CURRICULUM VITAE

Personal Information

Name: Roman Klymenko Date of Birth: 14 January 1997 Email: roman.klymenko@wetsus.nl Nationality: Ukrainian Gender: Male



Personal Profile

I am an ambitious and responsible applied water physicist with a strong background in plasma physics and water technology. My strengths include consistency, responsibility, innovation, and a strong desire to continuously learn and improve. I am motivated by challenges and thrive on solving complex problems.

Education

2021 – present time: PhD researcher in the Department of Electrical Engineering, Eindhoven University of Technology / Wetsus

2018 – 2020: Master's Degree in Radiophysics, Electronics, and Computer Systems, Taras Shevchenko National University of Kyiv

2014 – 2018: Bachelor's Degree in Radiophysics, Electronics, and Computer Systems, Taras Shevchenko National University of Kyiv

Work Experience

Seller, Gas Station, Hamburg, Germany (July 2017 – September 2017)

Waiter, Restaurant, Rostock, Germany (July 2019 – September 2019)

Seller, Shop, Graal-Müritz, Germany (July 2020 – September 2020)

Seller, Antique Shop, Kiev, Ukraine (2015 – 2020)

Scientific Experience

PhD Researcher, Wetsus and Eindhoven University of Technology (April 2021 – April 2025)

Internship, Institute of Physics, National Academy of Sciences of Ukraine, Department of Gas Kinetics (September 1, 2019 – May 31, 2020)

Internship, Institute of Physics, National Academy of Sciences of Ukraine, Department of Crystal Physics (September 1, 2018 – May 31, 2019)

Publications

Klymenko, R., Nanninga, H., de Kroon, E., Agostinho, L. L. F., Fuchs, E. C., Woisetschläger, J., & Hoeben, W. F. L. M. (2023). Preparation of Free-Surface Hyperbolic Water Vortices. Journal of Visualized Experiments (JoVE), 197, Article e64516. https://doi.org/10.3791/64516

Klymenko, R., de Kroon, E., Agostinho, L. L. F., Fuchs, E., Woisetschläger, J., & Hoeben, W. F. L. M. (2024). Characterization of a Hyperbolic Vortex Plasma Reactor for the Removal of Aqueous Phase Micropollutants. Journal of Physics D: Applied Physics, 57(21), Article 215204. https://doi.org/10.1088/1361-6463/ad2b22

Donepudi, T., van de Griend, M., Agostinho, L. L. F., de Kroon, E. J., Klymenko, R., Pecnik, R., Woisetschläger, J., & Fuchs, E. C. (2024). Numerical Analysis of Vortex Dynamics in Hyperbolic Funnels Using Computational Fluid Dynamics. Physics of Fluids, 36(9), Article 095171. <u>https://doi.org/10.1063/5.0222216</u>

Windisch, M., Klymenko, R., Grießler, H., Fuchs, E. C., Kittinger, C. Toxicological Characterization of Plasma-Treated PFAS-Contaminated Water Using In Vitro Bioassays. Toxics

Submitted: Klymenko, R., Disch, M., Fuchs, E. C., Woisetschläger, J., Agostinho, L. L. F., Hoeben, W. F. L. M. PFAS Degradation Using a Hyperbolic Vortex Plasma Reactor. Journal of Hazardous Materials

Submitted: Klymenko, R., Cerutti, L., Agostinho, L. L. F., Fuchs, E. C., Woisetschläger, J., Hoeben, W. F. L. M. Enhanced Groundwater Aeration with a Geometrically Constrained Vortex Water

Patent

Geometrically Constrained Water Vortex Plasma Discharge, Patent Number: P191760NL00/100

Languages

Ukrainian (Fluent) Russian (Fluent) English (Fluent) German (Intermediate) Dutch (Intermediate) Polish (Intermediate)

Technical Skills

Analytical thinking and problem-solving MATLAB, C++, Python Expertise in water technology and PFAS treatment Plasma discharge and pulsed signal expert LC/MS, IC, ICP-OES Pharmaceutical and wastewater treatment Supervisory skills

Personal Skills

Strong organizational skills Detail-oriented and punctual Adaptable to unpredictable situations Team player with a positive mindset Innovative and eager to learn

Hobbies and Interests

Playing guitar Sports and physical activities Learning new languages Meditation