

Europass curriculum vitae

Personal information

Surname(s) / First name(s)

Baciu, Laurențiu-Călin

Address(es)

Str. Fântânele 30, Cluj-Napoca

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Nationality(-ies)

Romanian

Date of birth

Gender

M

Occupational field

Academic field

Work experience

Dates

1. 2009 - current
2. 2007 - 2012
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., Geology
2. M. Sc., Environmental Management
3. Bachelor of Science, Geology

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 8

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

Communication abilities in relation with the employees and external public.

Organisational skills and competences

- 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 in more than 30 international scientific symposia
- More than 120 published papers in national and international scientific journals
- More than 30 environmental impact assessment studies for major companies.

Technical skills and competences

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

Computer skills and competences

research. Microsoft Package; hydrogeologic and environmental modelling software

Other skills and competences

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 and Horizon 2020 Programs

Driving licence(s)

Romania, B category

Annexes

Recent publications

Publications

Books

1. Muntean L., **Baciu C.**, Petrescu-Mag Malina, 2013, *Dezvoltarea durabila – obiectiv al proiectelor cu finantare europeana*. Ed. Eikon, 450 p., Cluj-Napoca.
2. **BACIU C.**, Costin D., 2008, *Geologie ambientală*. Casa Cărții de Știință, 244 pp., Cluj-Napoca.
3. **BACIU C.** (2004) Hidrogeologie – elemente teoretice și aplicații practice. Casa Cărții de Știință, 151 pp., Cluj-Napoca.
4. **BACIU C.** 2003 Charophytele paleogene din nord-vestul Depresiunii Transilvaniei. Casa Cărții de Știință, 198 pp., Cluj-Napoca – Premiul Grigore Cobălcescu al Academiei Române, 2005.

Articles

No.	Article	IF
1	OLENICI A., BLANCO S., BORREGO-RAMOS M., MOMEU L., BACIU C. , 2017, Exploring the effects of acid mine drainage on diatom teratology using geometric morphometry. <i>Ecotoxicology</i> , DOI 10.1007/s10646-017-1830-3.	1.951
2	IONESCU A., BURRATO, P., BACIU, C. , ETIOPE, G., KIS, B.-M., 2017, Inventory of Onshore Hydrocarbon Seeps in Romania (HYSED-RO Database). <i>Geosciences</i> , 7(2), 39. ; doi:10.3390/geosciences7020039	0.000
3	BACIU, C. , IONESCU A., ETIOPE, G., 2017, Hydrocarbon seeps in Romania: Gas origin and release to the atmosphere, <i>Marine and Petroleum Geology</i> , DOI: 10.1016/j.marpetgeo.2017.06.015	2.888
4	KIS B.-M., IONESCU A., CARDELLINI C., HARANGI S., BACIU C. , CARACAUȘI A., VIVEIROS F., 2017, Quantification of carbon dioxide emissions of Ciomadul, the youngest volcano of the Carpathian-Pannonian Region (Eastern-Central Europe, Romania). <i>Journal of Volcanology and Geothermal Research</i> , DOI: 10.1016/j.jvolgeores.2017.05.025	2.492
5	IONESCU A., BACIU C. , KIS B.-M., SAUER P.E., 2017, Evaluation of dissolved light hydrocarbons in different geological settings in Romania, <i>Chemical Geology</i> , 10.1016/j.chemgeo.2017.04.017	3.482
6	POPIȚA G.E., BACIU C. , RÉDEY A., FRUNZETI N., IONESCU A., YUZHAKOVA T., POPOVICI A., 2017, Life cycle assessment (LCA) of municipal solid waste management systems in Cluj County, Romania. <i>Env. Eng. Manag. J.</i> , 16, 1, 47-57	1.008
7	PAPP D.C., COCIUBA I., BACIU C. , COZMA A., 2017, Composition and Origin of Mine Water at Zlatna Gold Mining Area (Apuseni Mountains, Romania). <i>Procedia Earth and Planetary Science</i> , 17, 37–40	0.000
8	BRAHAITA I.-D, BACIU C. , POP I.-C., POPITA G.-E., MIHAIESCU R., MODOI C., 2017, <i>The efficiency of limestone in neutralizing acid mine drainage - a laboratory study</i> , <i>Carp. J. Earth Env. Sci.</i> , 12, 2, 347–356	0.730
9	COZMA A.-I., BACIU C. , ROSIAN G., POP I.-C., PAPP D., 2017, <i>Isotopic composition of precipitation in Western Transylvania (Romania) reflected by two local meteoric water lines</i> , <i>Carp. J. Earth Env. Sci.</i> , 12, 2, 357–364	0.730
10	ITALIANO F., KIS B.-M, BACIU C. , IONESCU A., HARANGI S., PALCSU L., 2016, <i>Geochemistry of dissolved gases from the Eastern Carpathians - Transylvanian Basin boundary</i> , <i>Chem. Geol.</i> , 450, 1 – 12 http://doi.org/10.1016/j.chemgeo.2016.12.019	3.482
11	NEAMȚIU I.A., AL-ABED S.R, MCKERNAN J.L, BACIU C. , GURZAU E.S., POGACEAN A.O., BESSLER S.M., 2016, Metal contamination in environmental media in residential areas around Romanian mining sites. <i>Reviews on Environmental Health</i> , DOI 10.1515/reveh-2016-0033. De Gruyter	0.000
12	COZMA A., BACIU C. , MOLDOVAN M., POP I.C., 2016, Using natural tracers to track the groundwater flow in a mining area. <i>Procedia Env. Sci.</i> , 32, 211-220. Elsevier	0.000
13	ROBA C., ROȘU C., PIȘTEA I., OZUNU A., BACIU C. , 2015, Heavy metal content in vegetables and fruits cultivated in Baia Mare mining area (Romania) and health risk assessment. <i>Env. Sci. Pollut. Res.</i> , DOI 10.1007/s11356-015-4799-6, 23, 7, 6062-6073	2.830
14	POPITA G.E., FRUNZETI N., IONESCU A., LAZAR A.L., BACIU C. , POPOVICI A., POP C., FAUR V.C., PROOROCU M., 2015, Evaluation of carbon dioxide and methane emission from Cluj-Napoca municipal landfill, Romania, <i>Env. Eng. Manag. J.</i> , 14, 6, 1389-1398	1.070
15	ROBA C., ROSU C., PISTEA I., · BACIU C. , · COSTIN D., · OZUNU A., 2015, Transfer of heavy metals from soil to vegetables in a mining/smeltering influenced area (Baia Mare - Ferneziu, Romania). <i>J. Env. Prot. Ecol.</i> , 16(3): 891-898.	0.840
16	DOBROTA C., LAZAR L., BACIU C. , 2015, Assessment of physiological state of <i>Betula pendula</i> and <i>Carpinus betulus</i> through leaf reflectance measurements. <i>Flora – Morph. Dist. Funct. Ecol. Plants</i> , 216, 26-34.	1.470
17	POP I.-C., IONESCU A., BACIU C. , 2015, Methane seepage from geologic sources on the Moldavian Platform (Eastern Romania). <i>Carp. J. Earth Env. Sci.</i> 10, 1: 203-210	0.630
18	NEAMȚIU I., BLOOM M.S., GATI G., GOESSLER W., SURDU S., POP C., BRAEUER S., FITZGERALD E.F., BACIU C. , AL-	3.829

