

Europass Curriculum Vitae

Personal information

First name(s) / Surname(s) **GABRIEL KATONA**

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Nationality Romanian

Date of birth 21/01/1972

Gender Male

Desired employment / Occupational field

CHEMIST/TEACHER

Work experience

Dates	01/03/2015 → present
Occupation or position held	Assoc.prof., Dr.,
Main activities and responsibilities	ORGANIC CHEMISTRY, NANOSTRUCTURES, 3D CAD Inorganic and Organic chemistry, reaction and mechanism, dendrimers, fullerenes and carbon nanostructures studies, enzyme immobilization and reaction, 3D CAD design and printing, microfluidic design and 3D printing, Transmission electron microscopy
Name and address of employer	Babes-Bolyai University, Facultate of Chemistry and Chemical Engineering 11 Arany Janos, 400001 Cluj-Napoca (Cluj)
Type of business or sector	Education

Dates	01/02/2002 → 01/03/2015
Occupation or position held	Lecturer, Dr.,
Main activities and responsibilities	ORGANIC CHEMISTRY TEACHING Organic chemistry reaction and mechanism, dendrimers, fullerenes and carbon nanostructures studies
Name and address of employer	Babes-Bolyai University, Facultate of Chemistry and Chemical Engineering

Type of business or sector	11 Arany Janos, 400001 Cluj-Napoca (Cluj)																																							
	Education																																							
Dates	01/01/2000 → 01/02/2002																																							
Occupation or position held	Scientific researcher III																																							
Main activities and responsibilities	QSPR/QSAR studies in bioregulator fields, software developer, research project leader																																							
Name and address of employer	BIOS Research and Production Center, Cluj-Napoca																																							
Type of business or sector	Bioregulator production and research																																							
Principal subjects / occupational skills covered	Summer School																																							
Name and type of organisation providing education and training	Max Planck Institute Leipzig (Germany)-2000																																							
Dates	01/06/2000 → 01/08/2000																																							
Title of qualification awarded	Ceepus																																							
Principal subjects / occupational skills covered	molecular modelling																																							
Name and type of organisation providing education and training	Szeged University Szeged (Hungary)																																							
Personal skills and competences																																								
Mother tongue(s)	Romanian																																							
Other language(s)																																								
Self-assessment																																								
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English	<table border="1"> <thead> <tr> <th colspan="4">Understanding</th> <th colspan="4">Speaking</th> <th colspan="2">Writing</th> </tr> <tr> <th colspan="2">Listening</th> <th colspan="2">Reading</th> <th colspan="2">Spoken interaction</th> <th colspan="2">Spoken production</th> <th colspan="2"></th> </tr> </thead> <tbody> <tr> <td>C1</td> <td>Proficient user</td> <td>C1</td> <td>Proficient user</td> <td>B2</td> <td>Independent user</td> <td>B2</td> <td>Independent user</td> <td>B2</td> <td>Independent user</td> </tr> </tbody> </table>										Understanding				Speaking				Writing		Listening		Reading		Spoken interaction		Spoken production				C1	Proficient user	C1	Proficient user	B2	Independent user	B2	Independent user	B2	Independent user
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	(*) Common European Framework of Reference (CEF) level																																							
Computer skills and competences	Borland Delphi																																							
Hirsch index = 20																																								
Total number of citations www.scopus.com = 1160																																								

e) optionally, the address of the researcherid.com profile (recommended for proposals in research areas outside of the humanities).

