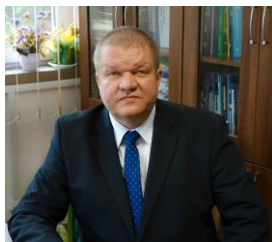


## PERSONAL INFORMATION

## Alexandru Ozunu



📍 Fântânele Street no. 30, 400294, Cluj-Napoca, Cluj County, Romania

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💬 Skype etc.: alozunu

Sex M | Date of birth 11.04.1961 | Nationality Romanian

## WORK EXPERIENCE

- |              |   |
|--------------|---|
| 2012-present | <p><b>Professor PhD Engineer, Dean of Faculty of Environmental Science and Engineering</b><br/> Babes-Bolyai University, Cluj-Napoca, Romania, Faculty of Environmental Science and Engineering<br/> Fântânele Street no. 30, tel 0264 - 307030 Cluj-Napoca</p> <ul style="list-style-type: none"> <li>▪ Academic leadership activities within the faculty as dean, teaching and research in the Department of Analysis and Environmental Engineering, Ph.D. coordination in Environmental Science</li> </ul> <p>Education and research</p>   |
| 2008-2012    | <p><b>Professor PhD Engineer, Vice Dean of Faculty of Environmental Science and Engineering</b><br/> Babes-Bolyai University, Cluj-Napoca, Romania, Faculty of Environmental Science and Engineering<br/> Fântânele Street no. 30, tel 0264 - 307030 Cluj-Napoca</p> <ul style="list-style-type: none"> <li>▪ Academic leadership activities within the faculty as vice dean, teaching and research activities in the Department of Physics, Chemistry and Environmental Engineering, Director of Regional Center for Disaster Management, Ph.D. coordination in Environmental Science</li> </ul> <p>Education and research</p> |
| 2002-2008    | <p><b>Associate Professor</b><br/> Babes-Bolyai University, Cluj-Napoca, Romania, Faculty of Environmental Science and Engineering<br/> Fântânele Street no. 30, tel 0264 - 307030 Cluj-Napoca</p> <ul style="list-style-type: none"> <li>▪ Teaching and research in the Department of Physics, Chemistry and Technology</li> </ul> <p>Education and research</p>   |
| 2001-2005    | <p><b>Director of College for Environmental Protection, Turda</b><br/> College for Environmental Protection, Turda, Cluj, A. Vlaicu Street No 7</p> <ul style="list-style-type: none"> <li>▪ Organizer of the "Environmental Protection" authorized specialization (3 years, short-term), that becomes a bachelor specialization, "Environmental Engineering" (4 years) in 2005</li> </ul> <p>Education</p>   |
| 2000-2002    | <p><b>Associate Professor</b><br/> Babes-Bolyai University, Faculty of Chemistry and Chemical Engineering, Cluj-Napoca, Romania, Arany Janos Street no. 11</p> <ul style="list-style-type: none"> <li>▪ Teaching and research: risk and safety assessment, Design of chemical plants, Hazard and Risk in the chemical industry, Chemical reaction engineering and specific equipments</li> </ul> <p>Education and research</p>  |
| 1994-2000    | <p><b>Assistant Professor</b><br/> Babes-Bolyai University, Faculty of Chemistry and Chemical Engineering, Cluj-Napoca, Romania, Arany Janos Street no. 11</p> <ul style="list-style-type: none"> <li>▪ Teaching and research: Design chemical plants, Hazard and Risk in chemical industry, Chemical reaction engineering and equipment specific, Transfer phenomena</li> </ul> <p>Education and research</p>  |
| 1991-1994    | <p><b>Assistant Lecturer</b></p> <p>Education and research</p>  |

Babes-Bolyai University, Faculty of Chemistry and Chemical Engineering, Cluj-Napoca, Romania,  
Arany Janos Street no. 11

- Teaching and research: Transfer phenomenon, Chemical reaction engineering and specific equipments, Design of chemical plants

Education and research

1986-1991

**Engineer**

Production activities: Plant for binders and refractory material, Turda

Production activities

## EDUCATION AND TRAINING

1993-1998

**PhD in Chemical Engineering**

EQF level 8

Faculty of Chemistry and Chemical Engineering, Babes-Bolyai University, Cluj Napoca

- Chemical technology (transfer phenomena)

1981-1986

**Engineer (Dipl.)**

EQF level 6

Polytechnic University of Bucharest, Faculty of Equipments and Chemical Process Engineering

- Specialisation: mechano-chemical; specialization: Equipments and Chemical Process Engineering

Mother tongue(s) Romanian

Other language(s)

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
English	C2 Proficient user	C2 Proficient user	C2 Proficient user	C2 Proficient user
Replace with name of language certificate. Enter level if known.				
German	B2: Independent user	B1: Independent user	B2: Independent user	B2: Independent user
Replace with name of language certificate. Enter level if known.				

