



## Europass Curriculum Vitae

### Personal information

Surname(s) / First  
name(s)

**ANGHEL Dan-Florin**

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-

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Nationality

Romanian

Date of birth

Gender

Male

### Occupational field

**Colloid chemistry and materials science**

### Work experience

**Dates**

**2021 – Present**

Occupation or position  
held

Voluntary Senior Scientific Researcher in Colloid Chemistry and Materials Science, 'Ilie Murgulescu' Institute of Physical Chemistry, Bucharest Romania.

**1990 – 2021**

Occupation or position  
held

Senior Scientific Researcher I, Head of Colloid Laboratory

Main activities and  
responsibilities

Surfactant micellization and solubilization, polymer-surfactant systems, fluorescently labeled polymers (FLP), effect of external stimuli on FLP, associative polymers, polyelectrolyte multilayers, emulsion, micro- and nanoemulsions, metallic and semiconductor nanoparticles, surfactant partition between nonmiscible phases, biodiesel, phase diagrams and thermodynamics of surfactants. Project Manager.

Name and address of  
employer

Institute of Physical Chemistry "I. Murgulescu", Romanian Academy, Laboratory of Colloids, No.202, Splaiul Independetei Bvd., District 6 , Post Code 060021, Bucharest, Romania

Type of business or  
sector

Research Organization - Institute of Romanian Academy

**Dates**

**1989-1990**

Occupation or position held	Senior Scientific Researcher II, Head of Laboratory
Main activities and responsibilities	Micellar and phase transfer catalysis, surfactant micellization and solubilization, polymer-surfactant systems, effect of surfactants on biological membranes. Project Manager
Name and address of employer	Institute of Physical Chemistry "I. Murgulescu", Romanian Academy, Department of Colloids, No.202, Splaiul Independentei Bvd., District 6 , Post Code 060021, Bucharest, Romania
Type of business or sector	Research Organization – Ministry of Chemical Industry
<b>Dates</b>	<b>1980-1989</b>
Occupation or position held	Senior Scientific Researcher III, Project leader
Main activities and responsibilities	Microemulsions for enhanced oil recovery, chemical products for soil compactness and glaze prevention, emulsions and microemulsions for polymer synthesis. Project Manager
Name and address of employer	Center of Physical Chemistry, Central Institute of Chemical Research, Spl. Independentei 202, Bucharest Romania
Type of business or sector	Research Organization – Ministry of Chemical Industry
<b>Dates</b>	<b>1973-1980</b>
Occupation or position held	Researcher, Project leader
Main activities and responsibilities	Microemulsions for enhanced oil recovery, surfactant selective electrodes, superplastifiers for cement and concrete, chemicals for glaze prevention. Project Manager
Name and address of employer	Center of Physical Chemistry, Central Institute of Chemical Research, Spl. Independentei 202, Bucharest Romania
Type of business or sector	Research Organization – Ministry of Chemical Industry
<b>Dates</b>	<b>1969-1973</b>
Occupation or position held	Researcher
Main activities and responsibilities	Microemulsions for enhanced oil recovery, surfactant selective electrodes, superplastifiers for cement and concrete, pesticide formulation. Member of research team
Name and address of employer	Center of Physical Chemistry, Central Institute of Chemical Research, Spl. Independentei 202, Bucharest Romania
Type of business or sector	Research Organization – Ministry of Education
<b>Education and training</b>	

<b>Dates</b>	<b>1972 - 1980</b>																																								
Title of qualification awarded	Doctor in Physical Chemistry																																								
Principal subjects/occupational skills covered	Colloid Chemistry																																								
Name and type of organisation providing education and training	Romanian Ministry of Education																																								
<b>Dates</b>	<b>1964 - 1969</b>																																								
Title of qualification awarded	Chemist																																								
Principal subjects/occupational skills covered	Organic Chemistry																																								
Name and type of organisation providing education and training	Romanian Ministry of Education																																								
Other language(s)	<b>English; French</b>																																								
Self-assessment	<table><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><tr><td>C2</td><td>Proficient User</td><td>C2</td><td>Proficient User</td><td>C2</td><td>Proficient User</td><td>C2</td><td>Proficient User</td><td>C2</td><td>Proficient User</td></tr><tr><td>C1</td><td>Proficient User</td><td>C1</td><td>Proficient User</td><td>C1</td><td>Proficient Use</td><td>C1</td><td>Proficient User</td><td>C1</td><td>Proficient User</td></tr></table>	Understanding				Speaking				Writing		Listening		Reading		Spoken interaction		Spoken production				C2	Proficient User	C2	Proficient User	C2	Proficient User	C2	Proficient User	C2	Proficient User	C1	Proficient User	C1	Proficient User	C1	Proficient Use	C1	Proficient User	C1	Proficient User
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<b>French</b>																																									
	<i>(*) Common European Framework of Reference for Languages</i>																																								
Social skills and competences	Very good social skills, excellent in collaboration with co-workers and superior staff.																																								
Organizational skills and competences	Very good organizational skills, excellent manager, competent team leader.																																								

