

Professor Suzanne McEnroe

CV

Personal Information

Suzanne A. McEnroe,
Nationality: American, Permanent Resident of Norway

Education

1993 PhD Dept. of Geosciences, Univ. of Massachusetts, Amherst, USA
1989 MS Dept. of Geology Univ. of Massachusetts, Amherst, USA
1985 BS Dept. of Geology & Geography (Geology) Univ. of Massachusetts, Amherst, USA

Current Position(s)

2018-present Head Geophysics Research Group, Institute of Geoscience and Petroleum
2017-present Professor, Institute of Geoscience and Petroleum, NTNU, Trondheim, Norway

Previous Positions

2012–2016 Professor, Department of Geology and Mineral Resource Engineering, NTNU,
2009-2010 Marie Curie Senior IE Fellow, Bayerisches Forschungsinstitut für Experimental Geo-
chemie und Geophysik, Universität Bayreuth, Germany
2009-2012 Professor II, Dept. of Chemistry, Center for Material Science and Nanotechnology, Uni-
versity of Oslo, Norway
2004- 2012 Professor Rank (1183) Geological Survey of Norway
2002- 2003 Visiting Senior Scientist, Advance Magnetics Group, Commonwealth Scientific and
Industrial Research Organization, North Ryde, Australia
1997-2004 Senior Geophysicist, Norwegian Geological Survey, Trondheim, Norway
1995-1998 Research Assistant Professor, Dept. of Geosciences, University of Massachusetts-
Amherst USA
1994-1995 U. S. National Science Foundation Post-doctoral Fellowship
1993-1994 Adjunct Assistant Professor, Dept. of Geosciences, University of Massachusetts-
Amherst USA
1993 Postdoctoral Fellow at Institute for Mineralogy and Petrology, Lund University, Sweden.

Teaching Activities

Geophysical Exploration for Natural Resources TGB4280; Crustal Magnetism TGB4285; Mineral and Crustal Magnetism GB8110; Applied Geophysics and Petrology for Exploration of Natural Resources GB8105.

Prizes/Awards/Academy Memberships

2019 William Gilbert Award, American Geophysical Union
2017 Fellowship Japan Society for the Promotion of Science
2016 Fellow of the Geological Society of America
2016 Geophysical Journal International, Outstanding Reviewer
2015- Fellow of the Mineralogical Society of America
2015- Fellow of the Norwegian Academy of Technological Sciences
2010- Fellow of the Royal Norwegian Society of Sciences and Letters
2009 The Bullard Lecture AGU Fall Meeting

Commissions of Trust

2010-2014 Member Advisory Board (Chair 2013-2014) Institute of Rock Magnetism,
University of Minnesota, USA
2014-2016 Dana Medal Committee, Mineralogy Society of American (2016-2017)
2018-2019 Norges Tekniske Vitenskapsakademi, Program Committee (2017-2018)
2018-2019 John Adam Fleming Award Committee, American Geophysical Union (2018-2019)
2015-present Advisory Board Member for Ivar Giæver Geomagnetic Laboratory, University of Oslo

Convener for Sessions on Geophysics, Nanogeoscience and Nanomagnetism:

American Geophysical Union, Goldschmidt Conference, International Association of Geomagnetism and Aeronomy, International Geological Congress, International Union of Geodesy and Geophysics, Geological Society of America, European Geosciences Union, and European Geophysical Society.

Representative Publications - 2047 citations, H-index 26 (Google scholars)

