION OF MEETINGS

- 2019 Geofaredagen, *organizing committee*, NFR-arrangement grant owner, Bergen, 31/10-1/11.
- 2017 EAGE, *Scientific committee*, 23rd European Meeting of Environmental and Engineering Geophysics, Malmö, September;
EGU PICO session TS 8.2, “*Unravelling the Earth structure from seismic imaging and interpretation, geological observations, and numerical experiments*”, co-convener, Vienna, April.
- 2012 EAGE *Liaison Officer*, “*Near-Surface Geoscience 2012*”, Paris.
EAGE co-convener workshop 4 “*Integrated Geosciences for subsurface instabilities, offshore and onshore*”, Copenhagen.
- 2009 EAGE Co-convener workshop “*Subsalt imaging*”, Cairo, Egypt.

INSTITUTIONAL RESPONSIBILITIES

- 2017-present **UiB/GEO**: GBS rep. in program board and deputy leader of the latter from 04/2019; 02/2017-08/2019 deputy leader of the “*Basin and Reservoir Studies - BRS*” research group (prior GBS); acting BRS leader 07/2017-08/2018; misc. GEO hiring evaluation committees; 2018-2021 GEO institute board member; 2019-2023 employment committee member (non-permanent positions) at the Faculty of Mathematics and Natural Sciences; 2019-2021 student-recruitment committee (GEO).
- 2019 Univ. Nancy, France, PhD committee member (Irakarama).
- 2017-present UiB PhD evaluation committee coordinator (Bredesen; Kehl; Stemland).
- Prior 2017 PhD evaluation committees: 2nd *opponent* (Måsøy, 2004, NTNU; Sanchis, 2010, UiT; Bælum, 2011, UiB/UNIS); *chairman* (Zhang, 2013, Univ. Uppsala); *member* (Taillander, 2008, Univ. Paris; Yang, 2012, Univ. Uppsala).

COMMISSIONS OF TRUST IN ACADEMIC, PUBLIC OR PRIVATE ORGANISATIONS

- 2019-2021 SEG Council, elected *District 7 Representative* (Northern Europe)
- 2019-2020 EAGE co-editor *Near-Surface Geophysics* special issue “*Quantitative Geophysical Characterisation of Marine Near-Surface*” (published January 2020).
- 2017-2020 SEG *European Regional Advisory Committee* member

2015	SEG/AAPG co-editor <i>Interpretation</i> special issue “ <i>Geophysical modelling for interpreters</i> ”
2008-2012	EAGE Technical Program Officer, Near-Surface Geoscience Division.
2008-2009	SEG nomination committee member
2008	SEG co-editor <i>Geophysics</i> special issue “ <i>Advances in seismic inversion and imaging</i> ”
2004-2011	SEG Associate Editor, <i>Geophysics, Seismic Imaging</i>

MEMBERSHIPS OF ACADEMIES / SCIENTIFIC SOCIETIES / NETWORKS

2005-2018	OSEG, funding member, treasurer (2005-2006), president (2007)
2001-present	EAGE member
1997-present	SEG active member

MAJOR COLLABORATIONS

2023-present	NFR kompetanse- og samarbeidsprosjekt (344437) “ <i>Sound TRANsport NETworks (S-TRANET): Establishing the cause of hazard events on railway infrastructure using a distributed sensor network</i> ”, NORCE leader; PhD main supervisor (TBA).
2023-present	Sand Injection Research Group (SIRG), Phase 5, M. Brettle project leader (industry consortium); geophysics and seismic modelling, principal researcher.
2023-present	NFR ENERGIX-Stort (336559) “ <i>4SWIND: Advancing seismic seabed survey techniques</i> ”, Prof. H. Hafliðason (leader, UiB/GEO), participant.
2021-2023	Sand Injection Research Group (SIRG), Phase 4, A. Hurst project leader (industry consortium); geophysics and seismic modelling, principal researcher.
2020-2023	Environmental factors in minimal-invasive Cultural Heritage Management. The Vestfold Monitoring Project (VEMOP), Dr. P. Schneidhofer project leader, Vestfold og Telemark fylkeskommune; reference group member.
2020-2024	NFR Petromaks2 (308805, KMP), “ <i>Rift and rifted margin deep-water depositional systems: Application to Late Jurassic – Early Cretaceous rifting on the NCS - DeepRift</i> ”, Prof. R. Gawthorpe (leader, UiB/GEO); participant.
2019-2023	European COST Action SAGA (CA17131), “ <i>The Soil Science & Archaeo-Geophysics Alliance</i> ”, C. Cuenca Garcia project leader, Dept. of Archaeology and Cultural History, NTNU; acting as MC substitute for Norway until 2021; participating to Working Group 3 “ <i>Data integration, visualization and Parameterization</i> ”.
2017-present	Paleokarst team in Bergen, J. Tveranger leader/coordinator (NFR and industry project), geophysics and seismic modelling advisor.
2014-2018	A. Braathen and colleagues from misc. univ. and industry, UiO NFR Petromaks “ <i>TriasNorth: Reconstructing the Triassic northern Barents Shelf; basin infill patterns controlled by gentle sags and faults</i> ” project #234152/E30
2003-2012	Guest researcher in the International Centre for Geohazards (ICG), NFR-funded Norwegian Research Centre of Excellence (SFF), in cooperation with NGI, NGU, UiO and NTNU

Track record

1991-present sources: [Scopus](#); [Google Scholar](#); [ResearchGate](#) (RG); [CRISStin \(Norway\)](#)
[Scopus](#): **h-index 22**; 122 documents; 2418 citations by 1851 documents; 242 co-authors
[Google Scholar](#): **h-index 29**; **i10-index: 62**; 169 documents; 3889 citations
[RG](#): **h-index 26**; 1967 RIS, 159 documents; 2899 citations; 39612 reads
[CRISStin](#): 178 documents

Selected/recent peer-reviewed publications – see links above for more or long list on demand.

- Dimmen, V., Rotevatn, A., and Lecomte, I., 2023. Imaging of small-scale faults in seismic reflection data: Insights from seismic modelling of faults in outcrop. *Marine and Petroleum Geology*, 147, 105980.

- Volatili, T., Agosta, F., Cardozo, N., Zambrano, M., **Lecomte, I.**, and E. Tondi, 2022. Outcrop-based characterization and seismic modelling of an extensional fault zone in Mesozoic platform carbonates of the Fucino Basin, central Italy. *Journal of Structural Geology*, 155, 104515.
- Faleide, T. S., Braathen, A., **Lecomte, I.**, and I. Anell, 2021. Exploring detection and resolution thresholds of fault architecture and gas seeps in the shallow subsurface with seismic modelling. *Marine and Petroleum Geology*, 143, 105776.
- Jensen, K., **Lecomte, I.**, Gelius, L.-J., and Kaschwich, T., 2021. Point-Spread Function convolution to simulate prestack depth migrated images: a validation study. *Geophysical Prospecting*, 69, 1571-1590.
- Faleide, T.S., Braathen, A., **Lecomte, I.**, Mulrooney, M.J., Midtkandal, I., Bugge, A.J., and S. Planke, 2021. Impacts of seismic resolution on fault interpretation: Insights from seismic modelling. *Tectonophysics*, 816, 229008.
- Bradaric, A. D., Andersen, T., **Lecomte, I.**, Løseth, H., and C. H. Eide, 2021. Recognition and characterization of small-scale sand injectites in seismic data: Implications for reservoir development. *Journal of the Geological Society*.
- Jensen, K., Johansen, M. K., **Lecomte, I.**, Janson, X., Tveranger, J., and T. Kaschwich, 2021, Paleokarst reservoirs: Efficient and flexible characterization using point-spread function-based convolution modeling, *Interpretation*, 9, 2, 1-65.
- Mascolo, V., and I. **Lecomte**, 2020, Seismic modelling of outcrop carbonate systems: an application to the Cretaceous platform-to-basin system of the Maiella Mountain (Central Apennines, Italy), in *Seismic characterization of carbonate platforms and reservoirs, Special Publications, Geological Society*, 509.
- Wrona, T., Fossen, H., **Lecomte, I.**, Eide, C.H., and Gawthorpe, R.L., 2020, Seismic expression of shear zones: Insights from 2-D point-spread-function based convolution modelling, *Journal of Structural Geology*, 140.
- Rabbell, O., Galland, O., Mair, K.; **Lecomte, I.**, Spacapan, J. B., Senger, K., and R. Manceda, 2018, From field analogues to realistic seismic modelling: a case study of an oil-producing andesitic sill complex in the Neuquén Basin, Argentina, *Journal of the Geological Society*, 175(4), 580.
- Eide, C. H., Schofield, N., **Lecomte, I.**, Buckley, S. J., and J. A. Howell, 2018, Seismic interpretation of sill complexes in sedimentary basins: Implications for the sub-sill imaging problem, *Journal of the Geological Society*, 175(2), 193-209.
- **Lecomte, I.**, Lubrano Lavadera, P., Anell, I., Buckley, S. J., Eide, C. H., Grippa, A., Mascolo, V., and S. Kjoberg, 2016, 2(3)D convolution modelling of complex geological targets – beyond 1D convolution, *First Break*, 34, 99-107.
- Botter, C., Cardozo, N., Hardy, S., **Lecomte, I.**, Paton, G., and A. Escalona, 2016, Seismic characterisation of fault zones in 3D using mechanical and seismic modelling techniques, *Marine and Petroleum Geology*, 77, 973-990.
- **Lecomte, I.**, Lubrano Lavadera, P., Anell, I., Buckley, S. J., Schmid, D. W., and M. Heeremans, 2015, Ray-based seismic modelling of geological models: understanding and analyzing seismic images efficiently, *Interpretation*, 3, no. 4, SAC71-SAC89.
- Botter, C., Cardozo, N., Hardy, S., **Lecomte, I.**, and Escalona, A., 2014, From mechanical modeling to seismic imaging of faults: A synthetic workflow to study the impact of faults on seismic, *Marine and Petroleum Geology*, 57, 187-207.
- Sauvin, G., **Lecomte, I.**, Bazin, S., L'Heureux, J. S., Vanneste, M., Solberg, I. L., and Dalsegg, E., 2013, Towards geophysical and geotechnical integration for quick-clay mapping in Norway, in Special Issue on Geotechnical Assessment and Geo-environmental Engineering, *Near Surface Geophysics*, 11, no 6, 613-623, ICG contribution 395.
- **Lecomte, I.**, 2008. Resolution and illumination analyses in PSDM: A ray-based approach, *The Leading Edge*, 27, 650-663.
- Gelius, L.-J., **Lecomte, I.**, and Tabti, H., 2002. Analysis of the resolution function in seismic prestack depth imaging, *Geophysical Prospecting*, 50, 505-515.
- **Lecomte, I.**, Gjøystdal, H., Dahle, A., and Pedersen, O. C., 2000. Improving modelling and inversion in refraction seismic with a first order Eikonal solver, *Geophysical Prospecting*, 48, 437-454, *Cit.* 57.

- Podvin, P., and **Lecomte**, I., 1991. Finite difference computation of traveltimes in very contrasted velocity models: a massively parallel approach and its associated tools, *Geophys. J. Int.*, 105, 271-284.

Patents:

- **Lecomte**, I., 2013, "*Method for simulating local prestack depth migrated seismic images*", Canada Patent 2,521,919.
- **Lecomte**, I., 2013, "*Method for simulating local prestack depth migrated seismic images*", European Patent 1611461, validated in France, Germany, The Netherlands, and the United Kingdom.
- **Lecomte**, I., 2008, "*Method simulating local prestack depth migrated seismic images*", US patent #7,376,539. **Cit. 88.**
- **Lecomte**, I., 2006, "*Fremgangsmåte for simulering av lokale prestakk dypmigrerte seismiske bilder*": Norway patent # 322089.

Industrial innovation:

- **SeisRoX™** is a software suite developed by NORSAR to model efficiently 3D PSDM seismic images at detailed reservoir scale. SeisRoX is developed around the the SimPLI patents (see under patents category above).

Research expeditions:

- **Glacial hazards**, geophysical expedition in Russia, Caucasus, summer 2010, and in Norway, Jotunheimen, summer 2011: project leader and grant owner for the NATO Collaborate Linkage Grant, "*Glacial Hazards due to Climate Change in South Russia*", partners Moscow State University, ICG, UiO and UiB.
- **Finneidfjord quick-clay case**, Northern Norway, 2008: geophysics to characterize quick clay sites, support from ICG and cooperation with the University of Strasbourg.
- **Flatbre debris-flow case**, Western Norway, 2006: geophysics on a terminal moraine damming a glacial lake, support from ICG, NORSAR, UiO, NGI, NGU, BreMuseum.
- **Åknes landslide case**, Western Norway, 2005: project leader and grant owner of the NFR Norwegian/French BILAT project #169822/D15, NORSAR/Grenoble, "*Geophysics for investigation and analyses of large landslides*", 01/06/2005-31/12/2005. Additional support from ICG and NGU.

