PERSONAL INFORMATION

Assylan Akhanuly

Kazakhstan, Astana, Qabanbay Batyr 53, D-6 1202
+7 (775) 750 5929
Assylan.akhanuly@nu.edu.kz
https://www.linkedin.com/in/assylan-akhanuly-6582b5235

Sex Male | Date of birth 17/11/2000 | Nationality Kazakh

WORK EXPERIENCE

December 2020 – Present

Research Assistant

Nazarbayev University (Prof. Askhat Jumabekov)

- Perform experimental work to fabricate perovskite solar cells
- Perform simulation and numerical calculations on perovskite solar cells
- Write project reports and manuscripts

September 2021 – Present

IT Engineer (Front-end Developer)

MANUL

- Design work-flow and develop interface for web-applications
- Develop logic and computer-based desktop software

June 2020 – July 2021

Physics Teacher

Skysmart school

- Online lessons for children and adolescents
- Write reports and feedback individually for each child
- Attend trainings of improving communication and teaching skills

EDUCATION

August 2019 – June 2023

Bachelor's Degree (Physics)

Nazarbayev University, School of Sciences and Humanities, Astana, Kazakhstan

- Modern Physics
- Electrodynamics I, and II
- Introduction to electrical circuits and systems
- Physics for scientists and engineers I and II
- Calculus I, II, and III
- Linear Algebra and Introduction to Differential Equations

CGPA: 3.37

August 2018 – May 2019

Foundation Year Program

Nazarbayev University, Centre for Preparatory Studies, Astana, Kazakhstan

General Secondary Education

September 2014 – May 2018 Regional National Gymnasium for Gifted Children with the residential care
September 2007 – May 2014 Akkystau Secondary School

PERSONAL SKILLS

Mother tongue: Kazakh language

Other languages:
- English (C1)
- Russian (C2)

Communication and leadership skills: Nazarbayev University Toastmasters International Club Membership (December 2018–May 2020)
- Participation in weekly meetings and giving speeches in ranges of topics
- Evaluation of speech of other speakers
- Organization of events and regular meetings

Programming languages: Programming languages to create desktop applications, websites, and perform numerical simulations
- Javascript (React.js Library)
- C, C++, C#
- MATLAB

ADDITIONAL INFORMATION

Publications:
- Kakimov, Alibek G., Yerassyl Yerlanuly, Assylan Akhanuly, Iliyas T. Dossayev, Erik O. Shalenov, Zhandos T. Sadirkhanov, Karlygash N. Dzhumagulova, Annie Ng, and Askhat N. Jumabekov. "Passivation of perovskite layer surface states with pyridine in flexible and printed perovskite solar cells." *Flexible and Printed Electronics* 7, no. 3 (2022): 035012. https://doi.org/10.1088/2058-8585/ac8753

Conferences:

Poster Presentation in the 7th IEEE Electron Devices Technology and Manufacturing (EDTM) Conference, March 7-10, 2023, Seoul, Korea
- Title: Perovskite Solar Cells with Structured and Planar SnO_2 Electron Transport Layers

Poster Presentation in the 10th International Conference of INESS 2022 on Nanomaterials and Advanced Energy Storage Systems, August 4-6, 2022, Astana, Kazakhstan
Title: Perovskite Solar Cells with Structured and Planar SnO_2 Electron Transport Layers

Honours and awards:
- Stipend of the President of Nazarbayev University (Mr. Shigeo Katsu) for the period of July-December 2022
- Dean's List award to outstanding students in recognition of their academic achievements in the Fall 2019 semester

Internships:
- Al-Farabi National University (KazNU) internship, computer simulation of Shottky-junction in perovskite solar cells under supervision of Prof. Erik Shalenov, December 4-25 Almaty, Kazakhstan

Projects

- Perovskite Solar Cells with Structured and Planar SnO_2 Electron Transport Layers
- Optimization of Back-Contact Metal-Semiconductor-Metal Perovskite Solar Cells
- Dome-shaped Anti-Reflecting Coating PMMA Layer Examination in Back-Contact Perovskite Solar Cells
- OPTI Well web application for KarazhanBasMunay oil company where its managers can monitor all Key Performance Indicators (KPI) such as oil production, status of each well, and history of action of each user in the company in real-time. Also, engineers can make adjustments parameters of each well and verification of data in order to send it to Egov (the government website) for further elaboration of the government authorities.
- OPTI Well computer-based desktop software for KazMunayGas oil company where its engineers can monitor and request data of oil storing tanks and flow meter coming from measuring equipment

Memberships

- Nazarbayev University Toastmasters International Club Membership (December 2018–May 2020)

References

- Arkhat Sultabayev (Technical Director and Senior Back-end Developer of MANUL company)
- Erik Shalenov (Professor of General Physics at Satbayev Univerisity)
- Askhat Jumabekov (Professor of Physics Department at Nazarbayev University)