



## Europass Curriculum Vitae

### Personal information

First name(s) / Surname(s) **Octavian Alexandru SIMA**

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[OctavianAlexandru.Sima@g.unibuc.ro](mailto:OctavianAlexandru.Sima@g.unibuc.ro); \_\_\_\_\_

Nationality Romanian

Date of birth

Gender M

### Work experience

Dates January 2019 onwards

Occupation or position held Physicist

Main activities and responsibilities Research: Gamma-ray spectrometry; Monte Carlo simulation of radiation transport.; participation in experiments  
Implication in PhD coordination, Teaching in the field of Monte Carlo simulation methods and computational methods in nuclear physics

Name and address of employer ELI-NP, Str. Reactorului no.30, P.O.BOX MG-6, Bucharest - Magurele, ROMANIA

Type of business or sector Research Institute

Dates November 2017 onwards

Occupation or position held Associate researcher

Main activities and responsibilities Participation in an ELI-RO project. Monte Carlo Simulations for experiments  
Implication in PhD coordination. Teaching in the field of Nuclear Physics. Environmental radioactivity monitoring

Name and address of employer Horia-Hulubei National Institute for Physics and Nuclear Engineering, Str. Reactorului no.30, P.O.BOX MG-6, Bucharest - Magurele, ROMANIA

Type of business or sector National Research and Development Institute

Dates February 1980 onwards

Occupation or position held Emeritus Professor (retired) (2016-onwards); Professor (2001-2016); associate professor (1996 – 2001); assistant professor (1990 – 1996); assistant (1980 – 1990)

Main activities and responsibilities Teaching at graduate, master and PhD level: nuclear and particle physics, nuclear reactor physics; nuclear spectroscopy; environmental radioactivity; Monte Carlo simulation methods; Computational methods in physics

Research: Gamma-ray spectrometry; high energy cosmic rays; nuclear reactions; Monte Carlo simulation of radiation transport; radiation measurement; environmental radioactivity monitoring

Name and address of employer Faculty of Physics, University of Bucharest; 36-46 Kogalniceanu Blvd, Bucharest, Romania

Type of business or sector University

Dates 1995 onwards (14 months in total visiting PTB); 2002 onwards (24 months in total visiting KIT)

Occupation or position held Visiting researcher (beneficiary of grants from PTB); Visiting researcher (beneficiary of DFG or other grants)