PUBLICATIONS

Peer-reviewed papers

- Dimmen, V., Rotevatn, A., and **Lecomte**, I., 2023. Imaging of small-scale faults in seismic reflection data: Insights from seismic modelling of faults in outcrop. *Marine and Petroleum Geology* 147, 105980. <https://doi.org/10.1016/j.marpetgeo.2022.105980>.
- Faleide, T. S., Braathen, A., **Lecomte**, I., and I. Anell, 2021. Exploring detection and resolution thresholds of fault architecture and gas seeps in the shallow subsurface with seismic modelling. *Marine and Petroleum Geology*, 143, 105776, doi 10.1016/j.marpetgeo.2022.105776.
- Volatili, T., Agosta, F., Cardozo, N., Zambrano, M., **Lecomte**, I., and E. Tondi, 2022. Outcrop-based characterization and seismic modelling of an extensional fault zone in Mesozoic platform carbonates of the Fucino Basin, central Italy. *Journal of Structural Geology*, 155, 104515, doi: 10.1016/j.jsg.2022.104515.
- Bradaric, A. D., Andersen, T., **Lecomte**, I., Løseth, H., and C. H. Eide, 2021. Recognition and characterization of small-scale sand injectites in seismic data: Implications for reservoir development. *Journal of the Geological Society*, doi 10.1144/jgs2021-041.
- Faleide, T.S., Braathen, A., **Lecomte**, I., Mulrooney, M.J., Midtkandal, I., Bugge, A.J., and S. Planke, 2021. Impacts of seismic resolution on fault interpretation: Insights from seismic modelling. *Tectonophysics*, 816, 229008, doi: 10.1016/j.tecto.2021.229008.
- Jensen, K., **Lecomte**, I., Gelius, L.-J., and Kaschwich, T., 2021. Point-Spread Function convolution to simulate prestack depth migrated images: a validation study. *Geophysical Prospecting*, 69, 8-9, 1571-1590, doi: 10.1111/1365-2478.13132.
- Mascolo, V., and I. **Lecomte**, 2021. Seismic modelling of outcrop carbonate systems: an application to the Cretaceous platform-to-basin system of the Maiella Mountain (central Apennines, Italy). *Geological Society, London, Special Publications*, 509, doi: 10.1144/SP509-2019-81.
- Masiero, I., Burgess, P., Hollis, C., Manifold, L., Gawthorpe, R., **Lecomte**, I., Marshall, J., Rotevatn, A., 2021. Syn-rift carbonate platforms in space and time: testing and refining conceptual models using stratigraphic and seismic numerical forward modelling. *Geological Society, London, Special Publications*, 509, doi: 10.1144/SP509-2019-217.
- Senger, K., Betlem, P., Birchall, T., Buckley, S.J., Coakley, B., Eide, C.H., Flaig, P.P., Forien, M., Galland, O., Jr, L.G., Jensen, M., Kurz, T., **Lecomte**, I., Mair, K., Malm, R.H., Mulrooney, M., Naumann, N., Nordmo, I., Nolde, N., Ogata, K., Rabbal, O., Schaaf, N.W., and A. Smyrak-Sikora, 2021. Using digital outcrops to make the high Arctic more accessible through the Svalbox database. *Journal of Geoscience Education*, 69, 123–137, doi: 10.1080/10899995.2020.1813865.
- Albaric, J., Kühn, D., Ohrnberger, M., Langet, N., Harris, D., Polom, U., **Lecomte**, I., and G. Hillers, 2021. Seismic Monitoring of Permafrost in Svalbard, Arctic Norway. *Seismological Research Letters*, doi: 10.1785/0220200470.
- Senger, K., Betlem, P., Grundvåg, S.-A., Horota, R.K., Buckley, S.J., Smyrak-Sikora, A., Jochmann, M.M., Birchall, T., Janocha, J., Ogata, K., Kuckero, L., Johannessen, R.M., **Lecomte**, I., Cohen, S.M., and S. Olausson, 2021. Teaching with digital geology in the high Arctic: opportunities and challenges. *Geoscience Communication* 4, 399–420. doi: 10.5194/gc-4-399-2021.
- Jensen, K., Johansen, M. K., **Lecomte**, I., Janson, X., Tveranger, J., and T. Kaschwich, 2021. Paleokarst Reservoirs: Efficient and Flexible Characterization Using Point-Spread-Function-Based Convolution Modeling, *Interpretation*, 9, no. 2, T331–47. doi: 10.1190/INT-2020-0130.1.

- Wrona, T., Fossen, H., **Lecomte**, I., Eide, C.H., and R. L. Gawthorpe, 2020. Seismic expression of shear zones: Insights from 2-D point-spread-function based convolution modelling. *Journal of Structural Geology*, 140, 104121, doi: 10.1016/j.jsg.2020.104121.
- Vardy, M., and I. **Lecomte**, 2020. Foreword. Issue - Quantitative Geophysical Characterisation of Marine Near-Surface, *Near Surface Geophysics*, 18, 3–4, doi: 10.1002/nsg.12087
- Lubrano-Lavadera, P., Senger, K., **Lecomte**, I., Mulrooney, M. J., and D. Kühn, 2019, Seismic modelling of metre-scale normal faults at a reservoir-cap rock interface in Central Spitsbergen, Svalbard: implications for CO2 storage, *Norwegian Journal of Geology*, 99, 2, 329-347, doi:10.17850/njg003.
- Grippa, A., Hurst, A., Palladino, G., Iacopini, D., **Lecomte**, I., and N. Huuse, 2019, Seismic imaging of complex geometry: forward modeling of sandstone intrusions, *Earth and Planetary Science Letters*, 513, 51-63, doi: 10.1016/j.epsl.2019.02.011.
- Yenwongfai, H., Mondol, N. H., **Lecomte**, I., Faleide, J. I., and J. Leutscher, 2018, Integrating facies-based Bayesian inversion and supervised machine learning for petro-facies characterization in the Snadd Formation of the Goliat Field, south-western Barents Sea, *Geophysical Prospecting*, 66, no. 6, 1365-2478, doi: 10.1111/1365-2478.12654.
- Lubrano-Lavadera, P., Kühn, D., Dando, B. D. E., **Lecomte**, I., and K. Senger, 2018, CO2 storage in the high Arctic: efficient modelling of pre-stack depth-migrated seismic sections for survey planning, *Geophysical Prospecting*, 66, no. 6, 1180-1200, doi: 10.1111/1365-2478.12637.
- Rabbel, O., Galland, O., Mair, K., **Lecomte**, I., Senger, K., Spacapan, J. B., and R. Manceda, 2018, From field analogues to realistic seismic modelling: a case study of an oil-producing andesitic sill complex in the Neuquén Basin, Argentina, *Journal of the Geological Society*, 175, no. 4, 580-593, doi: 10.1144/jgs2017-116.
- Eide, C. H., Schofield, N., **Lecomte**, I., Buckley, S. J., and J. A. Howell, 2018, Seismic interpretation of sill complexes in sedimentary basins: implications for the subsill imaging problem, *Journal of the Geological Society*, 175, no. 2, 193-209, doi: 10.1144/jgs2017-096.
- Lubrano-Lavadera, P., Drottning, Å., **Lecomte**, I., Dando, B. D. E., Kühn, D., and V. Oye, 2017, Seismic modelling: 4D capabilities for CO2 injection, *Energy Procedia*, 114, 3432-3444, doi: 10.1016/j.egypro.2017.03.1474.
- Yenwongfai, H., Mondol, N., Faleide, J. I., **Lecomte**, I., and J. Leutscher, 2017, Prestack inversion and multi-attribute analysis for porosity, shale volume and sand probability in the Havert formation of the Goliat field, southwestern Barents Sea, *Interpretation*, 5, no. 3, SL69-SL87, doi: 10.1190/INT-2016-0169.1.
- Yenwongfai, H., Mondol, N., Faleide, J. I., and I. **Lecomte**, 2017, Prestack simultaneous inversion to predict lithology and pore fluid in the realgrunnen subgroup of the Goliat field, southwestern Barents Sea, *Interpretation*, 5, no. 2, SE75-SE96, doi: 10.1190/INT-2016-0109.1.
- Kjoberg, S., Schmiedel, T., Planke, S., Henrik H. Svensen, H. H., John M. Millett, J. M., Jerram, D. A., Olivier Galland, O., **Lecomte**, I., Schofield, N., Haug, Ø. T., and A. Helsem, 2017, 3D structure and formation of hydrothermal vent complexes at the Paleocene-Eocene transition, the Møre Basin, mid-Norwegian margin, *Interpretation*, 5, no. 3, SK65-SK81, doi: 10.1190/INT-2016-0159.1
- Botter, C., Cardozo, N., **Lecomte**, I., Rotevatn, A., and G. Paton, 2017, The impact of faults and fluid flow on seismic images of a relay ramp over production time, *Petroleum Geoscience*, 23, 17–2822, doi: 10.1144/petgeo2016-027.

- Botter, C., Cardozo, N., Hardy, S., **Lecomte**, I., Paton, G., and A. Escalona, 2016, Seismic characterisation of fault zones in 3D using mechanical and seismic modelling techniques, *Marine and Petroleum Geology*, 77, 973-990, doi: 10.1016/j.marpetgeo.2016.08.002.
- Anell, I., **Lecomte**, I., Braathen, A., and S. J. Buckley, 2016, Synthetic seismic illumination of small-scale growth faults, paralic deposits and low-angle clinoforms: A case study of the Triassic successions on Edgeøya, NW Barents Shelf, *Marine and Petroleum Geology*, 625-639, doi: 10.1016/j.marpetgeo.2016.07.005.
- **Lecomte**, I., Lubrano Lavadera, P., Anell, I., Buckley, S. J., Eide, C. H., Grippa, A., Mascolo, V., and S. Kjoberg, 2016, 2(3)D convolution modelling of complex geological targets – beyond 1D convolution, *First Break*, 34, 99-107.
- **Lecomte**, I., Lubrano Lavadera, P., Anell, I., Buckley, S. J., Schmid, D. W., and M. Heeremans, 2015, Ray-based seismic modelling of geological models: understanding and analyzing seismic images efficiently, *Interpretation*, 3, no. 4, SAC71-SAC89, doi: 10.1190/INT-2015-0061.1.
- Garofalo, F., Sauvin, G., Socco, V., and I. **Lecomte**, 2015, Joint inversion of seismic and electric data applied to 2D media, *Geophysics*, 80, no. 4, EN93-EN104, doi: 10.1190/geo2014-0313.1.
- Mascolo, V., Rusciadelli, G., and I. **Lecomte**, 2015, Young geoscientists show the way forward with style in student paper competition - Synthetic Seismic Modelling of Outcropping Carbonate System of the Maiella Mountain (Central Apennines-Italy), *First Break*, 33, June, 103-108.
- Botter, C., Cardozo, N., Hardy, S., **Lecomte**, I., and Escalona, A., 2014, From mechanical modeling to seismic imaging of faults: A synthetic workflow to study the impact of faults on seismic, *Marine and Petroleum Geology*, 57, 187-207.
- Sauvin, G., **Lecomte**, I., Bazin, S., Hansen, L., Vanneste, M., and L'Heureux, J.-S., 2014, On the integrated use of geophysics for quick-clay mapping: The Hvittingfoss case study, Norway, *Journal of Applied Geophysics*, 106, 1-13, doi: 10.1016/j.jappgeo.2014.04.001.
- Albaric, J., Oye, V., Langet, N., Hasting, M., **Lecomte**, I., Iranpour, K., Messeiller, M., and Reid, P., 2013, Monitoring of induced seismicity during the first geothermal reservoir stimulation at Paralana, Australia, *Geothermics*, 52, 120-131, DOI: 10.1016/j.geothermics.2013.10.013.
- Hansen, L., L'Heureux, J.-S., Sauvin, G., Polom, U., **Lecomte**, I., Vanneste, M., Longva, O., and Krawczyk, C., 2013, Effects of mass-wasting on the stratigraphic architecture of a fjord-valley fill: correlation of onshore, shear-wave seismic and marine seismic data at Trondheim, Norway, *Sedimentary Geology*, 289, 1-18.
- L'Heureux, J.-S., Long, M., Sauvin, G., Polom, U., Hansen, L., **Lecomte**, I., Vanneste, M., Dehls, J., and Janbu, N., 2013, Settlement prediction from high resolution shear-wave seismics in the Trondheim harbour, mid Norway, *Engineering Geology*, 167, 72-83.
- Sauvin, G., **Lecomte**, I., Bazin, S., L'Heureux, J. S., and Vanneste, M., Solberg, I. L., and Dalsegg, E., 2013, Towards geophysical and geotechnical integration for quick-clay mapping in Norway, in *Special Issue on Geotechnical Assessment and Geo-environmental Engineering, Near Surface Geophysics*, 11, no 6, 613-623, ICG contribution 395, doi: 10.3997/1873-0604.2012064.
- Zühlsdorff, L., Gjøystdal, H., Drottning, Å, **Lecomte**, I., Moen, S. I., and Bolin, H., 2013, Modern Ray-Based Modelling and Simulated Depth Migration for Survey Planning and Interpretation: A 3D VSP Example, *Geohorizons*, 18, no 2, 27-37.