Technical skills and competences	Surfactant micellization and solubilization, polymer-surfactant systems, fluorescently labeled polymers (FLP), effect of external stimuli on FLP, associative polymers, polyelectrolyte multilayers, emulsions, micro- and nano-emulsions, surfactant partition between non-miscible phases, metallic and semiconductor nanoparticles, self-sintering conductive inks, hydrophobization of surfaces, biodiesel, phase diagrams and thermodynamics of surfactants, micellar and phase transfer catalysis, effect of surfactants on biological membranes, chemical products for soil compactness and glaze prevention, emulsions and microemulsions for polymer synthesis, microemulsions for enhanced oil recovery, surfactant selective electrodes, superplastifiers for cement and concrete.
Computer skills and competences	Good computer skills (Microsoft Windows; Excel; PowerPoint, Origin, etc.)
Other skills and competences	Elaboration and coordination of research & development projects
Driving license	B
<b>Additional information</b>	<p>Dr. Anghel is a member of Romanian Chemical Society, European Colloid and Interface Society, International Association of Colloid and Interface Scientists, German Colloid Society, and is an expert of the United Nations Industrial Development Organization (UNIDO).</p> <p>Dr. Anghel has published a book with Springer and eight book chapters in Romania (4), the USA (2) and India (2). He holds about 180 scientific papers in ISI journals, has presented more than 200 papers at national and international meetings, has 8 Romanian patents, 3 technologies applied in Romanian oil and chemical industry, 42 technical reports to grants with Romanian industry, 26 Romanian grants and 9 foreign grants [EU funded project INFRANANOCHEM for Infrastructure (1), Ontario Center for Materials Research – Canada (1), Swedish Science Foundation (2), Deutsche Forschungsgemeinschaft (3), Deutscher Akademischer Austausch Dienst (1), and Max Planck Society (1)].</p> <p>Dr. Anghel was awarded with the 'Ilie Murgulescu' prize of the Romanian Academy. He is included in Hübners Who is Who Outstanding Intellectuals of the 21<sup>st</sup> Century, in Leading Scientists of the World (International Biographical Centre, Cambridge, UK), and in the Dictionary of the successful people in Romania (2015).</p> <p>Dr. Anghel is currently reviewer to Romanian and foreign ISI scientific journals, and his Hirsch index is 27.</p>
<b>Annexes</b>	List of scientific contributions

### Scientific papers (Selected list)

1. M Ioan, **DF Anghel**, M Anastasescu, IC Gifu, E Alexandrescu, RI Matei, et al., Hybrid materials based on ZnO nanoparticles and organo-modified silica coatings as eco-friendly anticorrosive protection for metallic historic artifacts, *Coatings* 13 (7), 1193, **2023**, Impact factor = 2,9.
2. M Ioan, **DF Anghel**, IC Gifu, E Alexandrescu, et al., Novel microemulsions with essential oils for environmentally friendly cleaning of copper cultural heritage artifacts, *Nanomaterials* 13 (17), 2430, **2023**, Impact factor = 4,4.
3. A Iovescu, G Stîngă, A Băran, AR Leontieș, ME Maxim, **DF Anghel**, Insights into BSA-micellar carrier-drug systems using pyrene excimer, *Colloid and Polymer Science*, 301, (9), 1061-1076, **2023**, Impact factor = 2,2.
4. G Stîngă, A Băran, A Iovescu, ME Maxim, **DF Anghel**, Metal ions recognition by pyrene labeled poly (acrylic acid), *Journal of Molecular Liquids* 365, 120135, **2022**, Impact factor = 6,0.
5. L Vlaia, I Olariu, AM Muț, G Coneac, V Vlaia, **DF Anghel**, ME Maxim, et al., New, biocompatible, chitosan-gelled microemulsions based on essential oils and sucrose esters as nanocarriers for topical delivery of fluconazole, *Pharmaceutics* 14 (1), 75, **2021**, Impact factor = 6,3.
6. L Aricov, AR Leonties, IC Gifu, D Preda, A Raducan, **DF Anghel**, Enhancement of laccase immobilization onto wet chitosan microspheres using an iterative protocol and its potential to remove micropollutants, *Journal of Environmental Management* 276, 111326, **2020**, Impact factor = 6,8.
7. A. Băran, G. Stîngă, **D.F. Anghel**, F. Brînzoi, Micellar size changing in the systems of octaethylene glycol mono(n-dodecyl) ether without and with poly(acrylic acid) *Journal of Molecular Liquids*, 284, **2019**, 709-717. Impact Factor = 4,5.
8. G. Stîngă, A. Băran, A. Iovescu, L. Aricov, **D.F. Anghel**, Monitoring the confinement of methylene blue in pyrene labeled poly(acrylic acid), *Journal of Molecular Liquids*, 273, **2019**, 125-133. Impact Factor = 4,5.
9. I.C. Gifu, M.E Maxim, A. Iovescu, L. Aricov, A.R. Leontieș, M. Anastasescu, C.M. Ninciuleanu, E. Alexandrescu, **D.F. Anghel**, 'Water-repellent glass by hydrophobically modified poly(acrylate)-surfactant complexes and silica', *Revue Roumaine de Chimie*, 63, **2018**, 475-480. Impact Factor = 0,4.
10. E.L. Vasilescu, M. Balcan, G. Stîngă, A. Băran, I.C. Văcăreșteanu, L. Aricov, **D.F. Anghel**, 'A micellar decontamination strategy for removal of polycyclic aromatic hydrocarbons from environment', *Environmental Engineering and Management Journal*, 17, **2018**, 2813-2821. Impact Factor = 1,3
11. L. Aricov, A. Băran, G. Stîngă, E.L. Simion, I.C. Gifu, **D.F. Anghel**, V. Rădițoiu, Formation and hosting properties of polyacrylate-surfactant complexes, *Colloid and Polymer Science*, 295, **2017**, 1017-1038. Impact Factor = 1,9.
12. E.L. Simion, G. Stîngă, A. Iovescu, A. Băran, **D.F. Anghel**, Ageing of fluorescent and smart naphthalene labeled poly(acrylic acid)/cationic surfactant complex, *Colloids and Surfaces A*, 527, **2017**, 81-88. Impact Factor = 2,7.
13. A. Băran, A. Iovescu, M. Gosecka, G. Stîngă, S. Peretz, T. Basinska, S. Slomkowski, M. E. Maxim, **D. F. Anghel**, Peculiarities of linear and hyperbranched polyglycidols in water and

