

CURRICULUM VITAE

1. Numele: **RIMBU**
2. Prenumele: **GIMI AURELIAN**
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4. Data si locul nasterii: 20 Mai 1972, Bucuresti
5. Cetatenie: romana
6. Starea civila: casatorit
7. Studii:

Institutia:	U. P.B. - Fac. Chimie Industriala	U. P.B. - Fac. Chimie Industriala
Perioada:	1990 - 1998	1998 - 2004
Grade sau diplome obtinute:	Dipl. de Licenta, Inginer chimist	Doctor in Stiinte Ingineresti

8. Titlul stiintific: **Doctor Inginer (2004)**

9. Experienta profesionala:

Perioada:	Locul:	Institutia:	Funcția:	Descriere:
2007 - prezent	Bucuresti	INCDIE ICPE-CA	Cercetator Stiintific gr.II	Cercetari in domeniul sistemelor & surselor alternative si ecologice de producere a energiei; pile de combustibili de tip PEMFC si DMFC.
2005 - 2006	Bucuresti	INCDIE ICPE-CA	Cercetator Stiintific	Cercetari in domeniul sistemelor & surselor alternative si ecologice de producere a energiei; pile de combustibili de tip PEMFC si DMFC.
2006 - 2007	Newcastle upon Tyne, UK	University of Newcastle	Res. Associate Visiting Sci.	Cercetari in domeniul sistemelor & surselor alternative si ecologice de producere a energiei; pile de combustibili de tip PEMFC si DMFC.
2005 - 2006	Bucuresti	Universitatea Bucuresti	Cercetator Stiintific gr.III	Cercetari in domeniul sistemelor & surselor alternative si ecologice de producere a energiei; pile de combustibili de tip PEMFC si DMFC.
2001 - 2003	Bucuresti	ICPE - CA	Cercetator Stiintific	Cercetari in domeniul mat. carbonice clasice cu performante imbunatatite si al materialelor carbonice avansate, pe baza de smoala mezofazica.
1998 - 2001	Bucuresti	ICPE Bucuresti	Inginer chimist	Cercetari in domeniul mat. carb. clasice cu performante imbunatatite si al mat. carbonice avansate.

10. Locul de munca actual si functia: INCDIE ICPE-CA, Cercetator Stiintific gr. II
11. Vechime la locul de munca actual: 9 ani
12. Brevete si inventii: 1 cerere brevet (anexa CV)
13. Lucrari publicate: Lista lucrarilor anexata
14. Membru al asociatiilor profesionale:
 - 1) Societatea Romana de Materiale Carbonice
 - 2) Asociatia Romana de Materiale
 - 3) Alianta Romana de Hidrogen si Pile de Combustie –membru co-fondator
15. Limbi straine cunoscute: Engleza
16. Alte competente: PC - Windows 95/98; Microsoft Office; INTERNET
17. Studii si specializari/calificari in domenii conexe:
 - ◆ 2007 (17-20 iulie), *International Summer School on Fuel Cells Fundamentals*, Sibiu, Romania
 - ◆ 2005 (august), *First European Summer School on Green Chemistry of Polymers*, “Petru Poni“ Institute of Macromolecular Chemistry, Iasi, Romania
 - ◆ 2003 – 2004 (15 august – 08 septembrie), *School of Chemical Engineering and Advanced Materials, University of Newcastle upon Tyne, Newcastle upon Tyne, UK* - Cercetari in domeniul pilelor de combustie de tip PEMFC si DMFC, sistemelor & surselor avansate si ecologice de producere a energiei;
 - ◆ August – Septembrie 2000, *School of Process Environmental and Materials Engineering - Materials Department, University of Leeds, UK* - Studiul unor noi tehnici de realizare si caracterizare a materialelor compozite carbon/ceramica.

