

Gyula Mr. Halasi

Research fellow

Accuracy of observation is the equivalent of accuracy of thinking.



halasigy@eli-alps.hu

+36703238049

Szeged, Hungary

WORK EXPERIENCE

Research Fellow

ELI-ALPS laser facility, Szeged, Hungary

03/2018 - Present

NanoESCA and time resolved momentum microscopy.

Szeged, HU

Achievements/Tasks

- Laboratory work - UHV techniques.
- Surface science measurements (PEEM, XPS, LEED).
- User project management
- NanoESCA

Contact : Dr. László Óvári - laszlo.ovari@eli-alps.hu

Postdoctoral/training studies

University of Göttingen I. Physikalisches Institut, Germany

04/2018 - 04/2019

Göttingen, Germany

Achievements/Tasks

- HHG laser driven TOF-PEEM experiments
- Learning the operation of the HHG laser beam
- Scientific collaboration with the ELI-ALPS-HU
- Daily usage of the Momentum microscope

Contact : Prof. Stefan Mathias

Research fellow

MTA-SZTE Reaction Kinetics and Surface Chemistry research group; University of Szeged

09/2014 - 03/2018

Szeged, HU

Achievements/Tasks

- Daily operation of the gas chromatography laboratory
- Heterogeneous photocatalytic measurements
- Supervising

Contact : Prof. Zoltán Kónya - konya@chem.u-szeged.hu

Research assistant

MTA-SZTE Reaction Kinetics and Surface Chemistry research group; University of Szeged, Hungary

04/2013 - 09/2014

Szeged, HU

MTA-SZTE Reaction Kinetics and Surface Chemistry research group

Achievements/Tasks

- Studying of photocatalytic reactions

EDUCATION

PhD degree

University of Szeged, Hungary

04/2014

Szeged, HU

Chemistry

- Investigation of photochemical processes on TiO₂ supported catalysts
- *Summa cum laude*

MSc in chemistry

University of Szeged, Hungary

2008

Szeged, HU

SKILLS

Heterogeneous catalysis

NanoESCA

Photoelectron spectroscopy

Project management

Material Science

Laboratory management

UHV

PERSONAL PROJECTS

OTKA (Hungarian Scientific Research Fund) Postdoc; Photocatalytic transformation of CO₂ (03/2015 - 03/2018)

INTERNATIONAL CONFERENCES:

- 15th International Congress on Catalysis; München, (Germany) 2012,
- 3rd European Symposium on Photocatalysis, JEP 2013, Portoroz, (Slovenia), 2013.
- Natural Gas Conversion Symposium, NCGS11, Tromsø, (Norway) 2016
- 21st International Conference on Photochemical Conversion and Storage of Solar Energy, IPS 21, St. Petersburg, (Russia) 2016
- European Conference of Surface Science – ECOSS 33, Szeged, (Hungary) 2017

LANGUAGES

English

Full Professional Proficiency

Hungarian

Native or Bilingual Proficiency

SCIENTIFIC SUMMARY

Assorted publications: 1. Photocatalytic decomposition of ethanol on TiO₂ modified by N and promoted by metals; J. Catal. 281 (2011) 309.
2. Comparative study on the photocatalytic decomposition of methanol on TiO₂ modified by N and promoted by metals; J. Catal.: 294 (2012) 199. IF: 5.787;
3. Photocatalytic reduction of NO with ethanol on Au/TiO₂ J. Catalysis: 325 (2015) 60-67 IF: 7.354;
4. Catalytic and photocatalytic reactions of H₂+CO₂ on supported Au catalysts; Appl. Catal. A Gen. 506 (2015) 85.
5. In Situ DRIFTS and NAP-XPS Exploration of the Complexity of CO₂ Hydrogenation over Size-Controlled Pt Nanoparticles Supported on Mesoporous NiO; J. Phys. Chem. C 122 (2018), 5553-5565
Total citations: 490 - Hirsch index: 13 ;
Number of publications: 30 Researchgate ID: Gyula Halasi
<https://scholar.google.de/citations?user=jYiXAoQAAAAJ&hl=hu>

Awards:

Erdős Pál Scholarships for young researchers 2014 MTA Postdoctoral Fellowship 2015 OTKA Postdoctoral Fellowship 2015

Educational journey:

3 user experience projects with NAP-XPS, Charles University, Prague (2017,2019,2021)