



ANEXA 2

STANDARDE MINIMALE ALE UNIVERSITĂȚII

FACULTATEA	FUNCȚIA DIDACTICĂ: CONFERENȚIAR
CHIMIE	<p>1. Îndeplinirea standardelor minimale obligatorii stabilite de comisia Chimie din cadrul CNATDCU</p> <p>Criterii adiționale față de cele menționate la punctul 1:</p> <p>2. Un grant câștigat prin competiție, ca director de proiect</p> <p>3. Un curs/carte/capitol de carte/manual de exerciții și probleme</p> <p>4. Minim 50 de puncte de la ultima promovare</p> <p>5. Activitatea științifică trebuie să fie obligatoriu în profilul postului</p>

Îndeplinirea standardelor minimale obligatorii stabilite de comisia Chimie din cadrul CNATDCU precum și a celor adiționale (condiții interne UAIC):

		Condiție MINIMĂ			REALIZAT		
		Indicator	Puncte		Indicator	Puncte	
Activitate didactică și profesională (A1)	1.1 Cărți/capitole de carte	1 (+1 condiție internă UAIC)	3 + 3 (condiție internă UAIC)		6	18	
Activitatea de cercetare (A2)	2.1 Articole în reviste cotate ISI Thomson Reuters	18 (din care 12 în reviste internaționale)	18 puncte impact	20 + 4	47 (în reviste internaționale)	205.6 puncte impact	63
	2.2 Granturi/Proiecte castigate prin competiție	1 (membru) 1 (director, condiție internă UAIC)	2 (membru) 4 (director)		4 (membru) 2 (director)	8 (membru) 8 (director)	
Recunoașterea și impactul activității (A3)	3.1 Citări în reviste ISI și BDI	30	15		850	425	
TOTAL PUNCTE		38 + 7 (condiție internă UAIC)			506		
Punctaj realizat de la ultima avansare		3000 puncte					



Lista explicită a indicatorilor realizați pentru fiecare activitate **A1, A2, A3**:

1.1: Cărți/Capitole de carte

1. **Dirtu AC**, Ionas AC, Malarvannan G, Covaci A. Chapter: Transformation Products of Brominated Flame Retardants (BFRs). Book: Transformation Products of Emerging Contaminants in the Environment: Analysis, Processes, Occurrence, Effects and Risks, John Wiley & Sons, Inc – *accepted for publication, in press*.
2. Covaci A, Geens T, Roosens L, Ali N, Van den Eede N, Ionas AC, Malarvannan G, **Dirtu AC**. Chapter: Human exposure and health risks to emerging organic contaminants. Book: The Handbook of Environmental Chemistry, 20 - Emerging organic contaminants and human health. ISBN: 978-3-642-28131-0, Springer-Verlag Berlin Heidelberg, pp 243-306, 2012.
3. **Dirtu AC**. Monitorizarea poluanților organohalogenai persistenți prezenți în mediu și fluide umane. ISBN 978-606-575-112-5. Editura Stef, Iași, România, 334 pagini, 2011.
4. Covaci A, **Dirtu AC**, Voorspoels S, Roosens L, Lepom P. Chapter: Sample preparation and chromatographic methods applied to congener-specific analysis of polybrominated diphenyl ethers. Book: The Handbook of Environmental Chemistry – Brominated Flame Retardants (BFRs), ISBN: 978-3-642-19268-5, Springer-Verlag Berlin, Heidelberg, pp 55-94, 2011.
5. Covaci A, **Dirtu AC**. Chapter: Anthropogenic and naturally-produced contaminants in fish oil: Role in ill-health, Book: Modern Dietary Fat Intake: Promotion of Disease, ISBN: 978-1-60327-570-5, Humana Press, Springer Science + Business Media LLC, New York, pp 321-344, 2010.
6. Covaci A, **Dirtu AC**. Brominated Flame Retardants: Analytical, Toxicological and Environmental Aspects, NATO Science for Peace and Security. Series A: Chemistry and Biology, Applications of Mass Spectrometry in Life Safety, ISBN 978-1-4020-8810-0; ISSN 1874-6489, Springer-Verlag Netherlands, pp. 153-184, 2008.

2.1: Articole în reviste cotate ISI Thomson Reuters (IF – factorul de impact al jurnalului în acord cu Thomson Reuters, 2013). Factor de Impact cumulat: 205.6 puncte.

