DEPARTMENT OF CHEMISTRY
AARHUS UNIVERSITY
DENMARK

Review of Ph.D. work of Marat Bektassov

The Ph.D. project of Marat Bektassov has been supervised by Assoc. Prof. Dr. Nassiba Baimatova as main supervisor, while I have been co-supervising during the time Marat Bektassov worked with me at Aarhus University, Denmark.

The focus of the PhD-project has been development and application of advanced methods for collection of volatile organic compounds from water for analysis by gas chromatography coupled to mass spectrometry. The main focus has been on development of dynamic headspace extraction, which is a "green" method for sample preparation.

The thesis is based on one peer-reviewed paper with the PhD candidate as first author, a manuscript in preparation (with the PhD candidate as first author) and a manuscript just accepted for publication in npj Climate and Atmospheric Science.

1. **M. Bektassov**, L.D. Thomsen, N. Baimatova, M. Glasius (2025) Advanced determination of biogenic volatile organic compounds in environmental water using dynamic headspace extraction.

   Microchemical Journal, 214, 113989. DOI: 10.1016/j.microc.2025.113989

2. **M. Bektassov,** Z. Teng, B. Rosati, D. Orazbayeva, N. Baimatova, M. Glasius: Dynamic headspace gas chromatography - mass spectrometry method for the determination of dimethyl sulfide and indirect quantification of dimethylsulfoniopropionate in environmental water.

   Manuscript in preparation for Journal of Chromatography A.

3. B. Rosati, J.T. Skønager, **M. Bektassov**, Z. Teng, M. Glasius, M. Bilde, M. Barbato, K.V. Kristensen, S.V.M. Tesson: Investigating the emissions of dimethyl-sulfide during aerosolisation of microalgae.

   Accepted for publication in npj Climate and Atmospheric Science, a Nature portfolio journal.

These are all well-esteemed international scientific journals that are indexed in Web of Science. The research of the PhD is thus expected to have a wide international impact in the scientific community.

Department of Chemistry

Associate Professor
Marianne Glasius

Date: 7 January 2026

Direct phone.: +45 21275261
E-mail: glasius@chem.au.dk

Department of Chemistry
Aarhus University
Langelandsgade 140
8000 Aarhus C
Denmark

E-mail: info@chem.au.dk
www.chem.au.dk

DEPARTMENT OF CHEMISTRY
AARHUS UNIVERSITY
DENMARK

Overall, the research performed by Marat Bektassov during his Ph.D.-studies is of very good quality, and he is very well prepared to defend his Ph.D. work.

I thus support that Marat Bektassov proceeds to the defense in order to obtain the Ph.D.-degree.

Yours sincerely,



Marianne Glasius