



16 December 2022

This is to certify that Shomanbayeva Manat from M.Auezov South Kazakhstan University, Kazakhstan, has taken part of the Staff mobility under ERASMUS+ KA2 project Integrated approach to STEM Teacher Training at the University of Helsinki, Finland from the 12th of December to the 17th of December 2022.

This mobility visit has taken place under the auspices of the EU funded Erasmus+ action for the purposes of # 598367-EPP-1-2018-1-SE-EPPKA2-CBHE-JP "Integrated Approach to STEM Teacher Training", STEM, hosted by MSc Oona Kiviluoto and Professor Maija Aksela, Department of Chemistry, Faculty of Science, University of Helsinki, Finland.

During the visit Shomanbayeva Manat has taken part of the lectures and study visit at the University of Helsinki. She has also interviewed university teachers, students, and other members of the university.

If further information is required, we can be contacted at the details below.

Yours sincerely,

Maiia Aksela

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Programme for the visit was as following:

December 12

Digital tools in STEM education, lecture, place: Chemicum room B156, time: 10.00-12.00

Research-based STEM teaching, lecture, place: Chemicum room B156, time: 12.00-15.00

December 13

School visit, high school, Liquid nitrogen ice cream, place: Chemicum room A127, time: 8.30-10.00

Becoming acquainted to the Faculty of Science and planning for the week.

Meeting with LUMA-centre Finland, place: Chemicum room B146, time: 15:15-16:30

December 14

School visit, high school, ionic liquids, place: Chemicum room B156, time: 12.00-14.20

Introduction to Machine Learning, lectures, time: 12:15 - 14:00, place: Exactum A111

December 15

School visit, 8th grade, covid-19 testing simulation, place: Chemicum room B156, time: 9.50-11.10

Distributed Data Infrastructures, lecture, time: 12:15 - 14:00, place: Exactum CK112

Elements of bioinformatics, lecture, time: 14:15 - 16:00, place: Exactum CK112

December 16

School visit, high school, Finnish-Russian school, organic chemistry, place: Chemicum room B156, time: 9.00-10.30

Visits and meetings at Faculty of Science, University of Helsinki.

Meeting with STEM students of University of Helsinki, place: Chemicum room B143, time: 15.30-17.00

December 17

Visit to Heureka science center