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user  
Common European Framework of Reference for Languages

Communication skills ▪ good communication skills gained through my experience as a university professor

## PERSONAL SKILLS

Organisational / managerial skills	<ul style="list-style-type: none"> <li>▪ Leader</li> <li>▪ Organizational skills</li> <li>▪ Experience in project management</li> <li>▪ Founder and coordinator of the Research Institute for Sustainability and Disaster Management based on High-Performance - ISUMADECIP.</li> <li>▪ From academic year 2003, organizer and head of the master specialization "Risk assessment and environmental security"</li> <li>▪ From academic year 2006-2007, organizer and head of postgraduate specialization course lasting one semester called "Risk Assessment in the Context of Seveso Directives"</li> <li>▪ Founding member of the Research Center for Disaster Management, within the Babes-Bolyai University of Cluj-Napoca</li> <li>▪ From academic year 2014, organizer and head of the master specialization "Sustainable development and environmental management", in English</li> <li>▪ Coordinating Editor of the Journal of Civil Protection (2008)</li> <li>▪ Initiator and organizer of International Conference ELSEDDIMA, 2001-2016</li> </ul>
Job-related skills	<p>Are demonstrated through membership in several organizations and volunteering in various communities:</p> <ul style="list-style-type: none"> <li>▪ Member in the regional team for Central and Eastern Europe for disaster response of International Federation of Red Cross and Red Crescent</li> <li>▪ Key expert in the project financed by the World Bank (beneficiary – Ministry of Administration and Interior) – National campaign for population information and education in the field of emergency situations management – 2006</li> <li>▪ Member of the Scientific Committee of the International Conference of Slovak Society of Chemical Engineering (2002-2008)</li> <li>▪ Member of the editorial staff of Studia Universitatis – series Ambientum (BDI)</li> <li>▪ Member of the editorial staff of Environmental Engineering and Management Journal (ISI)</li> <li>▪ Member of the editorial staff of Environment &amp; Progress</li> <li>▪ Member of the editorial staff of AES International Journal Bioflux (B +)</li> <li>▪ Member of the Advisory Board of the Journal "Annals of the Academy of Romanian Scientists-Series on Chemistry"</li> <li>▪ guest editor: EEMJ - January 2011, Vol.10, No. 1,</li> <li>▪ guest editor: EEMJ - February 2013, Vol. 12, No 2;</li> <li>▪ guest editor: EEMJ - November 2015, Vol. 14, No. 11;</li> <li>▪ Chief-editor of Journal of Environmental Research and Protection – ECOTERRA (BDI)</li> <li>▪ Member of the Scientific Committee of International Conference 7th International Scientific and Professional Conference „Crisis Management Days”, 22 and 23 May 2014, Zagreb, Croatia, organized by University of Applied Sciences Velika Gorica</li> <li>▪ Member of the Scientific Committee of the International Conference on Energy and Environment, CIEM 2015,</li> <li>▪ Member of the Scientific Committee of the International Conference "Ecological Performance in a competitive Economy" (PEEC2016)</li> <li>▪ ARACIS expert</li> <li>▪ Member in the Commission for Litigation Analysis of CNATDCU, since 2013</li> <li>▪ Reviewer at International Journal of Loss Prevention</li> </ul>
Computer skills	<ul style="list-style-type: none"> <li>▪ Knowledge of computer operating - Microsoft Office (Word, Excel, PowerPoint), Internet, specific software for environmental impact and technological risk assessments (Effects, SEVEX, Aloha, Fair View)</li> </ul>
Driving licence	License category B

## ADDITIONAL INFORMATION

- |  |   |
|--|---|
| Presentations<br>Conferences<br>Seminars | <ul style="list-style-type: none"> <li>• <b>June 2003</b>, participation in the International Workshop IRCYL at Imperial College, London, plenary lecture.</li> <li>• <b>July 2006</b>, invited key expert for training assessment in the field of disaster management in the South-East Europe from the Stability Pact, Disaster Prevention and Preparedness Initiative (Serbia, Croatia, Slovenia, Bosnia and Herzegovina, Macedonia, Montenegro, Hungary, Albania, Moldavia and Romania).</li> </ul> |
|--|---|