18. Experienta profesionala de specialitate

	Granturi / Proiecte CDI	Calitatea	Tema	Finanțator	Valoare RONI	Anul
Pn1.	Grant 6098 GR (6602 / 2000)	Director Proiect	Materiale avansate in sistem bifazic de tip aliaj carbon-ceramica	MEdC	20.000	2000-2002
Pn2.	Grant 7050 GR (6605 / 2001)	Director Proiect	Sisteme compozite avansate de tip mezofaza carbonica – nanopulberi de fier	MEdC	20.000	2001-2003
Pn3.	CEEX 88 / 2005	Director Proiect	Materiale alternative multifunctionale cu cost scazut, pentru pile de combustie cu electrolit polimer (PEMFC) ce opereaza la temperaturi mai mari de 180°C	AMCSIT	1.500.000	2005-2008
Pn4.	CEEX 602/ 2005	Partener Responsabil Proiect	Dezvoltarea si implementarea de noi solutii in vederea imbunatatirii performantelor pilelor de combustie cu membrana schimbatoare de protoni	MENER	1.500.000	2005-2008
Pn5.	CEEX 195/2006	Director Proiect	Sistem hibrid pentru autonomie energetica pe baza de modul fotovoltaic / pila de combustie	AMCSIT	1.500.000	2006-2008
Pn6.	CEEX 760/2006	Director Proiect	Sistem de pile de combustie pentru electrooxidarea directa a bio-alcoolilor (BioDAFC)	MENER	150.000	2006-2008
Pn7.	CEEX 226/2006	Partener Responsabil Proiect	Sistem integrat de conversie a energiei din surse regenerabile	AMCSIT	150.000	2006-2008
Pn8.	PN II-034/2007	Director Proiect	MODUL ENERGETIC INTEGRAT CU PUTEREA DE 5 KW PE BAZA DE PILE DE COMBUSTIE	CNMP	2.000.000	2007 - 2010
Pn9.	PN II-222/2007	Director Proiect	MATERIALE NOI NANOSTRUCTURATE PENTRU STOCAREA HIDROGENULUI	CNCSIS	1.000.000	2007 - 2010
Pi1.	NATO SfP 974214	Cercetator, Responsabil activitati cercetare	Materiale compozite carbon/ceramica cu aplicatii in industria electrotehnica	NATO		2000 - 2003
Pi2.	FP5 - HPMT-GH-01-00333-03	Research Fellow	Advanced and Ecological Energy Sources & Systems - Fuel Cell Technology	European Community		2003 - 2004
Pi3.	NATO EAP.RIG 981428	Director Proiect	Development of new proton conducting membranes	NATO		2005 - 2008
Pi4.	MTKD –CT – 2004 – 517215	Postdoc Fellow	Biological & Microbial Fuel Cells	European Community		2006

19. Alte mentiuni:

➤ Burse internationale pentru cercetare si specializare:

Anul	Locul	Tipul Bursei	Finanțator	Specializarea
2006	University of Newcastle	Bursa postdoctorala ToK	European Community	Cercetari in domeniul pilelor de combustie de tip PEMFC si DMFC, sistemelor & surselor avansate si ecologice de producere a energiei
2003 - 2004	University of Newcastle	Bursa Marie Curie	European Community	Cercetari in domeniul pilelor de combustie de tip PEMFC si DMFC, sistemelor & surselor avansate si ecologice de producere a energiei

➤ Premii pentru cercetare:

2007 – **Premiul II** pentru proiectul de cercetare complexa: **Sistem hibrid pentru autonomie energetica pe baza de modul fotovoltaic / pila de combustie**. Acordat de Autoritatea Nationala pentru Cercetare Stiintifica (ANCS).

Subsemnatul imi asum raspunderea asupra veridicitatii datelor continute in document, subliniind totodata ca aceste date se refera la activitati si realizari proprii.

Data:

Dr.ing. Gimi A. RIMBU

Dr.ing. Gimi A. RIMBU - LISTA LUCRARILOR**Cărți publicate(C1, C2 etc.), capitole în cărți (CC1, CC2 etc), manuale (M1, M2 etc)**

- CC1. **Rimbu G.A.**, „*Trasaturi generale ale materialelor compozite si nanocompozite in cadrul stiintei carbonului*”, publicata pe <http://www.icpe-ca.ro/index.php?m=60>

Articole/studii de specialitate cotate ISI. (S1, S2 etc.)