- ter Maat, G., Fabian, K., Church, N. & S. A. McEnroe (2020) Separating geometry- from stress-induced remanent magnetization in magnetite with ilmenite lamellae from the Stardalur basalts, Iceland. *Geochemistry, Geophysics, Geosystems*: 10.1029/2019GC008761
- Michels, A., Fichler, C., Pastore, Z. & S.A. McEnroe (2020) Magnetic properties and subsurface models of fault zones in the Leka Ophiolite Complex, Norway. *Norwegian Journal of Geology*: doi.org/10.17850/njg100-1-1
- Grant, T., Larsen, R., Brown, E., Müller, A. & S. A. McEnroe (2020) Mixing of heterogeneous, high-MgO, plume-derived magmas at the base of the crust in the Central Iapetus Magmatic Province (Ma 610-550): Origin of parental magmas to a global LIP event. *Lithos* doi.org/10.1016/j.lithos.2020.105535
- ter Maat, G., McEnroe, S. A., Church, N., & R. B., Larsen (2019) Magnetic Mineralogy and Petrophysical Properties of Ultramafic Rocks - Consequences for Crustal Magnetism. *Geochemistry, Geophysics, Geosystems* doi: 10.1029/2018GC008132
- Pastore, Z., H., Church, N. & S.A. McEnroe (2019) Multi-step parametric inversion of scanning magnetic microscopy data for modeling magnetization of multidomain magnetite. *Geochemistry, Geophysics, Geosystems* doi:10.1029/2019GC008542
- McEnroe, S. A., Robinson, P., Church, N., & Purucker, M (2018) Magnetism at depth: A view from an ancient continental subduction and collision zone. *Geochemistry, Geophysics, Geosystems*, doi.org/10.1002/2017GC007344 (6 citations)
- Pastor, Z., Fichler, C. and S.A. McEnroe (2016) The deep crustal structure of the mafic-ultramafic Sealing Igneous Province of Norway from 3D gravity modeling and geological implications, *Geophysical Journal International* 207 (3) 1653-1666 (12 citations)
- Robinson, P., McEnroe, S.A., Miyajima, N., Fabian, K. and N. Church (2016) Remanent magnetization, magnetic coupling, and interface ionic configurations of intergrown rhombohedral and cubic Fe-Ti oxides: A short survey. *American Mineralogist*, <http://dx.doi.org/10.2138/am-2016-5519> (10 citations)
- Smirnov, A. V., Tarduno, J.A., Kulakov, E. V., McEnroe, S.A. and R. K. Bono (2016) Paleointensity, core thermal conductivity and the unknown age of the inner core, *Geophysical J. Int.*, doi:10.1093/gji/ggw080. (42 citations)
- Fabian K., V. P. Shcherbakov and S. A. McEnroe (2013) Measuring the Curie temperature. *Geochemistry, Geophysics, Geosystems*, doi:10.1029/2012GC004440. (78 citations)
- McEnroe, S. A., Fabian, K., Robinson, P., Giana, C. and L. L. Brown (2009) Crustal Magnetism, Lamellar Magnetism and Rocks that Remember, *Elements*, 5, 241-246. (44 citations)
- McEnroe, S.A., Carter-Stiglitz, B., Harrison, RJ Robinson, P., and K. Fabian (2007) Magnetic exchange bias of more than 1 Tesla in a natural mineral intergrowth, *Nature Nanotechnology* doi.org/10.1038/nnano.2007.292 (77 citations)
- McEnroe, S. A. Langenhorst, F., Robinson P., Bromiley G. and C. Shaw (2004) What is magnetic in the lower Crust? *Earth and Planetary Science Letters* 226, 175-192. (73 citations)
- McEnroe, S. A., Harrison, R. J., Robinson Peter and F. Langenhorst (2002) Nanoscale haematite-ilmenite lamellae in massive ilmenite rock: an example of lamellar magnetism' with implications for planetary magnetic anomalies. *Geophysical Journal International* 151, 890-912. (100 citations)
- Robinson, P., Harrison, R. J., McEnroe, S. A. and R. Hargraves (2002) Lamellar magnetism in the hematite-ilmenite series, *Nature*, 418 (6897), 517-520. (216 citations)
- McEnroe, S. A., Robinson, P. and P. Panish (2001) Aeromagnetic anomalies, magnetic petrology and rock magnetism of hemo-ilmenite- and magnetite-rich cumulates from the Sokndal Region, South Rogaland, Norway, *American Mineralogist*, 86, 1447-1468. (82 citations)

Professional Society Memberships: American Geophysical Union, Geological Society of America, Mineralogical Society of America