	ABED S, LUPSA I.R., ANASTASIU D., GURZAU E., 2015, Pregnant women in Timis County, Romania are exposed primarily to low-level (<10µg/L) arsenic through residential drinking water consumption. <i>Int. J. Hygiene Env. Health</i> , 218, 4, 371-379	
19	LAZAR L., BACIU C. , ROBA C., DICU T., POP C., ROGOZAN C., DOBROTA C., 2014, Impact of the past mining activity in Roşia Montană (Romania) on soil and vegetation, <i>Environmental Earth Sci.</i> , 72, 11, 4653-4666	1.770
20	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. <i>Icarus</i> , 224/2, 424-432.	3.218
21	GURZAU E.S., BACIU 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. <i>Carp. J. Earth Env. Sci.</i> , vol. 7, No. 4, p. 231 – 240.	1.495
22	FRUNZETI N., BACIU C. , 2012, Diffuse CO2 emission at Sfânta Ana lake-filled crater (Eastern Carpathians, Romania). <i>Procedia Environmental Sciences</i> 14 (2012) 188 – 194. Elsevier.	0.000
23	KIS B.-M., CZELLECZ 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. <i>Procedia Environmental Sciences</i> 14 (2012) 195 – 206, Elsevier	0.000
24	FRUNZETI N., MOLDOVAN M., BURGHELE B.-D., COSMA C., BACIU 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). <i>Carpathian Journal of Earth and Environmental Sciences</i> , vol. 8, No. 3, p. 75 – 80.	1.495
25	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), <i>Carp. J. Earth Env. Sci.</i> , 7/3. 159 – 166	1.579
26	COSTIN D., BACIU C. , POP C., VARGA I., 2011, Field-based kinetic testing of ARD potential of the waste rock from Roşia Montană ore deposit (Apuseni mountains, Romania), in Rűde T. R, Freund A., & Wolkersdorfer C. (Eds) <i>Proceedings 11th IMWA Congress, Aachen</i> , pp. 677-681	0.000
27	ROWLAND H., OMOREGIE E., MILLOT R., JIMENEZ C., MERTENS J., BACIU C. , HUG S., BERG M., 2011, <i>Geochemistry and arsenic behaviour in groundwater resources of the Pannonian Basin (Hungary and Romania)</i> , <i>Applied Geochemistry</i> , 26/1, 1 – 17.	1.961
28	ETIOPE G., BACIU C. , SCHOELL M., 2011, <i>Extreme methane deuterium, nitrogen and helium enrichment in natural gas from the Homorod seep (Romania)</i> , <i>Chemical Geology</i> , 280/1-2, 89 – 96.	3.407
29	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. <i>Proceedings of the 2011 Sustainable Development in the Minerals Industry conference, Aachen, 14-17 June 2011</i> , pp 153-170. VGE Verlag GmbH, Essen.	0.000
30	ROBA, C. A.; JIMENEZ, C.; BACIU, C. ; BELDEAN-GALEA, S.; LEVEL, E.; CORDOS, E., 2011, <i>Assessment of different sorbents efficiency for solid phase extraction of aquatic humic acids</i> . <i>CENTRAL EUROPEAN JOURNAL OF CHEMISTRY</i> , 9 (4), pp. 598-604.	0.991
31	SPULBER L., ETIOPE G., BACIU C. , MALOS C., VLAD S.N., 2010, Methane emission from natural gas seeps and mud volcanoes in Transylvania (Romania). <i>Geofluids</i> , 10/4, 463–475.	1.533
32	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), <i>Geofluids</i> , 10/4, 571 – 585	1.533
33	ETIOPE G., BACIU C. , 2010, <i>Geofluids and natural gas in Romania, and the 10th International Conference on Gas Geochemistry. Editorial</i> , <i>Geofluids</i> , 10/4, 457 – 462.	1.533
34	JIMENEZ C., BACIU C. , CORDOS E., TATU C., 2009, Environmental Geochemistry and Drinking Water Resources in the Pannonian Basin (Western Romania) (abstract). <i>Epidemiology</i> , 20/6, S73-S74.	5.500
35	ETIOPE G., FEYZULLAYEV A., BACIU C. , 2009, Terrestrial methane seeps and mud volcanoes: A global perspective, <i>Marine and Petroleum Geology</i> , doi:10.1016/j.marpetgeo.2008.03.001., 26/3, 333-344,	2.346
36	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). <i>Geoch. et Cosm. Acta</i> , 73/13S: A596.	4.385
37	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). <i>Geochimica et Cosmochimica Acta</i> , 73/13S: A874	4.385
38	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). <i>Geochimica et Cosmochimica Acta</i> , 73/13S: A973.	4.385
39	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). <i>Geoch. et Cosm. Acta</i> , 73/13S: A1126	4.385

