

Alexandru-Milentie Hada



● WORK EXPERIENCE

01/01/2020 – CURRENT Cluj-Napoca, Romania
RESEARCH ASSISTANT BABES-BOLYAI UNIVERSITY

2015 – 31/12/2019 Cluj-Napoca, Romania
RESEARCH STUDENT NANOBIOPHOTONICS AND LASER MICROSPECTROSCOPY CENTER,
INTERDISCIPLINARY RESEARCH INSTITUTE IN BIO-NA

● EDUCATION AND TRAINING

09/2010 – 07/2014 Arad, Romania
HIGH SCHOOL DIPLOMA National College "Moise Nicoară"

Level in EQF EQF level 4

01/10/2014 – 09/07/2017 Cluj-Napoca, Romania
BACHELOR'S DEGREE Medical Physics, Faculty of Physics, Babes-Bolyai University

Level in EQF EQF level 6

01/10/2014 – 01/07/2017 Cluj-Napoca, Romania
PEDAGOGICAL DEGREE IN PHYSICS Teacher Training Department, Babes-Bolyai University

Level in EQF EQF level 6

03/10/2018 – 26/02/2019 Messina, Italy
ERASMUS+ STUDENT CHIBIOFARAM Department, University of Messina

Level in EQF EQF level 7

01/10/2017 – 03/07/2019 Cluj-Napoca, Romania
MASTER'S DEGREE - "FABRICAREA DE NOI NANOPARTICULE HIBRIDE POLIMER-METAL NOBIL PENTRU APLICAȚII BIOMEDICALE" Biophysics and Medical Physics, Faculty of Physics, Babes-Bolyai University

Level in EQF EQF level 7

01/10/2019 – CURRENT Cluj-Napoca, Romania
PHD DEGREE Faculty of Physics, Babes-Bolyai University

Level in EQF EQF level 8

● LANGUAGE SKILLS

Mother tongue(s): **ROMANIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C1	C1	C2	C2	C1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

● DIGITAL SKILLS

Microsoft Word | Microsoft Excel | Microsoft Office | Microsoft Powerpoint | Google Drive | Zoom | Skype | Adobe Photoshop | Adobe Illustrator | Adobe Premiere Pro

● ADDITIONAL INFORMATION

PUBLICATIONS

Publications

- "Linezolid nanoAntibiotics and SERS-nanoTags based on polymeric cyclodextrin bimetallic core-shell nanoarchitectures" **A.-M. Hada**, M. Potara, S. Astilean, A. Cordaro, G. Neri, M. Malanga, A. Nostro, A. Mazzaglia, A. Scala, A. Piperno, **Carbohydrate Polymers**, Vol. 293, 2022, pp. 119736
- "Controlling the optical and morphological stability of 4-mercaptobenzoic acid-modified triangular silver nanoplates in saline environments", S. Suarasan, **A.-M. Hada**, M. Muntean, A. Vulpoi, M. Potara, S. Astilean, **Applied Surface Science** 638 (2023) 158126 (first author with equal contribution)
- "Probing polyvinylpyrrolidone-passivated graphene oxide nanoflakes as contrast agents inside tissue-like phantoms via multimodal confocal microscopy" M. Potara, S. Suarasan, A.-M. Craciun, M. Focsan, **A.-M. Hada**, S. Astilean, **Talanta**, Vol. 247, 2022, pp. 123581
- "Dopamine Photochemical Behaviour under UV Irradiation" A. Falama, A. Petran, **A.-M. Hada**, A. Bende., **International Journal of Molecular Sciences** Vol. 23, 2022, pp. 5483
- "Folic acid functionalized gold nanoclusters for enabling targeted fluorescence imaging of human ovarian cancer cells" **A.-M. Hada**, A.-M. Craciun, M. Focsan, R. Borlan, O. Soritau, M. Todea, S. Astilean, **Talanta**, Vol. 225, 2021
- "Intrinsic photoluminescence of solid-state gold nanoclusters: towards fluorescence lifetime imaging of tissue-like phantoms under two-photon near-infrared excitation" **A.-M. Hada**, A.-M. Craciun, S. Astilean, **Frontiers in Chemistry**, Vol. 9, 2021, pp. 761711
- "Gold nanoclusters performing as contrast agents for non-invasive imaging of tissue-like phantoms via two-photon excited fluorescence lifetime imaging" **A.-M. Hada**, A.-M. Craciun, S. Astilean, **Analyst** 2021
- "Novel paper-based sensing platform using photoluminescent gold nanoclusters for easy, sensitive and selective naked-eye detection of Cu²⁺" **A.-M. Hada**, M. Zetes, M. Focsan, T. Nagy-Simon, A.-M. Craciun, **J. of Molecular Structure** Vol. 1244, 2021, pp. 130990
- "Recent advances on the development of plasmon-assisted biosensors for detection of C-reactive protein" T. Nagy-Simon, A.-M. Hada, S. Suarasan, M. Potara, **J. of Molecular Structure** Vol. 1246, 2021, pp. 131178
- "Marine Bacterial Exopolymers-Mediated Green Synthesis of Noble Metal Nanoparticles with Antimicrobial Properties" A. Scala, A. Piperno, **A.-M. Hada**, S. Astilean, A. Vulpoi, G. Ginestra, A. Marino, A. Nostro, V. Zammuto, C. Gugliandolo, **Polymers**, Vol. 11(17), 2019, pp. 1157
- "Fabrication of gold-silver core-shell nanoparticles for performing as ultrabright SERS-nanotags inside human ovarian cancer cells" **A.-M. Hada**, M. Potara, S. Suarasan, A. Vulpoi, T. Nagy-Simon, E. Licarete, S. Astilean, **Nanotechnology** Vol. 30(31), 2019, pp. 315701-315711
- "Chitosan-coated bimetallic gold-silver nanoparticles: synthesis, characterization and SERS activity" **A.-M. Hada**, M. Potara, S. Suarasan, A. Vulpoi, S. Astileans, **STUDIA UBB PHYSICA**, Vol. 62 (LXII), 1-2, 2017, pp. 5-14