<http://www.researcherid.com/rid/A-8486-2011>

<https://orcid.org/0000-0003-3508-0023>

<https://scholar.google.hu/citations?user=3eMFMxcAAAAJ&hl=en>

List of Publication

1. M.V. Diudea, G. Katona, O.M. Minailiuc, B. Parv, *Molecular topology* 24. Wiener and hyper-Wiener indices in spiro-graphs, *Izvest. Akad. Nauk, Ser. Khim.*, 9 (1995) 1674-1679, *Russ. Chem. B+*, 44, 9, 1606-1611, **1995** DOI: 10.1007/BF01151278
2. M.V. Diudea, O.M. Minailiuc, G. Katona, *Molecular topology* 22. Novel connectivity descriptors based on walk degrees, *Croat. Chem. Acta*, 69, 3, 857-871, **1996**
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7. A.A. Kiss, G. Katona, M.V. Diudea, Szeged and Cluj Matrices within the Matrix Operator $W(M1, M2, M3)$. *Coll. Sci. Papers Fac. Sci. Kragujevac*, 19, 95-107, **1998** (Kragujevac Journal of Science)
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10. L. Jantschi, G. Katona, M.V. Diudea, Modeling molecular properties by Cluj indices, *MATCH-Communications in Mathematical and in Computer Chemistry*, 41, 151-188, **2000**
11. M. Ardelean, **G. Katona**, I. Hopartean, M. V. Diudea, Cluj Property Indices in Property Modeling, *Studia Univ. Babes-Bolyai, Chemia*, XLV, 1 (2) **2000**
12. G. Katona, G. Turcu, A.A. Kiss, O.M. Minailiuc, M.V. Diudea, QSAR/QSPR studies by Cluj and Szeged descriptors, *Rev. Roum. de Chim.*, 46, 4, 395-410, **2001**
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- modeling antifungal activity of some 5-or 6-methyl-2-substituted benzoxazoles/ benzimidazoles against C. albicans using molecular descriptors, MATCH-Communications in Mathematical and in Computer Chemistry*, 60, 3, 977-984, **2008**
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51. F. Goga, R. Dudric, L. Bizo, A. Avram, T. Dippong, G. Katona, G. Borodi, A. Anton, *Influence of the thermal treatment on the colour of RO·Al₂O₃ (R=Co, Ni) type spinel pigments prepared by a modified sol – gel method*, *Studia UBB CHEMIA*, LXI, 3, 263-273, **2016, IF=0.148**
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Project manager

Nr. Crt.			
1	Grant CNCIS 29	Director de proiect	2000-2001
2	Serviciu de informare si educare publica online. substante cu potential toxic, cancerigen, teratogen. dezvoltarea unei interfete de acces web si legarea ei la o baza de date relationala, CNCIS nr. 50	Director proiect	2004-2005
3	Metode de combatere și prevenire a efectelor negative produse de microorganisme in special in infrastructura liniilor de metrou, COPMET, AMTRANS nr. 7C22	Director proiect	2004-2006
4	Elaborarea unor algoritmi noi de explorare a bazelor de date și a unor modele avansate utilizabile pentru	Director proiect	2004-2006

	proiectarea compușilor bioactivi, CERES nr. 4-108		
5	Metodă nouă de separare a compușilor enantiopuri utilizând anticorpi selectivi, ANTISEL, CERES nr. 4-110	Responsabil proiect	2004-2006
6	Dezvoltarea și promovarea serviciilor de agroturism pentru valorificarea potențialului turistic din Transilvania cu ajutorul Societății informaționale”, VALOTRANS, INFOSOC nr. 137	Responsabil proiect	2004-2006
7	CONEXIUNI LA PROGRAMELE DE CERCETARE EUROPENE SI INTERNATIONALE IN DOMENIUL PANCREATOLOGIEI”-PANCROM, CEEX Modul III nr. 139	Responsabil proiect	2006-2008
8	Sisteme inteligente de predicție a recurenței și progresiei în cancerul superficial de vezică bazate pe inteligența artificială și date microarray: mRNA tumoral și microRNA plasmatic, PN_II nr: 125	Responsabil proiect	2012-2014
9	Nanoscale Enzyme Immobilization and Microfluidics for Systems Biocatalysis, ID P_37_273, codSMIS 103413	Responsabil implementare proiect	2016-2020
10	Advanced (multi)-enzymatic synthesis and purification processes for bio-based furan derivatives – ASPIRE, contract de finanțare nr. 760042/23.05.2023, cod: CF 25/14.11.2022	Responsabil implementare proiect	2022-2026

Project member

Nr.crt.			
1.	MCT Nr. 3009/ 1997, A ₃ , B ₃	membru	1996- 1998
2.	Grant Academia Română nr. 2627	membru	1997
3.	Contract 16/ Tema 34/ 195	membru	1998
4.	Orizont 2000	membru	1999- 2000
5.	Contract Infrac	membru	2000-2003
6.	Metodologie biocatalitică stereoselectivă pentru sinteza unor compuși cu activitate biologică, Ceres 3-84	membru	2003-2005
7.	Model experimental bioreactor-extractor pentru obținerea enzimatică a unor compuși anti-sida, Ceres nr. 3-85	membru	2003-2005
8.	Metodă nouă, modernă de amprentare și control al calității vinurilor, prin RMN și RES, VINMES, CALIST nr. 5130	Membru	2004-2006
9.	REABILITAREA SOLURILOR CONTAMINATE CU METALE GRELE PRIN METODE DE FITOEXTRACȚIE, FITOREM, CERES NR. 4-112	Membru	2004-2006
10.	Model de investigare a impurităților și produșilor de degradare în clasa medicamentelor cardiovasculare și antiinflamatoare, MEDIMP, CEES nr. -109	Membru	2004-2006

