

## Curriculum vitae Europass



### Informații personale

First name(s) / Surname(s) **Dumitru –Victor, Arad,**  
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Nationality Romanian  
Date of birth 01.12.1951  
Gender Male

**Occupational field** **Panel 2 from CNATDCU, UEFISCDI, committee of geological engineering, geodesic engineering, mining, oil and gas**

### Work experience

Dates April 2012-currently  
Occupation or position held **Vice Rector on the Research and Projects Management**  
Dates May 2011- currently  
Occupation or position held **Vice President of the Geological engineering, geodesic engineering, mining, oil and gas Committee, Panel 2 from CNATDCU (National Council for certification of academics Titles, Diplomas and Certificates) of the UEFISCDI**  
Dates October 2009 - currently  
Occupation or position held **Director** of Analysis and Testing Laboratory in Construction, 1-st Degree, No 2846/04.12.2013, Accredited by the State Construction Inspectorate, University of Petrosani  
Dates October 2004 - currently  
Occupation or position held **PhD supervisor** in Mining, Oil, Gas Field, at University of Petrosani  
Dates February 2008 - May 2011  
Occupation or position held **Head of Department, Department of Mining engineering and safety in industry**, University of Petrosani  
Dates October 1999 -currently  
Occupation or position held **Professor, Department of Mining Engineering, Surveying and Civil Engineering**, University of Petrosani  
Dates October 1980 until October 1999.  
Occupation or position held **Assistant Professor, Lecturer and Associate Professor**, Department of Mining Engineering,

Main activities and responsibilities Academic management, evaluation, management, control and coordination of PhD students at the University of Petroșani and CNATDCU; teaching activities and research activities, laboratory research coordination, management and execution in the accredited Laboratory of Analyzes and Tests in Construction.

Name and address of employer University of Petroșani, Universității Str, no. 20, Petroșani, Romania, [inginerie\\_miniera@yahoo.com](mailto:inginerie_miniera@yahoo.com), [VictorArad@upet.ro](mailto:VictorArad@upet.ro), [prorectorcercetare@upet.ro](mailto:prorectorcercetare@upet.ro), [www.upet.ro](http://www.upet.ro)

Type of business or sector Higher Education (teaching activity - research)

Dates From May 1977 to October 1980

Occupation or position held **Mining Engineer**, Petrila Coal Mine from Jiu Valley Mining Company

Main activities and responsibilities Execution and control responsibilities to the Petrila Mining, Ventilation, Safety and Health at Workers

Name and address of employer Petrila Coal Mine, Minei str, 332006 Petrila, Romania

Type of business or sector coal exploitation

Dates From August 1975 to May 1977

Occupation or position held **Trainee Engineer**, Hydro technical Construction Company -TCH Bucharest, Raul Mare Retezat Group

Main activities and responsibilities Execution and control of underground mining construction in hydro-electric site

Name and address of employer Râul Mare Retezat Group, sites Hateg, Romania

Type of business or sector Underground construction in hydro-technical -developments

## Education and training

Dates 2008/2009

Title of qualification awarded Specialization

Principal subjects/occupational skills covered Project Manager, Manager of Quality System Management.

Name and type of organisation providing education and training SC RADU & NISTOR IMOBILINVEST SRL, Craiova

Dates 2004, 5 days

Title of qualification awarded Specialization.

Principal subjects/occupational skills covered Quality management systems for certification of testing laboratories.

Name and type of organisation providing education and training RENAR, Romanian Accreditation Association.

Dates 1996, 1 month

Title of qualification awarded Specialization

Principal subjects/occupational skills covered Geomechanics, geotechnical and foundations, mining, underground mining construction, hydro construction, terrestrial communication routes, ventilation and occupational safety in the mining industry

Name and type of organisation providing education and training TEMPUS Program, Polytechnic University of Madrid, School of Mining and Energy Engineering, Spain

Dates 1990-1992

Title of qualification awarded Ph.D. Diploma

Principal subjects/occupational skills covered Engineering Sciences, Mining, Oil, Gas field: Geomechanics, Geotechnics and foundations, mining, underground mining construction, hydro construction, terrestrial communication routes