CONFERENCES AND SEMINARS

Conferences

- Poster "4MBA Labeled Chitosan Coated Gold-Silver Core-Shell Nanoparticles as In Vitro SERS Traceable pH Sensors" at IC-ANMBES Brasov 2018
- Oral presentation "Hybrid Plasmonic Nanoparticles Au-Ag labeled with Raman reporters to be used as contrast agents and pH sensors in intracellular SERS imaging" at Next Generation College Conference Belis 2018

- Oral presentation "INVESTIGATION OF PROTEIN-STABILIZED GOLD NANOCCLUSERS WITH APPLICABILITY IN CELLULAR IMAGING" at National conference of Physics PhD students 2020
- Oral presentation "Novel paper-based sensing platform using photoluminescent gold nanoclusters for easy, sensitive and selective naked-eye detection of Cu²⁺" at NN21 Nanotechnology 2021
- Poster presentation "Novel paper-based sensing platform using photoluminescent gold nanoclusters for easy, sensitive and selective naked-eye detection of Cu²⁺" at ISSON21 Nanotechnology 2021
- Poster Presentation "Colorimetric detection of C-reactive protein using aptamer-modified gold-silver core-shell nanoparticles" ICPAM-13 2022
- Poster Presentation "Intrinsic photoluminescent protein-stabilized gold nanoclusters: towards fluorescence imaging applications" ICPAM-13 2022
- Poster Presentation "Cationic cyclodextrin polymer vs chitosan for SERS-nanotags fabrication" 20th ICS 2022

PROJECTS

Projects

- Scientific performance scholarship granted by Babes-Bolyai University in the academic year 2017-2018
- "Proiectarea de noi aptasenzori plasmonici pentru detecția colorimetrică a proteinei C reactive" - POCU 153310 - "Dezvoltarea competențelor de cercetare avansată și aplicată în logica STEAM + Health" financed by Babes-Bolyai University 2022-2023

Member in projects

- Research Assistant in "Designing new plasmonic aptasensors for detection and monitoring of infections"
- Research Assistant in "Direct, sensitive and selective fluorescence "turn-off" detection of metallic contaminants from water using photoluminescent gold nanoclusters"
- Research Assistant in "NEW TARGETED OPTICAL IMAGING NANOPROBES FOR NEAR-INFRARED (NIR) REAL-TIME (RT) IMAGE-GUIDED SURGERY OF OVARIAN CANCER", project code: PN-III-P4-ID-PCCF-2016-0142

HONOURS AND AWARDS

Honours and awards

- Chief of Promotion, Bachelor's Degree - Faculty of Physics, Babes-Bolyai University, promotion 2014-2017
- Chief of Promotion, Master's Degree - Faculty of Physics, Babes-Bolyai University, promotion 2017-2019

16/06/2022

CYCLONET ACRI Young Investigator Training Program 2019 AWARD – Associazione Casse di Risparmio Italiane

Link <https://www.ismn.cnr.it/ics20/cyclonet.html>

31/01/2023

"Experienced Researchers - Teams" trophy at the 1st Romanian Research Gala – Ministry of Research, Innovation and Digitalization The Nanobiophotonics and Laser Microspectroscopy Center, led by Prof. Dr. Simion Aștilean, of which I am a member, was awarded the **"Experienced Researchers - Teams" trophy** at the **1st Romanian Research Gala**

ORGANISATIONAL SKILLS

Organisational skills

- good organizational skills (I was the manager of my own research grants offered by Babes-Bolyai University, 2017-2018 and 2022-2023)

COMMUNICATION AND INTERPERSONAL SKILLS

Communication and interpersonal skills

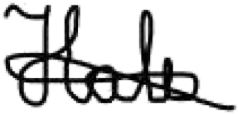
- good communication skills obtained within the pedagogic module and researching at Nanobiophotonics and Laser Microspectroscopy Center, Interdisciplinary Research Institute in Bio-Nano-Sciences, Babes-Bolyai University

JOB-RELATED SKILLS

Job-related skills

- good experience in noble metal nanoparticles synthesis
 - good experience in gold nanoclusters synthesis
 - competent in the use of various spectroscopic techniques (Raman, SERS, UV-Vis) and other characterization techniques (dynamic light scattering, zeta potential)
 - experienced user of OriginLab
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02.10.2023

A handwritten signature in black ink, appearing to be 'H. H. H.', written in a cursive style.