- **September 2006**, participation in Advanced Research NATO Workshop ARW "Strategies to enhance environmental security in transition countries".
- **October 2006**, participation in the International Workshop of Expert Group for Vulnerability Group, organized by United Nations University, Prato, Italia
- **March 2007**, invited professor in Lund University, Sweden, at the International Institute for Industrial Environmental Economics (IIIEE), within the "Knowledge Transfer and institutional capacity building for cleaner production in Romania" project, by professor Thomas Lindquist.
- **April 2007**, participation in Advanced Research NATO Workshop ARW "Risk Assessment as a Basis for Elaboration of Recommendations for Forecast and Prevention of Catastrophes". Member of the organizing committee, chairman in section "Forecast and prevention of manmade disaster".
- **September 2007**, participant in Workshop NATECH Risk Assessment and Management, Milano, Italy
- **March 2008**, participation in "Training and Mentoring of Science Shops, Trams" seminar, Intermediu Romania, 28-30 March 2008, Moeciu Bran
- **April 2008**, participant in NATO Advanced Research Workshop, „Optimization of disaster forecasting and prevention measures in the context of human and social dynamics”, Chisinau, Republic of Moldova
- **October 2009**, participant in the 9th IASA-DPRI FORUM on Integrated Disaster Risk Management "Scientific Challenges in Implementing Integrated Disaster Risk Management (IDRiM) in a Changing World", 12 – 16th October, Kyoto,
- **May 2010**, participant in the European Geosciences Union - General Assembly 2010, Vienna, Austria, with the presentation „Investigations on Natural Hazards Effects which trigger Technological Disasters"
- **October 2010**, participant in The NATO-Advanced Research Workshop, Yerevan, Armenia,
- **November 2010**, participant in The SECURENV Foresight Scenario Workshop, Stockholm, Sweden
- **April 2011**, participant in the European Geosciences Union General Assembly 2011, Vienna Austria, 03 – 08 April 2011
- **November 2011**, invited lecture in the Global APELL Anniversary Forum: 25 years of Local Level Preparedness and Environmental Emergency Management, Beijing, China, 16 – 18th November 2011
- **April 2012**, work visit at Department of Environmental Science, Mathematics and Statistics at Ca' Foscari University, Venice, Italy
- **May 2013**, participation in the BENA International Conference: "Environmental Engineering and Sustainable Development", Alba-Iulia, Romania, 23-25 May, 2013
- **May 2013**, participation in the 40th Conference of Slovak Society of Chemical Engineering, Tatranské Matliare, Slovakia, Mai 27-31, 2013
- **July 2013**, participation in the Conference "Antreprenoriat, Mediu de Afaceri și Dezvoltare Durabilă", organized by the Technical University of Cluj-Napoca, 4-5 July 2013
- **September 2013**, participation in The 4th Conference of the International Society for Integrated Disaster Risk Management (IDRiM 2013), Northumbria University, Newcastle upon Tyne, UK, 4 – 6 September 2013
- **September 2013**, participation in The 7th International Conference on Environmental Engineering and Management, Integration Challenges and Management, Vienna, Austria, 18 – 21 September 2013
- **June 2014**, invited speaker in The International Conference of the University of Agronomic Sciences and Veterinary Medicine of Bucharest "Agriculture for Life, Life for Agriculture", June 5 - 7, 2014, Bucharest, Romania
- **June 2014**, invited speaker to Second International Conference on Natural and Anthropic Risks - ICNAR2014, 04-07 June 2014, Bacău, Romania, with the plenary presentation "Industrial risks related to NaTech events in Romania"
- **June 2014**, invited speaker to SICHEM 2014/SICR\_ASTR, 20<sup>th</sup> June 2014, Bucharest, Romania
- **June 2014**, participation in The 5th GIST - European Universities Joint Workshop, Cluj Napoca, 17 - 18 June 2014
- **February 2015**, participation in the "VERDEXCHANGE ARIZONA – A Business to Business Leadership Conference for Sustainable Economic Growth", Phoenix, Arizona, U.S.A.
- **May 2015**, participation in the International U.A.B. – B.E.N.A. Conference Environmental Engineering And Sustainable Development, Alba Iulia, Romania, May 28-30th, 2015
- **September 2015**, participation in the annual Disaster Management Institute of South Africa (DMISA) Conference, Bloemfontein, South Africa, September 4<sup>th</sup> – 11<sup>th</sup>, 2015

#### Honours and awards

- The distinction "Transylvania Cross", awarded by the Mitropolie of Cluj, Alba, Crisana and Maramures on 26<sup>th</sup> May 2013;

- Honor for the contribution to the improvement of the system for emergency situations prevention and management, 2008,
- Honor of Didactic Excellence for the introduction of new mechanisms for quality assurance and of new methods in the teaching pedagogy and methodic at Babes-Bolyai University, 2007,
- Honor of the Ministry of Administration and Interior for the contribution to the development of training activities of the leading personal in public administration, 2003;
- Honor for the contribution to the Babes-Bolyai University, 2002.

