CURRICULUM VITAE (dated on August 8, 2025)
Péter Salamon (birth date: October 26, 1984)

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EDUCATION

2009 – 2013 Eötvös Loránd University, PhD in Physics (2014)
2003 – 2008 Budapest University of Technology and Economics, MSc in Engineering-physics

LANGUAGES: Fluent: Hungarian, English Basic: German, French

SCHOLARSHIPS, PROJECT LEADING

2023 – 2026 EIG CONCERT-Japan consortial project: ***Epoch-making ferroic fluids based multi-functional materials***
2022 – 2026 NKFIH FK17 research project: ***Thermoelectric and electromechanical effects in ferroelectric nematic fluids***
2022 – 2025 Bolyai Scholarship of the Hungarian Academy of Sciences (MTA)
2022 – 2023 MTA – JSPS Japanese-Hungarian mobility project: ***Electro-rheology of confined ferroelectric nematic fluids***
2020 – 2022 Wigner Postdoctoral Fellowship
2019 – 2023 EU COST CA17139 - ***European Topology Interdisciplinary Action****, EUTOPIA,* (Management Committee Member)
2017 – 2021 NKFIH FK17 research project: ***Tunable topology of confined soft matter***
2016 – 2019 NKFIH PD16 postdoctoral project: ***Interfacial topology of anisotropic soft matter***
2016 – 2018 MTA Slovenian-Hungarian mobility project: ***Microfluidic systems based on anisotropic soft matter***
2014 – 2016 MTA Postdoctoral Scholarship: ***Dielectro-wetting in anisotropic complex fluids***
2009 – 2012 MTA Young Researcher Scholarship: ***Flexoelectricity in liquid crystals***

LONG TERM PROFESSIONAL TRAVELS

2016 – 2017 Jožef Stefan Institute, Ljubljana, Slovenia (3 months)
2016 – 2017 RIKEN Center for Emergent Matter Science, Wako, Japan (4 months)
2010 Kent State University, Liquid Crystal Institute/Dep. of Physics, Kent, USA (3 months)
2008 – 2009 Kent State University, Liquid Crystal Institute/Dep. of Physics, Kent, USA (6 months)

RESEARCH INTEREST

Materials science, physics of soft condensed matter, optics, liquid crystals, polymers, elastomers, membranes, fibres, suspensions, microfluidics, nonlinear phenomena, pattern formation, topological defects, experimental and simulation techniques.

RESEARCH EXPERIENCE

Building automated experimental measurement systems for dielectric spectroscopy, optical microscopy, imaging polarimetry, electric & magnetic field controlled birefringence, optical biaxiality, spontaneous polarization, optical activity, and rheology/rheo-optical measurements. Software development for measurement controlling, for data/image processing & analyzing, for computer simulation (continuum modelling of nematic liquid crystals, linear stability analysis to describe pattern formation, calculation of electric and optical properties), and for fitting purposes (fitting measurement data to numerical simulations by numerical nonlinear optimization for determining material constants). Quantum-chemical calculations (molecular conformation optimization).

TEACHING (MSc/PhD courses)

2020 – Physics of Liquid Crystals (with Ágnes Buka and Nándor Éber), Eötvös Loránd University
2020 – Dynamical Phenomena in Soft Materials (with Tamás Börzsönyi), Eötvös Loránd University
2009 – Liquid Crystals Laboratory Practice, Eötvös Loránd University
2009 Dielectric Spectroscopy Laboratory Practice I.-II., Kent State University

COMPUTER SKILLS

Matlab, Python, Mathematica, Labview, C, C++, Origin Pro, Maple, Comsol, Visual Basic, Hyperchem

SCIENTOMETRIC DATA

Scientific papers: **52**, Conference proceedings: 3, Cumulative impact factor: **231.581**,
Citations: 602/884 (independent/total, MTMT), 1061 (Google Scholar) H-index: 19
Presentations at international conferences: (oral/poster): 17/17