



Europass Curriculum Vitae



Personal information

Surname(s) / First name(s) **BALABANSKI Dimiter Loukanov**

Address(es)

Telephone(s) +40755090971 (mobile, work)

E-mail dimiter.balabanski@eli-np.ro

Nationality Bulgarian

Date of birth

Gender Male

Work experience

Dates 2014 – present

Occupation or position held PhD Thesis adviser

Main activities and responsibilities nuclear physics and applications, γ -ray spectroscopy, nuclear fission

Name and address of employer Doctoral School in Engineering and Applications of Lasers and Accelerators (SDIALA), University Politehnica of Bucharest, 313 Splaiul Independenței, 060042 Bucharest, Romania

Type of business or sector State University

Dates 2013 – present

Occupation or position held Senior Researcher I, Head of the Gamma-Driven Experiments Department

Main activities and responsibilities nuclear physics and applications, γ -ray spectroscopy, nuclear fission

Name and address of employer Extreme Light Infrastructure – Nuclear Physics, IFIN-HH,
30 Reactorului Str., 077125 Magurele, Romania

Type of business or sector Research Institute

Dates 2007 – 2013

Occupation or position held Senior Researcher, Group Leader

Main activities and responsibilities γ -ray spectroscopy, nuclear physics and applications

Name and address of employer	Institute for Nuclear Research and Nuclear Energy 72 Tsarigradsko Chaussee Blvd., 1415 Sofia, Bulgaria
Type of business or sector	Research Institute
Dates	2004 – 2007
Occupation or position held	Professor
Main activities and responsibilities	γ -ray spectroscopy, nuclear physics and applications
Name and address of employer	University of Camerino Via Madonna delle Carceri, 62032 Camerino (MC), Italy
Type of business or sector	State University
Dates	1996 – 2004
Occupation or position held	Associate Professor
Main activities and responsibilities	γ -ray spectroscopy, nuclear physics and applications
Name and address of employer	St. Kliment Ohridski University of Sofia, Bulgaria
Type of business or sector	State University
Dates	1999 – 2000
Occupation or position held	Visiting Associate Professor
Main activities and responsibilities	γ -ray spectroscopy, nuclear physics and applications
Name and address of employer	University of Tennessee Knoxville, TN, USA
Type of business or sector	State University
Dates	1995 – 2003
Occupation or position held	Visiting Scientist (in total five years)
Main activities and responsibilities	γ -ray spectroscopy, nuclear physics and applications
Name and address of employer	University of Leuven, Belgium
Type of business or sector	State University
Dates	1985 – 1996
Occupation or position held	Assistant Professor
Main activities and responsibilities	γ -ray spectroscopy, nuclear physics and applications
Name and address of employer	St. Kliment Ohridski University of Sofia, Bulgaria
Type of business or sector	State University
Dates	1987 – 1990
Occupation or position held	Visiting Scientist
Main activities and responsibilities	γ -ray spectroscopy, nuclear physics and applications
Name and address of employer	Forschungszentrum Juelich, Germany
Type of business or sector	National Research Center
Dates	1980 – 1985
Occupation or position held	Research Associate
Main activities and responsibilities	γ -ray spectroscopy, nuclear physics and applications
Name and address of employer	St. Kliment Ohridski University of Sofia, Bulgaria
Type of business or sector	State University

Education and training

Dates	1996
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Title of qualification awarded: Habilitation
Principal subjects/occupational skills covered: nuclear physics
Name and type of organisation providing education and training: St. Kliment Ohridski University of Sofia, Bulgaria State University
Dates: 1993
Title of qualification awarded: PhD in Physics
Principal subjects/occupational skills covered: γ -ray spectroscopy, nuclear structure physics
Name and type of organisation providing education and training: St. Kliment Ohridski University of Sofia, Bulgaria State University
Dates: 1975 – 1980
Title of qualification awarded: MS in Physics Engineering
Principal subjects/occupational skills covered: Nuclear Engineering
Name and type of organisation providing education and training: St. Kliment Ohridski University of Sofia, Bulgaria State University