- S1. Scott K., Murano C, **Rimbu G.**, “A tubular microbial fuel cell”, *Journal of Applied Electrochemistry*, Volume 37, Issue 9, Pages 1063-1068 (2007), factor impact 0,912;
- S2. Keith Scott, **Gimi A. Rimbu**, Krishna P. Katuri and Ian M. Head, “*Application of Modified Carbon Anodes in Microbial Fuel Cells*”, *Process Safety and Environmental Protection, Official Journal of the European Federation of Chemical Engineering: Part B*, Vol.85, Issue B5, p.481-48 (2007), factor impact 0,447;
- S3. **Rimbu G.A.**, Stamatina I., Jackson C.L. and Scott K., „*The morphology controll of polyaniline as conducting polymer in fuel cell technology*”, *Journal of Optoelectronics and Advanced Materials (JOAM)* vol.8, nr.2, p.670-675 (2006), factor impact 1,106;
- S4. **Rimbu G.A.**, Jackson C.L., Scott K., “*Platinum / carbon / polyaniline based nanocomposites as catalysts for fuel cell technology*”, *Journal of Optoelectronics and Advanced Materials (JOAM)*, vol.8, nr.2, p.611-617 (2006), factor impact 1,106.

Articole/studii indexate în baze de date internaționale (D1, D2 etc.)

- D1. Pasuk I, Banciu C, Bondar A.M, **Rimbu G.A.**, Ion I, Stamatina I, Morjan I, “Influence of some nanocarbon adds on the mesophase pitch development – a structural study”, *Romanian Reports in Physics*, vol.56, no.3, p.320-327 (2004);
- D2. **Rimbu G.A.**, Panaitescu C., Stamatina I., “*Kinetic analysis of mesophase transformation in coal tar pitch matrix-based C/C composites*”, *U.P.B. Science Bulletin, Series B*, vol.66, no.2-4, p.17-32, ISSN 1454-2331 (2004).

Articole/studii publicate în volumele unor manifestări științifice internaționale recunoscute (Vi1, Vi2 etc.)

- Vi1. Irina Mihaela Pelin, Gabrielle Charlotte Chitanu, Irina Popescu, Mihaela Avadanei, **Gimi Aurelian Rimbu**, *Maleic anhydride copolymers for thin layer fabrication*, The 5th Conference „New research trends in materials science” ARM-5, Sibiu, 5-7 septembrie 2007, proceedings pag.523 (2007);
- Vi2. **Rimbu G.A.**, Katuri K.P, Scott K, *Carbon based anodes and theirs influence on the microbial fuel cell performance*, The 5th Conference „New research trends in materials science” ARM-5, Sibiu, 5-7 septembrie 2007, proceedings pag.540 (2007);
- Vi3. **Rimbu G.A.**, *Performances and optimization of direct methanol fuel cells*, The 5th Conference „New research trends in materials science” ARM-5, Sibiu, 5-7 septembrie 2007, proceedings pag.541 (2007);
- Vi4. **Rimbu G.A.**, Katuri K.P, Scott K, *Carbon functionalization for improving the microbial fuel cell performance*, The 5th Conference „New research trends in materials science” ARM-5, Sibiu, 5-7 septembrie 2007, proceedings pag.701 (2007);
- Vi5. Pirvulescu V, Ene R, **Rimbu G.**, Stamatina I, *Pt-based alloys colloids supported on carbon for fuel cells applications*, The 5th Conference „New research trends in materials science” ARM-5, Sibiu, 5-7 septembrie 2007, proceedings pag.908 (2007);
- Vi6. V. Parvulescu, R. Ene, **G. Rimbu** and I. Sandulescu, *Platinum catalysts and their activity in oxidation of alcohols for fuel cells applications*, III International Conference “Catalysis Fundamentals and Application” Novosibirsk, Rusia, 4-8 iulie 2007
- Vi7. Chitanu Gabrielle Charlotte, Popescu Irina, Pelin Irina Mihaela, **Rimbu Gimi Aurelian**, *Maleic Copolymers as Potential Materials for Membrane Fabrication*, The 2th International Conference on “Advances in Petrochemical and Polymers”, Bangkok, Thailand, June 25 – 28, Thailanda (2007);
- Vi8. M. Grigoras, G. C. Chitanu, I. Popescu, I. M. Pelin, **G. A. Rimbu**, *Polyaniline / Maleic acid copolymers composites: synthesis and characterization*, Europolymer Conference - From Polymer Structure and Rheology to Process Modeling, EUPOC 2007, May 27– June 1 2007, Gargnano, Italia (2007);
- Vi9. Conduruta D., Grigoras, M, Chitanu, G.C, Popescu, I., **Rimbu, G.**, „*Template polymerization of aniline in presence of maleic acide copolymers*”, YoungChem 2006 – International Congress of Young Chemists, October 25 – 29, Pultusk, Poland (2006);

