

Europass curriculum vitae

Personal information

Surname(s) / First name(s)

Baciu, Laurențiu-Călin

Address(es)

Telephone(s)

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+40264307032

E-mail(s)

Nationality(-ies)

Romanian

Date of birth

Gender

M

Occupational field

Academic field

Work experience

Dates

1. 2009 - current
2. 2007 - current
3. 2003 - 2009
4. 1996 - 2003
5. 1990 - 1996
6. 1988 - 1990

Occupation or position held

1. Full Professor, Babes-Bolyai University, Cluj-Napoca
2. Dean of the Faculty of Environmental Science and Engineering, Babes-Bolyai Univ., Cluj-Napoca
3. Assoc. Professor, Babes-Bolyai University, Cluj-Napoca
4. Lecturer, Babes-Bolyai University, Cluj-Napoca
5. Assist. Professor, Babes-Bolyai University, Cluj-Napoca
6. Geologist

Main activities and responsibilities

Teaching and research activities in the field of Hydrogeology, Environmental Geology, Geochemistry

Name and address of employer

- 1 to 5. Babes-Bolyai University, Cluj-Napoca, Romania
6. Aghires Mining Quarry, Cluj-County

Type of business or sector

- 1 to 5. Education & Research
6. Geology

Education and training

Dates

1. 1995-1999
2. 1994-1995
3. 1984-1988

Title of qualification awarded

1. Ph. D.
2. M. Sc.
3. Bachelor of Science

Principal subjects/Occupational skills covered

Groundwater flow modeling; Modeling of transport of contaminants into soil and groundwater; Gas geochemistry; Environmental impact and risk assessment

Name and type of organisation providing education and training

1. Babes-Bolyai University, Cluj-Napoca, Romania
2. Free University of Brussels, Belgium
3. Babes-Bolyai University, Cluj-Napoca, Romania

Level in national or international classification

ISCED 6

Personal skills and competences

Mother tongue(s)

Other language(s)

Self-assessment

European level ()*

English

French

Italian

Romanian

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
C1 Proficient user	C1 Proficient user	C1 Proficient user	C1 Proficient user	C1 Proficient user
C1 Proficient user	C1 Proficient user	C1 Proficient user	C1 Proficient user	C1 Proficient user
B1 Independent User	B1 Independent User	B1 Independent User	B1 Independent User	B1 Independent User

() Common European Framework of Reference (CEF) level*

Social skills and competences

Organisational skills and competences

Technical skills and competences

Computer skills and competences

Other skills and competences

Driving licence(s)

Annexes

Communication abilities in relation with the employees and external public.

- Coordinator of several national and international research projects, funded by NATO, Romanian Ministry for Education and Research, World Bank
- Short courses in hydrogeochemical modeling, contaminated sites remediation, preparedness for emergency situations
- Participation at more than 20 international scientific symposia
- More than 80 published papers on national and international scientific journals
- More than 30 environmental impact assessment studies for major companies.

Computer modelling of environmental processes, using laboratory and field equipment for research.

Microsoft Package; hydrogeologic and environmental modelling software

Project evaluator, Romanian Ministry of Education and Research
 Environmental Impact Assessment and environmental studies
 Master thesis coordinator, University of Lausanne, Switzerland
 Expert of the European Commission for the 7th Framework Program