CV – Long List - Isabelle Lecomte – 2023

- Long, M., Donohue, S., L'Heureux, J.-S., Solberg, I.-L., Rønning, J. S., Limacher, R., O'Connor, P., Sauvin, G., Rømøen, M., and I. **Lecomte**, 2012, Relationship between electrical resistivity and basic geotechnical parameters for marine clays, *Canadian Geotechnical Journal*, 49, 1-11, doi:10.1139/T2012-080.
- Morgan, E., Vanneste, M., **Lecomte**, I., Baise, L. Longva, O. and B. McAdoo, 2012, Estimation of free gas saturation from seismic reflection surveys by the genetic algorithm inversion of a P-wave attenuation model, *Geophysics*, 77(4), R175–R187.
- Petrakov, D. A., Kutuzov, S. S., Lavrientiev, I., **Lecomte**, I., and M. S. Shakhmina, 2011, An assessment of glacier lake development limit: case study Lapa Lake, Central Caucasus, Russia, submitted to *Earth's Cryosphere* (In Russian).
- Buske, S., I. **Lecomte**, T. Nemeth, S. Operto, and V. Sallares, 2009, Supplement: Imaging and inversion — Introduction: *Geophysics*, 74, no. 6, WCA1-WCA4.
- Drottning, Å., M. Branston, and I. **Lecomte**, 2009, Value of illumination-consistent modeling in time-lapse seismic analysis, *First Break*, 27, no. 10, 75-83.
- **Lecomte**, I., 2008. Resolution and illumination analyses in PSDM: A ray-based approach, *The Leading Edge*, 27, 650-663.
- **Lecomte**, I., Thollet, I., Juliussen, H., and Hamran, S.-E., 2008, Using geophysics on a terminal moraine damming a glacial lake: the Flatbre debris flow case, Western Norway, *Advances in Geosciences*, 14, 301-307, ICG contribution 191, doi: 10.5194/adgeo-14-301-2008.
- Gjøystdal, H., Drottning, Å., **Lecomte**, I., and Branston, M., 2008, Seismic reservoir characterization: including sensitivity to the overburden, survey, and reservoir properties when simulating the 3D response to the reservoir, *Earth Sciences Frontiers*, 15, 1, 123-132.
- Gjøystdal, H., Iversen, E., **Lecomte**, I., Kaschwish, T., Drottning, Å., and Mispel, J., 2007, Improved applicability of ray tracing in seismic acquisition, imaging, and interpretation, *Geophysics*, 72, SM261-SM271.
- Gjøystdal, H., Drottning, Å., **Lecomte**, I., and Branston, M., 2007, Advances in quantitative model-assisted seismic interpretation, *First Break*, 25, 95-102.
- **Lecomte**, I., Hamran, S.-E., and Gelius, L.-J., 2005. Improving Kirchhoff migration with repeated Local Plane-Wave imaging? a SAR-inspired signal-processing approach in prestack depth imaging, *Geophysical Prospecting*, 53, 767–785.
- Solheim, A., Bhasin, R., De Blasio, F. V., Blikra, L. H., Boyle, S., Braathen, A., Dehls, J., Elverhøi, A., Etzelmüller, B., Glimsdal, S., Harbitz, C. B., Heyerdahl, H., Høydal, Ø. A., Iwe, H., Karlsrud, K., Lacasse, S., **Lecomte**, I., Lindholm, C., Longva, O., Løvholt, F., Nadim, F., Nordal, S., Romstad, B., Røed, J. K., Strout, J. M., 2005. International Centre for Geohazards (ICG) - Assessment, prevention and mitigation of geohazards, *Norwegian Journal of Geology*, 85, 1 & 2, 45-62.
- Laurain, R., Gelius, L.-J., Vinje, V., and **Lecomte**, I., 2004, A review of 3D illumination studies, *Journal of Seismic Exploration*, 13, 17-37.
- **Lecomte**, I., Gjøystdal, H., Maaø, F., Bakke, R., Drottning, Å., and Johansen, T.-A., 2004. Efficient and flexible seismic modelling of reservoirs: the HybriSeis concept, *The Leading Edge*, 23, 432-437.
- Hamran, S.-E., **Lecomte**, I., and Gelius, L.-J., 2003. Local Plane-Wave Imaging of GPR data, *Journal of Environmental and Engineering Geophysics*, Volume 8, Issue 2, 9-16.

- Gelius, L.-J., **Lecomte**, I., and Tabti, H., 2002. Analysis of the resolution function in seismic prestack depth imaging, *Geophysical Prospecting*, 50, 505-515.
- Gjøystdal, H., Iversen, E., Laurain, R., **Lecomte**, I., Vinje, V., and Åstebøl, K., 2002. Applications of ray theory in modelling and imaging of seismic data, *Studia Geophysica et Geodaetica*, 46, 113-164.
- Johansen, T.-A., Drottning, Å., **Lecomte**, I., and Gjøystdal, H., 2002. Seismic modelling of fluid substitution effects, *Geophysical Prospecting*, 50, 119-137.
- **Lecomte**, I., Gjøystdal, H., Dahle, A., and Pedersen, O. C., 2000. Improving modelling and inversion in refraction seismic with a first order Eikonal solver, *Geophysical Prospecting*, 48, 437-454, (**EAGE Eötvös Award 2001**; <http://www.eage.org/index.php?evp=1964>).
- Gelius, L.-J., and **Lecomte**, I., 2000. The resolution function in linearized Born and Kirchhoff inversion, in *Lecture Notes in Earth Sciences: Methods and Applications of Inversion* (P.C. Hansen, B.H. Jacobsen and K. Mosegaard, eds.), Springer Verlag.
- **Lecomte**, I., 1999. Local and controlled prestack depth migration in complex areas, *Geophysical Prospecting*, 47, 799-818.
- Hamran, S.-E., and **Lecomte**, I., 1993. Local plane wavenumber diffraction tomography in heterogeneous backgrounds. Part I: Theory, *Jrnl. Seismic Explor.*, 2, 133-146.
- **Lecomte**, I., and Hamran, S.-E., 1993. Local plane wavenumber diffraction tomography in heterogeneous backgrounds. Part II: Green's functions and finite-difference traveltimes, *Jrnl. Seismic Explor.*, 2, 287-299.
- **Lecomte**, I., 1993. Finite difference calculation of first traveltimes in anisotropic media, *Geophys. J. Int.*, 113, 318-342.
- Podvin, P., and **Lecomte**, I., 1991. Finite difference computation of traveltimes in very contrasted velocity models: a massively parallel approach and its associated tools, *Geophys. J. Int.*, 105, 271-284.

Book Chapters (peer-reviewed)

- Donohue, S., Long, M., L'Heureux, J.-S., Solberg, I.-L., Sauvin, G., Rmoen, M., Kalscheuer, T., Bastani, M., Persson, L., **Lecomte**, I., and O'Connor, P. 2014. The use of geophysics for sensitive clay investigations, in *Landslides in Sensitive Clays: From Geosciences to Risk Management*, (J.-S. L'Heureux et al., eds), *Advances in Natural and Technological Hazards Research*, 36, doi:10.1007/978-94-007-7079-9_18, Springer Science+Business Media Dordrecht, pp. 159-178. http://link.springer.com/chapter/10.1007/978-94-007-7079-9_1
- Sauvin, G., **Lecomte**, I., Bazin, S., L'Heureux, J.-S., Vanneste, M., 2013. Geophysical data integration for hazard assessment of quick-clay landslide-prone areas: the Hvittingfoss case study, Norway. in *Landslides in Sensitive Clays: From Geosciences to Risk Management*, (J.-S. L'Heureux et al., eds), *Advances in Natural and Technological Hazards Research*, 36, doi:10.1007/978-94-007-7079-9_18, Springer Science+Business Media Dordrecht, pp. 236-246. http://link.springer.com/chapter/10.1007/978-94-007-7079-9_1
- Polom, U., L. Hansen, S. Sauvin, J.-S. L'Heureux, I. **Lecomte**, C. M. Krawczyk, M. Vanneste, and O. Longva, 2011, High-resolution SH-wave seismic reflection for characterization of onshore ground conditions in the Trondheim harbor, central Norway, In *Advances in Near-Surface Seismology and Ground-penetrating Radar*, SEG Geophysical Developments Series No. 15, edited by Richard D. Miller, John H. Bradford, and Klaus Holliger, ISBN 978-1-56080-224-2.

Conferences with peer-reviewed proceedings

- Zvirtes, G., Hurst, A., Brettle, M., Philipp, R.P., **Lecomte**, I., Holden, D., Waltham, R., Stephens, T., Crawford, Z., Yousef, Y.A., 2023. Outcrop Characterization and Modelling of Sand Injection Complexes. *Extended Abstracts*, 84th EAGE Annual Conference & Exhibition, 1–5. Doi: 10.3997/2214-4609.2023101172.
- Faleide, T. S. Braathen, A., **Lecomte**, I., Midtkandal, I., Bugge, A. J., Planke, S., and I. Anell, 2022. Exploring seismic detection and resolution thresholds of fault interpretations in the shallow subsurface using seismic modelling. *Extended Abstract*, Sixth International Conference on Fault and Top Seals, 26-28 September, Vienna.
- Faleide, T. S. Braathen, A., **Lecomte**, I., Mulrooney, M. J., Midtkandal, I., Bugge, A. J. and S. Planke, 2021. Exploring extensional fault interpretations from seismic reflection data of various resolution substantiated by seismic modelling. Norwegian Geological Winter Meeting, Oslo, 8-10 January
- Bradaric, A. D., Andersen, T., **Lecomte**, I., Løseth, H., and C. H. Eide, 2021. What do small-scale sand injectites look like in 2D seismic data? Norwegian Geological Winter Meeting, Oslo, 8-10 January.
- Balyesiima, M., **Lecomte**, I., Pettersen, Ø., and J. Tveranger, 2020. Geometric and Infill Effects on Flow Patterns and Production Rates in Paleokarst Reservoir Models. Conference Proceedings, 82nd EAGE Annual Conference & Exhibition, 1–5, doi: 10.3997/2214-4609.202011698.
- Faleide, T.S., Braathen, A., **Lecomte**, I., Mulrooney, M.J., Anell, I., Midtkandal, I., and S. Planke, 2020. Testing Seismic Interpretations of Faults by Modelling; Viable Geometries versus Seismic Resolution in the Subsurface. Conference Proceedings, 82nd EAGE Annual Conference & Exhibition, 1-5, doi: 10.3997/2214-4609.202011930.
- Jensen, K., **Lecomte**, I., Janson, X., and J. Tveranger, 2020. Efficient and flexible characterization of paleokarst seismic signatures using point-spread function-based convolution modeling, in: SEG Technical Program Expanded Abstracts 2020, SEG Technical Program Expanded Abstracts. Society of Exploration Geophysicists, 2744–2748, doi: 10.1190/segam2020-3426595.1.
- Pertiwi, R.N., **Lecomte**, I., and D. Iacopini, 2020. 3D seismic modeling of heterogeneous poorly-consolidated sandstones in shale host rocks, in: SEG Technical Program Expanded Abstracts 2020, SEG Technical Program Expanded Abstracts. Society of Exploration Geophysicists, 2469–2473, doi: 10.1190/segam2020-3418232.1.
- Betlem, P., Rabbal, O., **Lecomte**, I., Senger, K., 2020. Seismic Modelling of Virtual Outcrops: Application of Rock Physics Beyond the Borehole. Presented at the Fifth EAGE Workshop on Rock Physics, European Association of Geoscientists & Engineers, 1–5, doi: 10.3997/2214-4609.2020603039.
- Cui, Z., Iacopini, D., and I. **Lecomte**, 2019. Novel seismic forward modelling of the seal bypass structure: An example from the Loyal Field of the North Sea (Scotland, UK), in: SEG Technical Program Expanded Abstracts 2019, SEG Technical Program Expanded Abstracts. Society of Exploration Geophysicists, 2054–2058, doi: 10.1190/segam2019-3199625.1.
- Senger, K., Betlem, P., Rabbal, O., **Lecomte**, I. and O. Galland, 2019. Early Cretaceous igneous intrusions in Svalbard: seismic modelling as a link between boreholes, outcrops and seismic data, LASI VI, Physical geology of subvolcanic systems: Laccoliths, sills and dykes, 24-25th November, Malargue, Argentina.
- Fossen, H., Wrona, T., **Lecomte**, I., Eide, C.H., Gawthorpe, R., and G. C. Cavalcante, 2019. Seismic Signature of Shear Zones: Insights from 2-D PSF-based Convolution Modelling. Presented at the AGU Fall Meeting 2019, AGU.

