



## Europass Curriculum Vitae

### Personal information

First name(s) / Surname(s) **Octavian Alexandru SIMA**  
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Nationality Romanian  
Date of birth March 26, 1951  
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 Physikalisches Technische Bundesanstalt (PTB), Braunschweig, Germany; Karlsruhe Institute of Technology (former Forschungszentrum Karlsruhe), Institute for Nuclear Physics

Type of business or sector National Institute (Germany);

**Education and training**

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 (<sup>222</sup>Rn and <sup>220</sup>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.

**Personal skills and competences**

Mother tongue(s) **Romanian**

Other language(s) **English, French, Russian**

Self-assessment *European level (\*)*

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

(\*) [Common European Framework of Reference for Languages](#)

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

