



## Curriculum vitae Europass



### Personal data

Name / First name **Letiția Susana, Arad**  
Address(es) Constructorul Street, Building B, entrance IV, flat 9, 332030, Petrosani, Romania  
Telephone(s) 004025 454 13 08 Mobile: 004072 775 94 74  
E-mail(s) [susanaarad@yahoo.com](mailto:susanaarad@yahoo.com) ; [susanaarad@upet.ro](mailto:susanaarad@upet.ro)  
Nationality(ies) Romanian  
Birth date 03.01.1955  
Sex female

### Work experience

Period	October 2014 –at present
Job	<b>Professor</b>
Employer's name and address	Department of Control Engineering, Computers, Electrical Engineering and Power Engineering, University of Petrosani, 20, Universității Street, 332006 Petrosani, Romania, <a href="mailto:susanaarad@upet.ro">susanaarad@upet.ro</a> , <a href="http://www.upet.ro">www.upet.ro</a>
Period	April 2012-currently
Job	<b>Scientific secretary</b> of Department of Research, Project Management, Innovation and Transfer Technology
Employer's name and address	University of Petrosani, 20, Universității Street, 332006 Petrosani, Romania, <a href="mailto:susanaarad@upet.ro">susanaarad@upet.ro</a> , <a href="http://www.upet.ro">www.upet.ro</a>
Period	October 1990 – October 2014
Job	<b>Associate Professor, Lecturer,</b>
Employer's name and address	Department of the Electrical Engineering and Power Systems, University of Petrosani, 20, Universității Street, 332006 Petrosani, Romania,
Period	October 1983 - October 1990
Job	<b>Assistant Professor,</b>
Employer's name and address	Mining Institute of Petrosani, Electrotechnics Department, 20, Universității Street, 332006 Petrosani, Romania,
Main activities and responsibilities	Teaching and research activities in Electrical Engineering and Power Systems (since 1983); Courses: Electrotechnics and Electrical Machines, Electrotechnologies, Renewable energy sources; the student practice guidance, coordination of teaching and research in laboratories; Head of the Electrotechnics and Electrical Machines Lab (since 1990); Head of the Electrotechnologies Lab (since 1998); member of the Professorial Board of Faculty (1985-1989), (2012- present), member of the Senat (1985-1989); the organizing of research activity and the project management DCOMPITT (since 2012).
Type/ field of activity	Education - Research

Period	August 1978 - October 1983
Job	Intern engineer and Head of the Organization- Staff- Education-Remuneration Department,
Main activities and responsibilities	Technological responsibilities at Electromechanical Department and the Mining Transport Sector; execution responsibilities and control at the Investments Department and the Mechanics and Energy Office; management at the Organization- Staff- Education-Remuneration Department OPIR from Barbateni Colliery
Employer's name and address	Barbateni Colliery– Jiu Valley Mining Company, Mierleasa street, Lupeni, Romania
Type/ field of activity	technological engineer, mining electro-mechanics
<b>Education and training</b>	
Period	2009- 2014 at present
Qualification/ diploma	Authorized as technical expert of the National Agency for Mineral Resources ANRM
Main fields approached/ acquired skills	technical expert in the field of mineral resources
Name and type of the institution providing education	National Agency for Mineral Resources ANRM, Romania
Period	2008, 8 weeks
Qualification/ diploma	ANRE Regulatory National Authority for Energy, postgraduate course/ Power system auditor - authorized expert
Main fields approached/ acquired skills	Power Balance, power engineering field
Name and type of the institution providing education	Polytechnic University of Timisoara, Romania
Period	2000, 3 months
Qualification/ diploma	Specialization
Main fields approached/ acquired skills	Environmental impact assessor
Name and type of the institution providing education	Ecological University of Bucharest
Period	1999 - 2001
Qualification/ diploma	Master diploma
Main fields approached/ acquired skills	Evaluation of the anthropical impact; field Environment engineering
Name and type of the institution providing education	University of Petrosani, Faculty of Mines
Period	1990-1996
Qualification/ diploma	PhD diploma
Main fields approached/ acquired skills	Engineering Sciences, specialization Power systems engineering
Name and type of the institution providing education	Technical University of Petrosani
Period	1981, 1 month
Qualification/ diploma	Specialization
Main fields approached/ acquired skills	Data automated processing in mining industry
Name and type of the institution providing education	Ministry of Mines, Oil and Geology – Staff improvement Center in Bucharest
Period	1980, 3 months
Qualification/ diploma	Specialization

Main fields approached/ acquired skills | Analyst-Programmer

Name and type of the institution providing education | Central Institute for Management and informatics, Bucharest ICI, CTCE- Sibiu, Romania