CV – Long List - Isabelle Lecomte – 2023

- Fossen, H., **Lecomte**, I., Wrona, T., Eide, C. H., Gawthorpe, R. and C. Cavalcante, 2019. Seismic signature of shear zones: insights from 2-D convolution forward modelling. Seismic signature of shear zones: insights from 2-D convolution forward modelling, *Geophysical Research Abstracts*, 21, EGU2019-2513-1.
- **Lecomte**, I., Grelaud, C., Masiero, I., and V. Mascolo, 2018, Insight through efficient seismic modelling: an extended convolution approach applied to various geological models of carbonate platforms. "Seismic Characterisation of Carbonate Platforms and Reservoirs", Geological Society Events, 2018 Year of Resources, Energy Group, The Geological Society, London, 10-11 October.
- Mascolo, V., Di Cuia, R., **Lecomte**, I., and P. Pace, 2018, Synthetic seismic modelling of the platform-to-basin transition in the Maiella Mt. (Central Apennines): an analogue for subsurface Mesozoic carbonate targets. Presented at the Synthetic seismic modelling of the platform-to-basin transition in the Maiella Mt. (Central Apennines): an analogue for subsurface Mesozoic carbonate targets. "Seismic Characterisation of Carbonate Platforms and Reservoirs", Geological Society Events, 2018 Year of Resources, Energy Group, The Geological Society, London, 10-11 October.
- Masiero, I., Burgess, P., Manifold, L., Hollis, C., **Lecomte**, I., Neergard Grinde, J., Peacock, D., Rotevatn, A., and R. Gawthorpe, 2018, Evaluating the structural control over carbonate platforms developed in syn-rift settings using stratigraphic and seismic forward models, "Seismic Characterisation of Carbonate Platforms and Reservoirs", Geological Society Events, 2018 Year of Resources, Energy Group, The Geological Society, London, 10-11 October.
- Jensen, K., **Lecomte**, I., and T. Kaschwich, 2018, Analyzing PSDM images in complex geology via ray-based PSF-convolution modeling, *Expanded Abstract*, 88th SEG annual meeting, October, Anaheim, 3843-3847.
- Masiero, I., Burgess, P., Manifold, L., Hollis, C., **Lecomte**, I., and J. N. Grinde, Rotevatn, A., Gawthorpe, R., 2018, Evaluating the structural control over carbonate platforms developed in syn-rift settings. IAMG 2018 - 19th Annual Conference, International Association for Mathematical Geosciences, Olomouc, 2-7 September.
- Botter, C., Cardozo, N., Rotevatn, A., **Lecomte**, I., and G. Paton, 2017, The Impact of Faults and Fluid Flow on Seismic Images of a Relay Ramp over Production Time. *Extended Abstract*, 79th EAGE Conference and Exhibition, Paris, doi: 10.3997/2214-4609.201700861.
- Yenwongfai, H. D., H. D., Mondol, N. H., Faleide, J. I., and I. **Lecomte**, 2016, Prestack inversion for porosity, shale volume, and sand probability in the Havert Formation of the Goliat field, SW Barents Sea, *Expanded Abstract*, 86th SEG annual meeting, October, Dallas.
- Yenwongfai, H. D., Mondol, N. H., **Lecomte**, I., and J. I. Faleide, 2016, Prestack Simultaneous Inversion to Predict Lithology in the Realgrunnen Subgroup of the Goliat Field, SW Barents Sea, *Extended Abstract*, 78th EAGE Conference and Exhibition, Vienna, doi: 10.3997/2214-4609.201600964.
- Mascolo, V., Rusciadelli, G., Ricci, C., and I. **Lecomte**, 2016, Three-dimensional Geological Modelling of a Slope-to-basin Carbonate Reservoir Analogue - The Case of the Maiella Mt., *Extended Abstract*, 78th EAGE Conference and Exhibition, Vienna, doi: 10.3997/2214-4609.201600926.
- Mascolo, V., Rusciadelli, G., and I. **Lecomte**, 2016, 2D and 3D Synthetic Seismic Modelling of Outcropping Carbonate System of the Maiella Mountain (Central Apennines-Italy), *Extended Abstract*, 2nd Conference on Forward Modelling of Sedimentary Systems, Th D01, doi: 10.3997/2214-4609.201600360.
- **Lecomte**, I., Lubrano-Lavadera, P., Wuestefeld, A., Kaschwich, T., Albaric, J., and H. N. Gharti, 2015, Focusing in migration-based location of weak microseismicity: modelling Point-Spread Function for resolution analyses, *Expanded Abstract*, SEG annual meeting, October, New-Orleans, 2491-2495 doi: 10.1190/segam2015-5813282.1.

CV – Long List - Isabelle Lecomte – 2023

- Botter, C., Cardozo, N., **Lecomte**, I., Rotevatn, A., and G. Paton, 2015, The effect of fluid flow in relay ramps on seismic images, *Extended Abstract, EAGE Fourth International Conference on Fault and Top Seals, Art or Science?* Almeria, Mo FTS-05. *EAGE Best Young Presenter Award (Botter)*.
- **Lecomte**, I., Lubrano-Lavadera, P., and D. Schmid, 2015, Understanding and Analysing Seismic Images - Insight through Appropriate Modelling, in workshop 12 - Interpreting the Uncertain Seismic Image, *Extended Abstract, 77th EAGE Conference and Exhibition – Workshops*, Madrid, WS12-A02, doi: 10.3997/2214-4609.201413549.
- Mascolo, V., Rusciadelli, G., and I. **Lecomte**, 2015, Synthetic Seismic Modelling of Outcropping Carbonate System of the Maiella Mountain (Central Apennines-Italy), *Extended Abstract, 77th EAGE Conference and Exhibition*, Madrid, doi: 10.3997/2214-4609.201412458.
- Botter, C., N. Cardozo, S. Hardy, I. **Lecomte**, A. Escalona, and G. Paton, 2015, From Geomechanical Modelling to Seismic Imaging of Faults in 3D: a synthetic workflow to study the impact of faults on seismic and their interpretation. *Norwegian Geological Winter Meeting*, Stavanger, 12-14 January.
- Braathen, A., Mulrooney, M., Ogata, K., Anell, I.M., Smyrak-Sikora, A., **Lecomte**, I., Osmundsen, P.T., and Maher Jr, H., 2015, Trias North: Late Triassic shallow faulting in Edgeøya, Svalbard; structural style, deformation mechanisms and seismic expression. *Norwegian Geological Winter Meeting*, Stavanger, 12-14 January.
- Hansen, L., L'Heureux, J.-S., Sauvin, G., Polom, U., **Lecomte**, I., Vanneste, M., Longva, O. and C.M. Krawczyk, 2015, Effects of mass-wasting on the stratigraphic architecture of a fjord-valley fill: Correlation of onshore, shear-wave seismic and marine seismic data at Trondheim, Norway, *Norwegian Geological Winter Meeting*, Stavanger, 12-14 January.
- Pasquet, S., Sauvin, G., Andriamboavonjy, M. R., Bodet, L., **Lecomte**, I., and R. Guerin, 2014, Surface-wave Dispersion Inversion versus SH-wave Refraction Tomography in Saturated and Poorly Dispersive Quick Clays, *Extended Abstract, Near Surface Geoscience 2014 - 20th European Meeting of Environmental and Engineering Geophysics*, Athens, 500-504.
- **Lecomte**, I., Polom, U., Sauvin, G., Ruud, B. O., Christiansen, H., and G. L. Gilbert, 2014, Shear-wave Reflection-seismic Pilot Study at the UNIS CO2 Lab site, Longyearbyen, Svalbard, *Extended Abstract, 76th EAGE Conference & Exhibition, Amsterdam*, We P04 05, ISBN 978-90-73834-89-7.
- Botter, C., Cardozo, N., Hardy, S., **Lecomte**, I., Escalona, A., Cooke, N., and G. Paton, 2014, From Geomechanical Modelling to Seismic Imaging of 3D Faults, *Extended Abstract, 76th EAGE Conference & Exhibition, Amsterdam*, We 104 09, **DOI**: 10.3997/2214-4609.20141072.
- Takahata, A. K., Gelius, L.-J., Lopes, R. R., Tygel, M. and **Lecomte**, I., 2013, 2D spiking deconvolution approach to resolution enhancement of prestack depth migrated seismic images, *Extended Abstract, 75th EAGE Conference & Exhibition incorporating SPE EUROPEC*, London, 10-13 June, Th 06 07.
- Vanneste, M., Longva, O., L'Heureux, J.-S., Vardy, M.E., Morgan, E., Forsberg, C.F., Kvalstad, T.J., Strout, J.M., Brendryen, J., Haflidason, H., **Lecomte**, I., Steiner, A., Kopf, A., Mörz, T., and Kreiter, S., 2013. Finneidfjord, a Field Laboratory for Integrated Submarine Slope Stability Assessment and Characterization of Landslide-prone Sediments: a Review, *Offshore Technology Conference - OTC*, 130TC-P-686-OTC, Houston.
- Garofalo, F., Sauvin, G., Socco, L. V., and **Lecomte**, I., 2013, Joint inversion of apparent resistivity and seismic surface and body wave data, *Geophysical Research Abstracts*, EGU General Assembly, Vol. 15, EGU2013-4306.
- Albaric, J., Langet, N., Hasting, M., **Lecomte**, I., Oye, V., Iranpour, K., Messellier, M., Llanos, E.M., and Reid, P., 2012, The Importance of Coupling Passive and Active Seismic Methods in Geothermal Fields - A Case Study at Paralana, Australia, *Extended Abstract, 74th EAGE Conference & Exhibition*, Copenhagen, June.

- Albaric, J., Langet, N., Hasting, M., Oye, V., **Lecomte**, I., Messeiller, M., Iranpour, K., Reid, P., and Llanos, E. M., 2012, Induced seismicity at the Paralana Enhanced Geothermal System, South Australia, Geophysical Research Abstracts, EGU General Assembly, Vol. 14, EGU2012-1 2584, Vienna.
- Botter, C., Cardozo, N., Hardy, S., **Lecomte**, I., and Escalona, A., 2012, Mechanical Modelling and Seismic Imaging of Fault Zones, Extended Abstract, 3rd International Conference on Fault and Top Seals - From Characterization to Modelling, Montpellier, A08, **DOI**: 10.3997/2214-4609.20142996.
- Garofalo, F., Sauvin, G., Socco, L. V., and **Lecomte**, I., 2012, Joint Inversion of Surface-wave Dispersion, P-wave Refraction and Apparent Resistivity Data, Extended Abstract, Near Surface 2012 - the 18th European Meeting of Environmental and Engineering Geophysics, Paris, September.
- Hansen, L., L'Heureux, J.S., Sauvin, G., **Lecomte**, I., Polom, U., Krawczyk, C., Longva, O., 2012, Valley-fill stratigraphy and mass-wasting events from onshore, high-resolution shear-wave seismic, Trondheim harbour area, central Norway, 30th Nordic Geological Winter Meeting, Reykjavik, January.
- Juliussen, H., Støren, E.N., **Lecomte**, I., Sauvin, G., Tissot, S., Hamran, S-E, Petrakov, D., Lavrentiev, I. and Kutuzov, S., 2012, Coupling alpine lake sediments with slope deposits using a combined geophysical and sedimentological approach, Leirvatnet, Jotunheimen, southern Norway, Geophysical Research Abstracts, EGU General Assembly, Vol. 14, EGU2012-12333, Vienna.
- L'Heureux, J.-S., Hansen, L., Sauvin, G., Polom, U., **Lecomte**, I., and Vanneste, M., 2012, High-resolution sub-surface geo-characterization from shear-wave seismic reflection profiling: An example from the Trondheim harbour, mid Norway, Proceeding, 16th Nordic Geotechnical Meeting, Copenhagen, May, ICG contribution 375.
- **Lecomte**, I., Juliussen, H., Nagel Støren, E.W., Sauvin, G., Hamran, S.-E., Lavrientiev, I. Petrakov, D., Kutuzov, S. and S. Tissot, 2012, Geophysical Investigations of Unstable Mountain Slopes in Jotunheimen, Norway, Extended Abstract, Near Surface Geoscience 2012 - the 18th European Meeting of Environmental and Engineering Geophysics, Paris, September.
- Sauvin, G., **Lecomte**, I., Bazin, S., l'Heureux, J.-S., and Malehmir, A., 2012b, Quick-clay landslide-prone grounds in Norway and Sweden: a complex problem requiring a combined geophysical and geotechnical approach. Expanded Abstract, Workshop 4: Integrated Geosciences for Subsurface Instabilities, Offshore and Onshore, 74th EAGE Conference & Exhibition, Copenhagen, June.
- Sauvin, G., **Lecomte**, I., Bazin, S., L'Heureux, J.-S., and Vanneste, M., 2012, Geophysical Investigations of Quick-clay Slide Prone Areas, Extended Abstract, Near Surface Geoscience 2012 - the 18th European Meeting of Environmental and Engineering Geophysics, Paris, September.
- Oye, V., Albaric, J., Langet, N., Hasting, M., **Lecomte**, I., Messeiller, M., and Reid, P., 2012, Microseismic monitoring of the hydraulic stimulation at the Paralana enhanced geothermal system, South Australia, First Break, 30, no 7, 91 – 95.
- Vanneste, M., C.-F. Forsberg, T. J. Kvalstad, S. Chand, J-S. L'Heureux, O. Longva, H. Hafliðason, B. O. Hjelstuen, M. E. Vardy, N. Baeten, M. Forwick, J.S. Laberg, T. O. Vorren, I. **Lecomte**, A. Kopf, E. Morgan, 2012, Assessing Offshore Geohazards: a Multi-disciplinary Research Initiative to Understand Shallow Landslide and Their Dynamics in Coastal and Deepwater Environments, Northern Norway. 5th International Symposium on Submarine Mass Movements and Their Consequences, Springer, Kyoto, Japan, 31, 29-41.
- Sauvin, G., Bazin, S., Vanneste, M., **Lecomte**, I., and A.A. Pfaffhuber, 2011, Towards Joint Inversion/Interpretation for Landslide-prone Areas in Norway - Integrating Geophysics and Geotechnique, Extended Abstract, Near Surface 2011 - the 17th European Meeting of Environmental and Engineering Geophysics, Leicester, September.