- Vi10. Radu Vasilescu-Mirea, **Gimi A. Rimbu**, Delia Patroi, *Carbonic materials used to obtain bipolar plates for PEM & SOFC fuel cells*, Nordic PEMFC 06, 25-27 Septembrie, Stockholm, Sweden (2006).
- Vi11. I.Dascalu, S.Somacescu, **G.A. Rimbu**, V. Parvulescu, “*Preparation and characterization of PtRu/C electrods for PEMFC fuel cells*” 12 th International Conference on Physical Chemistry, September 6 - 8, Bucharest, ROMANIA (2006);
- Vi12. Popescu, I., Pelin, I.M., Chitanu, G.C, **Rimbu, G.**, Grigoras, M., Conduruta D., *Polymeric materials based on polyaniline and maleic copolymers for fuel cells*, Proceedings of 1st International IUPAC Conference on Green-Sustainable Chemistry, September 10-15, Dresden, Germany (2006);
- Vi13. I.Dascalu, **G.A. Rimbu**, V. Parvulescu, “*Colloidal nanometals supported on carbon for PEMFC fuel cells*”, Proceedings of ROCAM 2006, Septembrie 11-14, Bucuresti, Romania (2006);
- Vi14. Daniela Stoenescu, Vasile Stanciu, Ioan Stefanescu, Adina Morozan, Silviu Vulpe, **G. A. Rimbu**, Ioan Stamatin, *Evaluation of proton conducting polymers as electrolyte for H₂/air fuel cell*, E-MRS 2006, 29 May - 2 June 2006, Nice, France, (2006);
- Vi15. Adina Morozan, Ioan Stamatin, Silviu Vulpe, **G. A. Rimbu**, Daniela Stoenescu, I. Stefanescu, *Hybrid membranes for application in DMFC*, E-MRS 2006, 29 May - 2 June 2006, Nice, France, (2006);
- Vi16. **Rimbu G.A.**, Stamatin I., Jackson C.L., Scott K., “*Polyaniline as catalyst support in fuel cell technology*”, 1st European Fuel Cell Conference, 14-16 December 2005, Rome, Italy (2005);
- Vi17. **Rimbu G.A.**, Jackson C.L., Scott K., „*Platinum based nanocomposite materials as catalysts for fuel cell technology*”, Proceedings of 1st Workshop of Electrical Engineering Materials and Applications, September 21, p.187-189, Bucharest, ISBN 973-718-308-8 (2005);
- Vi18. Bara A., Bondar A.M., Mirea R., Banciu C., Patroi E., Pasuk I., **Rimbu G.**, Stamatin I., Morjan I., Biris A., „*Carbon mesophase based composites with electrical/magnetical properties*”, the 4th National Conference – New Research Trends in Materials Science, ARM 4, Constanta September 4-6, 2005, p.899-900, ISBN 973-718-299-5 (2005)
- Vi19. **Rimbu G.A.**, Jackson C.L., Scott K., “*Platinum / carbon / polyaniline based nanocomposites as catalysts for fuel cell technology*”, the 4th National Conference – New Research Trends in Materials Science, ARM 4, Constanta September 4-6, 2005, p.548-562, ISBN 973-718-299-5 (2005)
- Vi20. **Rimbu G.A.**, Iordache I., Enescu E., Stamatin I., Jackson C.L., Scott K., “*The morphology control of polyaniline as conducting polymer in fuel cell technology*”, RoPM 5005 International Conference, Sinaia 7-9 July, Romania, published in conference’s proceeding, p.827 – 837, ISSN 1221-5872 (2005);
- Vi21. **Rimbu G.A.**, Iordache I., Enescu E., Stamatin I., Jackson C.L., Scott K., “*Investigation of the catalytic performance of deposited platinum on different substrates*”, RoPM 5005 International Conference, Sinaia 7-9 July, Romania, published in conference’s proceeding, p.509/1 – 509/14, ISSN 1221-5872 (2005);
- Vi22. **Rimbu G.A.**, “*Contribution to polymer thin layer deposition by electrochemical methods. Part 1 – Deposition and characterization of polyaniline film on conducting cellulose support, by cyclic voltametry*”, 4th International Conference of URB – CORR , Sibiu, 9-11 iunie (2005);
- Vi23. Banciu C, Bondar A.M, **Rimbu G.A**, Pasuk I, Stamatin I, Morjan I, “*Electromagnetic transparent carbonaceous nanocomposites for radomes*”, The 35th International Scientific Symposium – Military Equipment and technologies Research Agency, 27-28 mai, Bucuresti (2004);
- Vi24. **Rimbu G.A.**, Banciu C., Pasuk I., Bondar A.M., Stamatin I., “*Multifunctional carbonaceous nanocomposites for electrical applications*” in Materials for Electrotechnics – Proceedings of the 4th International Workshop, Printech Ed., Bucharest, ROMANIA, p. 290-295 (2004);
- Vi25. Pasuk I., **Rimbu G.A.**, Bondar A.M., Stamatin I., Banciu C., Ion I., Morjan I., “*Influence of some nanocarbon adds on the mesophase pitch development – a structural study*”, in Proceeding of The 3-rd National Conference of New Research Trends in Material Science” – ARM 3, Sept. 12-13, Constanta, Romania (2003);
- Vi26. Ioana I., Avdeev M.V., Balasoiu M., Kovalev I., Pasuk I., **Rimbu G.A.** et al., “*Structural analysis of some coal tar pitch-nanocarbon composite materials*”, in Proceeding of The 3-rd National Conference of New Research Trends in Material Science” – ARM 3, Sept. 12-13, Constanta, Romania (2003)
- Vi27. **Rimbu G.A.**, Banciu C., Ion I., Pasuk I., Bondar A.M., Stamatin I., Morjan I., “*Electrical properties investigation in mesophase pitch/nanocarbon systems*”, in Proceeding of Carbon’03 Conference, July 6-10, 2003, Oviedo, Spain, published on CD (2003).
- Vi28. Pasuk I., Ion I., Bondar A.M., **Rimbu G.A.**, Banciu C., “*Structural studies of some mesophase pitch – micropowder systems*”, in Proceeding of The 3rd International Balkan Workshop on Applied Physics, June 26-28, Targoviste, Romania, pag.90-91 (2002);
- Vi29. **Rimbu G.A.**, Banciu C., Ion I., Pasuk I., Bondar A.M., Stamatin I., Morjan I., “*Structural modifications induced by micro and nano-carbons on fractionated coal tar pitch*”, in Proceeding of Carbon’02 Conference, Sept. 15-20, 2002, Beijing, China, published on CD (2002);