#### Memberships

- Founding member and president of the National Society for Environmental Science and Engineering
- Member of the International Society for Integrated Disaster Risk Management- IDRIM, 2010, Kyoto, Japan
- Member of Balkan Environmental Association (B.EN.A.),
- Member of European Geosciences Union (EGU)
- Member of Rotary Club Turda, District 2241, Assistant Governor 2012-2013
- Founding member of the Society of Chemical Engineering in Romania, Cluj
- Member of the Chemical Society in Romania

#### ANNEXES

1. Articles, books published
2. Research grants and contracts completed

Annex 1

#### Articles, books published

##### Specialty books published in recognized publishing houses in the country (selection):

1. Modoi, Oana-Cristina, **Alexandru Ozunu**, (2012), "*Practical applications in solid waste management*", Ed. EFES, Cluj-Napoca, P. 135
2. Zoltan Torok, Ajtai Nicolae, **Alexandru Ozunu**, (2011), *Applications for risk assessment of major industrial accidents involving dangerous substances*, Ed. EFES, Cluj-Napoca, P. 117
3. Misca, R., Manciu, D., **Ozunu, A.**, (2009), "*Practical workbook for Environmental Engineering*", Cluj University Press, Cluj-Napoca
4. Roşu Cristina Doina, Costin Dan Florin, Arghius Viorel-Ilie, **Ozunu Alexandru**, (2009), (editors), *Environment&Progress*, Ed. EFES, Cluj-Napoca, P. 370
5. **A.Ozunu**, C.I.Anghel, *Technologic risk assessment and environmental security*, Accent Publishing House, Cluj-Napoca, 2007

##### Chapters in books published in international publishing houses:

1. Lucrina Ştefănescu, Török Zoltan, Francisc Senzaconi, **Alexandru Ozunu**, 2013, *Quantitative Fire Risk Assessment Procedure at Pesticide Storage Facilities in Romania*, NATO Science for Peace and Security Series C: Environmental Security, Environmental Security Assessment and Management of Obsolete Pesticides in Southeast Europe, pp 249-256, Editors Lubomir I. Simeonov, Fliur Z. Macaev, Biana G. Simeonova, DOI 10.1007/978-94-007-6461-3\_22,
2. **Ozunu, Alexandru**, Gagi, Andra, Costan, Camelia, Nour, Eugen, 2011, *Risk perception and social vulnerability in local communities: A case study for Băiuţ area, Maramureş County. Romania*, NATO Science for Peace and Security Series - E: Human and Societal Dynamics, Volume 80, 2011, Stimulus for Human and Societal Dynamics in the Prevention of Catastrophes, Edited by Arman Avagyan, David L. Barry, Wilhelm G. Coldewey, Dieter W.G. Reimer, ISBN 978-1-60750-737-6, DOI: 10.3233/978-1-60750-738-3-3
3. **Ozunu, A.**, Torok, Z., Cosara, V., Cordos, E., Dutrieux, A., (2008), *Vulnerability Mitigation and Risk Assessment of Technological Disaster*, NATO Science for Peace and Security Series, E: Human and Societal Dynamics, Volume 35, Risk Assessment as a Basis for the Forecast and Prevention of Catastrophes, Edited by Ion Apostol, Wilhelm G. Coldewey, David L. Barry, Dieter Reimer, ISBN 978-1-58603-844-1, Editura Springer Netherlands
4. Dacinia Crina Petrescu, **Alexandru Ozunu**, (2008), *Environmental negotiations and their connection with the climate change risks*, NATO Science for Peace and Security Series, E: Human and Societal Dynamics, Volume 35, 2008, Risk Assessment as a Basis for the Forecast and Prevention of Catastrophes, Edited by Ion Apostol, Wilhelm G. Coldewey, David L. Barry, Dieter Reimer, ISBN 978-1-58603-844-1