- Kaschwich, T., Gjøystdal, H., and **Lecomte**, I., 2011, Impact of Diffraction on Resolution of PSDM, Extended Abstract, 73rd EAGE Conference & Exhibition, Vienna, P384.
- Georgsen, F., O. Kolbjørnsen, and I. **Lecomte**, 2010, A 3D ray-based pulse estimation for seismic inversion of PSDM data, Extended Abstract, 72nd EAGE Conference & Exhibition, Barcelona, A031.
- Hansen, L., U. Polom, J.-S. L'Heureux, G. Sauvin, I. **Lecomte**, C. M. Krawczyk, and O. Longva, 2010, Valley-fill stratigraphy and evidence for prehistoric quick-clay landslides from onshore, high-resolution shear-wave seismic, Trondheim harbour area, Central Norway, abstract, 29th Nordic Geological Winter Meeting, 11-13 January, Oslo.
- Kaschwich, T., and **Lecomte** I., 2010. Improved Ray-based Seismograms by Combining Modeling by Demigration with a Prestack Depth Migration Simulator, Extended Abstract, 72nd EAGE Conference & Exhibition, Barcelona, C041.
- **Lecomte**, I., Köllner, F., Petrakov, D., Chernomorets, S., Shakhmina, M., Hamran, S.-E., Juliussen, H., and Kääh, A., 2010, Geophysics in Glacial-hazard Initiation Zones, Russian Caucasus, Expanded Abstract, Near Surface 2010 – 16th European Meeting of Environmental and Engineering Geophysics, 6 - 8 September 2010, Zurich, Switzerland, A39.
- L'Heureux, J.-S., Polom, U., Hansen, L., Dehls, J.F., Guillaume Sauvin, L., **Lecomte**, I., Longva, O., and C.M. Krawczyk, 2010, High resolution shear-wave seismics for geohazard assessment in the Trondheim Harbor area, Central Norway: abstract, 29th Nordic Geological Winter Meeting, 11-13 January, Oslo.
- Polom, U., J.-S. L'Heureux, L. Hansen, I. **Lecomte**, O. Longva, and C.M. Krawczyk, 2010, Joint land and shallow-marine seismic investigations of landslide processes in the bay of Trondheim, Mid-Norway: Best of Near Surface 2009, SAGEEP Meeting, Keystone, 23, 31-34.
- Oye, V., Kühn, D., **Lecomte**, I., Zühlsdorff, L., and, Gharti, H.-N., 2010, SafeCO2: Safety Monitoring of CO2 Storages Using Microseismicity and 4-D Seismic Modelling, GHGT, Amsterdam.
- Drottning, Å., and I., **Lecomte**, 2009, Illumination-consistent modeling of time-lapse seismic data, 11th International Congress of the Brazilian Geophysical Society, expanded abstract, Salvador, Brasil, August 24-28.
- Drottning, Å, I. **Lecomte**, and M. Branston, 2009, The importance of including overburden and survey illumination effects in reservoir seismic simulation, Petroleum Geology Conference & Exhibition (PGCE), expanded abstract, Kuala Lumpur.
- Hansen, L., Polom, U., L'Heureux, J.-S., Longva, O., **Lecomte**, I., Krawczyk: Stratigraphy of a fjord valley fill from onshore high-resolution shear wave seismics, Trondheim harbour area, Mid Norway. 2nd International Workshop on "Fjord environments: Past, Present and Future", Bergen, 7–8 May 2009.
- Hansen, L., U. Polom; J.-S. L'Heureux; G. Sauvin; I. **Lecomte**; C. M. Krawczyk; O. Longva (2009) Fjord-valley fill stratigraphy from onshore high-resolution shear-wave seismics, Trondheim harbour area, central Norway. AGU fall meeting, San Francisco, USA, 14-18 December 2009.
- Kühn, D., V. Oye, I. **Lecomte**, and A. Drottning, 2009, SafeCO2: Safety Monitoring of CO2 Storages Using Microseismicity and 4-D Seismic Modelling – a new CCS Project in Norway, CO2 Sequestration Geophysics, 2009 SEG Summer Research Workshop, Banff, Canada, 23-27 August.

CV – Long List - Isabelle Lecomte – 2023

- Köllner, F., I. **Lecomte**, D. Petrakov, S. Chernomorets, M. Shakhmina, S.-E. Hamran, A. Kaab, and H. Juliussen, Geophysics in glacial-hazard initiation zones: the high mountains of South Russia, "Glacier Hazards, Permafrost Hazards and GLOFs in Mountain Areas: Processes, Assessment, Prevention, Mitigation" international workshop, Vienna, 10-13 November.
- **Lecomte**, I., T. Kaschwich, H. Gjøystdal, and I. Iversen, 2009, Use ray-based modeling methods to plan, analyze and control subsalt imaging, EAGE "Subsalt Imaging - focus on azimuth" workshop, Cairo, 15-18 November.
- Morgan, E.C., Vanneste, M., Longva, O., **Lecomte**, I., McAdoo, B., and Baise, L., 2009, Evaluating gas-generated pore pressure with seismic reflection data in a landslide-prone area: an example from Finneidfjord, Norway, proceeding, 4th Symposium on Submarine Mass Movements and Their Consequences, Austin, Texas, November.
- Polom, U., Hansen, L., L'Heureux, J.-S., Longva, O., **Lecomte***, I., and Krawczyk1, C.M., 2009, High-resolution shear wave reflection seismic in the harbour area of Trondheim, Norway, 71st EAGE Conference & Exhibition, Amsterdam. Selected among the "best of" (**Lecomte** speaker), with invitation to SAGEEP 2010.
- Polom, U., Hansen, L., L'Heureux, J.-S., Longva, O., **Lecomte**, I., and Krawczyk, C., 2008, Shear wave reflection seismic surveying in the Trondheim harbour area - imaging of land slide processes, AGU Fall Meeting, San Francisco, December.
- Morgan, E., Vanneste, M., Longva, O., **Lecomte**, I., McAdoo, B., and Blaise, L., 2008, Using seismic reflection data to investigate gas-generated pore pressure in a landslide-prone area: and example from Finneidfjord, Norway, AGU Fall Meeting, San Francisco, December.
- **Lecomte**, I., and T. Kaschwich, 2008, Closer to real earth in reservoir characterization: a 3D isotropic/anisotropic PSDM simulator, Expanded Abstract, SEG 78th Annual Meeting, Las Vegas, 1570-1574.
- **Lecomte**, I., Bano, M., Hamran, S.-E., Dalsegg, E., and Nielsen, K. M., 2008, Mapping quick-clay sites for geohazard assessment: the Finneidfjord case study, Norway, Expanding Abstracts, EAGE Near Surface Annual Meeting, Krakow, September 4-6, ICG contribution 192. Selected among the "best of", with invitation to SAGEEP 2009 (declined).
- Morgan, E., Vanneste, M., Longva, O., **Lecomte**, I., and Blaise, L., 2008, Using seismic reflection data to investigate free gas in a landslide area: an example from Finneidfjord, Norway, 33rd International Geological Congress, Oslo, 6-14 August.
- **Lecomte**, I., Bano, M., Hamran, S.-E., Dalsegg, E., Nielsen, K.-M., Holst Nielsen, M., Douillet, G., Fréry, E., Guy, A., and Volesky, S., 2008, Submarine slides at Finneidfjord (Norway): geophysical investigations, proceeding, 21st SAGEEP, Philadelphia, April 6-10, ICG Contribution 182, ranked among the top 10 best.
- Vanneste, M., Westerdahl, H., Sparrevik, P., Madshus, C., **Lecomte**, I., Zühlendorff, L., 2007, Shear-Wave Source for Offshore Geohazard Studies: A Pilot Project to Improve Seismic Resolution and Better Constrain the Shear Strength of Marine Sediments, proceeding, Offshore Technology Conference, Houston, 30 April–3 May.
- **Lecomte**, I., Thollet, I., Breien, H., Elverhøi, A., Høeg, K., Juliussen, H., Hamran, S.-E., Bagge-Lund, M., Souche, A., and Sand, M., 2007, Using geophysics on a terminal moraine damming a glacial lake: the Flatbre debris flow case, Western Norway: EGU General Assembly, Vienna, April 16-20.
- **Lecomte**, I., Juliussen, H., Hamran, S.-E., Thollet, I., Bagge-Lund, M., Souche, A., and Sand, M., 2007, Geophysical survey of a terminal moraine in Fjaerland, Norway: looking for ice after a major debris flow in 2004: 2nd Alexander von Humboldt International Conference, EGU, "The Role of Geophysics in Natural Disaster Prevention", Lima, March 5-9.

CV – Long List - Isabelle Lecomte – 2023

- Kaschwich, T., Iversen, E., **Lecomte**, I., Mispel, J., and Gjøystdal, H., 2006. Aspects of imaging tilted anisotropic media: Model representation, model parameter specification, and selection of wave types. The 12th international workshop on seismic anisotropy, Beijing, 22-27 October 2006.
- **Lecomte**, I., 2006, Illumination, resolution, and incidence-angle in PSDM: a tutorial, Expanded Abstracts, SEG 76th Annual Meeting, New-Orleans, SPMI_6.6.
- **Lecomte**, I., Dietrich, M., Roth, M., Meric, Delarue, C., and Rønning, J.S., 2006. Active and passive seismic at the unstable rock slide of Åknes (Norway), Expanding Abstracts, EAGE Near Surface Annual Meeting, Helsinki, September.
- **Lecomte**, I., 2006, Illumination and resolution in seismic imaging for all acquisition geometries, in passive or active mode: a general approach, "What Can EP Learn from Seismology and Vice-Versa" workshop, 68th EAGE Conference & Exhibition, Vienna, poster.
- Drottning, Å., **Lecomte**, I., Gjøystdal, H., Skorstad, A., Kolbjørnsen, O., and Huseby, O., 2006, Modelling the Seismic Response to Production: a closer look at the sensitivity to overburden, survey, rock physics model and seismic modelling approach, Biennial Geophysical Seminar, Norwegian Petroleum Society, Kristiansand, March 20-22.
- Roth, M., Dietrich, M., Blikra, L.H., and **Lecomte**, I., 2006. Seismic monitoring of the unstable rock slope site at Åknes, Norway, Expanding Abstracts, SAGEEP Annual Meeting, Seattle, April 6-10.
- Brenguier, F., Coutant, O., Dietrich, M. and I. **Lecomte**, 2005, High resolution seismic imaging of highly heterogeneous media: An experiment on the Puy des Goules volcano, France, Geophysical Research Abstracts, Vol. 7, 06548, Vienna, April.
- **Lecomte**, I., and Pochon-Guérin, L., 2005. Simulated 2D/3D PSDM images with a fast, robust, and flexible FFT-based filtering approach, Expanded Abstracts, SEG 75th Annual Meeting, Houston, SPI_1.1.
- Drottning, Å., **Lecomte**, I., Gjøystdal, H., Johansen, T. A., and Klefstad, L., 2004. Towards an efficient workflow for modelling the seismic responses from reservoir fluid simulator data, SGBf/SPE Workshop, 22-24 June, Rio de Janeiro.
- **Lecomte**, I., 2004. Simulating Prestack Depth Migrated Sections, Extended Abstracts, EAGE 66th Conference and Exhibition, Paris, June 2004, P071.
- **Lecomte**, I., Gjøystdal, H., and Drottning, Å., 2003. Simulated Prestack Local Imaging: a robust and efficient interpretation tool to control illumination, resolution, and time-lapse properties of reservoirs., Expanded Abstracts, SEG 73rd Annual Meeting, Dallas.
- Sjøberg, T., Gelius, L.-J., and **Lecomte**, I., 2003. 2D deconvolution of seismic image blur, Expanded Abstracts, SEG 73rd Annual Meeting, Dallas.
- Mispel, J., Iversen, E., Vinje, V., Laurain, R., and **Lecomte**, I., 2003. Local two-way travelttime approximation in 3-D media, Extended Abstracts, EAGE 65th Conference and Exhibition, June 2003, Stavanger.
- Gelius, L.-J., **Lecomte**, I., and Hamran, S.-E., 2002. The concept of Local Parabolic Wave Imaging (LpI) in PSDM, Expanded Abstracts, SEG 72nd Annual Meeting, Salt Lake City.
- **Lecomte**, I., Gelius, J.-J., and Hamran, S.-E., 2002. Local Imaging approach and applications, Extended Abstracts, EAGE 64th Conference and Exhibition, Florence, May 2002.

