Gabriela Paun

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Adresă: Splaiul Independentei 296, sector 6, Bucuresti, România (Loc de muncă)

EXPERIENȚA PROFESIONALĂ

01/05/2017 – ÎN CURS Bucuresti, România
CERCETATOR STIINTIFIC GRADUL I INSTITUTUL NATIONAL DE CERCETARE-DEZVOLTARE PENTRU STIINTE BIOLOGICE - CENTRUL DE BIOANALIZA

- Obtinerea suporturilor microporoase polimerice/compozite (membrane, microparticule) cu diverse aplicații;
- Aplicații ale proceselor membranare (micro-, ultra- și nanofiltrare) în diferite domenii: biotehnologie și industria alimentară,
- Fito-farmaceutică (fractionare si concentrare de compusi biologici activi din extracte de plante);
- Bioanaliza extractelor de plante (caracterizarea analitica a principiilor active, determinarea activitatii antioxidante a extractelor și evaluarea activitatii inhibitoare asupra unor enzime legate de diverse afectiuni).
- Imobilizare de enzime pe membrane polimerice;
- Redactare si publicare lucrari in reviste de specialitate.
- Redactarea și aplicarea pentru finanțare a proiectelor de cercetare.
- Managementul proiectelor de cercetare.

25/08/2008–30/04/2017 Bucuresti, România
CERCETATOR STIINTIFIC GRADUL II INSTITUTUL NATIONAL DE CERCETARE-DEZVOLTARE PENTRU STIINTE BIOLOGICE - CENTRUL DE BIOANALIZA

21/11/2005 – 31/08/2008 Bucuresti, România
CERCETATOR STIINTIFIC GRADUL III INSTITUTUL NATIONAL DE CERCETARE-DEZVOLTARE PENTRU STIINTE BIOLOGICE - CENTRUL DE BIOANALIZA

01/09/1995 – 20/11/2005 Bucuresti, România
RESEARCHER CENTRUL DE CERCETARE PENTRU MATERIALE MACROMOLECULARE SI MEMBRANE

EDUCAȚIE ȘI FORMARE PROFESIONALĂ

10/10/2000 – 10/06/2004 Cluj-Napoca, România
DOCTOR IN CHIMIE Universitatea "Babes-Bolyai", Facultatea de Chimie si Inginerie Chimica

Domeniu de studiu Chimie **Nivel CEC** Nivelul 8 CEC

Lucrare de diplomă Studiul proceselor membranare la separarea si concentrarea unor compusi bioactivi din medii lichide naturale

01/10/1990 – 30/07/1995 Bucuresti, România
LICENTA IN INGINERIE CHIMICA Universitatea Politehnica Bucuresti, Facultatea de Chimie Industriala

Domeniu de studiu inginerie biochimica **Nivel CEC** Nivelul 6 CEC

03/09/2007 – 07/09/2007 Bucuresti
ABSOLVIRE CURS "SISTEME DE MANAGEMENT PERFORMANT

COMPETENȚE LINGVISTICE

Limbă(i) maternă(e): **ROMÂNĂ**

Altă limbă (Alte limbi):

	COMPREHENSIUNE		VORBIT		SCRIS
	Comprehensiune orală	Citit	Exprimare scrisă	Conversație	
ENGLEZĂ	B2	C1	B2	B2	B2

Niveluri: A1 și A2 Utilizator de bază B1 și B2 Utilizator independent C1 și C2 Utilizator experimentat

COMPETENȚE DIGITALE

Bună stăpânire a instrumentelor Microsoft Office (Word, Excel și PowerPoint)

Programe de comunicare (Zoom, Skype, Google Meet), Google (Google Meet, Google Docs, Google Classroom, Google Forms, Google Drive)

COMPETENȚE DE MANAGEMENT ȘI CONDUCERE

Competente de management si organizare

- bune abilități de conducere a echipei de cercetare dobândite în calitate de manager și responsabil de proiecte;
- bune abilități organizatorice și stabilirea de obiective și mijloace de realizare a acestora

