

# CV – Inga Berre

## Personal information

First name, Surname:	Inga Berre
Date of birth:	1978-07-31
Nationality:	Norwegian
ORCID	<a href="https://orcid.org/0000-0002-0212-7959">https://orcid.org/0000-0002-0212-7959</a>
URL for personal website:	<a href="http://www.uib.no/en/persons/Inga.Berre">http://www.uib.no/en/persons/Inga.Berre</a>

## Key scientific expertise

Berre's main research interests are mathematical modeling, partial differential equations and numerical methods, in particular motivated by simulation of coupled thermal-hydraulic-mechanical processes in fractured geothermal systems and fault reactivation induced by subsurface injection and production.

## Education

2011	Research leadership programme, University of Oslo, Norway
2005	<b>dr.scient</b> (PhD), Faculty of Math. and Natural Sci., University of Bergen (UiB), Norway
2001	<b>cand.scient</b> (MSc), Department of Mathematics, University of Bergen, Norway

## Positions - current and previous

2021-2025	<b>Director</b> , Center for Modeling of Coupled Subsurface Dynamics, UiB
2013-	<b>Full Professor</b> (100%), Department of Mathematics, UiB
2006-2013	<b>Associate Professor</b> (100%), Department of Mathematics, UiB
2010-2019	<b>Scientific Advisor</b> (20%), NORCE/Christian Michelsen Research AS, Norway

## Career breaks

Maternity leave: 8 months (2004-2005), 6 months (2006-2007), and 7 months (2008-2009)

## Project management experience (recent grants, **PL: Project leader, PI: Principal investigator**)

2021-2026	<b>PI</b> , Mathematical and Numerical Modelling of Process-Structure Interaction in Geothermal Fractured Geothermal Systems, 2.0 MEUR ERC Consolidator Grant + 0.9 MEUR UiB grant
2020-2025	<b>Center Director and PI</b> , Center for Modeling of Coupled Subsurface Dynamics, 2.5 MEUR VISTA grant + 1.5 MEUR UiB grant (VISTA is a basic research program financed by Equinor and carried out in close cooperation with the Norwegian Academy of Science and Letters.)
2020-2024	<b>Steering Committee leader and PI</b> , Simulation of governing processes in superheated and supercritical geothermal systems: mathematical models, numerical methods and field data (SiGS), 1.5 MEUR Research Council of Norway grant (RCN)
2017-2020	<b>PL and PI</b> ; Enhancing Geothermal Reservoirs – Hydraulic and Thermal Stimulation Technology (ERIS), 1.5 MEUR Research Council of Norway grant
2016-2021	<b>Work package leader and PI</b> , Thermo-Mechanical Subsurface Energy Storage (TheMSES); 2.4 MEUR Research Council of Norway Toppforsk grant
2015-2018	<b>PL and PI</b> ; Improved simulation technology for flow and transport in fracture zones, 0.3 MEUR VISTA grant
2009-2017	<b>PL and PI</b> for several research projects; 4.4 MEUR total, Research Council of Norway grants

## Supervision of students

Master	Ph.D.	Postdoc	University; Comments
31			UiB; 29 graduated (19 as main supervisor), 2 current as main supervisor
	18		UiB; 11 graduated (7 as main supervisor), 7 current (3 as main supervisor)
		5	UiB; all completed (3 as main supervisor)

## Teaching activities

- 2001- **Lecturer/course coordinator** Calculus 1&3 (MAT111, MAT212), Functional Analysis (MAT232), Flow in Porous Media (MAT254), Project (MAT292), Energy resources and energy use (ENERGI200)
- 2015 **Lecturer/course coordinator**, Future Energy Landscapes - Bergen summer research school (PhD course), UiB (interdisciplinary)
- 2008-2013 **Coordinator**, writing groups for master students
- 2009- **Guest lecturer**, courses at Stanford University, University of Tromsø, Norwegian School of Economics and Business Administration, Norwegian University of Life Science

## Institutional responsibilities (selected from recent)

- 2021 **Board Member**, The University Board, University of Bergen (UiB)
- 2017-2020 **1st Deputy Board Member**, The University Board, University of Bergen (UiB)
- 2019-2023 **Board member**, Board for Natural Science and Technology, Research Council of Norway
- 2015-2023 **Board member**, Board Committee for International Matters, Research Council of Norway
- 2017-2019 **Member**, The Joint Committee of the Nordic Research Councils for Natural Sciences (NOS-N), Nordforsk/ Nordic Research Councils for Natural Sciences
- 2015-2018 **Board member**, The Division for Science, Research Council of Norway
- 2015-2018 **Member**, Board committee, National Financing Initiative for Research Infrastructure, Research Council of Norway

## Commissions of trust (selected from recent)

- 2021- **International Expert Panel member**, [Knowledge Programme on Effects of Mining](#) (KEM), Dutch Ministry of Economic Affairs and Climate
- 2021-2022 **Chair**, [SIAM Activity Group on Geosciences](#)
- 2021 **Jury member**, Ruggero Bertani European Geothermal Innovation Award, EGEN
- 2020- **Associate Editor** and member of Journal Editorial Board, [Geothermal Energy: Geothermal Energy: Science – Society – Technology](#), Springer Berlin Heidelberg
- 2020-2021 Germund Dahlquist **Prize selection committee**, [SIAM](#)
- 2019-2021 **Elected Co-chair**, [SET-Plan IWG Deep Geothermal](#), European Commission
- 2018-2023 **Elected Coordinator** (chair), [JP Geothermal, European Energy Research Alliance](#) (29 Full Participants and 8 Assoc. Participants institutions from across Europe)
- 2018-2023 **Steering Committee Member**, [ETIP Deep Geothermal](#)
- 2019-2020 **Elected officer**, [SIAM Activity Group on Geosciences](#)
- 2018- **Scientific Advisory Board member**, Collaborative Research Center [SFB 1313](#), Uni. Stuttgart
- 2017-2018 **Committee member**, Scientific Evaluation of [UFZ Leipzig](#)
- 2017- **Program committee member**, Annual International Conference, [InterPore](#)
- 2011-2021 **Evaluator/Committee member**, 15 PhD theses from Imperial College London, Heriot-Watt University, TU Delft, ETH Zürich, University of Stuttgart, Polytechnical University Milano, University of Nice Côte d'Azur, University of Toulouse, University of Strasbourg, NTNU
- 2020 **Evaluator/Committee member**, Habilitation thesis; University of Stuttgart
- 2018-2021 **Scientific evaluator** for positions: Res. Scientist, Law. Berkeley Nat. Lab (2021); Prof., Heriot-Watt (2020); Prof., TU Berlin/GFZ (2020); Assoc. Prof., NTNU (2019); Assoc. Prof., TU München (2018); Assoc. Prof., Politecnico di Torino (2018); Assoc. Prof., Norwegian University of Life Sciences (2018)
- 2013- **Reviewer** of grant applications for the European Commission and 5 other funding agencies
- 2015- **Scientific Committee Member**, Geilo Winter Schools in eScience
- 2011-2017 **Vice spokesperson**, [International Research Training Group NUPUS](#) coordinated by the University of Stuttgart.

## 10-year track record

### Invited presentations and/or International advanced schools (selected from 2020-21)

- 2021 **Keynote**, International Symposium on Geofluids, Eötvös Loránd University (ELTE), Hungary, 7-9 Jul 2021 ([geofluids2020.hu](http://geofluids2020.hu))
- 2020 **Keynote**, Computational Methods in Water Resources XXIII, Stanford University (online), USA ([cmwrconference.org/keynote-speakers](http://cmwrconference.org/keynote-speakers)); 13-15 Dec 2020
- 2020 **Invited**, Earth Science and Engineering Departmental seminar, Imperial College (online), 19 Nov 2020 <https://www.youtube.com/channel/UCRuqnWWGjtQxvNYfSOjiDUw>
- 2020 **Keynote**, [CouFrac 2020](http://CouFrac2020.com), Seoul National Univ. (online), Seoul, South Korea, 11-13 Nov, 2020
- 2020 **Keynote**, Int. weekly webinar series on GeoScience and GeoEnergy, TU Delft and Heriot-Watt Univ., 14 May, 2020 <https://youtube.com/channel/UCoIW2njFBhPNDINFdf8Z9uA>
- 2020 **Invited**, DARSim-DSS Lecture Series, TU Delft, The Netherlands, 26 Feb 2020
- 2020 **Plenary**, [KAUST Research Conference](http://KAUSTResearchConference.com), Saudi Arabia, 27-29 Jan 2020
- 2020 **Keynote**, Computational Methods in Water Resources XXIII, Stanford University (online), USA ([cmwrconference.org/keynote-speakers](http://cmwrconference.org/keynote-speakers)); 13-15 Dec 2020

### Recent organisation of international conferences

- 2022 **Vice-chair, Scientific Committee**, European Geothermal Congress, Berlin 17-21 October, 2022
- 2017 - **Programme committee**, Annual International Conference on Porous Media and Meeting of the International Society of Porous Media; #p: 800-1000 every year
- 2022 **Scientific Committee**, Gordon Research Conference on Flow and Transport in Permeable Media, 19-24 July 2020, Les Diablerets, Switzerland (postponed to 2022)
- 2020 **Scientific Committee**, Finite Volumes for Complex Applications IX. 15-19 June 2020, Bergen, Norway.
- 2019 **Scientific Committee**, European Geothermal Congress, 11-14 June 2019, Haag, Netherlands; #p: ~900
- 2018 **Scientific Committee**, European Geothermal Workshop, 10-11 Oct 2018, Strasbourg, France; #p: 140
- 2017 **Organizing committee**, 12th European Conference on Numerical Mathematics and Advanced Applications (ENUMATH), September 25-29 2017, Voss, Norway; #p: ~350
- 2011 - 19 **Programme Committee Chair** (2011, 2013, 2015)/**Member** (2017, 2019), biennial GeoEnergi Conference, Bergen, Norway (~100 participants)

### Prizes, awards, academy memberships

- 2021 **10 000<sup>th</sup> ERC grantee**, European Research Council
- 2021- **Member**, AERG Association of ERC Grantees
- 2017- **Elected member**, Norwegian Academy of Technological Sciences
- 2012 **Lauritz Meltzer Prize for Young Researchers 2011**, University of Bergen (10 000 EUR)

### Lists of publications

- [Cristin database](#) (Current Research Information System in Norway)
- [Google Scholar](#)