CV – Long List - Isabelle Lecomte – 2023

- Hamran, S.-E., **Lecomte**, I., and Gelius, L.-J., 2002. GPR Processing using Local Plane-Wave Imaging, GPR 2002 Conference, Santa Barbara, USA, April 29 - May 2, 2002.
- **Lecomte**, I., Hamran, S.-E., Tabti, H., and Gelius, L.-J., 2001. New insights in migration through analogies between Generalized Diffraction Tomography and Synthetic Aperture Radar, 71st Ann. Internat. Mtg., Soc. Expl. Geophys., Expanded Abstracts, MIG P1.4.
- Laurain, R., and **Lecomte**, I., 2001. Elastic / electromagnetic wave propagation: equivalences and application to 2D modelling of GPR, Extended Abstracts, EAGE 63rd Conference & Technical Exhibition, Amsterdam, P 142, Volume 2.
- Gelius, L.-J., and **Lecomte**, I., 1999. The resolution function in prestack depth migration, Extended Abstracts, EAGE 61st Annual Meeting, Helsinki, P134.
- **Lecomte**, I., and Gelius, L.-J., 1998. Have a look at the resolution of prestack depth migration for any model, survey and wavefields, Expanded Abstracts, SEG 68th Annual Meeting, New-Orleans, September, 1112-1115.
- Gjøystdal, H., **Lecomte**, I., Mjelva, A.E, Maaø, F., Hokstad, K., Johansen, T.A., 1998. Fast repeated seismic modelling of local complex targets, Expanded Abstracts, SEG 68th Annual Meeting, New-Orleans, 1452-1455.
- Gelius, L.-J., and **Lecomte**, I., 1998. The resolution function in linearized Born and Kirchhoff inversion, abstract book, Interdisciplinary Inversion Conference 1998 (IIC98), Copenhagen, August.
- Hokstad, K., **Lecomte**, I., Maaø, F., Tuseth, M., Mjelva, A.E., Gjøystdal, H., and Sollie, R., 1998. Hybrid modelling of elastic wavefield propagation, Extended Abstracts, EAGE 60th Annual Meeting, Leipzig, 5-56.
- **Lecomte**, I., 1996. Hybrid modeling with ray tracing and finite difference. Expanded Abstract, SEG 66th Annual Meeting, Denver, November, MOD 2.6.
- Iversen, E., **Lecomte**, I., and Gjøystdal, H., 1994. Macro-model construction by integration of local prestack depth imaging, event interpretation and non-zero offset ray-theoretical depth conversion, Expanded Abstracts, SEG 64th Annual Meeting, Los Angeles, october 1994.
- Vinje, V., **Lecomte**, I., Åstebøl, K., and Iversen, E., 1994. Efficient Green's functions calculation for improved 3D seismic imaging in complex areas, EAEG 56th Annual Meeting, paper B043, Wien.
- Vinje, V, **Lecomte**, I., Åstebøl, K., Iversen, E., and Gjøystdal, H., 1994: New wave simulation tools for improved seismic imaging in complex areas, Extended Abstract, NPF Conference "The 3D Seismic Challenge", Kristiansand, March 1994.
- Iversen, E., Gjøystdal H., and **Lecomte**, I., 1993. Local velocity estimation and structural imaging based on prestack depth migration, Lofoten Seminaret, Nyvågar, August 1993.
- **Lecomte**, I., 1993. Finite-difference traveltimes and reflection seismics: modeling and inversion, EAEG 55th Annual Meeting, paper P101, Stavanger.
- **Lecomte**, I., 1992. Finite-difference calculations of first traveltimes in anisotropic media, EAEG 54th Annual Meeting, paper P86, Paris.
- **Lecomte**, I., Glangeaud, F., Geli, L., Mars, J. Gounon, P., and Gavin, P., 1988. Signal processing applied to refraction seismic data obtained with an Ocean Bottom Vertical Seismic Array: spectral matrix method and other processing, in Signal Processing IV: Theories and Applications, J.L. Lacoume, A. Chehikian, N. Martin, and J. Malbos (Editors), Elsevier Sciences Publishers B.V. (North-Holland), Eurasip 1988.

Other publications

- **Lecomte, I.**, 2019. *From Outcrop Geology to Seismic... and Back!* GEO ExPro Magazine (AAPG), <https://archives.datapages.com/data/geo-expro-magazine/016/016004/pdfs/72.html>

PATENTS

- **Lecomte, I.**, 2013, "Method for simulating local prestack depth migrated seismic images", Canada Patent 2,521,919.
- **Lecomte, I.**, 2013, "Method for simulating local prestack depth migrated seismic images", European Patent 1611461, validated in France, Germany, The Netherlands, and the United Kingdom.
- **Lecomte, I.**, 2008, "Method simulating local prestack depth migrated seismic images", US patent #7,376,539.
- **Lecomte, I.**, 2006, "Fremgangsmåte for simulering av locale prestakk dypmigrerte seismiske bilder": Norway patent # 322089.

THESES AND REPORTS

- Michel, A., Chamaux G., Bosq M., Castel J.-Ch., Fat-Cheung C., Gouhier B., **Lecomte I.**, Lagarde-Cardona C., Matéo S., Petrognani S., Pradier H., Rigaud S., Robert E., Sirieix C., 2022, *La grotte de Jovelle, La Tour-Blanche-Cercles, Dordogne, Nouvelle Aquitaine, Rapport de sondage*, Périgueux: SDA, Conseil Départemental de la Dordogne, Ministère de la Culture (SRA Nouvelle -Aquitaine). 175 p.
- Sirieix, C., I., **Lecomte**, and S. Mateo, 2022, *Mesures de tomographie de résistivité électrique et radar sur le site de la grotte de Jovelle (24) – identification des limites de remplissage*, internal report, part of Chamaux et al. (2022).
- Malehmir, A., Bastani, M., Krawczyk, C., Polom, U., Malinowski, M., Persson, L., Gurk, M., Snowball, I., Juhlin, C., Ismail, N., and **Lecomte, I.**, 2013, Integration of geophysical, hydrogeological and geotechnical methods to aid monitoring landslides in Nordic countries: a 4D approach for landslide risk assessment, *Final Report 2011-2013*, Uppsala University, SEG "Geoscientists Without Borders" project.
- Polom, U., and **Lecomte, I.**, 2013, Shear-wave reflection-seismic tests at the UNIS CO2 Well park, Spitzberg, September 2012, NORSAR Technical Report, 13-004.
- **Lecomte, I.**, 2012, ICG Theme 1: Geophysics for Geohazards, *Summary report 2005-2012*, NORSAR Technical Report, 12-025.
- Vanneste, M., Forsberg, C. F., Kvalstad, T. J., L'Heureux, J.-S., Longva, O., Chand, S., Rise, L., Vardy, M. E., Brendryen, J., Haflidason, H., and **Lecomte, I.**, 2012, C-Dog: Coastal and Deepwater Offshore Geohazards, Assessing Offshore Geohazards: Site Surveying, Sampling and Comparison of Shallow, Submarine Landslides in Coastal and Deepwater Environments, Northern Norway. *SEABED consortium*, Report Number: 20100135-1.
- **Lecomte I.**, Bazin S., Grandjean G., Michoud C., Derron M.-H., Abellán A., Jaboyedoff M., 2010. Ground-Based Geophysical Investigations. In the Deliverable 4.1 of the European project SAFELAND: Review of Techniques for Landslide Detection, Fast Characterization, Rapid Mapping and Long-Term Monitoring, edited by Michoud C., Abellán A., Derron M.-H. and Jaboyedoff M., available at <http://www.safeland-fp7.eu>.
- Kaschwich, T., **Lecomte, I.**, Gjøystdal, H., and Iversen, E., 2010. Reflection, diffraction and resolution. *14th*

Annual Report, Wave Inversion Technology (WIT) consortium, p153-163.

- Kaschwich, T., I. **Lecomte**, G. Gjøystdal, E. Iversen, and M. Tygel, 2009, Advanced ray-based synthetic seismograms, in 13th Annual Report of the Wave Inversion Technology (WIT) consortium.
- **Lecomte**, I., 2002. Strategic Institute Program "3D seismic hybrid-modelling of oil/gas reservoirs", NORSAR Contribution 759, Final Scientific Report, NFR project # 113597/ 420.
- **Lecomte**, I., 2001. Prestack Depth Migration with Local Plane-Wavenumber Diffraction Tomography, NORSAR Contribution 736, in the final report of the NFR-PetroForsk Project # 128440/431.
- Co-author of "*HybriSeis. Hybrid modelling of seismic data Feasibility study*", IKU & NORSAR, Final Report prepared for Agip, Norsk Hydro, Saga Petroleum and Statoil, February 1998.
- Co-author of "*High resolution seismic seabed imaging, Final Scientific-Technical Report*", EU MAST II Program, MAS2-CT94-0093, by ISMES, NGI, GEODIA, NORDEV, NORSAR and LASSSO, January 1998.
- **Lecomte**, I., 1997. High resolution seismic seabed imaging - Computer modelling and imaging tasks, Third yearly scientific report, NORSAR Technical Report 626.
- Dahle, A., H. Gjøystdal, I. **Lecomte**, A.E. Mjelva & V. Vinje, 1997: NORSAR Shallow Seismics (Seismiske metoder for grunnundersøkelser), STP 101061/420 Strategiske Instituttprogram, Final Report, April 1997.
- Dahle, A., I. **Lecomte**, H. Gjøystdal & A.E. Mjelva, 1997: A study of traveltimes and amplitude variations of seismic waves across a weakness zone in bedrock. NORSAR Tech. Rep. (contribution no. 613), March 1997.
- **Lecomte**, I., 1996. High resolution seismic seabed imaging - Computer modelling and imaging tasks, Second yearly scientific report, NORSAR Technical Report 602.
- **Lecomte**, I., 1995. High resolution seismic seabed imaging - Computer modelling and imaging tasks, First yearly scientific report, NORSAR Technical Report 567.
- Iversen, E., **Lecomte**, I., Mjelva, A.E., and Gjøystdal, H., 1994. Velocity estimation based on prestack depth migration. Phase II. Report prepared for Statoil, January 1994.
- **Lecomte**, I., 1993. Analysis of finite-difference calculations of traveltimes, NORSAR Technical Report 480.
- **Lecomte**, I., 1990. Crustal structure of a slow ridge: 3D seismic tomography of Mohn's ridge (72°20N, 1°30E), **Ph.D. Thesis, Sciences (Geophysics)**, University of Strasbourg, <https://archimer.ifremer.fr/doc/00034/14522/>, in French.
- **Lecomte**, I., 1988. Application of spectral matrix methods to data obtained with an OBVSA, **Diploma Engineering, Geophysicist, Thesis**, University of Strasbourg, in French.
- **Lecomte**, I., 1987. Sismogrammes synthétiques obtenus par une methode de differences finies: étude et application à la simulation numérique de codas, **Diplôme d'Etudes Approfondies (DEA), Geophysics, Thesis**, University of Strasbourg, in French.

INVITED TALKS – STAYS ABROAD

- **Research leave, 6-month stay at Univ. Bordeaux**, I2M (UMR 5295), France, visiting Prof. C. Sirieux for cooperation around near-surface/archaeo-geophysics (ERT and GPR), with field around/in French decorated caves (e.g. Lascaux), July-December 2022.
- **Lecomte**, I., 2017, "*Understanding and analysing seismic images Insight through appropriate modelling*",

University of Leeds, UK, February.

- **Lecomte, I.**, 2012, “*Modern applications of ray tracing in seismic O&G exploration*”, Politecnico di Torino, March.
- **Lecomte, I.**, 2009, “*Modern applications of ray tracing in seismic O&G exploration*”, Institute of Geology and Geophysics, Chinese Academy of Sciences, Beijing, May.
- **Lecomte, I.**, 2009, “*International Centre for Geohazards, Oslo: activity overview with focus on geophysics*”, Institute of Geology and Geophysics, Chinese Academy of Sciences, Beijing, May.
- **Lecomte, I.**, 2007, “*Improved applicability of ray tracing in seismic acquisition, imaging, and interpretation. Application to near surface and geohazards?*”, ETH, Zurich, May.
- **Lecomte, I.**, 2004, “*Dealing with strong heterogeneity in seismic modelling and imaging*”, NTNU – Medical Imaging seminar, Trondheim, December.
- **Rio de Janeiro, Brazil, May 2003**, 2-week stay at PUC university, invited by Petrobras; courses in seismic modelling, both to students and Petrobras employees.

PUBLIC OUTREACH

- Demo of GPR equipment, **Geologisdag** 2018-2019, Bergen.
- Participation to “**Forskningsdagene**”, 2018, Bergen (UiB/GEO).
- Demo of GPR equipment, UiO/NMBU cooperation for “**Forskningsdagene**”, Oslo, 20-21 September 2013.
- **Lecomte, I.**, 2004, “*L’imagerie sismique en exploration pétrolière... ou comment éviter de forer pour rien!*”, invited evening lecture, Centre Culturel Français, Oslo.

PROJECTS

- **co-investigator** in the *Sand Injection Research Group* (SIRG – industry consortium), phase 5, Dr. M. Brettle project leader; geophysics and seismic modelling advisor (08/2023-present).
- **participant** in NFR ENERGIX-Stort (336559) “*4SWIND: Advancing seismic seabed survey techniques*”, Prof. H. Hafliðason (leader, UiB/GEO) (2023-present).
- **co-investigator** in the *Sand Injection Research Group* (SIRG – industry consortium), phase 4, A. Hurst project leader; geophysics and seismic modelling advisor (08/2021-2023).
- **participant** in **reference group** for *The Vestfold Monitoring Project* (VEMOP), P. Schneidhofer project leader, Vestfold og Telemark fylkeskommune (01/2020-2023).
- **participant** in WG3 “*Data integration, visualization and Parameterization*” and Norway MC substitute 2 in the European COST Action CA17131 “*The Soil Science & Archaeo-Geophysics Alliance - SAGA*”, C. Cuenca Garcia project leader, Dept. of Archaeology and Cultural History, NTNU (2019-2023).
- **partner** in the UNIS UArctic education projects “*Circum-Arctic Geology for Everyone: An integrated approach to learning and teaching in the Arctic*” (2016-2018) and “*Svalbox2020: digital teaching and outreach of Arctic*”

Geology” (2019-2020).