COMPETENȚE DE COMUNICARE ȘI INTERPERSONALE

Competente de comunicare Abilitati de comunicare foarte bune obtinute ca urmare a conducerii unei echipe de cercetare si a participarii ca membru in numeroase echipe de cercetare

INFORMAȚII SUPLIMENTARE

PUBLICAȚII

Selectie de publicatii ISI

▪**Paun, G.,** Neagu, E., Albu, C., (...), Seciu-Grama, A.-M., Radu, G.L. (**2024**). Antioxidant and Antidiabetic Activity of Cornus mas L. and Crataegus monogyna Fruit Extracts. *Molecules*, 29(15),3595

▪Neagu, E.; **Paun, G**.; Albu, C.; Radu, G.L. (**2024).** Valorization of Bioactive Compounds from Lingonberry Pomace and Grape Pomace with Antidiabetic Potential. *Molecules* , *29*, 5443.

▪Petcu, G., Ciobanu, E.M., **Paun, G**., Neagu, E., Baran, A., Trica, B., Neacsu, A., Atkinson, I., Bucuresteanu, R., Badaluta, A. et al. Hybrid Materials Obtained by Immobilization of Biosynthesized Ag Nanoparticles with Antioxidant and Antimicrobial Activity. *Int. J. Mol. Sci.* **2024**, *25*, 4003.

▪**Paun, G**.; Neagu, E.; Alecu, A.; Albu, C.; Seciu-Grama, A.-M.; Radu, G.L. Evaluating the Antioxidant and Antidiabetic Properties of *Medicago sativa* and *Solidago virgaurea* Polyphenolic-Rich Extracts. *Molecules* **2024**, *29*, 326.

▪Neagu, E.; **Paun, G**.; Albu, C.; Apreutesei, O.T.; Radu, G.L. (**2023**). In Vitro Assessment of the Antidiabetic and Anti-Inflammatory Potential of *Artemisia absinthium, Artemisia vulgaris* and *Trigonella foenum-graecum* Extracts Processed Using Membrane Technologies. *Molecules*, *28*, 7156. https://doi.org/10.3390/molecules28207156

▪Neagu, E., **Paun, G**., Albu, C., Eremia, S.A.-M.V., Radu, G.L. (**2023**). *Artemisia abrotanum* and *Symphytum officinale* Polyphenolic Compounds-Rich Extracts with Potential Application in Diabetes Management. *Metabolites*, *13*, 354. https://doi.org/10.3390/metabo13030354

▪**Paun, G**.; Neagu, E.; Parvulescu, V.; Anastasescu, M.; Petrescu, S.; Albu, C.; Nechifor, G.; Radu, G.L. (**2022**). New Hybrid Nanofiltration Membranes with Enhanced Flux and Separation Performances Based on polyphenylene Ether-Ether- Sulfone/Polyacrylonitrile/SBA-15. *Membranes*, *12*(7), 689

▪ **Paun, G**., Parvulescu, V., Neagu, E., Albu, C., Ionita, L., Maxim, M. E., . . . Radu, G. L. (**2021**). Nanofiltration composite membranes based on KIT-6 and functionalized KIT-6 nanoparticles in a polymeric matrix with enhanced performances. *Membranes*, 11(5) doi:10.3390/membranes11050300

▪ Zanfirescu, A., Marineci, C.D., **Paun, G.**, Ungureanu, O., Neagu, E., Chirita, C., Velescu, B.S., Olaru, O.T., Negres, S. (**2021**). Chitosan supports containing Impatiens noli-tangere and Symphytum officinale hydroalcoholic extracts in burns treatment: antimicrobial and healing effects. *Farmacia*, 69(5), 948-953

• Neagu, E., **Păun, G.,** Moroeanu, V., Ungureanu, O., Radu, G. L. (**2021**). Antioxidant and antidiabetic properties of polyphenolic-rich extracts of apium graveolens and agropyrum repens *Revue Roum. Chim.*, *64(10), 909-913*