Period | 1973-1978

Qualification/ diploma | Engineer diploma

Main fields approached/ acquired skills | Electrical engineering and power engineering

Name and type of the institution providing education | Mining Institute of Petrosani, Faculty of Mining Machines and Equipments, Department of the Mines Electrification and Automation, Petrosani, 1978

**Personal skills**

Power Engineering, Renewable Energy, Electro-technologies; Analyst -Programmer, the finite element modeling; Environmental Impact Assessor and Auditor, Power Systems Auditor and technical expert of the National Agency for Mineral Resources ANRM

Native language(s) | **Romanian**

Foreign language(s)

Self-evaluation

European level (\*)

**English**

**French**

Understanding				Speaking				Writing	
Listening		Reading		Conversation		Speech		Writing	
B2	Independent user	C1	Experienced user	C2	Experienced user	B2	Independent user	C1	Experienced user
A2	Elementary user	B1	Independent user	A2	Elementary user	A1	Elementary user	B1	Independent user

(\*)European Languages Framework

Social abilities

Team work (jointly participate in various research projects, collaboration with academic and professional membership of professional associations); communication skills obtained through teaching, publishing, and disseminating research results.

Organizational skills

Leadership; Organizational skills (as Chairman of the Women Union in the trade union from IMP, OPIR Department manager, manager of research projects); Experience in project management (participation in various projects, over 20 of them as project manager).

Technical skills

Good knowledge of technical and electro-mechanical equipments (acquired under professional circumstances and as the lab's person in charge)

Computer skills

Good knowledge of informatics tools: Microsoft Office and Internet, finite element analysis and modeling, simulation software, statistical and probabilistic analysis, etc. (all required under professional circumstances)

Driving license

B

**Didactic, scientific, and research activity**

I have elaborated books and teaching materials (12), I have published scientific articles (more than 160 scientific works published and/or presented at scientific symposia international and national out of which 16 are ISI indexed), I developed new laboratory works and I contributed to the modernization and equipping laboratories;

I have taken part in 14 research/development projects obtained owing to competition, during the last 10 years: national (10) and international (1), out of which 7 as a project manager. I have implemented over 50 R&D projects together with companies.

- Guest researcher in the international project **MINING II – Sal & Uranium Mines Closure manuals and Training** component, -**C & E Consulting und Engineering GmbH (Germany)** and RE GmbH (Germany) and ERCOSPLAN Ingenieurgesellschaft Geotechnick und Bergbau mbH (Germany), 2006 and *Technical and Environment Audit* component - **C & E Consulting und Engineering GmbH (Germany)** in association with RE (GmbH) (Germany), 2007
- Guest scientific consultant in the project **Intelligent Energy for Europe RESINBUIL**, Miercurea Ciuc, 2008
- Guest of the training program via learning platform in Integrated Project sponsored by the European Commission in support of the Strategic Objective "Networked businesses and government" set out in the IST 507849, Work program of FP6, 2006, Athens– **Advanced Technologies for Interoperability of Heterogeneous Enterprise Networks and Their Applications**, 2007.
- Initiation and development of bilateral relations between the University of Petrosani and didactical staff of Silesian University of Technology, Chair of Electrical Engineering and mining Automations, Gliwice, (2005) and Technical University of Ostrava, The institute of Economy and Systems Control, Ostrava (2007).
- Initiator of the agreement belonging to the ERASMUS/ Socrates Program with The Silesian University of Technology, Gliwice, 2006
- Visiting professor at The Silesian University of Technology, Gliwice, 2008 and The Technical University of Ostrava 2011.

#### Additional data

- **Expert evaluator** of the European Commission for research and innovation R&I, 2015
- **International expert** in research projects at *National Science Fund of Bulgaria* (2008, 2009),
- **Expert** for evaluation of Research project in Higher Education CNCISIS, CEEX, PN II, beginning with 2004
- **Expert** of the Romanian Agency for Quality Assurance in Higher Education (ARACIS);
- **Technical expert** for RAMR Romanian Agency of Mineral Resources;
- **Expert** on the government level at the UN Economic Commission for Europe at the meeting of the Working Group on Clean Energy from fossil fuels, **10th Session Group of Experts on Cleaner Electricity Production from Fossil Fuels\_ (21 October 2014) Salle VIII, Palais des Nations, Geneva**
- **Expert** in POS DRU project no.2/1.2/S/2 ETS "Development of an operational system of higher education in Romania DOCIS, ACPART European Social Fund co-financed by the Sectoral Operational Programme 2007-2013; [www.acpart.ro/docis](http://www.acpart.ro/docis)
- **Member of the Academy** of Natural Sciences of the Russian Federation, 2015
- I have been part of acknowledged international bodies in the field of *IEEE, Institute of Electrical and Electronics Engineers, since 2007*, IEEE Geoscience and Remote Sensing Society, IEEE Power & Energy Society, Robotics and Automation Society; Int. Society of Automation and Robotics in Construction *ISARC since 2010* and national organisms:
- *Member of the National Romanian Committee of the World Energy Council, beginning with 2009, Romanian National Institute for Development Studies the Use of Energie Sources since 2011, Member of AGIR, Romanian Engineers General Association, 2008, Member of the Society of Geo-resources and Environment, University of Petrosani, beginning with 1998; Member of the Computer Assisted Engineering Society, Technical Constructions University of Bucharest, beginning with 1995.*
- Project manager Diploma, Series F/ 0240143; Manager of the quality management, specialization, series F/ 0318224; Public acquisitions expert, series F/ 0240459, Craiova, 2009

