europass Curriculum vitae

PERSONAL INFORMATION

Nicolae Leopold

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http://phys.ubbcluj.ro/~nicolae.leopold/

PROFESSIONAL EXPERIENCE

1 Sept 97 - 27 Sept 99 — Debutant teacher
Brukenthal Theoretical High School, Sibiu

27 Sept 99 - 25 Feb 02 — Preparator
Faculty of Physics, Babeș-Bolyai University
Laboratory work: Atomic physics, Molecular physics, Nuclear physics

25 Feb 02 - 25 Feb 05 — Assistant
Faculty of Physics, Babeș-Bolyai University
Laboratory works and seminars: Atomic physics, Molecular physics, Nuclear physics

25 Feb 05 -25 Feb 13 — Lecturer
Faculty of Physics, Babeș-Bolyai University
Courses and laboratory works: Physics of the atom, Physics and progress of knowledge, Numerical and analogical modeling of biological processes, Vibrational methods with biomedical applications, Complements of modern physics
Tutoring diploma and dissertation works
Responsible at the Faculty level for the Erasmus program

25 Feb 13 - 25 Sep 21 — Associate professor
Faculty of Physics, Babeș-Bolyai University
Courses and laboratory works: Physics of the atom, Numerical and analogue modeling of biological processes, Vibrational methods with biomedical applications,
Guidance of diploma and dissertation works
until 2015, responsible at the Faculty level for the Erasmus program

25 Sep 21- present — Professor
Faculty of Physics, Babeș-Bolyai University

EDUCATION AND TRAINING

Sept 89 - Jun 93 — Baccalaureate Diploma
Brukenthal Theoretical High School, Sibiu
mathematics-physics profile

Oct 93 - Jul 97 — Bachelor's Degree in Physics
Babeș-Bolyai University, Cluj-Napoca
Physics specialization

Oct 98 - July 99 — Advanced Studies Diploma
Babeș-Bolyai University, Cluj-Napoca
specialization Atomic and nuclear physics

Oct 99 - May 04

Doctoral degree in Physics

Babeș-Bolyai University, Cluj-Napoca

Applied molecular spectroscopy

Jun 18

Habilitation

Babeș-Bolyai University, Cluj-Napoca

Engineered metal nanoparticle structures towards interaction with cells, molecules and light

Jan 00 – Jan 02

Research internship

University of Würzburg

12 months (of which 5 months through the Erasmus program) of internship during 2000-2002 studies and research in the field of optical molecular spectroscopy

Feb 02 - Aug 02

Research internship

University Technical Vienna

Experimental studies on analytical applications of optical molecular spectroscopy

Sep 04 - Aug 05

Internship postdoctoral research

University of Tübingen

Development of optical molecular sensors

Nov 06 - Oct 08

Postdoctoral research internship - EU Marie Curie scholarship

Vienna Technical

University Experimental bioanalytical studies, regarding the coupling of detection by optical spectroscopic methods with molecular separation techniques

PERSONAL COMPETENCES

Mother tongue(s): Romanian, German

Other foreign languages known

	COMPREHENSION		SPEAKING		WRITING
	Reading	Participating	in conversation	Speaking	Listening
English	C1	C1	B2	B2	B2

Levels: A1/2: Elementary user - B1/2: Independent user - C1/2 : Experienced user
Common European Framework of Reference for Foreign Languages

Communication: good communication skill, as a result of 24 years of teaching activity

Organizational/managerial: managerial skills acquired through the management of 7 national research grants

ADDITIONAL INFORMATION

Awards:
2010 Award of the Romanian Academy for the group of works: Spectroscopic properties of some molecules of biological interest
2011 Babeș-Bolyai University Award for didactic activity
2014 *Excellence* Babeș-Bolyai University
Award 2016 Babeș-Bolyai University Award for didactic excellence
2019 Babeș-Bolyai University Award for excellence in research
2021 Babeș-Bolyai University Award for excellence in research