##### Articles / studies published in ISI journals (selection):



1. Roba, C., Roșu, C., Piște, I., **Ozunu, A.**, Baci, C., 2015, *Heavy metal content in vegetables and fruits cultivated in Baia Mare mining area (Romania) and health risk assessment*, Environmental Science and Pollution Research, DOI: 10.1007/s11356-015-4799-6, ISSN: 1614-7499
2. Dora Doroșan, **Alexandru Ozunu**, Dan Costin, 2015, *Industrial, Historical and Natural Accumulation of Heavy Metals in Soils and Alluvial Deposits of Lăpuș River, Maramureș County, Romania*, Carpathian Journal of Earth and Environmental Sciences, Vol. 10, 2015 – Number 4.
3. C. Botezan, **Al. Ozunu**, H. Ștefănie, 2015, *Vulnerability Assessment: the Case of the Aries River Middle Basin*, Journal of Environmental Protection and Ecology, vol. 16, no. 4, 2015, pg. 1316 - 1326
4. Roba, C., Roșu, C., Piște, I., Baci, C., Costin, D., **Ozunu, A.**, 2015, *Transfer of Heavy metals from soil to vegetables in a mining/smelting influenced area (Baia Mare – Ferneziu, Romania)*, Journal of Environmental Protection and Ecology, 16(3), pp. 891 – 898, ISSN 1311 – 5065
5. Maria L. Bizo, Erika A. Levei, Erika Kothe, Marin Șenilă, Cristina O. Modoi, **Alexandru Ozunu**, 2015, *Chemical Assessment of Soil Quality for Ecological Reconstruction Strategies*, Carpathian Journal of Earth and Environmental Sciences, Vol. 10, 2015 – Number 4.
6. Zoltán Török, **Alexandru Ozunu**, 2015, *Hazardous Properties of Ammonium Nitrate and the Modeling of Explosions Using TNT Equivalency*, Environmental Engineering and Management Journal, November 2015, Vol. 14, No. 11, 2671 - 2679.
7. Maria L. Bizo, Carmen Roba, Erika A. Levei, Alexandra Hoaghia, Cristina O. Modoi, **Alexandru Ozunu**, 2015, *Comparison of FAAS and XRF performance for metal monitoring in brownfields*, Environmental Engineering and Management Journal, November 2015, Vol. 14, No. 11, 2515 - 2523
8. Livio Belegante, Marius Mihai Cazacu, Adrian Timofte, Florica Toanca, Jeni Vasilescu, Madalin Ion Rusu, Nicolae Ajtai, Horatiu Ioan Ștefănie, Ion Vetres, **Alexandru Ozunu**, Silviu Gurlui, 2015, *Case study of the first volcanic ash exercise in Romania using remote sensing techniques*, Environmental Engineering and Management Journal, November 2015, Vol. 14, No. 11, 2503 - 2515.
9. Roșu, C., Piște, I., Roba, C., Miha, M., **Ozunu, A.**, 2014, *Surface Water Quality Assessment. Case Study: Tarnava Mare River, Medias Town–Romania*, Indian Journal of Applied Research, 4(5), pp. 70 – 72, ISSN 2249 – 555X
10. Modoi O.-C., Roba C., Török Z., **Ozunu A.**, 2014, *Environmental risks due to heavy metal pollution of water resulted from mining wastes in NW Romania*, Environmental Engineering and Management Journal, Vol.13/9, pp. 2325-2336.
11. Roba C., Ștefănie H., Török Z., Kovacs M., Roșu C., **Ozunu A.**, 2014, *Determination of volatile organic compounds and particulate matter levels in an urban area from Romania*, Environmental Engineering and Management Journal, Vol.13/9, pp. 2261-2265.
12. Gheorghiu A.-D., Török Z., **Ozunu A.**, Antonioni G., Cozzani V., 2014, *Comparative Analysis of Technological and Natech Risk for two Petroleum Products Tanks Located in a Seismic Area*, Environmental Engineering and Management Journal, Vol.13/8, pp. 1887-1892.
13. Gheorghiu A.-D., Török Z., **Ozunu A.**, Antonioni G., Cozzani V., 2014, *Natech Risk Analysis in the Context of Land Use Planning. Case Study: Petroleum Products Storage Tank Farm Next to a Residential Area.*, Chemical Engineering Transactions, Vol. 36, pp. 439-445.
