Faculty of Physics, University of Rijeka

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SCIENTIFIC SUPERVISOR	
Name and Surname	Nenad Kralj
UNIRI Faculty	Faculty of Physics
Organisational Unit / Research Group	Division of Experimental and Applied Physics
Research Team	Quantum and Nonlinear Optics Lab
EU-funded project experience	 Recipient of MSCA ITN Fellowship as part of the Cavity Quantum Optomechanics (cQOM) project (grant no. 290161) ERC-STG 2024 applicant (evaluation in progress) As postdoc and PhD student, my research was also part of the following EU-funded projects of my then-PIs: 1. ERC project Q-CEM (grant no. 638765) 2. ERC project PHOQS (grant no. 101002179) 3. MSCA ETN Optomechanical Technologies (OMT, grant no. 722923) 4. Horizon 2020 FET proactive Hybrid Optomechanical Technologies (HOT, grant no. 732894)
Research Interests	My interest is in optomechanics with the membrane-in-the- middle setup. I am currently pursuing the realization of new quantum systems operating at room temperature, and of long-lived quantum memories for light, to be used as nodes in the future "quantum internet". Both research lines are facilitated by state-of-the-art membranes, while the latter also encompasses single-photon sources and detection. The research is primarily experimental, but I welcome also theory-oriented applicants.
ORCID (link)	https://orcid.org/0000-0003-4055-7770

Personal or Research Team's Website	https://www.phy.uniri.hr/en/divisions-and-laboratories/50- en/divisions-and-laboratories/760-laboratory-for-quantum-and- nonlinear-optics.html https://www.phy.uniri.hr/hr/ustroj/29-hr/ustroj/laboratoriji/754- laboratorij-za-kvantnu-i-nelinearnu-optiku.html
Contact e-mail	nenad.kralj@phy.uniri.hr