- Vi30. **Rimbu G.A.**, Banciu C., Ion I., Pasuk I., Bondar A.M., Enescu E., Stamatina I., “*The effect of hard ferrite on structural and physical mesocarbon composite properties*”, in Proceeding of Carbon’02 Conference, Sept. 15-20, 2002, Beijing, China, published on CD (2002);
- Vi31. **Rimbu G. A.**, Bondar A. M., Stamatina I., Banciu C., Ion I., Pasuk I. and Rand B. “*The effect of different controlled added on the coal tar pitch phase transformations*”, Fourth International Symposium – Coal Structure 2002, “Structure and Reactivity of Carbonaceous Materials”, July 7-10, Gliwice, Poland (2002);
- Vi32. Enescu E., Bondar A.M, **Rimbu G.A.**, Pasuk I., Stancu N., “*The effect of hard ferrite filler in structural and physical mesocarbon composite properties*”, in Proceeding of Advanced Materials and their characterization – JINR Romanian Workshop, March 18-22, Dubna, Russia, pag. 33-38 (2002);
- Vi33. **Rimbu G.A.**, Iordache I., Bondar A.M., Stamatina I. and Rand B., “*The effect of the insertion method on the modification of the mesophase pitch with carbon black*”, in Proceeding of Carbon’2001 Conference, July 14-19, 2001, Kentucky, SUA, published on CD (2001);
- Vi34. Bara A., **Rimbu G.A.**, Bondar A.M et. al., “*The influence of added nanopowder on the phase transformation in the pitch mesophase systems, as precursors for C/ceramic composites and C/ceramic alloys*”, in Proceeding of Romanian Conference on Advanced Materials - ROCAM’2000, Oct. 23-25, Romanian Academy, Bucharest (2000).
- Vi35. **Rimbu G.A.**, Iordache I., Bondar A.M., Stamatina I., “*Carbon black influence on mesophase formation*”, in Proceeding of New research trends in material science Conference – ARM 2, Sept. 24-26, Constanta, Romania, pag.24-26 (2001);
- Vi36. Bara A., **Rimbu G.A.**, Iordache I. et. al., “*The mesophase separation of Romanian pitches as precursors in carbon-ceramic composites and C-C alloys*”, Conference on Chemical and Physical Characterization of Carbonaceous Materials, University of Leeds, U.K., 10th – 11th April (2000);
- Vi37. Bondar A.M., Cristescu E., Iordache I., **Rimbu G.A.**, “*Ceramic/C composite - electromagnetically waves absorber*”, Ulusal Toz Metalurjisi Konferansi: National Powder Metallurgy Conference, Ankara, Turkey, Sept. 15-17 (1999), Pages 329-332.