14. Arghiuș, V., **Ozunu, A.**, Samara, I., and Roșian, G., 2013, *Results of the post flash-flood disaster investigations in the Transylvanian Depression (Romania) during the last decade (2001–2010)*, Nat. Hazards Earth Syst. Sci. Discuss., 1, 6199-6225, doi:10.5194/nhessd-1-6199-2013, 2013.
15. Stezar I. C., **Ozunu A.**, Barry D. L., 2013, *The role of stakeholder attitudes in managing contaminated sites: survey of Romanian stakeholder awareness*, Environ Sci Pollut Res, DOI 10.1007/s11356-013-2238-0
16. Stezar, I.C., Pizzol, L., Critto, A., **Ozunu, A.**, Marcomini, A., (2013), *Comparison of risk-based decision-support systems for brownfield site rehabilitation: DESYRE and SADA applied to a Romanian case study*, Journal of Environmental Management, 131, pp. 383-393
17. Gheorghiu A. D., Török Z., **Ozunu A.**, 2013, *How can existing risk assessment methodologies be used in a systematic manner, in the extractive mining industry?*, Journal of Environmental Protection and Ecology, Vol.14/4, pp. 1597-1607
18. Ștefănescu L., Robu B. M., **Ozunu Al**, 2013, *Integrated approach of environmental impact and risk assessment of Rosia Montana mining area, Romania*, Environ Sci Pollut Res, DOI 10.1007/s11356-013-152.
19. Pop Andreea Ioana, Mihăiescu Radu, Mihăiescu Tania, Oprea Marius George, Tănăsescu Claudiu, **Ozunu Alexandru**, 2013, *Physico-chemical properties of some glacial lakes in the Romanian Carpathians*. Carpathian Journal of Earth and Environmental Science, Baia Mare, România. ISSN Printed: 1842 – 4090, ISSN Online: 1844 - 489X
20. Arghiuș Corina, Arghiuș Viorel-Ilie, **Ozunu Alexandru**, Muntean Liviu-Octavian, Mihăiescu Radu, 2013, *Landslide Susceptibility Assessment in the Codrului Hills (North-Western Part of Romania)*, Carpathian Journal of Earth and Environmental Sciences, Volume 8, 2013 - Number 3
21. Ajtai Nicolae, Ștefănie Horatiu-Ioan, **Ozunu Alexandru**, 2013, *Description of aerosol properties over Cluj-Napoca derived from Aeronet sun-photometric data*, Environmental Engineering and Management Journal, Vol. 12, No. 2, 227-232.
22. Piște Ioana, Rosu Cristina, Martonos Ildiko, **Ozunu Alexandru**, 2013, *Romanian surface water quality: Tarnava Mare River between Medias and Copsa Mica case study*, Environmental Engineering and Management Journal, Vol. 12, No. 2, 283-289.
23. Stezar Ileana-Codruta, **Ozunu Alexandru**, Gheorghiu Augusta-Diana, 2013, *Risk-based analysis of an industrial Romanian site historically contaminated with heavy metals and total petroleum hydrocarbons*, Environmental Engineering and Management Journal, Vol. 12, No. 2, 291-296.
24. Simion Dragan, **Alexandru Ozunu**, 2012, *Characterization of the calcium carbonates used in the wet flue gas desulphurization processes*, Central European Journal of Chemistry, ISSN: 1895-1066 (print version), ISSN: 1644-3624 (electronic version) (accepted for publishing)
25. Ajtai Nicolae, **Ozunu Alexandru**, Torok Zoltan, 2012, *Air Quality Modelling Of SO2 Emissions Associated to Metallurgical Processes*, Studia Universitatis Babes-Bolyai Chemia, volum 57 (LVII).
26. **Ozunu, A.**, Senzaconi, F., Botezan, C., Ștefănescu, L., Nour, E., and Balcu, C., (2011), *Investigations on natural hazards which trigger technological disasters in Romania*, Nat. Hazards Earth Syst. Sci., 11, 1319-1325, doi:10.5194/nhess-11-1319-2011
27. Viorel-Ilie Arghiuș, Corina Arghiuș, **Alexandru Ozunu**, Eugen Nour, Gheorghe Roșian, Liviu-Octavian Muntean, (2011), *The*