- **participant** in NFR Petromaks2 (308805, KMP), “*Rift and rifted margin deep-water depositional systems: Application to Late Jurassic – Early Cretaceous rifting on the NCS - DeepRift*”, Prof. R. Gawthorpe (leader, UiB/GEO) (2020-2024).
- **project leader** for UiB/GEO as partner in “*Forecasting of architecture, seismic characteristics and flow behaviour in paleokarst reservoirs - FOPAK*”, NFR Petromaks2 contract 267634/E30, led by NORCE/CIPR (J. Tveranger) (01/2017-12/2019).
- **project leader** for NORSAR as a partner of the NFR Petromaks “*Reconstructing the Triassic northern Barents Shelf; basin infill patterns controlled by gentle sags and faults*” project led by University of Oslo, NFR contract #234152/E30 (01/2014-12/2017).
- **project leader** and **grant owner** for the NATO Collaborate Linkage Grant, “*Glacial Hazards due to Climate Change in South Russia*”, project involving Moscow State University, ICG, UiO and UiB (11/2009-10/2011).
- **project leader** of the NORSAR Innovation AS “*Brukerstyrte innovasjonsprosjekter (BIP)*”, “*Fast Elastic Inversion of Multi-offset Prestack Depth Migrated Seismic Data*”, PETROMAKS program, NFR contract #187318/S30 (01/2008-12/2010).
- **project leader** and **grant owner** of the NORSAR Strategic Institute Program “*Flexible local seismic imaging in an integrated dynamic modelling framework*”, NFR contract #181688/I30 (01/2007 to 12/2009).
- **theme coordinator** for “*Geophysics for Geohazards*”, International Centre for Geohazards (ICG), Norwegian Research Centre of Excellence (SFF), NFR contract #128440/431 (2005-2012).
- **project leader** and **grant owner** of the NFR Norwegian/French BILAT project #169822/D15, NORSAR/Grenoble, “*Geophysics for investigation and analyses of large landslides*” (01/06/2005-31/12/2005)
- **project leader** for NORSAR as a partner of the E-learning project “*UniGEM*” of the universities of Oslo and Bergen, financial support from Statoil, contract #128440/431 (01/04/2003-31/12/2004).
- **project leader** for NORSAR as a partner of the ICG #6 project “*Offshore Geohazards*”, responsible of the Geophysics task, NFR contract #128440/431 (01/04/2003-2012).
- **project leader** for NORSAR as a partner of the ICG #8 project “*Ground-based Interferometric Synthetic Aperture Radar*”, responsible of the software task (imaging and interferometry), NFR contract #128440/431 (01/04/2003-2008).
- **project leader** for NORSAR as a partner of the UiO PetroForsk “*Improving prestack depth migration by using resolution functions*”, NFR contract #128440/431 (01/09/1999-31/08/2001).
- **project leader** of the NORSAR Strategic Institute Program “*3D seismic hybrid modelling of oil and gas reservoirs*” – NFR contract #113597/420 (01/1997 to 12/2001).
- **project leader** for NORSAR as a partner of the EC MAS2-CT94-0093 project “*High Resolution Seabed Imaging*”, NGI subcontract #521675 (11/1994 to 12/1997).

MAJOR FIELDWORKS AND SIMILAR

- **Glacial hazards, geophysical expedition in Russia, Caucasus, summer 2010, and in Norway, Jotunheimen, summer 2011**: project leader and grant owner for the NATO Collaborate Linkage Grant, “*Glacial Hazards due to Climate Change in South Russia*”, partners Moscow State University, ICG, UiO and UiB.

- **Finneidfjord quick-clay case, Northern Norway, 2008:** geophysics to characterize quick clay sites, support from ICG and cooperation with the University of Strasbourg.
- **Flatbre debris-flow case, Western Norway, 2006:** geophysics on a terminal moraine damming a glacial lake, support from ICG, NORSAR, UiO, NGI, NGU, BreMuseum.
- **Åknes landslide case, Western Norway, 2005:** project leader and grant owner of the NFR Norwegian/French BILAT project #169822/D15, NORSAR/Grenoble, "*Geophysics for investigation and analyses of large landslides*", 01/06/2005-31/12/2005. Additional support from ICG and NGU.

TEACHING & LECTURING & PEDAGOGY

Courses taught – University of Bergen

- **GEOV111**, "*Geofysiske Metoder*", teacher since 2017 (in Norwegian), **responsible teacher** since 2018.
- **Special Pensum**, "*Reservoir Geophysics: from outcrop to seismic*", field course (Spain), co-teacher 2007, 2019 and 2023.

Lectures – University of Bergen

- **GEOV272**, "*Basic Seismic Interpretation*", 2016-present, seismic modelling used to highlight seismic interpretation issues.
- **PTEK100**, "*Petroleum- og prosessteknologi*", lectures in seismic, 2016-2019.

Courses taught – University of Oslo

- **GEO4260**, "*Reservoir Geophysics*", **responsible teacher** (regular teacher on sick leave), **Adj. Assoc. Prof.** (30% during course period), fall 2015.
- **GEO4120**, "*Environmental/Near-surface Geophysics*", **responsible teacher, Adj. Assoc. Prof.** (20%), 2012-2016.
- **GF281**, "*Inverse metoder*", **responsible teacher** (regular teacher on leave), in Norwegian, 1995.

Lectures – University of Oslo

- **GEO4170**, "*Landslides and Debris Flows*", 2012; **GEO4171**, "*Floods and Landslides*", 2013; and **GEO4181**, "*Introduction to natural hazards*", 2015, introduction to near-surface geophysics.
- **GEO4360**, "*Field methods in hydrogeology*", introduction to near-surface geophysics and field demos, 2012-2014.
- **GEO4620**, "*Seismic waves and seismology*", lecture on ray-based seismic modelling, 2013.

Lectures – University Centre of Svalbard

- **AG222**, “*Integrated Geological Methods: from outcrop to geomodel*”, lectures in seismic methods and seismic modelling, 2018-present.
- **AG335**, “*Arctic Seismic Exploration*”, lectures in micro-seismicity, seismic modelling and GPR; March 2015, 2017.
- **SVALEX**, multidisciplinary integration of students in petroleum-related courses, Norwegian Universities UiO, UiB, NTNU, UiT, UiS and UNIS, *lectures/demos in near-surface geophysics and participation to student exercises*, 2005-2009.

Pedagogy – University of Bergen (completed pedagogy training, based on

- Participant to “*Centre for Integrated Earth Science Education*”, **iEarth** (Centres for Excellence in Education – SFU - <https://iearth.no/>); e.g., design of a new 10-ECTS course “*Geopraksis*” and attending seminars, etc.
- Participant to UiB research group “*Teaching and Learning in Higher Education*” (**TeLEd**), 2020-present, <https://www.uib.no/en/rg/teled>.
- Participant to UiB research project “*Teaching and Learning in the Digital Age: Rethink learning through teaching and assessment*” (**TALIDA**), with re-designing of course GEOV111 in 2018-2019, <https://talida.w.uib.no/>.
- “**Vurdering og vurderingsformer**”, UPED621, **5 ECTS**, fall 2017, pass.
- “**How to create effective instructional videos**”, UPED637, 5 ECTS, spring 2017, pass. **5 ECTS** was the amount of extra ECTS required by UiB when hired fall 2016 to complete the pedagogy training from UiO (see below).

Pedagogy – University of Oslo (87.5% of total and mandatory pedagogy training)

- “**The courage to teach**”, 12.5% module (**12.5 hours**; voluntary as adjunct associate professor), fall 2015.
- “**Forskningsveiledning**”, 25% module (**25 hours**; voluntary as adjunct associate professor), fall 2014.
- “**Basiskompetanse**”, 50% module (**50 hours**; mandatory part for adjunct associate professors), fall 2013.

PHD & MSC/CIV. ENG. SUPERVISION

PhDs

- **Daniel Holden**, 2023-present, working title “*Resolving geological complexity using seismic modelling: visualising sand injection complexes and sub-seismic geological features*”, University of Aberdeen, **co-supervisor** (A. Hurst main supervisor).
- **Peter Betlem**, 2023, “*De-risking top seal integrity - Imaging heterogeneity across shale-dominated cap rock sequences*”, University of Oslo/UNIS, **co-supervisor** (K. Senger main supervisor).
- **Vilde Dimmen**, 2023, “*Geologic controls on fluid flow and seismic imaging of faults in carbonate rocks - Insights from quantitative outcrop analysis and reflection seismic modeling*”, University of Bergen, **co-supervisor** (A. Rotevatn main supervisor).
- **Zhihua Cui**, 2023, “*Fluid pipe subsurface characterisation using seismic modelling methods*”, University of Aberdeen, **co-supervisor** (D. Iacopini main supervisor).

CV – Long List - Isabelle Lecomte – 2023

- **Raisya Noor Pertiwi, 2021**, “*The Frequency-Dependent Elastic Properties of Shale and Sandstone, and their Seismic Responses in Sand Injection Complex*”, University of Aberdeen, **co-supervisor** (D. Iacopini main supervisor).
- **Kristian Jensen, 2021**, “*Seismic modelling and deconvolution of prestack depth migrated images through ray-based Point-Spread Functions*”, University of Bergen, **main-supervisor**.
- **Thea Sveva Faleide, 2021**, “*Seismic imaging of faults and sedimentary systems of the Hoop region, Barents Sea – seismic facies, fault geometries and detection thresholds*”, University of Oslo, **co-supervisor** (A. Braathen main supervisor).
- **Bjarte Lønøy, 2021**, “*Paleokarst reservoir modelling – a concept-driven approach*”, University of Bergen, **co-supervisor** (J. Tveranger main supervisor).
- **Isabella Masiero, 2020**, “*3D Stratigraphic and seismic forward modeling of syn-rift carbonate platforms evolution*”, University of Liverpool, **major cooperation**, with visits (P. Burgess main supervisor).
- **Simon Oldfield, 2018**, “*Addressing structural uncertainty through seismic forward modelling*”, University of Leeds, **major cooperation**, with visits both ways (D. Paton main supervisor; <https://etheses.whiterose.ac.uk/22925/>; embargoed until March 2022).
- **Honoré Dzekamelive Yenwongfai, 2018**, “*Seismic attributes and facies of the Triassic Barents Shelf*”, University of Oslo, **co-supervisor** (J. I. Faleide main supervisor). (<https://www.mn.uio.no/geo/forskning/aktuelt/arrangementer/disputaser/2018/geolofys/yenwongfai.html>)
- **Valentina Mascolo, 2017**, “*Synthetic seismic modeling of outcropping carbonate systems: an application to the Cretaceous platform margins of the Maiella Mountain (Central Apennines, Italy) and the Mount Parnassus (External Hellenids, Greece)*”, Univ. Chieti-Pescara PhD, Italia, **co-supervisor** (G. Rusciadelli main supervisor). (Thesis not available online; see Mascolo and Lecomte, 2021, as publication post thesis about the seismic modelling; see also other Mascolo publications)
- **Charlotte Botter, 2015**, “*From mechanical modelling to seismic imaging of fault zones*”, University of Stavanger, **co-supervisor** (N. Cardozo main supervisor). (<https://uis.brage.unit.no/uis-xmlui/handle/11250/2391582>)
- **Guillaume Sauvin, 2014**, “*Integrated geophysics for mapping of quick-clay landslide-prone areas in Norway*”, University of Oslo, **main supervisor**. (<https://www.duo.uio.no/handle/10852/39924>)
- **Florent Brenguier, 2003**, “*High Resolution Seismic Imaging of Volcanic Structures: How can 2D and 3D forward modelling improve survey planning and data processing*”, LGIT, Univ. Grenoble, June 2003, main research contact at NORSAR.
- Prior 2011: Scientific support to Ph.D. students at/visiting NORSAR and at UiO: e.g., **Roger Bakke** (UiB), **Renaud Laurain** (UiO/NORSAR), **Øyvind Marcussen** (UiO).

PhD committees

- Committee chair (UiB/GEO): **Thomas de Jonge** (2023), **Helene M. Stemland** (2020), **Christian Kehl** (2017), **Kenneth Bredesen** (2017).
- Chairman (disputation): **Fengjiao Zhang**, “*Quantifying the Seismic Response of Underground Structures via Seismic Full Waveform Inversion Experiences from Case Studies and Synthetic Benchmarks*”, 2013, Uppsala, Sweden.

- 2nd opponent (Norway): **Karoline Bælum**, 2011, UiB/UNIS, "Geophysical and geological investigations of subsurface reservoirs - case studies of Spitsbergen, Norway"; **Charlotte Sanchis**, 2010, UiT, "Signal processing techniques for the enhancement of marine seismic data"; **Svein-Erik Måsøy**, 2004, NTNU, "Estimation and correction of aberration in medical ultrasound imaging"; **Kittinat Taweesintanon**, 2023, NTNU, "Distributed Acoustic Sensing and 4D Seismic Time-Strain Inversion for Subsurface Monitoring".
- Member PhD defense: **Modeste Irakarama**, 2019, "Towards Reducing Structural Interpretation Uncertainties Using Seismic Data", Nancy, France; **Can Yang**, 2012, "Time-lapse Analysis of Borehole and Surface Seismic Data, and Reservoir Characterization of the Ketzin CO₂ Storage Site, Germany", Uppsala, Sweden; **Cédric Taillandier**, 2008, "Formulation de la tomographie des temps de première arrivée à partir d'une méthode de gradient : un pas vers une tomographie interactive", ENSMP, Paris, France.