• **Paun, G**., Neagu, E., Albu, C., Savin, S., Radu, G.L. (**2020**). *In Vitro* Evaluation of Antidiabetic and Anti-Inflammatory Activities of Polyphenolic-Rich Extracts from Anchusa officinalis and Melilotus officinalis. *ACS Omega*, 5, 22, 13014-13022

• **Paun, G**., Neagu, E., Moroeanu, V., Albu, C., Savin, S., Radu, G.L. (**2019**). Chemical and Bioactivity Evaluation of Eryngium planum and Cnicus benedictus Polyphenolic-Rich Extracts. *BioMed Research International*, vol. 2019, Article ID 3692605

• Neagu, E., **Paun, G**., Ungureanu, O., Radu, G. L. (2019). Antioxidant activity and phenolics content of capsella bursa-pastoris and marrubium vulgare depending on environmental factors. *Environ. Eng. Manag. J.*, *18*(7), 1553-1560

• Ciobanu, M., Pirvu, L., **Paun, G.,** …., Parvulescu, V. (**2019**). Development of a new (bio)hybrid matrix based on *Althaea officinalis* and *Betonica officinalis* extracts loaded into mesoporous silica nanoparticles for bioactive compounds with therapeutic applications. *J. Drug Deliv. Sci. Technol.*, 51, 605-613.

• Niculescu, V.-C., **Paun, G.,** Parvulescu, V. (**2018**). New organometallic complex supported on mesoporous silica for and its enzymes activity inhibition properties. *Appl. Organom. Chem.*, 32(12), e4590.

• **Paun, G.,** Neagu, E., Moroeanu, V., …., C., Radu, G.L**.** (**2018**).). Anti-inflammatory and antioxidant activities of the Impatiens noli-tangere and Stachys officinalis polyphenolic-rich extracts. *Rev. Bras. Farmacogn.*, 28(1), 57-64

• Neagu, E., Radu, G. L., Albu, C., **Paun, G**. (**2018**). Antioxidant activity, acetylcholinesterase and tyrosinase inhibitory potential of pulmonaria officinalis and centarium umbellatum extracts. *Saudi J. Biol. Sci.*, 25(3), 578-585

• Neagu, E., **Paun, G.,** Constantin, D., Radu, G.L. (**2017**). Cytostatic activity of Geranium robertianum L. extracts processed by membrane procedures. *Arabian J. Chem.*, 10, S2547-S2553

• **Paun, G.,** Neagu, E., Albu, C., Moroeanu, V., Radu, G.-L. (**2016**). Antioxidant activity and inhibitory effect of polyphenolic-rich extract from Betonica officinalis and Impatiens noli-tangere herbs on key enzyme linked to type 2 diabetes. *J. Taiwan Inst. Chem. Eng.*, 60, 1-7.

• **Paun, G.,** Neagu, E., Albu, C., Radu, G.L. (**2016**). Verbascum phlomoides and Solidago virgaureae herbs as natural source for preventing neurodegenerative diseases. *J. Herbal Med.*, 6 (4), 180-186

• **Paun, G.,** Neagu, E., Albu, C., Radu, G.-L. (**2015**). Application of the polyphenylene ether-ether-sulfone ultrafiltration membrane for concentration of antioxidants from the Phyllitis scolopendrium L. extract. *New J. Chem.*, 39(2), 1154-1160

• **Paun, G.,** Neagu, E., Albu, C., Radu, G.-L, (**2015**). Inhibitory potential of some Romanian medicinal plants against enzymes linked to neurodegenerative diseases and their antioxidant activity. *Pharmacognosy magazine*, 11(42) S1, 110-116

• Neagu, E., **Paun, G.,** Albu, C., Radu, G.-L. (**2015**)**.** Assessment of acetylcholinesterase and tyrosinase inhibitory and antioxidant activity of Alchemilla vulgaris and Filipendula ulmaria extracts. *J. Taiwan Inst. Chem. Eng.*, 52, 1-6.