Name and type of organisation providing education and training University of Petroșani, Romania

Dates 1980, 1 month

Title of qualification awarded Specialization

Principal subjects/occupational skills covered Industrial explosive, ventilation and safety in the mining industry

Name and type of organisation providing education and training Ministry of Mines and Geology, Oil - MMPG-Staff Training Center Bucharest

Dates 1970-1975

Title of qualification awarded Engineer-Bachelor Degree  
 Principal subjects/occupational skills covered Mining engineering, Rock mechanics, Geological engineering, Ventilation and occupational safety, Underground Construction, Surveying  
 Name and type of organisation providing education and training Faculty of Mines, the Mining Institute of Petrosani, Romania

**Personal skills and competences** Mining engineering, Rock mechanics, Geological Engineering, Geomechanics, Environmental Geotechnics, Geotechnics and foundations, the Geomechanical risks in mining, Reference standards for the accreditation of testing laboratories: ISO / IEC 17025

Mother tongue(s) Romanian

Other language(s)

Self-assessment

European level (\*)

**French**

**English**

**Russian**

**Understanding**

**Speaking**

**Writing**

Listening

Reading

Spoken interaction

Spoken

Written expression

A2	Basic user	B1	Independent user	B1	Independent user	A2	Basic user	A2	Basic user
B2	Independent user	B2	Independent user	B2	Independent user	B1	Independent user	B1	Independent user
B2	Independent user	B2	Independent user	C1	Utilizator competent	B2	Independent user	B1	Independent user

(\*)Common European Framework of Reference for Languages

Social skills and competences Communication skills, availability, professional development; use of foreign languages

Organisational skills and competences Leadership - academic management, projects management;  
 Academic management: Vice-Rector of Research and Projects Management, University of Petrosani  
 Administrative Leadership:  
 Head of Department of Mining Engineering and Safety in Industry,  
 Director of the Laboratory of Analysis and Testing in Civil Engineering Degree I, authorized No 2846 / 12.04.2013, University of Petrosani;  
 Director of the research unit "Engineering of rocks, minerals and construction materials IRSMMC" certificate no.24 / CC - C, CNCSIS 2001, University of Petrosani;  
 Organizational Responsibilities in production;  
 Responsibilities in the Mining Engineering study programme accreditation (2009) and authorizing of the research laboratory for analyzes and tests in construction (2009) and reauthorized in 2013.

Technical skills and competences Technical skills - Research, design, manufacturing, tests.  
 - Knowledge and handling of machinery from Laboratory.

Computer skills and competences Good knowledge of IT & C and PC, Microsoft Office and Internet, acquired in a professional context, the use of foreign languages.

Skills and competences related to industry cooperation

- Technical Expert of the National Agency for Mineral Resources NAMR, Ministry of Economy and Trade Certificate no. 1477/29.05..2014.
- Expert at government level at the Economic Commission for Europe of the United Nations to the Working Group regarding the emissions of methane from coal mines, *9<sup>th</sup> Session Group of Experts on Coal Mine Methanethe, Joint Meeting of the UNECE and the Coal Subcommittee of the Global Methane Initiative*, Palais des Nations, Geneva October 21 to 22 2014.
- Member of the Steering Committee of the National Institute for Research and Development in Mine Safety and Protection to Explosion, INSEMEX-OEC Petrosani, Romania, since 2010.
- Organizing in partnership with the Canadian Embassy in Romania of a conference on "Corporate Social Responsibility in the exploitation of natural resources and ensuring sustainable development," March 2013;
- Scientific Consultant, invited within the *Intelligent Energy for Europe project RESINBUIL*, 2008.
- Visiting researcher in the international projects **Mining II** - Salt & Uranium Mines Closure component manuals and training, R & E Consulting und Engineering GmbH (Germany) and RE GmbH (Germany) and ERCOSPLAN Ingenieur gesellschaft Geotechnick und Bergbau GmbH (Germany), 2006 and Technical audit and environmental component - C & E Consulting und Engineering GmbH (Germany) in association with RE (GmbH) (Germany),
- Expertises to establish the causes that have produced a number of of technical accidents:
  - o Petrla Coal Mine in 2008, Vulcan Coal Mine in 2001, Uricani Coal Mine in 1999,
  - o S.N.S Bucharest: Ocna Mures in 2010, Ocnele Mari 2001 Targu Ocna 2005.