- aqueous surfactant solutions, *European Polymer Journal*, 94, **2017**, 162–172, Impact Factor = 3,5
14. I.C. Gîfu, M.E. Maxim, A. Iovescu, L. Aricov, E.L. Simion, A.R. Leonties, M. Anastasescu, C. Munteanu, D.F. Anghel. Natural aging of multilayer films containing hydrophobically modified poly(acrylate)s or their complexes with surfactants, *Applied Surface Science*, 412, **2017**, 489–496. Impact Factor = 3,1.
  15. L. Aricov, A. Băran, E.L. Simion, I.C. Gîfu, **D.F. Anghel**, V.V. Jerca, D.M. Vuluga, New insights into the self-assembling of some hydrophobically modified polyacrylates in aqueous solution, *Colloid and Polymer Science*, 294, **2016**, 667–679. Impact Factor = 1,9.
  16. G. Stîngă, A. Băran, A. Iovescu, **D.F. Anghel**, Self-aggregation of the pyrene labeled poly(acrylic acid) in nanoscopically crowded environments, *Journal of Photochemistry & Photobiology, A: Chemistry*, 328, **2016**, 33–41. Impact Factor = 2,5.
  17. E.L. Simion, G. Stîngă, A. Băran, L. Aricov, I.C. Gîfu, **D.F. Anghel**, Smart borax complexes starting from anionic surfactant in association with unlabeled or fluorescently labeled poly(acrylic acid)s, *Colloid and Polymer Science*, 294, **2016**, 927–939. Impact Factor = 1,9.
  18. G. Stîngă, M. E. Maxim, A. Iovescu, D. E. Mihăiescu, A. Băran, A. R. Leonties, Marieta Balcan, **D. F. Anghel**, NRET - A rapid method to investigate the water-oil interface in reverse micellar systems, *Journal of Molecular Liquids*, 214, **2016**, 283–292. Impact Factor = 2,7.
  19. I.C. Gîfu, M.E. Maxim, A. Iovescu, E.L. Simion, L. Aricov, M. Anastasescu, C. Munteanu, **D.F. Anghel**, Surface hydrophobization by electrostatic deposition of hydrophobically modified poly(acrylates) and their complexes with surfactants, *Applied Surface Science*, 371, **2016**, 519–529. Impact Factor = 3,1.
  20. L. Aricov, H. Petkova, D. Arabadzhieva, A. Iovescu, E. Mileva, K. Khristov, G. Stîngă, C.F. Mihailescu, **D.F. Anghel**, R. Todorov, Aqueous solutions of associative poly(acrylates): Bulk and interfacial properties, *Colloids and Surfaces A*, 505, **2016**, 138–149. Impact Factor = 2,8.

Bucharest,

Signature:

