

# PAUL MONCEYRON RØREN

Researcher at the Department of Electric Energy (IEL) NTNU

@ monceyron.paul@gmail.com  
in paul-m-r

+47 90228120  
paul.m.roren

Trondheim, Norway



## EDUCATION

Ph.D. Electrical Power Engineering

Norwegian University of Science and Technology (NTNU)

2020-2024

Trondheim, Norway

- Experimental and simulation based work on ablation assisted, SF<sub>6</sub>-free, medium voltage load break switches.

M.Sc. in Applied Physics

Norwegian University of Science and Technology (NTNU)

2015 - 2020

Trondheim, Norway

- Experimental work using an in-house X-ray setup
- Two neutron beamtimes at ISIS (UK)

## EXPERIENCE

Researcher

IEL department at NTNU 2024-

- Applied research on SF<sub>6</sub> free high voltage test equipment.

Ph.D representative

IEL department at NTNU 2022-2023

- Represented the temporary employees at the extended leader group meetings of the IEL department, where the budget, goals and milestones of the department are set.

Treasurer

Nabla 2016-2017

- Elected as treasurer in the board of Nabla, the organization by and for students of physics and mathematics holding the economical responsibility of the organization.

## PUBLICATIONS

Journal Articles

- P. M. Røren and K. Niayesh, "Switching arc characteristics at load currents in air and a fluoroketone-air mixture," *IEEE Transactions on Plasma Science*, vol. 52, no. 5, pp. 1815-1821, 2024.
- K. W. B. Hunvik, K. K. Seljelid, D. Wallacher, *et al.*, "Intercalation of co2 selected by type of interlayer cation in dried synthetic hectorite," *Langmuir*, vol. 39, no. 14, pp. 4895-4903, 2023.
- P. Roren and K. Niayesh, "Impact of ablation based self blast nozzles on load break switch current interruption performance," *Plasma Physics and Technology*, vol. 10, no. 2, pp. 69-72, 2023.

## LIFE PHILOSOPHY

"Keep calm and carry on"

## MOST PROUD OF



Årets Laborant 2023

IEL prize for distinguished lab work



DIY Fish feeder

Designed and build a fish feeder with an arduino and a 3D printer



Baking

Baked my own sourdough bread since 2018

## STRENGTHS

Python

C/C++

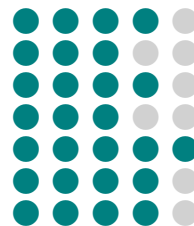
Arduino

Comsol

Onshape (CAD)

Solid Works

3D Printing



Hard-working

Level-Headed

Analytical

Technical

Dynamic

## LANGUAGES

English

Norwegian

French

German



## REFERENCES

Prof. Kaveh Niayesh

NTNU

kaveh.niayesh@ntnu.no

+47 92119160

Dr. Erik Jonsson

SINTEF

erik.jonsson@sintef.no

+47 45010212

Dr. Nina Sasaki Støa-Aanensen

SINTEF

nina.stoa-aanensen@sintef.no

+47 99296248

- K. W. B. Hunvik, R. J. d. S. Lima, A. Kirch, *et al.*, "Influence of co<sub>2</sub> on nanoconfined water in a clay mineral," *The Journal of Physical Chemistry C*, vol. 126, no. 40, pp. 17 243–17 254, 2022.
- P. M. Røren, K. W. Hunvik, V. Josvanger, O. T. Buseth, and J. O. Fossum, "Controlled sample environment for studying solid–gas interactions by in situ powder x-ray diffraction," *Journal of Applied Crystallography*, vol. 54, no. 1, pp. 371–375, 2021.
- K. W. B. Hunvik, P. Loch, L. P. Cavalcanti, *et al.*, "Co<sub>2</sub> capture by nickel hydroxide interstratified in the nanolayered space of a synthetic clay mineral," *The Journal of Physical Chemistry C*, vol. 124, no. 48, pp. 26 222–26 231, 2020.
- P. Loch, K. W. B. Hunvik, F. Puchtler, *et al.*, "Spontaneous formation of an ordered interstratification upon ni-exchange of na-fluorohectorite," *Applied Clay Science*, vol. 198, p. 105 831, 2020.

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## Conference Proceedings

- M. P. Røren and K. Niayesh, "Carbon condensation due to nozzle material incompatibility in alternative gas switchgear," in *Proceedings of the XXIII International Conference on Gas Discharges and their Applications*, 2023, pp. 200–203.
- P. M. Røren, K. Rustad, and K. Niayesh, "Arc voltages of free burning arc in air and air with added fluoroketone," in *2022 ICHVE*, IEEE, 2022, pp. 1–4.