- Skills in the organization of conferences and scientific meetings
  - Member of the Scientific Committee and Section chairman of the 3rd International Symposium on Mine Safety Science and Engineering, ISMS 2016 organized by McGill University in Montreal, Canada, 2016
  - Member of the scientific committee of Multidisciplinary Symposium WMEES Earth Science conference, Prague, 2015.
  - Chairman of the Scientific Committee and Executive Chairman of the Organizing Committee of the International Multidisciplinary Symposium *Universitaria SIMPRO*, University of Petrosani, 2012, 2014
  - Member of the Scientific Committee of the International Symposium SESAM 2013, 2015, INCD INSEMEX Petrosani
  - Member of the scientific committee of SGEM International Multidisciplinary Scientific GeoConferences Albena, Bulgaria, since 2013.
  - Member of the scientific committee of the symposia: 4th European Conference of Civil Engineering (ECCIE '13) and 1st European Conference of Mining Engineering (MINENG '13), Antalya, 2013
  - Member of the scientific board of the Mining Revue, ISSN-L 1220-2053/ ISSN 2247-8590 University of Petrosani, since 2008
  - Member of the scientific board of the international journal CUPRUM Magazine, Editor KGHM R & D Centre Ltd. CUPRUM, 2014.
  - Member of the Scientific organizing Committee of the International Symposium 12<sup>th</sup> International Conference on Heat Transfer, Thermal Engineering and Environment HTE'14, Geneva, 2014.
  - Member of scientific committee of organization of the International Symposium Advances in Mining Technology and Management (AIMM), IIT Kharagpur, India, 2005;
- Skills in editorial and review activity
  - Editor chief of the Mining Revue, Universitas Publisher, Petrosani since 2012 and Member of the Scientific Committee since 2008, <http://www.upet.ro/revistaminelor/>.
  - Editor of the book "Recent Advances in civil and mining engineering" Antalya, 2013 ISSN: 2227-4588 ISBN: 978-960-474-337-7
  - Editor of the Proceedings of Int. Symposium Universitaria SIMPRO, Universitas Petrosani, 2012, 2014
  - Reviewer in *Proceedings of Institution of Civil Engineering, Geotechnical Engineering Journal*, published by ThomasTelford, <http://www.thomastelford.com/journals> 2008, 2009;
  - Reviewer in *Materials Characterization*, Elsevier Journal, 2010;
  - Reviewer in *The Institution of Engineers (India), The Mining Engineer's Journal*, Vol -9 No -4, pp 9-14 (2007)
  - Reviewer of the *Annals of Mining Engineering*, University of Petrosani
  - Reviewer of the Mining Revue „Universitas” Publisher, University of Petrosani, indexed BDI and CNCSIS B+.

## Additional information

### Teaching, scientific and research

The teaching and research and development activities were conducted in the Department of Mining Engineering, Surveying and Construction since 1980.

Activity of research and development focused on three areas: (1) The stability of underground and surface, (2) efficiency techniques and technologies mining considering the geomechanical studies, (3) risks in mining and post mine closure impact mining industry on the environment.

The research has resulted through total of 236 research projects / development. Teaching and scientific activity is materialized in 20 Reference Books and teaching materials in recognized national and international publishers and over 225 scientific papers of which 31 are Web of Science indexed

### International research. Visits to documentation and training

- International PhD supervisor in Co-tutelle at the Technical University of Moldova, Chisinau.
- Visiting Professor at the University of Technology Wroclaw, Poland, 2008
- Visiting professor at the Technical University of Moldova, Chisinau, 2008, 2009, 2010, 2014
- Documentation at RWTH Aachen University, Polytechnic University of Torino, University of Technology Ostrava, TU Bergakademie Freiberg, University of Technology Wroclaw, National University of Mineral Resources "University of Mines" Saint-Petersburg, Russia, National University of Science and Technology "MISIS" Moscova, Rusia, IIT Kharagpur, India, IIT Danbad, India.