- relation between the landslide activity and irregular rainfall and snowmelt in the Codrului Hills, Romania, Environmental Engineering and Management Journal, „Gh. Asachi” Technical University of Iași, January 2011, Vol.10, No. 1, 3-9
28. Viorel Arghius, Camelia Botezan, Andra Cristina Gagi, Ioanna Samara, Francisc Senzaconi, **Alexandru Ozunu**, (2011), *Normalized economical flood damages in Romania during 2000-2009*, Environmental Engineering and Management Journal, „Gh. Asachi” Technical University of Iași, January 2011, Vol.10, No. 1, 17-21
  29. Marin Senila, Erika Levei, Mirela Miclean, Lacrimioara Senila, Lucrina Stefanescu, Sanda Marginean, **Alexandru Ozunu**, Cecilia Roman, (2011), *Influence of pollution level on heavy metals mobility in soil from NW Romania*, Environmental Engineering and Management Journal, „Gh. Asachi” Technical University of Iași, January 2011, Vol.10, No. 1, 59-64
  30. Ileana-Codruta Stezar, Oana-Cristina Modoi, Török Zoltan, Ajtai Nicolae, Augusta Diana Crisan, Gheorghe-Viorel Cosara, Francisc Senzaconi, **Alexandru Ozunu**, (2011), *Preliminary investigation and risk assessment of contamination on an industrial site in Maramures County*, Environmental Engineering and Management Journal, „Gh. Asachi” Technical University of Iași, January 2011, Vol.10, No. 1, 65-73
  31. Zoltan Torok, **Alexandru Ozunu**, Emil Cordos, (2011), *Chemical risk analysis for land-use planning. I. Storage and handling of flammable materials*, Environmental Engineering and Management Journal, „Gh. Asachi” Technical University of Iași, January 2011, Vol.10, No. 1, 81-88
  32. Ștefănescu Lucrina, Constantin Veronica, Surd Vasile, **Ozunu Alexandru**, Vlad Șerban-Nicolae, (2011), *Assessment of soil erosion potential by the USLE method in Roșia Montană mining area and associated NATECH events*, Carpathian Journal of Earth and Environmental Sciences, February 2011, Vol. 6, No. 1, p. 35 – 42, ISSN 1844 - 1489X
  33. Gabriela Boca, **Alexandru Ozunu**, Șerban Nicolae Vlad, (2010), *Screening of NaTech Hazards: Case Study of the Tamavelor Plateau, Romania*, Environmental Engineering and Management Journal, „Gheorghe Asachi” Technical University of Iași, Romania, October 2010, Vol. 9, No. 10, 1329-1333, ISSN 1582-9596
  34. Zoltán Török, Nicolae Ajtai, Adrian-Teofil Turcu, **Alexandru Ozunu**, (2010), *Comparative consequence analysis of the BLEVE phenomena in the context on Land Use Planning; Case study: The Feyzin accident*, Process Safety and Environmental Protection, doi:10.1016/j.psep.2010.08.003, ISSN 0957-5820
  35. **Alexandru Ozunu**, 2009, Lucrina Ștefănescu, Camelia Costan, Mirela Miclean, Cristina Modoi, Șerban – Nicolae Vlad, *Surface Water Pollution Generated by Mining Activities. Case Study: Aries River Middle Catchment Basin, Romania*, Environmental Engineering and Management Journal, Environment Engineering and Management Journal, „Gh. Asachi” Technical University of Iași, ISSN 1582 – 9596, July/August 2009, vol. 8, no. 4.
  36. **Alexandru Ozunu**, Viorel Coșara, Codruța Stezar, Camelia Costan, Cristina Modoi, Diana Crișan, Baci Călin, 2009, *Case Studies Regarding Contamination Remediation of Polluted Soils from Industrial Establishments with Closed Activities*, Environmental Engineering and Management Journal, „Gh. Asachi” Technical University of Iași, ISSN 1582 – 9596, July/August 2009, vol. 8, no. 4, 923-930