Romania, B category

Recent publications in peer-reviewed journals
Relevant research projects

Recent publications in peer-reviewed journals

1. Ioan-Cristian Pop, Artur Ionescu, Calin Baci, 2015, Methane seepage from geologic sources on the Moldavian Platform (Eastern Romania). *Carp. J. Earth Env. Sci.* 10, 1: 203-210.
2. Lazar L., Baci C., Roba C., Dicu T., Pop C., Rogozan C., Dobrota C., 2014, Impact of the past mining activity in Romania Montană (Romania) on soil and vegetation, *Environmental Earth Sci.*, 72, 11, 4653-4666.
3. Frunzeti N., Moldovan M., Burghel B.-D., Cosma C., Baci C., Papp B., Popita G.-E., Stoian L.-C., 2013, Flux measurements of ^{222}Rn , CH_4 and CO_2 along with soil concentrations (^{222}Rn , CO , NO_2 and SO_2) over a methane reservoir in Transylvania (Romania). *Carpathian Journal of Earth and Environmental Sciences*, vol. 8, No. 3, p. 75 – 80.
4. ALLEN C.C., OEHLER D. Z., ETIOPE G., VAN RENSBERGEN P., **BACIU C.**, FEYZULLAYEV A., MARTINELLI G., TANAKA K., VAN ROOIJ D., 2013, Fluid expulsion in terrestrial sedimentary basins: A process providing potential analogs for giant polygons and mounds in the martian lowlands. *Icarus*, 224/2, 424-432.
5. FRUNZETI N., **BACIU C.**, ETIOPE G., PFANZ H., 2012, Geogenic emission of methane and carbon dioxide at Beciu mud volcano, (Berca-Arbanasi hydrocarbon bearing structure, Eastern Carpathians, Romania), *Carpathian Journal of Earth and Environmental Sciences*, Vol. 7, No. 3, p. 159 – 166.
6. FRUNZETI N., **BACIU C.**, 2012, Diffuse CO_2 emission at Sfânta Ana lake-filled crater (Eastern Carpathians, Romania). *Procedia Environmental Sciences* 14 (2012) 188 – 194. Elsevier.
7. KIS B.-M., CZELLECH B., **BACIU C.**, KÉKEDY-NAGY L., 2012, Hydrogeochemical features of some mineral waters at the contact between Harghita Mts. (Eastern Carpathians) and the Transylvanian Basin. *Procedia Environmental Sciences* 14 (2012) 195 – 206, Elsevier.
8. **BACIU C.**, FRUNZETI N., IONESCU A., ETIOPE G., COSTIN D., MALOS C., 2012, Geogenic gas emissions in Romania and their value for tourism. *Proceedings International Multidisciplinary Scientific GeoConference SGEM 2012*, 439-446.
9. Gurzau E.S., Baci C., Gurzau A.E., Surdu S., Damian G., 2012, Impact of the tailings impoundments on groundwater quality in Bozanta area (Baia Mare – NW Romania) and human exposure. *Carpathian Journal of Earth and Environmental Sciences*, vol. 7, No. 4, p. 231 – 240.
10. ROWLAND H., OMOREGIE E., MILLOT R., JIMENEZ C., MERTENS J., **BACIU C.**, HUG S., BERG M., 2011, *Geochemistry and arsenic behaviour in groundwater resources of the Pannonian Basin (Hungary and Romania)*, *Applied Geochemistry*, 26/1 , 1 – 17. IF: 1,961
11. ETIOPE G., **BACIU C.**, SCHOELL M., 2011, *Extreme methane deuterium, nitrogen and helium enrichment in natural gas from the Homorod seep (Romania)*, *Chemical Geology*, 280/1-2 , 89 – 96. IF: 3,407
12. ADEY, E., SHAIL, RK., WALL, F., VARUL, M., WHITBREAD-ABRUTAT, P., **BACIU, C.**, EJDEMO, T., LOVRIC, I & UDACHIN, V. (2011) Corporate social responsibility within the mining industry: case studies from across Europe and Russia. *Proceedings of the 2011 Sustainable Development in the Minerals Industry conference*, Aachen, 14-17 June 2011, pp 153-170. VGE Verlag GmbH, Essen.
13. ROBA, C. A.; JIMENEZ, C.; **BACIU, C.**; BELDEAN-GALEA, S.; LEVEI, E.; CORDOS, E., 2011, *Assessment of different sorbents efficiency for solid phase extraction of aquatic humic acids*. *CENTRAL EUROPEAN JOURNAL OF CHEMISTRY*, 9 (4), pp. 598-604. IF: 0.991 (2010)