40	BACIU C. , ETIOPE G., CUNA S., SPULBER L., 2008, Methane seepage in an urban development area (Bacau, Romania): origin, extent, and hazard. <i>Geofluids</i> , 8/4, 311-320.	1.333
41	BACIU C. , CARACAUSSI A., ETIOPE G., ITALIANO F., 2007, Mud volcanoes and methane seeps in Romania: main features and gas flux. <i>Annals of Geophysics</i> , 50/4: 501-512.	0.298
42	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. <i>Chemical Papers</i> , 61(3): 186-193.	0.367
43	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. <i>Radiation Measurements</i> , 42/1: 68-73, Elsevier	1.023
44	ETIOPE G., FEYZULLAYEV A., BACIU C. , MILKOV A. (2004) Methane emission from mud volcanoes in eastern Azerbaijan. <i>Geology</i> , 32/6: 465-468	3.065
45	ETIOPE G., BACIU C. , CARACAUSSI A., ITALIANO F., COSMA C. (2004) Gas flux to the atmosphere from mud volcanoes in eastern Romania. <i>Terra Nova</i> , 16:179-184	1.667
46	ETIOPE G., CARACAUSSI A., FAVARA R., ITALIANO F., BACIU C. (2003) Reply to comment by A. Kopf on "Methane emission from the mud volcanoes of Sicily (Italy)", and notice on CH ₄ flux data from European mud volcanoes, <i>Geophys. Res. Lett.</i> , 30(2), 1094, doi:10.1029/2002GL016287, 66-1 – 66-4. Am. Geophysical Union	2.719
47	ETIOPE G., CARACAUSSI A., FAVARA R., ITALIANO F., BACIU C. (2002). Methane emission from the mud volcanoes of Sicily (Italy). <i>Geophys. Res. Lett.</i> , 29(8), 10.1029/2001GL014340, 56-1 – 56-4. Am. Geophysical Union.	2.719
48	BACIU C. , HARTENBERGER J.L. (2001) Un exemple de corrélation marin-continentale dans le Priabonien de Roumanie. Remarques sur la Grande Coupure. <i>C. R. Acad. Sci. Paris, sér. II a, Sciences de la Terre et des planètes</i> 333: 441-446, Elsevier SAS	0.501