1. Louis C, Covaci A, Stas M, Crocker DE, Malarvannan G, Dirtu AC, Debier C. Bioaccumulation of hydroxylated polychlorinated biphenyls and pentachlorophenol in the serum of northern elephant seal pups (*Mirounga angustirostris*). *Environmental Research* 136, 441-448, 2015. (IF – **3.951**)
2. **Dirtu AC**, Buczynska AJ, Godoi AFL, Favoreto R, Bencs L, Potgieter-Vermaak SS, Godoi RHM, Van Grieken R, Van Vaeck L. Methods, fluxes and sources of gas phase alkyl nitrates in the coastal air. *Environmental Monitoring and Assessment* 186 (10), 6445-6457, 2014. (IF – **1.679**)
3. Dirinck EL, **Dirtu AC**, Govindan M, Covaci A, Van Gaal LF, Jorens PG. Exposure to Persistent Organic Pollutants: Relationship With Abnormal Glucose Metabolism and Visceral Adiposity. *Diabetes Care* 37 (7), 1951-1958, 2014. (IF – **8.570**)
4. Ali N, Mehdi T, Malik RN, Eqani SAMAS, Kamal A, **Dirtu AC**, Neels H, Covaci A. Levels and profile of several classes of organic contaminants in matched indoor dust and serum samples from occupational settings of Pakistan. *Environmental Pollution* 193, 269-276, 2014. (IF – **3.902**)
5. Louis C, **Dirtu AC**, Stas M, Guiot Y, Malarvannan G, Das K, Costa DP, Crocker DE, Covaci A, Debier C. Mobilisation of lipophilic pollutants from blubber in northern elephant seal pups (*Mirounga angustirostris*) during the post-weaning fast. *Environmental Research* 132, 438-448, 2014. (IF – **3.951**)
6. Ionas AC, **Dirtu AC**, Anthonissen T, Neels H, Covaci A. Downsides of the recycling process: Harmful organic chemicals in children's toys. *Environment International* 65, 54-62, 2014. (IF – **5.664**)
7. Pereira-Fernandes A, Dirinck E, **Dirtu AC**, Malarvannan G, Covaci A, Van Gaal L, Vanparys C, Jorens PG, Blust R. Expression of Obesity Markers and Persistent Organic Pollutants Levels in Adipose Tissue of Obese Patients: Reinforcing the Obesogen Hypothesis? *Plos One* 9 (1), e84816, 2014. (IF – **3.534**)



8. **Dirtu AC**, Geens T, Dirinck E, Malarvannan G, Neels H, Van Gaal L, Jorens PG, Covaci A. Phthalate metabolites in obese individuals undergoing weight loss: Urinary levels and estimation of the phthalates daily intake. *Environment International* 59, 344-353, 2013. (IF – 5.664)
9. **Dirtu AC**, Dirinck E, Malarvannan G, Neels H, Van Gaal L, Jorens PG, Covaci A. Dynamics of Organohalogenated Contaminants in Human Serum from Obese Individuals during One Year of Weight Loss Treatment. *Environmental Science & Technology* 47(21), 12441-12449, 2013. (IF – 5.481)
10. Coakley JD, Harrad SJ, Goosey E, Ali N, **Dirtu AC**, Van den Eede N, Covaci A, Douwes J, 't Mannetje A. Concentrations of polybrominated diphenyl ethers in matched samples of indoor dust and breast milk in New Zealand. *Environment International* 59, 255-261, 2013. (IF – 5.664)
11. **Dirtu AC**, Niessen SJM, Jorens PG, Covaci A. Organohalogenated contaminants in domestic cats' plasma in relation to spontaneous acromegaly and type 2 diabetes mellitus: A clue for endocrine disruption in humans? *Environment International* 57-58, 60-67, 2013. (IF – 5.664)
12. Malarvannan G, Dirinck E, **Dirtu AC**, Pereira-Fernandes A, Neels H, Jorens PG, Van Gaal L, Blust R, Covaci A. Distribution of persistent organic pollutants in two different fat compartments from obese individuals. *Environment International* 55, 33-42, 2013. (IF – 5.664)
13. Ali N, Ali L, Mehdi T, **Dirtu AC**, Al-Shammari F, Neels H, Covaci A. Levels and profiles of organochlorines and flame retardants in car and house dust from Kuwait and Pakistan: Implication for human exposure via dust ingestion. *Environment International* 55, 62-70, 2013. (IF – 5.664)
14. **Dirtu AC**, Abdallah MAE, Covaci A. Advances in the sample preparation of brominated flame retardants and other brominated compounds. *TrAC – Trends in Analytical Chemistry* 43, 189-203, 2013. (IF – 6.612)
15. Dodson RE, Perovich LJ, Covaci A, Van den Eede N, Ionas AC, **Dirtu AC**, Brody JG, Rudel RA. After the PBDE Phase-Out: A Broad Suite of Flame Retardants in Repeat House Dust Samples from California. *Environmental Science & Technology* 46 (24), 13056-13066, 2012. (IF – 5.481)
16. Kiciński M, Viaene MK, Den Hond E, Schoeters G, Covaci A, **Dirtu AC**, Nelen V, Bruckers L, Croes K, Sioen I, Baeyens W, Van Larebeke N, Nawrot TS. Neurobehavioral function and low-level exposure to brominated flame retardants in adolescents: a cross-sectional study. *Environmental Health* 11 (86), 1-12, 2012. (IF – 2.713)
17. **Dirtu AC**, Van den Eede N, Malarvannan G, Ionas AC, Covaci A. Analytical methods for selected emerging contaminants in human matrices-a review. *Analytical and Bioanalytical Chemistry* 404 (9), 2555-2581, 2012. (IF – 3.578)
18. **Dirtu AC**, Ali N, Van den Eede N, Neels H, Covaci A. Country specific comparison for profile of chlorinated, brominated and phosphate organic contaminants in indoor dust. Case study for Eastern Romania, 2010. *Environment International* 49, 1-8, 2012. (IF – 5.664)
19. Croes K, Colles A, Koppen G, Govarts E, Bruckers L, Van de Mierop E, Nelen V, Covaci A, **Dirtu AC**, Thomsen C, Haug LS, Becher G, Mampaey M, Schoeters G, Van Larebeke N, Baeyens W. Persistent organic pollutants (POPs) in human milk: A biomonitoring study in rural areas of Flanders (Belgium). *Chemosphere* 89 (8), 988-994, 2012. (IF – 3.499)
20. Ali N, **Dirtu AC**, Van den Eede N, Goosey E, Harrad S, Neels H, 't Mannetje A, Coakley J, Douwes J, Covaci A. Occurrence of alternative flame retardants in indoor dust from New Zealand: Indoor sources and human exposure assessment. *Chemosphere* 88 (11), 1276-1282, 2012. (IF – 3.499)
21. Ali N, Van den Eede N, **Dirtu AC**, Neels H, Covaci A. Assessment of human exposure to indoor organic contaminants via dust ingestion in Pakistan. *Indoor Air* 22 (3), 200-211, 2012. (IF – 4.202)
22. Petro EML, Leroy JLMR, Covaci A, Fransen E, De Neubourg D, **Dirtu AC**, De Pauw I, Bols PEJ. Endocrine-disrupting chemicals in human follicular fluid impair in vitro oocyte developmental competence. *Human Reproduction* 27 (4), 1025-1033, 2012. (IF – 4.585)
23. Van den Eede N, **Dirtu AC**, Ali N, Neels H, Covaci A. Multi-residue method for the determination of brominated and organophosphate flame retardants in indoor dust. *Talanta* 89, 292-300, 2012. (IF – 3.511)
24. Schnitzler JG, Celis N, Klaren PHM, Blust R, **Dirtu AC**, Covaci A, Das K. Thyroid dysfunction in sea bass (*Dicentrarchus labrax*). Part 2: Underlying mechanisms and effects of polychlorinated biphenyls on thyroid hormone physiology and metabolism. *Aquatic Toxicology* 105 (3-4), 438-447, 2011. (IF – 3.513)
25. Van den Steen E, Poisbleau M, Demongin L, Covaci A, **Dirtu AC**, Pinxten R, van Noordwijk HJ, Quillfeldt P, Eens M. Organohalogenated contaminants in eggs of rockhopper penguins (*Eudyptes chrysocome*) and imperial shags



