

Ministry of Education and Science of the Russian Federation Federal State Autonomous Educational Institution of Higher Education «Ural Federal University named after the first President of Russia B.N. Yeltsin» (UrFU)

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26 April 2023

## Reference Letter

Dear Sir/Madam.

I can verify that Dmitry Zorikhin was employed on a full-time basis, 40 hours per week, at Ural State University named after A.M. Gorky from 03/11/2009 to 12/05/2011 and at Ural Federal University named after the first President of Russia B.N. Yeltsin from 12/05/2011 to 15/08/2014 in Yekaterinburg, Russian Federation, in accordance with his permanent employment contract.

On 12/05/2011 the Ural State University named after A.M. Gorky State Institution of Higher Professional Education was reorganized by merging with the Ural Federal University named after the first President of Russia B.N. Yeltsin (UrFU) Federal State Autonomous Institution of Higher Professional Education. Cause: Order No. 155 of the Ministry of Education and Science of Russia dated 02/02/2011. Order No. 330/03 of UrFU dated 12/05/2011.

During his time at the university, Dmitry held the position of Data and Research Scientist at the Department of Computer Physics of the Physics and Applied Mathematics Research Institute. He performed the following job responsibilities for at least 20 hours per week:

- 1. Automating the processing and analysis of large sets of computational and experimental data using Python programming language with respect to optoelectronics
- 2. Building descriptive and predictive analytical models using advanced statistical and mathematical algorithms for simulating physical processes
- Designing and developing software for conducting experiments on the polarization switching of ferroelectric crystals using system-design platform and development environment for a visual programming language LabVIEW
- 4. Developing and maintaining databases for photolithography integrated circuit manufacturing process
- 5. Programming automatic multi-step wafer cleaning equipment and metal/dielectric thin films deposition equipment using third-party proprietary software based on scientific data analysis and results from analytical experiments

Dmitry took part in numerous analytical and scientific contests and conferences inside Russia and abroad which involved substantial work on scientific data analysis. I would like to highlight his major achievements:

- 1. 2nd place at All-Russian "International experience in Innovations" data science contest
- 2. Reached final stage at All-Russian "Mendeleev" contest of innovative analytical data projects
- 3. 3rd place at regional technical "Advanced Technology" analytical contest
- Presented scientific data analytical research at joint UFFC, EFTF and PFM Symposium in 2013, Prague

Dmitry has 4 publications and owns a patent "Hysteresis-free high-temperature precise bimorph actuators produced by direct bonding of lithium niobate wafers" (Patent #2539104).

The payment of salary was carried out in accordance with internal policy and staffing schedule.

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**Evgeniy Mingaliev**