Member of the editorial board since OCT 2020: : Romanian Journal of Physics (IF 1.46) http://www.nipne.ro/rjp/editorial.html

Director/responsible for research grants: 2006-2008, Research Excellence Program, Module II, Human Resources Development Projects for Research, Project type: Research excellence project for young researchers, Project code:

91, Funding: National Research Authority Scientific (ANCS) New optical sensors for the determination of heavy metal ions, value 138,800 lei

2008-2010, National Program II, Project type: Research projects to stimulate the return of researchers to the country, Project code: RP_6, Contracting Authority - UEFISCSU New strategies for online detection for capillary electrophoresis and liquid chromatography using ultrasensitive Raman spectroscopy - SERS, value 500,000 lei

2010-2013, National Program II, Project type: Research projects to stimulate the establishment of young independent research teams, Project code: TE_323, Authority UEFISCDI contractor, Project title: New approaches in dete determination of chemical residues from complex matrices using TLC-SERS coupling: detection of melamine, antibiotics and pesticides in milk and milk powder, value 750,000 lei

2016-2017 PNCDI III, Program 3 European and International Cooperation, Subprogram 3.1. Bilateral/multilateral (Romania-China), financing contract no. 61BM/2016, Project title: Treatment of cystic and alveolar echinococcosis with nanoparticles loaded with fungal extract and antiparasitic substances, UMF Cluj - coordinator, UBB Cluj - partner (8,000 lei) - project manager N. Leopold

2017-2018 Project code: PN-III-P2-2.1-PED-2016-0983; Financing contract no. 185PED/2017, Project title: Development of a portable microfluidic device for rapid SERS detection of pathogens, Partner P1 UBB (189,999 lei), – project manager N. Leopold

2018-2020 Project code: PN-III-P1-1.2-PCCDI-2017 -0056, Functional collaboration model between public research organizations and the economic environment with the aim of providing high-level scientific and technological services in the field of bioeconomy, N. Leopold- Project partner responsible P2 UBB (400,000 lei)

2020-2022 Program P2 - Growth the competitiveness of the Romanian economy through RDI; Project type: Demonstration experimental project, Project code: PN-III-P2-2.1-PED-2019-3268, Contracting Authority UEFISCDI Financing contract no. 340/2020, Project title: Experimental demonstrator based on Raman spectroscopy for the quantification of glycated proteins in diabetes screening, UBB value 421,600.00 lei 2021-2023

Project code: PN-III-P4-ID-PCE-2020-1292, Contract of financing no. PCE189/2021, Project title: Profiling and concentration of cancerous DNA and quantification of the oncometabolite 2-hydroxyglutarate in IDH-mutant malignancies, UBB value 1,198,032 lei

Other professional information

Invention Patent Application: Silver nanoparticles coated with chlorine ions, process of their preparation and use as a substrate for the amplification of Raman scattered radiation. OSIM 291/ 15.05.2017

Metrics (Web of Science): Publications 144, Citations: 4757 *h*-index: 35

Researcher ID: **B-5790-2011**

ORCID profile: http://orcid.org/0000-0002-2174-8064

Google Scholar profile: https://scholar.google.com/citations?hl=en&user=HI49hvAAAAAJ

Publons profile: https://publons.com/researcher/479182/nicolae-leopold/

Member of the Organizing Committee: **European Congress on Molecular Spectroscopy**, August 26 - 31, 2012, Cluj-Napoca, Romania

2017-2020 Member of the CNADTCU appeals commission, Commission no. 3 Physics (OMEN no. 3990/2017)

Expert evaluator of national (UEFISCDI) and international projects

Member **of the Romanian Society of Physics** (SRF), Censor of the Cluj Branch of SRF (2013-2017)

Member **of the Romanian Society of Pure and Applied Biophysics**

President of the Cluj branch

President of the Commission Evaluation and Quality Assurance at the Faculty of Physics (since 2018)

Cluj-Napoca
16/IAN/2026

Nicolae Leopold