Personal skills and competences

Mother tongue(s): **Bulgarian**

Other language(s): **English, German, Russian, Italian**

Self-assessment
European level ()*

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
English	C2 Proficient user	C2 Proficient user	C2 Proficient user	C2 Proficient user	C2 Proficient user	C2 Proficient user	C2 Proficient user	C2 Proficient user	C2 Proficient user
German	C1 Proficient user	C1 Proficient user	C1 Proficient user	B2 Independent user	A2 Basic user	A2 Basic user	A2 Basic user	A2 Basic user	A2 Basic user
Russian	C2 Proficient user	C2 Proficient user	C2 Proficient user	C1 Proficient user	B2 Independent user	B2 Independent user	B2 Independent user	B2 Independent user	B2 Independent user
Italian	B2 Independent user	B1 Independent user	B1 Independent user	A2 Basic user	A2 Basic user	A2 Basic user	A2 Basic user	A1 Basic user	A1 Basic user

(*) *Common European Framework of Reference for Languages*

Social skills and competences

- team spirit;
- good ability to adapt to multicultural environments, gained through my work experience abroad.

Organisational skills and competences

- leadership (currently responsible for a team of more than 40 people);
- sense of organization (experience in leading different research projects);
- good experience in project management.

Technical skills and competences

- excellent experience with nuclear spectroscopic equipment

Computer skills and competences

- good experience with different operational systems;
- programming skills in C++ and FORTRAN;
- good command with different applications (text, graphic and data base handling).

Driving license

Category B

References

Prof. Muhsin Harakeh, University of Groningen, The Netherlands
Prof. Gerda Neyens, University of Leuven, Belgium and ISOLDE, CERN
Prof. Rick Casten, Yale University, New Haven, CT, USA
Prof. Sydney Gales, IFIN-HH, ELI-NP, Magurele, Romania

Additional Information

Positions as visiting scientist:

2009 – 2015: University Paris-Sud, France, Visiting Professor (in total ½ year)
2007: CSNSM, Orsay, France, CNRS Visiting Research Professor (three months)
1999 – 2002: University of Tennessee, Knoxville and ORNL, Oak Ridge, TN, USA, Guest Professor (in total 1 ½ years)
1995 – 2003: University of Leuven, Belgium, Visiting Scholar (fellowships of EC: HPRI-1999-CT50001, NATO, the Ministry of Science and Technologies of Belgium and the Flemish Science Foundation; in total 5 years)
1994 – 1996: University of Milano and INFN-Milano, Italy, Visiting Scientist (INFN fellowships, total ½ year)
1987 – 1993: Visiting Scientist, Forschungszentrum Juelich, Germany (fellowships of IAEA, Vienna and FZ-Juelich, in total 3 ½ years)

Research activities:

Photo-fission
ISOL technique
Photonuclear processes and nuclear photonics
Structure of atomic nuclei at high angular momenta
Structure of atomic nuclei away from the stability line
Dynamic symmetries in atomic nuclei
Design of multi-detector systems for nuclear spectroscopy
Isotope glaciology (1988 – 2000)
Moessbauer spectroscopy (1980 – 1987)
Applied nuclear physics (1980 – 1987)

Scientific projects:

2020 – 2022: PI of PNCDI III project “Frontier research of the interaction of photons with matter with extreme helical light” with the Romanian Research Fund (PN-III-P4-ID-PPCF-2016-0164, contract no. 8.2018)
2011 – 2013: coordinator of bilateral projects with the Bulgarian National Science Fund (France DRILA-01/8 and Germany DNTS/GERMANY-01/7)
2010 – 2014: FP7 I3 ENSAR (262010) project (European Nuclear Science and Applications Research), coordinator of the Bulgarian team, work package leader (JRA06 EWIRA – East-West Integrated Research Activity), member of the Scientific Council and of the Program Coordination Committee
2009 – 2013: projects with the Bulgarian National Science Fund (DRNF-02/5 – coordinator, DID-02/16 and DNTS-02/21 – team member)
2007 – 2011: Spriral2 Preparatory Phase project: EC FP7 Spiral2PP (212692); head of the Bulgarian team and member of the Steering Committee of the PARIS project to construct a 4π scintillator array
2003 – 2009: nuclear data evaluation; IAEA Research Contract No. 12482 (2005 – 2008)
2003 – 2012: leader of the Bulgarian team and member of the Steering Committee of the AGATA project to construct an European gamma-ray tracking array; EC FP6 project RII3 – EURONS: 506065
2002 – 2004: co-chair of a NATO CLG “New dynamic symmetries in atomic nuclei” (joint research project of the St. Kliment Ohridski University of Sofia, Bulgaria, the Istanbul and the Bosphoros Universities, Istanbul, Turkey, Yale University, New Haven, USA, NCSR “Demokritos”, Athens, Greece and IFIN-HH, Bucharest, Romania)
since 1995: team leader of *more than 25* experimental projects to study the structure and the symmetries in atomic nuclei: at the INFN LNL laboratory in Legnaro, Italy (three), the National Accelerator Center iThemba labs, Cape Town, South Africa (three), Yale University, New Haven, USA (four), the ORNL National Laboratory, Oak Ridge, USA (one), the State University of Florida, Tallahassee, USA (one), the CYCLONE accelerator laboratory, Louvain-le-Neuve, Belgium (two), the Australian National University, Canberra, (one), the Tandem laboratory, Orsay, France (six), GSI, Darmstadt, Germany (one), ILL, Grenoble, France (five), GANIL, France (three), the Institute of Modern Physics, Lanzhou, China (one), the Tandem Laboratory, Bucharest, Romania (three), ATOMKI, Debrecen, Hungary (one) and ISOLDE at CERN (one).
1995 – 1998: head of the Bulgarian Antarctic Glaciological Program, field work during the 1995, 1996 and 1998 polar campaigns

1993 – 1994: projects for computerization of the Physics Library of the University of Sofia and setting of a LAN and internet connection of the Faculty of Physics of the University of Sofia, projects with the Open Society Fund (Soros Foundation), Sofia, Bulgaria

Scientific papers and conference reports:

Papers in refereed international journals: >150
Conference papers in refereed international journals: >70
Papers in conference proceedings: >100
Papers in Bulgarian journals: >10
Papers in Laboratory Annual Reports: >50
Invited seminars: >20
Invited talks at conferences: >50
Plenary talks at conferences and workshops: >60
Citations (SCI): > 5000
h-index: 37 (SCI), 36 (Scopus)

Lecture courses:

- (a) St. Kliment Ohridsky University of Sofia
1995/96: Atomic and Nuclear Physics (for Physics students)
1994/95, 1995/96: Atomic and Nuclear Physics (for Geology students)
1995/96, 1996/97, 1997/98, 2002/03: Nuclear structure (for M.S. students in Nuclear Physics)
- (b) University of Camerino, Italy
2003/04, 2004/05: Nuclear spectroscopy
- (c) University Politehnica Bucharest
2015/16, 2016/17, 2017/2018, 2018/2019, 2019/2020, 2021/2022: Research Opportunities at ELI-NP (M.S. students in Laser and Accelerator Technologies)

Diploma and Ph.D students:

- since 2015: adviser of *ten* students at SDIALA, University Politehnica Bucharest
2020: defended Doru Dinescu, at present civil servant
- 2005 - 2010: consultant of *three* Ph.D. students at the University of Sofia (two), at the University of Istanbul (one).
2018: defended Liliya Atanasova (U. Sofia) at present Assist. Professor, Medical University Sofia
2009: defended Lidya Susam (University of Istanbul) at present Assoc. Professor, U. Istanbul
- 1996 - 2006: adviser of *seven* Ph.D. students at the University of Sofia
2005: defended Andrej Blazhev, at present Lecturer, U. Koeln
2005: defended Radomira Lozeva, at present Researcher at CSNSM, Orsay
2001: defended Georgi Rainovski, at present Professor and Dean of Physics, U. Sofia
2004: defended Kalin Gladnishki, at present Assoc. Professor, U. Sofia
2003: defended Miroslav Danchev, Assoc. Professor, U. Sofia (2009-2015), now in IT company
- 1996 – 2018: referee (jury member) of 15 Ph.D. theses in Bulgaria, Belgium, Germany, Australia, India, France and Romania
- 1991 – 2013: adviser of 12 M.S. theses at the University of Sofia, one at the University of Camerino and one at the Southwestern University of Blagoevgrad

Serving the scientific community:

- 2011 – 2014: member of the Board of the Bulgarian Union of Physicists
2010 – 2017: member of the International PAC of the Tandem-ALTO Laboratory at Orsay, Paris, France
2009 – 2015: member of the Nuclear Physics Board of the European Physical Society
2009 – 2016: member of the International PAC of the Heavy Ion Laboratory, Warsaw University, Poland
2009 – 2021: member of the International PAC of the Tandem Laboratory, IFIN-HH, Bucharest, Romania
2008 – 2013: member of the International PAC of the FP7-REGPOT-2008-1 LIBRA 210123 project at NCSR “Demokritos”, Athens, Greece
2008 – 2012: chair of the South-Eastern European Nuclear Physics Network (2002 – 2008 vice-chair)
2008 – 2012: co-chair of the European Network of NSDD evaluators (since 2002 IAEA NSDD expert)
2007 – 2014: member of the Steering Committee of the PARIS project for the construction of a 4 π spectrometer of LaBr₃:Ce detectors
2006 – 2012: co-chair of an Working Party to study nuclear electromagnetic moments within the SPIRAL2 project, Caen, France
2004 – 2012: coordinator of an Working Group to study nuclear electromagnetic moments and member of the Technical Board of the HiSpec/DeSpec project within the NUSTAR collaboration (project FAIR)
2003 – 2012: member of the Steering Committee of the AGATA project for the construction of a 4 π spectrometer of segmented HPGe detectors

since 2002: referee of Physical Review Letters, Physical Review C, Journal of Physics G, European Physical Journal A, Physics Letters A and B, New Journal of Physics, Review of Scientific Instruments, Europhysics Letters and Annals of Nuclear Energy
2000 – 2003: coordinator of an Working Group for ground-state properties and fundamental interactions within the EURISOL preliminary design study, EC FP5 project HPRI-1999-CT50001
1999 – 2011: Bulgarian correspondent of Nuclear Physics News Magazine of NuPECC
1998 – 2008: chair or member of the Organizing/Program Committee of more than *ten* international conferences and workshops
1998 – 2002: founder and chair/member of the Organizing Committee of the Balkan workshop on Nuclear Physics and Applications (Tsigov Chark, Bulgaria – 1999, Edirne, Turkey – 2001, Tirgoviste, Romania – 2002); now Balkan Workshop on Applied Physics which is held annually in Constanta, Romania
1997 - 2013: co-founder and member of the Board of Directors of the Balkan School on Nuclear Physics (Istanbul, Turkey – 1998, Bodrum, Turkey – 2000, Thessaloniki, Greece – 2002, Bodrum, Turkey – 2004, Brasov, Romania – 2006, Troyan, Bulgaria – 2008; Adrasan, Antalya, Turkey – 2010; Blagoevgrad, Bulgaria – 2012)

Membership in scientific organizations

European Physical Society – individual member
Bulgarian Union of Physicists
Bulgarian Antarctic Institute

Prizes and Awards

2020: Horia Hulubei Prize of the Romanian Academy of Sciences
2009: Pythagoras Prize of the Bulgarian Ministry of Education, Youth and Science for an Established Scientist in the field of Natural Sciences and Mathematics
1997: NATO Research Fellow
1987: IAEA Research Fellow