Postdoctoral fellows

- **Mentor**, UiO program, 1-year mentoring of 1 female postdoctoral fellow, 2013-2014.
- **Paul Lubrano Lavadera**, 2-year postdoctoral fellowship, NORSAR, 2014-2015.
- Regular cooperation with postdoctoral fellows at NORSAR over the years and at UiB since 2016, with publications as results (see publication list, e.g., **P. Lubrano-Lavadera**, **C. H. Eide**, **T. Wrona**, **A. Grippa**, etc).

MSc. supervision and equivalent (e.g., Civ. Eng. and French "DEA" - Degree of "in-Depth Studies")

- **Nooshin Fathi**, 2023-2025, ongoing, working title "Seismic modelling of brecciated sand injectite systems: sensitivity analyses and uncertainty", **main** supervisor.
- **Espen Tjessheim**, 2022-2024, ongoing, working title "Insights into CO₂ storage using the FluidFlower", co-supervisor.
- **Synnøve Sørvåg Slåtsveen**, 2022-2023, ongoing, working title "Improving interpretation of 3D Ground-Penetrating Radar data in archaeology via attributes developed in seismic – application to selected Norwegian sites", **main** supervisor.
- **Muhammad Usman Khurshid**, 2021-2023, ongoing, working title "Seismic attributes for paleokarst reservoirs: a modelling study", **main** supervisor.
- **Wouter Bell Gravendeel**, 2022, UiB MSc., " Seismic imaging of fault-controlled dolomites in carbonate successions: insights from seismic modeling and RMS amplitude analysis", co-supervisor.
- **Lucas Correa**, 2023, UiB MSc., "A study of normal fault structure and along-strike variations, based on the northern Moab fault system, Utah", co-supervisor.
- **Casper Paulsen Flæte**, 2022, UiB MSc., "Seismic imaging of faults and fault zones: insight through modelling for improved interpretation", **main** supervisor.
- **Kingsley Chibuzo Ofoedu**, 2022, UiB MSc., "Seismic data analysis of an onshore-offshore transition zone at Ramså Basin, Norway – a modelling study", **main** supervisor.
- **Victoria Gajos Hamre**, 2022, UiB MSc., "Seismic Modelling of the Stratigraphic Architecture of Syn-rift Gilbert Delta Bottomset and Deepwater-fans of the West Xylokaastro Fault Block, Corinth Rift", co-supervisor.
- **Ina Tårup**, 2022, UiB MSc., "Seismic modelling of the stratigraphic architecture of syn-rift deep-water channel complexes in the Corinth Rift, Greece", co-supervisor.
- **Emil Lie Hansen**, 2021, UiB MSc., "Ground penetrating radar for archaeology in Western Norway: Examples from Lyse Abbey and Fana burial mound", **main** supervisor.
- **Øystein Haugen Ødegård**, 2021, UiB MSc., "From outcrop to Ground Penetrating Radar images with Point-Spread Function based convolution modelling", **main** supervisor.

CV – Long List - Isabelle Lecomte – 2023

- **Alma Dzozlic Bradaric**, 2020, UiB MSc., “*Seismic signature and detectability of small-scale sand injectites: insights from 2D Point-Spread Function based convolution modelling*”, **main** supervisor.
- **Mari Prestegård**, 2020, UiB MSc., “*Controls of fault zone structure on synthetic seismic images of the Maghlaq Fault, Malta*”, co-supervisor.
- **Ingvild Gabrielsen Andersen**, 2020, UiB MSc., “*Effects of geophysical parameters on the seismic expression of the Maghlaq Fault, Malta: insights from outcrop-based 2D seismic modeling*”, co-supervisor.
- **Mustaqim Balyesiima**, 2020, UiB MSc., “*Flow Simulation and Sensitivity Analysis of Paleokarst Carbonate Reservoirs*”, **main** supervisor.
- **Sondre Hagevold**, 2019, UiB MSc., “*From outcrop to synthetic seismic: 2D and 3D modelling of igneous intrusions at Botneheia, central Spitsbergen*”, **main** supervisor.
- **Mari Sæbø**, M., 2019, UiB MSc., “*Kallskarskredet og påfølgjande tapping av Onilsavatnet – Tafjord, Møre og Romsdal*”, co-supervisor.
- **Espen Friestad**, 2018, UiB MSc., “*Synthetic seismic modelling of fluvial channels in the Blackhawk Formation as an analogue to the Triassic Barents Sea*”, co-supervisor.
- **Thomas Jarle Grimstad**, 2018, UiB MSc., “*Modelling illumination and resolution effects in seismic with a 2(3)D convolution method*”, **main** supervisor.
- **Martin Kyrkjebø Johansen**, 2018, UiB MSc., “*A Modelling Workflow for Seismic Characterization of Paleokarst Reservoirs*”, **main** supervisor.
- **Thea Sveva Faleide**, 2017, UiO MSc., “*High-resolution 3D seismic interpretation of a Lower Cretaceous delta system in the Hoop area, SW Barents Sea*”, co-supervisor.
- **Malin Flesland**, 2017, UiB MSc., “*Volcanic rifted margins: comparing lidar data from outcrops of Traill Ø (East Greenland) with seismic data from the conjugate Vøring Margin*”, co-supervisor.
- **Ole Rabbøl**, 2016, UiO MSc., “*Seismic modelling of magmatic intrusions*”, co-supervisor.
- **Thomas Andre Larsen Greiner**, 2016, UiO MSc., “*AVO signature on broadband seismic*”, Lundin, replaced Prof. L. Gelius (sick leave) as UiO supervisor.
- **Ali Joiya Ahmed**, 2014, UiO MSc., “*Assessing offshore geohazards: seismic integration and velocity model building at the ICG Finneidfjord lab site, Norway*”, **main** supervisor.
- **Birara Ashagrie Yilma**, 2014, UiO MSc., “*Geotechnical and geophysical investigations for stability assessment, a case study at Hvittingfoss, Norway*”, co-supervisor.
- **Mesay Geletu Gebre**, 2013, UiO MSc., “*Tunnel Health Monitoring using Active Seismics*”, co-supervisor.
- **Juan Saez-Barrero**, 2012, UiO MSc., “*Comparative study of the Nise formation seismic response between Møre and Vøring basin Case studies*”, **main** supervisor.
- **Nadege Langet**, 2011, Civil Engineer in Geophysics, “*Shear-wave seismic for geohazards: a case study from Trondheim harbour*”, EOST, University of Strasbourg, co-supervisor.
- **Jean Letort**, 2010, Civil Engineer in Geophysics, “*Fast elastic seismic inversion: from theory to software*”, EOST, University of Strasbourg, confidential, **main** supervisor.
- **Guillaume Sauvin**, 2010, Civil Engineer in Geophysics, “*Shear-wave seismic for geohazards: a case study from Trondheim harbour*”, EOST, University of Strasbourg, **main** supervisor.
- **Junaid Yaqoob**, 2009, UiO MSc., “*Modelling by demigration: a feasibility study*”, co-supervisor.

CV – Long List - Isabelle Lecomte – 2023

- **Alexandra Guy**, 2008, Civil Engineer in Geophysics, "*Flexible and target-oriented Prestack Depth Migration tools: a ray-tracing approach*", EOST, University of Strasbourg, **main** supervisor.
- **Marianne Holst Nielsen**, 2008, UiO MSc., "*Structure and microseismicity of the unstable rock slide at Åknes*", Norway, co-supervisor.
- **Karl-Magnus Nielsen**, 2007-2008, UiO MSc., "*Seismic surface wave analysis for the determination of soil shear-strength in sites exposed to landslides*", co-supervisor.
- **Maxime Mouyen**, 2007, Civil Engineer in Geophysics, "*SeisRoX: case studies and tutorial*", EOST, University of Strasbourg, **main** supervisor.
- **Isabelle Thollet**, 2006, Civil Engineer in Geophysics, "*Geophysics for Glacial Hazards: the Flatbre moraine GLOF case, Norway*", EOST, University of Strasbourg, **main** supervisor and censor.
- **Sandrine Eichert**, 2006, Civil Engineer in Geophysics, "*Including noise in the Simulated Migration Method*", EOST, University of Strasbourg, co-supervisor.
- **Mael Daleau**, 2006, Civil Engineer in Geophysics, "*Shear-wave source for offshore geohazards: preliminary studies*", EOST, University of Strasbourg, **main** supervisor and censor.
- **Anne-Laure Bouillon**, 2005, Civil Engineer in Geophysics, "*Geophysics for geohazards assessment on land: technical review, user guide, application examples and advices for potential users*", EOST, University of Strasbourg, **main** supervisor and censor.
- **Matthieu Bulteau**, 2004, Civil Engineer in Geophysics, "*Controlling and correcting resolution effects in marine seismics: application to better assessment of offshore geohazards*", EOST, University of Strasbourg, main supervisor and censor.
- **Thomas Alexander Sjøberg**, 2003, "*Dekonvolving av seismiske bilder v.h.a. billedprosesseringsmetoder*", MSc in Geophysics, University of Oslo, co-supervisor.
- **Anthony Quillivic**, 2002, "*Integrating 1D modelling in commercial ray tracing software*", DESS Geosciences, IPGS, University of Paris VI, main supervisor.
- **Anne Sieminski**, 2002, "*Receiver effects in 3D seismic ray modelling*", Civil Engineer in Geophysics, EOST, University of Strasbourg, co-supervisor and censor.
- **Renaud Laurain**, 2000, Civil Engineer in Geophysics, "*From seismics to GPR. A theoretical and technical evaluation for modelling, processing and imaging*", EOST, University of Strasbourg, main supervisor and censor.
- **Renaud Laurain**, 2000, DEA Physique et Chimie de la Terre, "*Modelling Ground Penetrating Radar: from electromagnetism to seismics*", University of Strasbourg, main supervisor.
- **Philippe Pessey**, 1990, Civil Engineer in Geophysics, "*Traitement de tirs individuels ECORS à l'aide de filtres matriciels*", EOST, University of Strasbourg, main supervisor and censor.
- **Vincent Sturny**, 1990, Research Project "*Modélisation d'atténuation par diffraction/dispersion avec code de différences finies*", Maîtrise des Sciences de la Terre, University of Strasbourg, main supervisor.
- Scientific support to MSc. students at NORSAR/UiO: **Christina Gladsø Hæreid** (1995), **Heidi Olsen** (2000).
- **Censor** (internal/external) in MSc/Civ. Eng. committees : **over 50**.

MSc. /Civ. Eng. - shorter/summer internships

CV – Long List - Isabelle Lecomte – 2023

- **Karine Petrus**, 2011, “*Interpretation and modelling of SH-wave reflection seismic, Trondheim harbour*”, Civ. Eng. summer job, University of Strasbourg and UiO Erasmus, main supervisor.
- **Sylvain Tissot**, 2011, Civ. Eng. summer job, fieldwork assistant, University of Strasbourg, co-supervisor with PhD candidate G. Sauvin.
- **Amandine Sergeant-Boy**, 2010, “*OhmMapper practical manual: from data acquisition to data inversion with Res2DInv software*”, ICG-T1-2010-1 report, summer job, University of Strasbourg, main supervisor.
- **Guillaume Sauvin**, 2008, “*Early warning system at Rauberget: geophysical investigations*”, summer job, University of Strasbourg, co-supervisor.

NATIONAL/INTERNATIONAL ACTIVITIES

- **Co-editor**: “Near-Surface Geophysics” special issue, “Quantitative Geophysical Characterisation of Marine Near-Surface”, 2020.
- Member of **SEG Council, Districte 7 representative** (Northern Europe), 2020-present.
- Member of **SEG Europe Regional Advisory Committee (RAC)**, 2018-2021.
- **Technical Program Officer** of the EAGE Near-Surface Geoscience Division committee, 2008-2012 and **Liaison officer** for “Near Surface Geoscience 2012”, Paris.
- **Associate Editor**, Seismic Migration, Geophysics, publication of the Society of Exploration Geophysicists (SEG), 08/2004-2011.
- **Chairman**: SEG (2007), EAGE/NSG (2008, 2009, 2010, 2011, 2012, 2017, 2021), EGU (2017), NGF (2009, 2015).
- **SEG Nomination committee**: 2008-2009 (OSEG representative).
- **Co-editor**: “Interpretation” special issue, 2015; Geophysics special issue, 2008.
- **Co-convenor of workshops**: EAGE Workshop 4 “*Integrated Geosciences for Subsurface Instabilities, Offshore and Onshore*”, 2012, Copenhagen; EAGE “*Subsalt-imaging*”, 2009, Cairo, 2009.

MEMBERSHIPS

- **Society of Exploration Geophysicist** (SEG), associate member since 1997, active member since 2005.
- **European Association of Geoscientists and Engineers** (EAGE), active member since 2001.
- **Oslo Society of Exploration Geophysicists** (OSEG, associated with SEG and EAGE), funding and active member since 2005, Treasurer 2005-2006, President 2007, SEG Nomination committee 2008-2009.
- **Others (past and present)**: EGU, AGU, EEGS, NPF.

HUMANITARIAN

- **Norwegian Red Cross**: refugee guide (2012-2016); local emergency preparedness guard (2012-2016).