11.	Chimia supramoleculara de la design la aplicații", SUPCHEM, CEEX Modul III nr. 7	Membru	2005-2007
12.	20 ani de topologie moleculara la Cluj, Romania, TOPMOL, CEEX Modul III nr. 16	Membru	2005-2007
13.	Teoria grafurilor ca instrument in modelarea moleculelor și reacțiilor chimice, CHEMMOD, CEEX Modul III, nr.23	Membru	2007-2008
14.	Sistem complex de decelare a unor substanțe medicamentoase hormonale și xenoestrogene, la nanoscală, în sursele de apă, MEDESTRO, EEX Mdul , nr. 115	Membru	2006-2008
15.	Tehnici avansate de determinare a reziduurilor chimice din alimente de origine animala, TECHIM, CEEX Modul I nr. 62	Membru	2006-2008
16.	Promovarea dezvoltarii cercetarii in chimia mediului - tehnici de remediere chimica si biochimica si realizarea unei propuneri de proiect PC7, BIOREMED, CEEX Modul III nr. 260	Membru	2006-2007
17.	MODELARE MOLECULARA IN CHIMIE SI BIOCHIMIE – MOLMOD, CEEX Modul III, nr. 146	Membru	2006-2007
18.	CHIRURGIA MINIMAL INVAZIVA - CHIRURGIA VIITORULUI? – CHIRMIN, CEEX Modul III, nr. 225	Membru	2006-2007
19.	Dezvoltarea chirurgiei tumorilor hepatice – HEPAC, CEEX Modul III nr. 216	Membru	2006-2007
20.	NANOPARTICULE BIOFUNCTIONALE PENTRU DEZVOLTAREA UNOR NOI METODE DE IMAGISTICA, SENZORISTICA, DIAGNOSTIC SI TERAPIE MOLECULARA IN MEDII BIOLOGICE, IDEI PCCE nr.129	Membru	2010-2013
21.	Nanostructuri dendritice de carbon conjugate ca suport in transportul medicamentelor, IDEI ID R. 0346	Membru	2011-2014
22.	Dezvoltarea unui laborator de sinteze, analize, testari de nanostructuri de carbon, functionalizari si composite, NSLAB, CAPACITATI nr. 113	Membru	2007-2009
23.	Metoda moderna, neconventionala pentru depoluarea microbiana a apelor fenolice, in scopul consolidarii diversitatii biologice, DEFENOL, PNCDI II nr. 2609	Membru	2007-2010
24.	Modelarea nanostructurilor carbonului și a derivaților lor funcționalizați, IDEI nr.506	Membru	2007-2009
25.	Valorificarea soluțiilor reziduale de amidon in scopul modernizarii productiei alimentare, REZAMIDO, PNCDI II nr. 51001	Membru	2007-2009
26.	Sinteza si investigarea unor noi polimeri biodegradabili pe baza de acid polilactic cu aplicatii in medicina, BIOPLAST, PNCDI II nr. 72152	Membru	2007-2009
27.	Bioremedierea apelor industriale cu continut de compusi fenolici, Capacitati Modul III, bilateral, CONTRACT NR. 35	Membru	2008-2009
28.	Modelarea nanostructurilor carbonului si proprietatile lor (NANOMOD), Capacitati Modul III, bilateral, CONTRACT NR. 26	Membru	2008-2009

29.	Terapia genica conditionata nanotehnologic in hepatocarcinom - NANOGEN PNCDI II nr. 92080	Membru	2009-2011
30.	Bioremedierea solurilor contaminate cu produse din industria petroliere pentru readucerea acestora in circuitul socio-economic, SOLPETRO- CEEEX: Nr. 31080/	Membru	2007-2009
31.	Nanostructuri dendritice de carbon conjugate ca suport in transportul medicamentelor, PCE IDEI, PN-II-ID-PCE-2011-3-0346	Membru	2011-2014
32.	Biocatalysis Engineering–Selective Magnetic nanoparticles-based Reactor Technology, BE-SMART (PN-III-P2-2.1-PED-2019-5031)	Membru	2020-2022
33.	„Renewable Enzyme Immobilization - RENZI”, contract nr. 760241/28.12.2023	Membru	2023-2026
34.	„Exploring bacterial protein-protein interactions for antibiotic research - BACPROBIO", contract nr. 760251/28.12.2023	Membru	2023-2026

Data: 30.03.2026

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