- National and international recognition**
- Correspondent member of **Academy of Technical Sciences of Romania ASTR-** Section X of Petroleum Engineering, Mining and Geonomy, since 2015;
  - **Russian Academy of Natural Sciences** - Section of Mining and Metallurgy, member since 2015;
  - **Mining Academy of Sciences of Ukraine**, member since 2010;
  - **SOMP, Society of Mining Professors**, 2004;
  - ARMR, - Romanian Association of Fracture Mechanics, 2007;
  - ISGF (Soc. Int. The Foundations and Geotechnics) and SRGF (Romanian Society of Geotechnical and Foundations , 2007;
  - SoGeReM, Georesurse Society and Environment, University of Petrosani , 1999;
  - SME, Society for Mining, Metallurgy and Exploitation, SUA, 1995;
  - ART, Romanian Association of tunnels, Technical University of Civil Engineering Bucharest , 1995;
  - SIAC, Society for Computer Aided Engineering, Univ. Civil Engineering Bucharest, 1994;
  - AIM, Asociation de Ingenieros de Minas d'España, Grupo Especializado de Geomecanica, Universidad Politecnica de Madrid, Spania1996;
  - Expert Research in Higher Education, Certificate CNCISIS no.1297/11.05.2001,
  - Expert in RNE - ARACIS since 2011.
  - Representative professor of the University of Petrosani and signatory of the Declaration of consensus on the establishment of the World Forum of Universities of Resources on Sustainability WFURS signed in TU Freiberg 2012.
  - Main representative professor of the University of Petrosani to the inter-governmental body of Member States ICSTI, Moscow 2014.
  - Member of Commission of reviewing in over 20 doctoral theses in the country and abroad:
    - o Member of the evaluation of the activity on the application *Higher Doctorat a d-lui Dr. A.K.M. Rainbow, Consultants on Reclamation, Treatment and Utilization of Coal Mining Wastes*, University of Nottingham, Anglia, 791/ 10.10.2003;
    - o Member of the evaluation of the activity on tDr. *Samir Kumar Das*, Associate Professor in Department of Mining Engineering at Indian Institute of Technology Kharagpur, to obtain the title of professor, IIT Kharagpur, India, 2004;
    - o Member in the comission of evaluation, for obtaining the title of PhD, of the PhD thesis: *Suitability of Fly Ash Amended Overburden Dump Soil of Opencast Mines for the Cultivation of Crops – An Investigation*" autor Gyan Prakash Singh, IIT Kharagpur, 2007;
- Medals and distinctions**
- Diploma of Excellence in Health and Safety at Work, INSEMEX Petrosani, 2006, 2009, 2013, 2014,2015.
  - Jubilee Medal "65 years after the establishment of the University of Petrosani", University of Petrosani, 2013.
  - Jubilee Medal "60 years of the University of Mining and Geology Ivan Rilski" Sofia, Bulgaria, 2013
  - Jubilee Medal "150 years of higher mining education in Romania", 2014
  - Jubilee Medal "125 years since the Founding of Kharkov Technical University" Ukraine .2010
  - Jubilee Medal "50 years after the establishment of the University of Petrosani", University of Petrosani, 1998.
  - Jubilee Medal "50 years since the establishment of the Faculty of Mining Electromechanics , Faculty IME, University of Petroșani, 2007.
  - Medal awarded by the administration Belfort " Belfort- Territoire des'Energies, Cite du Lion" in 2007
- Representative scientific papers and books**
- Arad, V.**, Radermacher, L., *Concrete - theory and laboratory*, Focus Publishing House, 2015, ISBN 978-973-677-294-8, 247 pgs., 2015.
- Arad, V.**, Radermacher, L., *Construction materials - Theory and laboratory*, Universitas Publishing House, Petroșani, ISBN 978-973-741-379-6, 243 pgs., 2014.
- Arad, V.**, Radermacher, L., *Mechanics of construction materials. Stability of constructions*, Universitas Publishing House, Petroșani, ISBN 978-973-741-374-1, 336 pgs., 2014.
- Arad, V.**, Radermacher, L., *Risk assessment and management in mining and constructions*, Universitas Publishing House, Petroșani, ISBN 978-973-741-380-2, 311 pgs., 2014.
- Arad, V.**, *Geomechanical risks in mining industry*. Universitas Publishing House, ISBN 978-973-741-320-0, Petrosani, 2013.
- Arad, V.** *Rock mechanics*, Focus Publishing House, Petrosani, ISBN 978-973-677-227-6, 2010.
- Arad, V.**, Goldan, T., *Geomechanics and underground mining technologies*, Focus Publishing House, Petrosani, ISBN 978-973-677-142-2, 2009.
- Arad, V.**, Stog I., Polcanov V.,. *Geomechanics*, Tehncia Info Publishing House, Chișinău, ISBN 978-9975-63-153-2, 248 pagini, 2009