Main activities and responsibilities	Research: Gamma-ray spectrometry; Research: High energy cosmic rays (KASCADE-Grande experiment)																																																		
Name and address of employer	Physikalisch-Technische Bundesanstalt (PTB), Braunschweig, Germany; Karlsruhe Institute of Technology (former Forschungszentrum Karlsruhe), Institute for Nuclear Physics																																																		
Type of business or sector	National Institute (Germany);																																																		
<b>Education and training</b>																																																			
Dates	1980 – 1987																																																		
Title of qualification awarded	PhD in Physics																																																		
Principal subjects/occupational skills covered	Thesis Title: 'Contributions to the Study of Environmental Radioactivity' Development of methods for improved measurement of environmental radioactivity ( $^{222}\text{Rn}$ and $^{220}\text{Rn}$ decay products); Monte Carlo procedures for quantifying the response of high resolution detectors																																																		
Name and type of organisation providing education and training	National Institute for Physics and Nuclear Engineering, Bucharest																																																		
Level in national or international classification																																																			
Dates	1970 – 1975																																																		
Title of qualification awarded	Physicist – Diploma + Diploma of Merit																																																		
Principal subjects/occupational skills covered	Physics; Mathematics; Computing; Programming Main field of study: Nuclear Physics																																																		
Name and type of organisation providing education and training	Faculty of Physics, University of Bucharest																																																		
Level in national or international classification	Note: 1. Ranked on the first position among all the students graduating in physics in Romania in 1975 2. Third Prize at the IV-th International Physics Olympiad, Moscow, 1970.																																																		
<b>Personal skills and competences</b>																																																			
Mother tongue(s)	<b>Romanian</b>																																																		
Other language(s)	<b>English, French, Russian</b>																																																		
Self-assessment <i>European level (*)</i>	<table border="1"> <thead> <tr> <th colspan="4">Understanding</th> <th colspan="4">Speaking</th> <th colspan="2">Writing</th> </tr> <tr> <th colspan="2">Listening</th> <th colspan="2">Reading</th> <th colspan="2">Spoken interaction</th> <th colspan="2">Spoken production</th> <th colspan="2"></th> </tr> </thead> <tbody> <tr> <td>C1</td><td>Proficient user</td> <td>C2</td><td>Proficient user</td> <td>C1</td><td>Proficient user</td> <td>C1</td><td>Proficient user</td> <td>C2</td><td>Proficient user</td> </tr> <tr> <td>C1</td><td>Proficient user</td> <td>C2</td><td>Proficient user</td> <td>B2</td><td>Independent user</td> <td>B2</td><td>Independent user</td> <td>B1</td><td>Independent user</td> </tr> <tr> <td>B1</td><td>Independent user</td> <td>B2</td><td>Independent user</td> <td>B1</td><td>Independent user</td> <td>B1</td><td>Independent user</td> <td>B1</td><td>Independent user</td> </tr> </tbody> </table>	Understanding				Speaking				Writing		Listening		Reading		Spoken interaction		Spoken production				C1	Proficient user	C2	Proficient user	C1	Proficient user	C1	Proficient user	C2	Proficient user	C1	Proficient user	C2	Proficient user	B2	Independent user	B2	Independent user	B1	Independent user	B1	Independent user	B2	Independent user	B1	Independent user	B1	Independent user	B1	Independent user
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	(*) <a href="#">Common European Framework of Reference for Languages</a>																																																		
Social skills and competences	Team work, in national and multicultural environments (member in international teams - collaborations KASCADE-Grande, LOPES, Pierre Auger Observatory; member in international panels – International Committee for Radionuclide Metrology (ICRM), International Atomic Energy Agency (IAEA); frequent work experience abroad) Good communication skills – lectures delivered in international training courses organized by IAEA and by other international organizations																																																		
Organisational skills and competences	Coordinator of scientific teams (Coordinator of the Gamma-Spectrometry Working Group of the International Committee on Radionuclide Metrology between 2011 and 2017) Good experience in scientific project management (director or responsible of projects awarded in national competitions; director of a research project within the frame of an IAEA coordinated research project) PhD Coordinator – 15 students																																																		
Technical skills and competences	Competence in radiation measurement; competence in Monte Carlo simulation																																																		

Computer skills and competences	Competence in computer programming – I developed computer codes that are used in several laboratories throughout the world and computer codes that are used in the international collaborations in which I am a member Good command of standard computer packages (word processing, computation)
Artistic skills and competences	
Other skills and competences	BSITF II and ASIF (UNDSS, IAEA) certificates obtained in 2012
Driving licence	
<b>Additional information</b>	Member in professional organizations: International Committee for Radionuclide Metrology (ICRM), Romanian Physical Society, European Physical Society, ROASTROPART consortium Coordinator of the gamma-spectrometry working group of the ICRM Consultant of IAEA in the field of gamma-ray spectrometry Official reviewer for the ICRM conferences; reviewer for the journals: Applied Radiation and Isotopes, Nuclear Instruments and Methods A, Measurement, Radiation Physics and Chemistry, Journal of Radioanalytical and Nuclear Chemistry, Nuclear Science and Engineering, Journal of Environmental Radioactivity, IEEE Transactions on Nuclear Science, Romanian Reports in Physics, Romanian Journal of Physics Member of international collaborations KASCADE-Grande, LOPES, Pierre Auger Observatory Researcher ID profile at: <a href="http://www.researcherid.com/rid/c-3565-2011">http://www.researcherid.com/rid/c-3565-2011</a>  Publications: 230 articles in ISI rated journals, with more than 4600 citations (excluding self-citations), 120 articles in Conference Proceedings listed in Web of Science, Hirsch index 40; one chapter in Encyclopedia of Analytical Chemistry (Wiley, 2012, online), one book and several book chapters published in Romania
<b>Annexes</b>	

Prof. Dr. Octavian SIMA