• Gatea, F., Teodor, E.D., **Paun, G**., Matei, A.O., Radu, G.L. (**2015**). Capillary electrophoresis method validation for organic acids assessment in probiotics. *Food Anal. Method.*, 8 (5), 1335-1340.

• **Paun, G.,** Litescu, S.C., Neagu, E., Tache, A., Lucian Radu, G. (**2014**). Evaluation of Geranium spp., Helleborus spp. and Hyssopus spp. polyphenolic extracts inhibitory activity against urease and a-chymotrypsin. *J. Enzyme Inhib. Med. Chem.*, 29(1), 28–34

• Parvulescu, V., Popa, A., **Paun, G.,** …., C.-M., Ilia, G. (**2014**). Effect of polymer support functionalization on enzyme immobilization and catalytic activity. *Pure Appl. Chem.*, 86(11), 1793-1803

• **Paun, G.,** Neagu, E., Tache, A., Radu, G.L. (**2014**). New Type of Chitosan/2-hydroxypropyl-β-cyclodextrin Composite Membrane for Gallic Acid Encapsulation and Controlled Release. *Acta Chim. Slov.*, 61(1), 27-33

• **Paun, G.,** Neagu, E., Litescu, S.C., Rotinberg, P., Radu, G.L. (**2012**). Membrane Processes Application on the Symphytum Officinale and Geranium Robertianum Extracts Concentration to Obtain High Antioxidative Activity Compounds. *J. Serb. Chem. Soc.*, 77(9), 1191-1203

• **Paun, G.,** Neagu, E., Tache, A., Radu, G.L., Parvulescu, V. (**2011**). Application of nanofiltration process for concentration of polyphenolic compounds from Geranium robertianum and Salvia officinalis extracts. *Chem. Biochem. Eng. Q.*, 25(4), 49-56.

• Neagu, E., **Roman, G. P.**, Radu, G. L. (**2011**). Antioxidant capacity of some salvia officinalis concentrated extracts. *Revue Roum. Chim.*, 56(8), 777-782

Articole publicate in reviste indexate BDI

• Simion, D., Gaidau, C., **Paun, G.,** Berechet, D. (**2023**). *Revista Pielarie si Incaltaminte*, 23(2), 107-114.
• Simion, D., Gaidau, C., **Paun, G. (2022).** *Revista Pielarie si Incaltaminte*, 22(3), 217-222.
• **Paun, G.,** Neagu, E., Moroeanu, V., Ungureanu,O., Cretu,R., Ionescu, E., Tebrencu, C.E., …, Radu, G.L. (**2017**).
• *Romanian Biotechnological Letters*, 22(4), 12751-12761
• Neagu, E., **Paun, G**., Radu, G. L. (**2014**). *Romanian Biotechnological Letters*, 19(2), 9203-9211
• **G. Paun**, P. Rotinberg, C. Mihai, E.Neagu, G.L. Radu (**2011**). *Romanian Biotechnological Letters*, 16(2), 6000-6008
• **Paun, G.,** Litescu, S.C., Neagu, E., Lucian Radu, G. (**2010**). *Revista de Chimie*, 61(9), 877-881.
• Neagu, E., **Roman, G. P.,** Radu, G. L. (**2010**). *Romanian Biotechnological Letters*, *15*(4), 5505-5511
• **Paun Roman**, **G.,** Tache, A., Neagu, E., Radu, G.L., Pârvulescu, V., Mureseanu, M. **(2010).** *Revista de Materiale*
• *Plastice*, 47(4), 497-502
• **Paun Roman**, G., Neagu, E., Teodor. E., Radu, G.L. (**2008**). *Revista de Chimie*, 59(2), 260-266.
• **Roman, G. P**., Pârvulescu, V., Radu, G. L., Su, B. -. (**2007**). *Revista De Chimie*, 58(1), 98-101