- Arad V.**, *Saline rock mechanics*, Focus Publishing House, Petroșani, ISBN 978-973-677-136-1, 212 pgs., 2008.
- Arad, S., **Arad, V.**, Bobora, B., *Robotics and automation in construction, Cha 23: Advanced Control Schemes for Cement Fabrication Processes*, Ed. InTech Education and Publishing Viena, Edited by: C. Balaguer and M. Abderrahim, ISBN 978-953-7619-13-8, pp 381-404, 404 pgs, 2008.
- Arad, V.**, Todorescu A. *Rocks' engineering and surface structures*, Risoprint Publishing House, Cluj-Napoca, ISBN 973-751-163-8; 978-973-751-163-8, 2006.
- Arad, V.** *Rock mechanics*, E.D.P. Bucuresti, ISBN 973-30-2610-7, 522 pgs., 2004
- Arad, V.**, Arad, S., Cosma, V., 2015. *Geo-mechanic study regarding the stability of the surface mining constructions belonging to the mining perimeter of Certej*, **Conference Papers** of the 3rd International Copper Ore Mining Congress, September 16 to 18, Lubin, Polonia.
- Suvar, M. C., Lupu, C., **Arad, V.**, Cioclea, D., Pasculescu, V., Mija, N., 2014. *Computerized simulation of mine ventilation networks for sustainable decision making process*. Environmental Engineering and Management Journal, Vol.: 13, Issue: 6, 1445-1451 pp., Publisher GH ASACHI TECHNICAL UNIV IASI, **ISI Web of Science**, Accession Number: WOS:000344577300021, ISSN: 1582-9596, eISSN: 1843-3707, Iasi, Romania,
- Arad, S., **Arad, V.**, Suvar, M., Vlasin, N., *Coal mine methane as an energy resource for Romania. Latest Innovations in Mining Education & Research*, Proceedings of the 26<sup>th</sup> Annual General Meeting & Conference of the Society of Mining Professors (SOMP), pp. 185 – 191., ISBN 978-3-86012-505-2, Freiberg, Germany, 2015,
- Veres, I., **Arad, V.**, Radu, S., Plesea, V., *Considerations on the possibility to improve the supporting of underground workings in the mining basins from Romania*. Latest Innovations in Mining Education & Research, Proceedings of the 26<sup>th</sup> Annual General Meeting & Conference of the Society of Mining Professors (SOMP), pp. 219 – 225, ISBN 978-3-86012-505-2, Freiberg, Germany, 2015
- Suvar, M., Cioclea, D., Vlasin, N., Lupu, C., Pasculescu, V., **Arad, V.**, Arad, S., 2015. *Study on the possibility for restoring a mine ventilation network affected by an explosion.*, 7<sup>TH</sup> International symposium on occupational health and safety, Int. Symp. SESAM 2015 Proceedings, Vol. 2, pp. 481-490, ISSN 1843 – 6226, Poiana Brasov, Romania,