brevete de invenție (B1, B2 etc.)

- B1. Cerere de brevet, OSIM A 00096/11.02.2005 – “*Material carbonic nanocompozit transparent la unde electromagnetice*”

alte lucrări similare - articole/studii publicate în volumele unor manifestări științifice naționale (Vn1, Vn2 etc)

- Vn1. **Rimbu G.A.**, Banciu C., Ion I., Pasuk I., Bondar A.M., Stamatina I., Morjan I., “*Materiale compozite nanostructurate pe baza de smoala mezofazica, pentru ecranarea undelor electromagnetice*”, CONRO 2002, Oct. 7-12, ROMEXPO, Romania (2002);
- Vn2. **Rimbu G.A.**, Banciu C., Pasuk I., Bondar A.M., Ion I., “*Influenta concentratiei adausului de nanocarboni si a temperaturii asupra dezvoltarii mezofazei carbonice*” in Analele Universitatii “Aurel Vlaicu”, Seria Chimie si Protectia Mediului, Ed.Universitara, Arad, ROMANIA, page 5 – 10 (2002).
- Vn3. **Rimbu G.A.**, Bondar A.M., Iordache I., Stamatina I., “*Analiza DMTA a unei smoale de gudron de huila din Romania*” in Materiale Avansate, Tratamente termice si Managementul Calitatii – Seria Conferinte, Ed. Politehnica, Timisoara, ROMANIA, page 280 – 283, ISBN 973-8247-32-2 (2001);
- Vn4. Bondar A.M., Iordache I., **Rimbu G.A.**, “*The utilization of the mesophase pitch in composite carbon materials*”, First National Symposium – View and Realization in the Field of Materials – Bucharest, May 6-7 (1999);
- Vn5. Bondar A.M., **Rimbu G.A.**, Iordache I., “*Materiale compozite carbonice pentru aplicatii in industria electrotehnica*”, Conferinta de Tehnologii avansate pentru Industria Electrotehnica, Bucuresti, Oct. 28-29 (1999).

Data:

Dr.ing. Gimi A. RIMBU