Brevete

- **RO 128610 B1/ 30.01.2017** "Procedeu de obtinere a unui extract purificat si concentrat din *Geranium robertianum* si *Helleborus purpurascens* cu efect citostatic, utilizand tehnologii membranare". Autori: **Paun Gabriela**, Radu Gabriel-Lucian, Neagu Elena, Moroeanu Veronica, Rotinberg Pincu
- **RO 126196/30.04.2012** "Procedeu si instalatie de obtinere a membranelor tubulare". Autori: Batrinescu Gheorghe, Garganciuc Dana, **Roman Gabriela**, Pasare Liliana, Viezure Ioana, Rata Daniela, Lehr Carol, Radu Florica, Radu Marin
- **RO123407/28.02.2012** "Sistem informatic pentru transfer tehnologic si stiintific". Autori: Radu Marin, Cristoiu Constantin, Poulalion Christian, Dinescu Mircea, Radu Florica, Arghirescu Marius, Badea Dan, Minciu Constantin, Mocuta Gheorghe, Alecu Corneliu, Batrinescu Gheorgh, **Roman Gabriela**,……, Vasile Florentina-Mirela
- **RO 132969/30.03.2023** "Procedeu de obtinere a unui biovector cu actiune antiinflamatoare, antimicrobiana si cicatrizanta". Autori: **Paun Gabriela**, Radu Lucian Gabriel, Neagu Elena, Moroeanu Veronica, Parvulescu Viorica, Negres Simona, Zanfirescu Anca, Ionescu Elena

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Carti publicate

1. **Paun-Roman Gabriela**, Batrinescu Gheorghe, Garganciuc Dana, Popescu Georgeta – Procese membranare la separarea si concentrarea unor compusi bioactivi din medii lichide naturale, Ed. Cartea Universitara, Bucuresti, 2006 ; Cod ISBN (10) 973-731 370-4, ISBN (13)978-973-731-370-6
2. Batrinescu Gheorghe, **Paun-Roman Gabriela**, Garganciuc Dana, Popescu Georgeta - Membrane cu enzime imobilizate, Ed. Cartea Universitara, Bucuresti, 2006, ISBN (10)973-731-372-0; ISBN (13)978-973-731-372-0.
3. Batrinescu Gheorghe, Popescu Georgeta, Garganciuc Dana, **Paun Gabriela**, Lehr Carol – Procese de membrană în biotehnologii, Ed. Ars Docendi, Bucuresti,2006 (215 pagini), ISBN (10) 973-558-270-8, ISBN (13) 978-973-558-270-8.

CONFERINȚE ȘI SEMINARE

Conferinte interationale selectate

- **Paun G.**, Neagu E., Tache, A. Ungureanu, O. Radu, G.L. 71st International Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product Research, 2–5 July **2023**, Dublin, Ireland
- **Paun G.**, Neagu E., Albu, C., Apreutesei, O.T., Radu, G.L.. 71st International Congressand Annual Meeting of the Society for Medicinal Plant and Natural Product Research, 2–5 July **2023**, Dublin, Ireland
- Simion, D., Gaidau, C., …, **Paun, G**. 9th International Conference on Advanced Materials and Systems- ICAMS **2022**, 26-28 October Bucharest
- **Paun G**., Neagu E., Badea G., Albu C., Radu G.L., Litescu S.C. International conference BioHub "Biological Science: Challenges and perspectives", 25th INCDSB anniversary conference, 15–17 November **2022**, Bucharest
- **Paun G**., Neagu E., Albu C., Radu G.L. International conference BioHub "Biological Science: Challenges and perspectives", 25th INCDSB anniversary conference, 15 – 17 November **2022**, Bucharest
- M. Ciobanu, G. Petcu, L. Parvu, **G. Paun**, A.I. Anghel, B.G Albu, V. Parvulescu. 2nd Bucharest Polymer Conference - 09-11th June **2021**, University "Politehnica" of Bucharest, Romania