- Arad, V.**, Arad, S., Apostu, S., Baraiac, O., , 2012. *The impact of coal mining in Jiu Valley on environment and rehabilitation of the area*. 12th International Multidisciplinary Scientific Geoconference, SGEM 2012, Vol. I, 877 - 884 pp, **ISI Web of Science** WOS: 000348530900112, DOI: 10.5593/SGEM2012/S03.V1064, Albena, Bulgaria
- Arad, V.**, Veres, I., Arad, S., Rotaru, R., 2012. *Study on the surface instability of the salt exploitation area in Ocna Mures*, 12th International Multidisciplinary Scientific Geoconference, SGEM 2012, Vol. I JUN 17-23, , 779 - 786 pp, **ISI Web of Science**, WOS: 000348532700099, DOI: 10.5593/SGEM2012/S07.V2015, Albena, Bulgaria.
- Robert, S. Csaba, B. **Arad, V.** Arad, S., 2012. *Rehabilitation method of the areas which are naturally contaminated with heavy elements in metaliferous district of Balan – Immobilizations with apatite*. 12th International Multidisciplinary Scientific Geoconference, SGEM 2012, Vol. V., 675 - 684 pp, **ISI Web of Science** WOS: 000348536400091, DOI: 10.5593/SGEM2012/S20.V5091, Albena, Bulgaria,
- Robert, S. Csaba, B. **Arad, V.** Arad, S., 2012. *Utilization of the Chauvenet statistical test in environmental researches respectively biogeochemical prospection for establishment of fund value, threshold value and anomalous values*. 12th International Multidisciplinary Scientific Geoconference, SGEM 2012, Vol. V, 995 - 1000 pp, **ISI Web of Science** WOS: 000348536400134, DOI: 10.5593/SGEM2012/S20.V5134, Albena, Bulgaria,
- Arad, V.**, Arad, S., Nita, A., Baciu, F., Nistor, C., Anca, D., 2011. *Geomechanical characterization of rocks from Sibiu County used in construction*, Proceedings Paper, International Multidisciplinary Scientific Geo Conference, pp. 467-473, , DOI: 10.5593/sgem2011, ISSN 1314-2704, **Indexed into ISI Web of Knowledge**, Web of Science, CrossRef and Scopus, WOS:000307366000063, DOI: 10.5593/SGEM2011/S02.119, Albena, Bulgaria
- Arad, S, **Arad, V.**, 2012. *Heat transfer in rotary kiln from Deva cement factory*. 12TH INTERNATIONAL MULTIDISCIPLINARY SCIENTIFIC GEOCONFERENCE, SGEM 2012, VOL. II, 373 - 380 pp, ISSN 1314-2704, 2012, DOI: 10.5593/SGEM2012/S04.V2003, indexed by **ISI Web of Science**, CrossRef and Scopus, ProQuest, EBSCO, Accession Number: WOS:000348532700048, DOI: 10.5593/sgem 2012, Scopus Code 101586, Albena Co., Bulgaria,
- Arad, S., **Arad, V.**, Onica, I., Oprina, A, Chipiesiu, F, Mitrica, B, Apostu, A., Margineanu, R.. 2010. *Stability study for a large cavern in salt rock from Slanic Prahova*, ACTA PHYSICA POLONICA B, Editor: Michal Praszalowicz, Vol 41 No. 7, pp 1789-1802, Cracow, Poland, PL ISSN 0587-4254, Elsevier B.V., **WorldCat, ISI Web of Science Thomson Reuters Master Journal List**, (SRI-0.54).

