UrSU

FACULTY OF PHYSICS AND MATHEMATICS

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EDUCATION:	• 2009 - 2013 Urgench State University, Bachelor (Diploma) • 2013 - 2015 National University of Uzbekistan, Master's degree (diploma) • 2019 –2022 Jeju National University (South Korea), Doctoral course, Ph.D. in Energy and Chemical Engineering major
CAREER / EMPLOYMENT:	• 2009-2013 y. – Bachelor's student at the Faculty of Physics and Mathematics, Urgench State University. • 2013-2015 y. – Master's student at the Faculty of Physics, National University of Uzbekistan. • 2015-2017 y. – Assistant Lecturer at the Department of Transport systems, Urgench State University • 2017-2019 y. - Lecturer at the Department of Interfaculty general technical sciences, Urgench State University • 2019-2022 y. – Ph.D. Student at the Jeju National University, South Korea • 2022-2023 - Senior Lecturer at the Department of Physics, Urgench State University • 2023-present - Associate Professor at the Department of Physics, Urgench State University
SPECIALITY	• Physics, Energy & Chemical Engineering
TEACHING SUBJECTS:	General Physics, Optical phenomena in semiconductor diodes, and Renewable energy sources.
RESEARCH AREAS OF INTEREST:	Plasma Physics, low-temperature atmospheric pressure plasma processing, the generation of plasma in a honeycomb catalyst, gliding arc plasma for gas conversion, plasma jet for thin film deposition, hydrogen generation, and applications of non-thermal plasma for air pollution control.
PROJECTS:	**2017-2020.** No. OT-F2-65 "Investigation of the laws of scattering of low-energy ions from the surface of $A^{III}B^{V}$ type semiconductor single crystals"

	2019-2019. Combined removal of NOx and soot using a plasma-assisted hydrocarbon SCR process. (2018.01.01-2019.12.31, KRICT, Korea) **2019-2022.** Combined monolithic catalyst and plasma for non-urea low-temperature NOx reduction system. (2019.09.30-2022.03.31, NRF, Korea) **2019-2020.** R&D of plasma device for ethylene removal. (2018.01.01-2020.12.31, National Fusion Research Institute, Korea)
LIST OF PUBLICATIONS	**1.** **N. Matyakubov**, D.B. Nguyen, S. Saud, Y.S. Mok, Enhancing the Selective Catalytic Reduction of NO_x at Low Temperature by Pretreatment of Hydrocarbons in a Gliding Arc Plasma, *Ind. Eng. Chem. Res. 10.1021/acs.iecr.2c00025 (2022).* **2.** **N. Matyakubov**, D.B. Nguyen, S. Saud, I. Heo, S.-J. Kim, Y.J. Kim, J.H. Lee, Y.S. Mok, Effective practical removal of acetaldehyde by a sandwich-type plasma-in-honeycomb reactor under surrounding ambient conditions, *J. Hazard. Mater. 415 (2021) 125608. https://doi.org/10.1016/j.jhazmat.2021.125608* **3.** D.B. Nguyen, **N. Matyakubov,** S. Saud, I.J. Heo, S.-J. Kim, Y.J. Kim, J.H. Lee, Y.S. Mok, High-Throughput NOx Removal by Two-Stage Plasma Honeycomb Monolith Catalyst, *Environ. Sci. Technol. 55 (2021) 6386-6396. https://doi.org/10.1021/acs.est.1c00750* **4.** D.B. Nguyen, S. Saud, **N. Matyakubov**, Y.S. Mok, S. Ryu, H. Jeon, S.B. Kim, Propagation of humidified air plasma in a sandwich-type honeycomb plasma reactor and its dependence on the ambient temperature and reactor diameter, *Plasma Sources Sci. Technol. 29 (2020) 125016.* **5.** S. Saud, D.B. Nguyen, R.M. Bhattarai, **N. Matyakubov**, I. Heo, S.-J. Kim, Y.J. Kim, J.H. Lee, Y.S. Mok, Dependence of humidified air plasma discharge performance in commercial honeycomb monoliths on the configuration and key parameters of the reactor, *J. Hazard. Mater. 404 (2021) 124024.* **6.** S. Saud, D.B. Nguyen, R.M. Bhattarai, **N. Matyakubov**, V.T. Nguyen, Y.S. Mok, Plasma-catalytic Ethylene Removal by a ZSM-5 Washcoat Honeycomb Monolith Impregnated With Palladium, *J. Hazard. Mater. (2021) 127843.* **7.** S. Saud, D.B. Nguyen, S.-G. Kim, **N. Matyakubov**, V.T. Nguyen, Y.S. Mok, Influence of Background Gas for Plasma-Assisted Catalytic Removal of Ethylene in

	a Modified Dielectric Barrier Discharge-Reactor, *ACS Agricultural Science & Technology (2021).* **8.** Shirjana Saud, Roshan Mangal Bhattarai, Duc Ba Nguyen, **Nosir Matyakubov** Shankar Neupane, Byungjin Lee, Young Jin Kim, Jin Hee Lee, Iljeong Heo, Young Sun Mok, A comprehensive study on scaling up ethylene abatement via intermittent plasma-catalytic discharge process in a novel reactor configuration comprising multiple honeycomb monoliths. Chemical Engineering Journal (2022) 140486. https://doi.org/10.1016/j.cej.2022.14048