14. SPULBER L., ETIOPE G., **BACIU C.**, MALOS C., VLAD S.N., 2010, Methane emission from natural gas seeps and mud volcanoes in Transylvania (Romania). *Geofluids*, 10/4, 463–475. IF: 1,533
15. ROBA C., CODREA V., MOLDOVAN M., **BACIU C.**, COSMA C., 2010, Radon and radium content of some cold and thermal aquifers from Bihor County (northwestern Romania), *Geofluids*, 10/4, 571 – 585. IF: 1,533
16. ETIOPE G., **BACIU C.**, 2010, *Geofluids and natural gas in Romania, and the 10th International Conference on Gas Geochemistry. Editorial*, *Geofluids*, 10/4, 457 – 462. IF: 1,533
17. JIMENEZ C., **BACIU C.**, CORDOS E., TATU C., 2009, Environmental Geochemistry and Drinking Water Resources in the Pannonian Basin (Western Romania). *Epidemiology*, 20/6, S73-S74. IF: 5.500.
18. ETIOPE G., FEYZULLAYEV A., **BACIU C.**, 2009, Terrestrial methane seeps and mud volcanoes: A global perspective, *Marine and Petroleum Geology*, doi:10.1016/j.marpetgeo.2008.03.001., 26/3, 333-344, IF: 2,346
19. JIMENEZ C., MERTENS, J., ROWLAND H.A., **BACIU, C.**, BERG M., FURRER G., HUG S., CORDOS. E., 2009, Groundwater geochemistry and As content in the Eastern Pannonian Basin (Romania) – PCA analysis (abstract). *Geochimica et Cosmochimica Acta*, 73/13S: A596. IF: 4,385
20. MERTENS J., ROWLAND H.A., JIMENEZ C., **BACIU, C.**, HUG S., WEHRLI B., FURRER G., 2009, Al nanoclusters: a new method for As removal from water (abstract). *Geochimica et Cosmochimica Acta*, 73/13S: A874. IF: 4,385
21. OMOREGIE E., ROWLAND H.A., JIMENEZ C., MERTENS, J., **BACIU, C.**, POLYA D., LLOYD J., 2009, Linking microbial community structure to groundwater arsenic concentrations in Pannonian basin wells (abstract). *Geochimica et Cosmochimica Acta*, 73/13S: A973. IF: 4,385
22. ROWLAND H.A., JIMENEZ C., OMOREGIE E., MERTENS, J., BERG M., **BACIU, C.**, HUG S., 2009, Controls on water geochemistry and arsenic mobilisation processes in aquifers of Eastern Europe (Pannonian Basin) (abstract). *Geochimica et Cosmochimica Acta*, 73/13S: A1126. IF: 4,385
23. **BACIU C.**, ETIOPE G., CUNA S., SPULBER L., 2008, Methane seepage in an urban development area (Bacau, Romania): origin, extent, and hazard. *Geofluids*, 8/4, 311-320. IF: 1.333.
24. ETIOPE G., FEYZULLAYEV A., **BACIU C.**, 2008, Terrestrial methane seeps and mud volcanoes: A global perspective, *Marine and Petroleum Geology*, 26/3: 333-344. IF: 2.346.
25. **BACIU C.**, CARACAUSI A., ETIOPE G., ITALIANO F., 2007, Mud volcanoes and methane seeps in Romania: main features and gas flux. *Annals of Geophysics*, 50/4: 501-512. IF: 0.298 ISI.
26. FRENTIU T., VLAD S.-N., PONTA M., **BACIU C.**, KASSLER I, CORDOS E., 2007, Profile distribution of As(III) and As(V) species in soil and groundwater in Bozanta area. *Chemical Papers*, 61(3): 186-193. IF: 0.367.
27. PLASTINO W., CHEREJI I., CUNA S., KAIHOLA L., DE FELICE P., LUPSA N., BALAS G., MIREL V., BERDEA P., **BACIU C.**, 2007, Tritium in water electrolytic enrichment and liquid scintillation counting. *Radiation Measurements*, 42/1: 68-73, Elsevier. IF: 1.023.

Relevant research projects

A1. International projects

	Year	Title	Position	Authority
1	2014-2016	3-005 – Tools for sustainable gold mining in EU (SUSMIN)	Coordinator UBB	European Commission
2	2014-2015	Hydrocarbons and CO2 evolution in mafic and ultramafic rocks	Coordinator UBB	Petrobras
3	2012-2013	Low temperature methanation in geologic environments	Coordinator UBB	Petrobras
4	2007-2010	MRTN-CT-2006 – 035420 – Program Marie Curie, FP6 “ <i>Geogenic chemicals in groundwaters and soils: a research training network (AquaTRAIN)</i> ”, www.aquatrain.eu	Coordinator UBB	European Commission
5	2004-2005	EST.EAP.CLG 980456 – “ <i>Groundwater resources impact from radioactive deposits generated during geofluids exploitation</i> ”	Coordinator UBB	NATO
6	2000-2002	EST.CLG.977422, “ <i>Emission of methane from mud volcanoes of Romania and Italy</i> ”	Coordinator UBB	NATO