**Arad, V.**, s.a., 2008, *State of stress simulation during mining of salt in solution*, Rock Mechanics: Meeting Society's Challenges and Demands, Vols 1 and 2, Eberhardt, Steed & Morrison (eds) Published by Taylor&Francis Group, London/Balkema, Proc. and Monographs in Engineering, Water and Earth Sciences, Vancouver Canada, ISBN 978-0-415-44401- 9, Vol 2, pp. 1489-1493, **Scopus indexed, ISI Web of Knowledge**, WOS:000252215300185, DOI 10.1201/NOE0415444019-c185,.

Arad, S., **Arad, V.**, Vereş, J.,s.a. 2008. *Safety Excavation in Salt Rock used for underground storage in Romania*. Proceedings Paper, 25th International Symposium on Automation and Robotics in Construction-ISARC-2008, pp 265-271, ISBN. 978-9955-28-304-1, IDS Number BID71, Vilnius Gediminas Technical Univ Press, editors: E. K. Zavadskas, A. Kaklauskas, M. J. Skibniewski, DOI 10.3846/isarc.20080626.265 2008, **Indexed into Thomson Reuters ISI Proceedings Database**, DI 10.3846/isarc.20080626.265 UT WOS:000258743700038.

## Significant R & D projects:

**Research project no. 634/2015** with National Gas Transport Company Transgaz Medias of Romania. *Research study on the location of natural gas transmission pipelines in areas with possible subsidence phenomena. Case study research on the location of natural gas transmission pipelines -Romania- Hungary-Bulgaria route in the Jiu Valley mining area.*

**Research project no. 2, 15, 2011-2012** with SAMAX Romania, „Determining the geo-mechanical characteristics of the rocks samples. The rock samples belong to AGP Rovina Project, no RO-635”.

**Contracts No.: 1, 15, 19, 20, 22, 24, 25, 26, 28,/2015 SC Deva Gold SA** "Objective Certej - Geotechnical research of the future locations of stockpiles of tailings north and south". *Research on the rocks quality used in construction.* (Pricipal investigator).

**Contracts no. 1, 5, 7, 8, 10, 11/2015 SC CARA SRL** "Objective Certej - geotechnical research of the future locations of stockpiles of tailings north and south", (Pricipal investigator).

**Research project 1/2009/828** with INCD Physics and Engineering IFIN-HH Bucharest, *Stability study and the 3D model of a large-scale excavations carried out in Slănic Prahova salt deposit.* Study Design supports FP7 project 212343 of the European Infrastructure for Large Apparatus pan stuying Grand Unification and Astrophysics Neutrio-LAGUNA, (Pricipal investigator).

**PN07-45 Nucleu Project-INCD INSEMEX, 17/2008** subcontract with University of Petroşani. *Developing national capacity for assessing, preventing and limiting the risks of industrial applications deployed in hazardous environments and / or toxicity in staff health and safety, environmental protection, mineral resources and materials / RISCMAJOR*, Stage 2008: Dynamics of migration research by soils of natural gas pipeline distribution of defects depending on soil structure and the elements of buried infrastructure. Phase IV - Research on the dynamics of methane gas movement through various soil types. Soil sampling and determination of permeability samples, phase IV, 2008 (Pricipal investigator).

**GEF GRANT nr. TF 053472 RO; 3.2-W/2006**, Hazards Risk Mitigation and Emergency Preparedness Project Componenta D "Reducerea Riscului de Producere a Accidentelor Miniere în Bazinul Tisei", finanţat de Banca Mondiala/FGM si Guvernul Romaniei si este coordonat de Agenţia Naţională pentru Resurse Minerale prin Unitatea de Management a Proiectului. Task: *Investigaţii de teren la iazurile de steril de mină aparţinând de exploatarea minieră Roşia Poieni - Licitajie obţinută de MINEXFOR Deva, Subcontr. Univ. Din Petroşani 27/2007, Determinarea caracteristicilor geomecanice ale rocilor cu impact asupra stabilităţii iazurilor de decantare şi a haldelor de steril aparţinând de Exploatarea Minieră Roşia Poieni.*

**Research project No 23/2009** with CNH Petrosani- EM Petrla, *Study on how the event influenced phenomena geomining seam 3, BL II, Horizon 250 from Petrla Mining dated 15.11.2008, ()*

**Reserch Grant R03/2007**, International joint research project with the partner country: India, from 2007 to 2010: *The Environmental Impact of Mines closure and ecological rehabilitation of mining area of India and Romania* (project director V. Arad), funded by ANCS

**Reserch Grant-MENER PNCDI 481/2004 -2006.** *Instability phenomena manifested in a salt mine deposit due to stress and consequences of environmental exploitation*, P1: ICPM MINESA SA Cluj-Napoca, P2: Univ. the North East, P3: Babes Bolyai University of Cluj Napoca, P4: SNS Bucharest. (Pricipal investigator).

**Reserach Grant 11/2005** with CONVERSMIN Bucharest, under convention with CEPROMIN Deva. *Technical Project closure and ecological objectives IX package, 2005.*

I declare that the above information are true,

**Professor, Dumitru Victor ARAD Ph.D.**