- Simion, D., Gaidau, C., **Paun,G**., …, Stanca, M. International conference «Advanced materials and innovative technologies: Biotechnology, Applied Chemistry and Ecology», May 14-15, **2020**, Kiev, Ukraine
- **Paun G**, Neagu E, Albu C, Savin S, Radu G L. 6th World Congress on Medicinal and Aromatic Plants for Human and Animal Welfare (WOCMAP VI), November 13-17, **2019**, N.Cyprus
- Niculescu, V.C., **Paun, G.,** Parvulescu, V.. 1st International Conference on Materials, Mimicking, Manufacturing from and for Bio Application, 27-29 June **2018**, Milan, Italy
- **Paun, G**., Neagu, E., …, Radu, G.L. 9th Joint Natural Products Conference **2016**, July 24-27, Copenhagen, Denmark;
- Ionescu, E., Tebrencu, C.E., …, **Paun, G**. 9th CMAPSEEC Conference on Medicinal and Aromatic Plants of Southeast European Countries, 26-29 May **2016**, Plovdiv, Bulgaria
- Parvulescu, V., Filip, M., Neagu, E., **Paun, G**., Bao-Lian Su . International Conference on Advanced Complex Inorganic Nanomaterials, 13th-17th July **2015**, Namur, Belgium - invited lecture
- **Paun, G.**, Neagu, E., Ungureanu, O., Radu, G L. 59th International Congress and Anual Meeting of the Society for Medicinal Plant and Natural Product Research, 4-9 sept.**2011** Antalya, Turkey
- Pârvulescu, V. …, **Paun, G.,** Popa, A. 7th International Conference of the Chemical Societies of South- Easten European Contries on "Chemistry – Beauty and Application", 15-17Sept., **2010** Bucharest
- **Paun Roman, G;** Neagu, E; Moroeanu, V; Nechifor, G; Radu, G.L. 57th International Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product Research, 16-20 August, **2009**, Geneva, Switzerland
- **Paun G.,** Neagu E., Rotinberg P., Mihai C., Radu G.L18th International Congress of Chemical and Process Engineering CHISA, 24-28 August, **2008**, Prague, Czech
- **Paun-Roman, G**, Neagu, E., Radu G.L. 5th Chemical Engineering Conference for Collaborative Research in Eastern Mediterranean Countries – EMCC5 – 24-29 May **2008**, Italy

PROIECTE

2006 – 2008
Procedee de obtinere a unor principii bioactive din plante indigene, in forma purificata si concentrata (CEEX 76/2006) - Director de proiect

2013 – 2017
Obtinerea prin metode biotehnologice a unor noi tipuri de vectori pentru principii fitoterapeutice si modelarea mecanismelor de cedare a acestora (PN-II-PT-PCCA-2013-4-0034) - Director de proiect

2022 – 2024
Fitonutrienti pe baza de fitocomplecsi imbogatiti in fitoestrogeni cu potential de utilizare in managementul bolilor metabolice (PN-III-P2-2.1-PED-2021-1185) - Director de proiect

2006 – 2008
Materiale hibride obtinute prin grefarea complecsilor metalici pe suporti functionalizati si aplicatiile lor in oxidari biomimetice (CEEX 50/2006) - Responsabil proiect

2006 – 2008
Tehnologie de concentrare prin materiale permselective a complecsilor bioactivi din tesuturile tinere ale plantelor (CEEX 70/2006) - Responsabil proiect

2007 – 2010
Nanocompozite din polisulfona-polianilina functionalizate pentru bioanaliza si bioseparari (PN 71-025/2007) - Responsabil proiect

2011 – 2016
Cercetari inovative, multidisciplinare de investigare a efectelor probiotice ale unor noi tulpini de bacterii lactice si consortii (PN-II-PT-PCCA-2011-3.1-0969) - Responsabil proiect

Alte proiecte: Am fost implicata ca membru al echipei de lucru in peste 60 de proiecte naționale și 4 proiecte internaționale (MedPlaNet, FP7-IRSES-EMAP; proiect bilateral România-Valonia „Membrane compozite pe bază de particule catalitice hibride organic-anorganice și mezoporoase structurate cu aplicații în procese catalitice și protecția mediului"; proiect bilateral România-Valonia „Biohibrizi prin imobilizarea enzimelor în materiale poroase polimerice conductoare nanostructurate pentru proiectarea celulelor de combustibil biologic enzimatici").