- Member of the scientific board at the *2nd International Conference on Energy Systems, Environment, Entrepreneurship and Innovation*, Antalya 2013
- Member of the scientific board /reviewer of the *2nd International Conference on Applied and Computational Mathematics (ICACM '13)*, Vouliagmeni, Athens 2013
- Session Conveyor of Scientific Session on *Mineral resources, Energy and Sustainability at the 13 th Int. GeoConference SGEM2013*, Albena 2013,
- Member of the International Advisory Committee of *17 th International Mining Congress & Exhibition of Turkey*, Ankara 2001 (ISI);
- Member of the program committee of the International Symposium *Environment and Mineral Processing* from the University of Technology Ostrava: Czech Republic, since 2007
- Member of the international committee of the Int. symposium *Advances in Mining Technology and Management*, IIT Kharagpur, India, 2005,
- Member of the program committee of the *International Symposium on Computer applications in the Minerals Industries CAMI and MPES*, Banff, Canada, 2005,
- Member of the scientific board and reviewer at *Int. Journal "Environmental & Socio-Economic Studies"* University of Silesia, 2013
- Member of the organizing committee of Workshop in Int. Symp. SESAM 2009 and of Int Symp. SESAM 2013,
- Member of the organizing committee of the Int. Symp. SESAM 2013, SESAM 2015
- Associate Editor of *Mining Revue* ISSN-L 1220-2053/ ISSN 2247-8590 (since 2012)
- Editor of the *Annals of the University of Petrosani, Electrical Engineering* series (since 2012)
- e-Editor of Int. Symposium SIMPRO 2012, Univ. Din Petrosani, proceedings, 2012,
- (Eds) **Arad, S.**, Man, E.T., Panagopoulos, Th., Radu, S., Fernandes de Arroyabe, P., Halbac-Cotoara-Zamfir, R., Kattel, G., Sopian, K., Zaharin, A., *Recent advances in Energy, environment and geology*. Energy, Environmental and Structural Engineering Series 18, Published by WSEAS Press ISSN 2227-4359, ISBN 978-960-474-338-4, Antalya, 2013 <http://www.wseas.org/main/books/2013/Antalya/NEGIC.pdf>
- (Eds) Arad, V., **Arad, S.**, Vlasin, N. *Int. Symp. Universitaria SIMPRO 2014*, Univ. of Petrosani, proceedings 2014, <http://upet.ro/simpro/2014/proceedings/Proceedings%20SIMPRO%202014.pdf>
- Diploma of excellence in area of health and safety in labour, INSEMEX Petrosani, 2006, 2013, 2014
- Jubilee Medal "150 de ani de învățământ superior minier în România", University of Petrosani, 2014.
- Jubilee Medal "50 de ani de la înființarea Facultății de Electromecanică minieră", Faculty of Mechanical and Electrical Engineering, 2007
- Jubilee Medal "50 de ani de la înființarea Universității din Petroșani", University of Petrosani, 1998.
- Jubilee Medal "40 de ani de la înființarea Facultății de Electromecanică minieră", Faculty of Mechanical and Electrical Engineering, Petrosani 1997.

**Important scientific works**

1. **Arad S.**, Arad V., Bobora, B. *Robotics and automation in construction, Chapter 23: Advanced Control Schemes for Cement Fabrication Processes*, InTech Education and Publishing, Vienna, Edited by: C. Balaguer and M. Abderrahim, ISBN 978-953-7619-13-8, pp 381-404, 404 pg, 2008, <http://www.intechweb.org/book.php?id=82>
2. **Arad, S.**, Arad, V., Onica, I., Oprina, A, Chipiesiu, F, Mitrica, B, Apostu, A., Margineanu, R.. *Stability study for a large cavern in salt rock from Slanic Prahova*, ACTA PHYSICA POLONICA B, Editor: Michal Praszalowicz, Vol 41, No. 7, pp 1789, ISI Web of Science Thomson Reuters Master Journal List, Cracow, Poland, 2010
3. **Arad, S.**, Cierpisz, S., Arad, V., *The Informatics System Infrastructure in Coal Preparation plant from Romania*, IEEE Conference Publications, THE INTERNATIONAL CONFERENCE ON COMPUTER AS A TOOL, VOLS 1-6, Pages:1980-1984, 2007. ISBN: 978-1-4244-0812-2, ISBN: 1-4244-0813-X, DOI: 10.1109/EURCON.2007.4400704, Inspec and Ei Compendex indexed, IEEE Xplore, IDS Number: BHX65, ISI Web of Knowledge, WOS:000257261901098, Warsaw, Poland, 2007,
4. **Arad, S.**, Arad, V., Lupu, L., *The remote control of Electric Devices, Protection, Control and Monitoring Systems.*, 2006 IEEE International Symposium on Industrial Electronics , IEEE Conference Publications, vol I, pp 267-271, ISSN 0018-9219, ISBN 1-4244-0497-5. **Indexed by IEEE Xplore, INSPEC, ISI Web of Knowledge**, Accession Number: 9132144, Digital Object Identifier 10.1109/ISIE.2006.295604, WOS: 00024438290047,2006, Montreal, Que, Canada, 2006
5. **Arad S.**, Arad V., Bobora, B. *Robotics and automation in construction, Chapter 23: Advanced Control Schemes for Cement Fabrication Processes*, InTech Education and Publishing, Vienna, Edited by: C. Balaguer and M. Abderrahim, ISBN 978-953-7619-13-8, pp 381-404, 404 pg, 2008, <http://www.intechweb.org/book.php?id=82>
6. **Arad, S.**, Arad, V., Bobora, B. *Cement Production at Deva Cement Factory from Romania*, 23<sup>rd</sup> ISARC2006 Proceedings CD, C8 Plant and Dismantling IAARC Publ. Int. Assoc.Aut. Rob.Constr., pp. 806- 809, ISBN 4-9902717-1-8, hosted on-line by IAARC on website: <http://www.iaarc.org/external/isarc2006-cd/> [www/ISARC2006/SessionC8.pdf](http://www.ISARC2006/SessionC8.pdf), indexed by **Scopus**, cod Code 89645, Tokio, Japan, 2006,
7. **Arad, S.**, Arad, V., *Heat transfer in rotary kiln from Deva cement factory*. Papers SGEM2012/ Conference Proceedings/ISSN 1314-2704, 2012, Vol. 2, 373 - 380 pp, DOI: 10.5593/SGEM2012/S04.V2003, indexed by **Scopus** Code 101586, **CrossRef, ProQuest, EBSCO**, Albena Co., Bulgaria, 2012, <http://sgem.org/sgemlib/spip.php?article1975&lang=en>
8. Stepanescu, S., Rehtanz, C., **Arad, S.**, Fotau, I., Marcu, M., Popescu, FI. *Implementation of small water power plants regarding future virtual power plants*. Conference Proceedings EEEIC 2011, Environmental and Electrical Engineering ISBN: 978-1-4244-8779-0, pgs. 473-477, **Indexed by Inspec, IEEE Xplore, Scopus, INSPEC** Accession Number: 12050488, DOI [10.1109/EEEIC.2011.5874649](https://doi.org/10.1109/EEEIC.2011.5874649), indexed by Scopus, Article number 5874649, Rome, 2011,
9. **Arad, S.**, Samoila, L., Petre, M. *Simulator for Studying the Wind Turbines Work*, IEEE-EEEIC 2015, 15th International Conference on Environment and Electrical Engineering (EEEIC) IEEE Publisher, pp. 1093 – 1098, ISBN: 1479979937, 9781479979936, E ISBN:1479979937, 9781479979929, 9781479979936, 1479979929, DOI:10.1109/EEEIC.2015.7165319, Source: **Scopus IEEE/IET Electronic Library (IEL)** INSPEC Accession Number: 15310242, Rome, Italy, 2015
10. **Arad, S.**, Pana, L., Popescu, FI. *Energy metering from the Lonea Colliery compressors*. Mining Review ISSN L 1220-2053, ISSN 2247-890, Universitas Publishing House, Indexed EBSCO, pg. 39-44, Vol 19, No 2/2013, <http://www.upet.ro/revistaminelor/>, [http://www.cncsis.ro/cenaposs/2007/Arhiva/reviste\\_cat\\_B+\\_07.pdf](http://www.cncsis.ro/cenaposs/2007/Arhiva/reviste_cat_B+_07.pdf)

I declare that the above information are true

Prof. Susana Arad Ph.D

**Petrosani, 01.10..2015,**