

Chemistry at Agricultural University of Georgia



School of Natural Sciences and Biotechnology

- Bachelor's Program in Chemistry
- Joint Master's Program in Natural Sciences
- PhD Program in Chemistry

Institute of Chemistry and
Molecular Engineering
Prof. Ramaz Katsarava



- Synthesis of biodegradable polymers - pseudoproteins such as poly(ester amides), poly(ester urethanes), poly(ester ureas), and their co-polymers.

Laboratory of Biological Oxidation
at Sergi Durmishidze Institute of
Biochemistry and Biotechnology
Prof. Gia Khatisashvili



- Molecular mechanisms of xenobiotic detoxification in plants for phytoremediation technologies.

Technological Laboratory of
Chemistry
Prof. Elizbar Elizbarashvili
Prof. Revaz Korashvili



- Synthesis of organic dyes.
- Synthetic organic chemistry.
- Synthesis of MOFs.

Laboratory of Engineering
Polymers
Prof. Giorgi Titvinidze



- Synthesis and investigation of polymerelectrolyte membranes: PEMs and AEMs.

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Prof. Revaz Korashvili



Laboratory of Engineering
Polymers
Prof. Giorgi Titvinidze



International collaborations:

- Universitat Politècnica de Catalunya (Barcelona, Spain)
- ...
- The Research Institute on Terrestrial Ecosystems (IRET) of the National Research Council of Italy (CNR) (Italy)
- NEIKER-Tecnalia, Basque Institute of Agricultural Research and Development (Spain)
- Artvin Coruh University (Turkey)
- Vysoká škola chemickotechnologická v Praze (Czech Republic)
- Hahn-Schickard (Freiburg, Germany)
- University of Freiburg (Freiburg, Germany)
- Zentrum für Sonnenenergie und Wasserstoff-Forschung Baden-Württemberg (ZSW) (Ulm, Germany)
- Max Planck Institute for Solid State Research (Stuttgart, Germany)
- Paul Scherrer Institute (Switzerland)
- ...

Fundings

Shota Rustaveli National Science Foundation of Georgia.

Bundesministeriums für Bildung und Forschung (BMBF).

Bundesministerium für Wirtschaft und Energie.

DAAD

ERASMUS+

A Key Asset of Our University

- Students gain extensive laboratory experience
- Direct involvement in real research projects

Senior project (bachelor thesis) – 2 semesters

Junior project – 1 semester

Our Alumni in Europe



MARTIN-LUTHER-UNIVERSITÄT
HALLE-WITTENBERG



UNIVERSITY
OF AMSTERDAM



Forschungszentrum
Jülich (FZJ)



Thank you for your attention!

Tuesday, September 8 (AUG/FUT, Auditorium #314)

Parallel Session: Chemistry Topics

[Conveners: Giorgi Titvinidze / Bernd Neumaier]
[11:00 – 13:30]

Giorgi Titvinidze (AUG)

“Introductory talk about the chemistry projects at AUG”

Bernd Neumaier / David Gabadadze (FZJ)

“Introduction to Nuclear Medicine”

Sandra Kapanadze (with Titvinidze) (AUG)

“Balancing Mechanical Properties and Chemical Stability in Sulfonated Poly(Phenylene Sulfone)s”

Elene Lezhava (with Titvinidze) (AUG)

“sPPS/PBI-O Blends as Polymer Electrolytes: The "Snake-in-a-Cage" Effect”

Davit Karichashvili (with Titvinidze) (AUG)

“Overcoming Challenges: One-Step Synthesis of Microblock sPPS and Crosslinking”

Vika Dzandzava (with Elizbarashvili) (AUG)

“Experimental Study of Quercetin Nitration”

Ana Labadze (with Goletiani) (AUG)

“Amnion Extract as a therapeutic strategy in an In vivo model of early-stage Alzheimer’s disease”

➔ **End with the guided tour to the Chemistry Lab’s (Giorgi Titvinidze)**