#### ISI Proceedings:

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2. Ruxandra Mălina Petrescu-Mag, Dacina Crina Petrescu, Doina Petri and **Ozunu Alexandru**, 2009, *Economic and Legal Aspects Related to the Prevention and Mitigation of Flood Risks and Their Consequences for Tirlisua (Bistrita-Nasaud): A Case Study from Northern Romania*, in Optimisation of Disaster Forecasting and prevention Measures in the Context of Human and Social Dynamics, I. Apostol, D.L. Barry, W.G. Coldewey, D.W.G. Reimer (Eds.), NATO Science for Peace and Security Series, E: Human and Societal Dynamics – Vol. 52, IOS Press, 98-111.
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Annex 2

## Research grants and contracts

### Grants and national / international research contracts (selection)

Date	Location	Company	Position	Description
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Date	Location	Company	Position	Description
2014 – 2015	Romania	UBB	Project manager	<b>MADECIP</b> - Development of research infrastructure for disaster management based on high performance computing, POS CCE Funding - The objective of the project is to increase the research-development capacity of Babes-Bolyai University of Cluj-Napoca, through the development of disaster management based on high performance computing. Furthermore, new laboratories/research centers will be founded and the existing ones will be updated, with the aim of creating new work places, intensifying interdisciplinary research and optimising international cooperation
2010 – 2013	Romania	UBB	Partner leader	<b>CUANTUMDOC</b> – Doctoral Studies for European Performances in Research and Innovation – development of human resources involved in research activities, through doctoral studies
2009 – 2012	Romania	UBB	Partner leader	<b>EURODOC</b> – Doctoral scholarships for the performance in research at European level - The improvement of participation to the initial training and increase of quality of research activities developed during the university studies, by the provision of financial support of a number of 141 PhD students and access to research tools, methods and equipments at European level
2009 – 2011	Romania	UBB	Partner leader	<b>RADO</b> , Romanian Atmospheric Research 3D Observatory, Innovation Norway Research Programme, no. 115266/2008 – the first 3D Atmospheric Observatory in Romania (and so far unique in SE Europe), dedicated to research and monitoring of atmospheric processes and compounds in the Planetary Boundary Layer and Free Troposphere was created
2008 – 2010	Romania	UBB	Partner leader	<b>RESOLMET</b> , Innovative remediation technology of soils contaminated by the activities specific to the metallurgical industry, Contract 32-161/2008 - elaboration of conceptual models and applicable techniques in case of bioremediation technologies of soils contaminated with heavy metals, sulfur dioxide, petroleum products
2007 – 2011	Romania	UBB	Partner leader	<b>ROLINET</b> , Romanian Lidar NETwork – PN II – Partnership 31-002/2007 - Creation of a competitive Romanian Network of Lidar Systems to be integrated into EARLINET, GAW, GEOS
2006-2008	Romania	UBB	Project manager	<b>DENATEH</b> , CEEX Project “Mitigation of vulnerability and consequences of natural and technological disasters, in order to support local communities” - development of national capacity to elaborate efficient crisis management systems and disaster responses
2006-2007	Romania	UBB	Project manager	<b>ELSEDIMA</b> , Project „Environmental legislation, safety engineering and disaster management – environmental safety management” – Organization the 5 <sup>th</sup> edition of the international conference in the field of environmental safety with the topic „ Environmental legislation, safety engineering and disaster management”
2006 – 2008	Romania	UBB	Scientific responsible	<b>SIG</b> , Developing hazard maps and environmental quality assessment in mining areas of Maramures and Satu Mare counties using geographic information systems - Real time knowledge of the state and evolution of ecological degree of the mining areas negatively affected as a result of exploiting and processing the useful minerals, Elaboration of maps of natural and antropic hazards in the mining areas according to current legislation
2006-2007	UE	UBB	Scientific responsible	<b>Pre-emergencies</b> - enhanced integration among the various entities involved in planning and managing response to an emergency and enhanced communication and information exchange and quality between response teams and civilians, in crisis situations
2005	UE	UBB	Scientific responsible	<b>BEQUAR</b> , Benchmark Exercise Risk Assessment in Central and Eastern European Countries (Accident consequence analysis), European Commission, Directorate General, Joint Research Center - evaluate the risk of a hazardous establishment and the area risk resulting from it by using the ARIPAR methodology, with the main objective of: conducting independent reviews of the risk analysis of a reference Seveso II establishment, and assessing the risk in the selected impact area
2005-2007	UE	UBB	Scientific responsible	<b>MASS</b> , Management and Security Assessment for Sustainable Environment, ERASMUS-MODUC-6 - courses development and implementation based on an e-learning method
2001-2004	Romania	UBB	Project manager	<b>CRAIM</b> , MENER Project Director “Inception of the Regional Centre for Major Industrial Accident Prevention” – development of the Regional Centre for Major Industrial Accident Prevention within the Babes-Bolyai University

Date	Location	Company	Position	Description
2001-2004	UE	UBB	Member	<b>IRCYL</b> , Investigation of the Risk of Cyanide in Gold Leaching on Health and Environmental in Central Asia and Central Europe, Copernicus project "Disaster Management Section" - investigated the health effects of an accidental cyanide spill of the Kumtor Company in the Kyrgyz Republic, on May 20, 1998, and of the Aurul dam rupture in Romania on January 30/31, 2000 and analyzed the responses to the accident in the view of disaster medicine and to develop recommendations for an appropriate response to cyanide accidents
2001-2004	Romania	UBB	Scientific responsible	<b>SALRISC</b> , Integrated Risk Management System for Salt Exploitations in Romania – Monitoring, Forecasting and Prevention Methods, Techniques and Technologies, MENER Programme - integrated risk management system at the salt deposits in Romania, as well as new technologies and monitoring and prevention techniques for the high risk sites

15.03.2016