- (*Phalacrocorax atriceps*) from the Falkland Islands. *Science of the Total Environment* 409 (14), 2838-2844, 2011. (IF – 3.163)
26. Van den Eede N, **Dirtu AC**, Neels H, Covaci A. Analytical developments and preliminary assessment of human exposure to organophosphate flame retardants from indoor dust. *Environment International* 37 (2), 454-461, 2011. (IF – 5.664)
27. **Dirtu AC**, Covaci A. Estimation of daily intake of organohalogenated contaminants from food consumption and indoor dust ingestion in Romania. *Environmental Science & Technology* 44 (16), 6297-6304, 2010. (IF – 5.481)
28. Petro EML, Covaci A, Leroy JLMR, **Dirtu AC**, De Coen W, Bols PEJ. Occurrence of endocrine disrupting compounds in tissues and body fluids of Belgian dairy cows and its implications for the use of the cow as a model to study endocrine disruption. *Science of the Total Environment* 408 (22), 5423-5428, 2010. (IF – 3.163)
29. Van Meel K, Horemans B, Krata A, Bencs L, Buczynska A, **Dirtu AC**, Worobiec A, Van Grieken R. Elemental concentrations in aerosols at the Belgian coast, as a function of size, season and air mass trajectories, *Environmental Chemistry Letters* 8 (2), 157-163, 2010. (IF – 1.906)
30. **Dirtu AC**, Jaspers VLB, Cernat R, Neels H, Covaci A. Distribution of PCBs and their HO-PCB metabolites in human serum from two European countries. *Environmental Science & Technology* 44 (8), 2876-2883, 2010. (IF – 5.481)
31. Dorneles PR, Lailson-Brito J, **Dirtu AC**, Weijs L, Azevedo AF, Torres JPM, Malm O, Neels H, Blust R, Das K, Covaci A. Anthropogenic and naturally-produced organobrominated compounds in marine mammals from Brazil. *Environment International* 36 (1), 60-67, 2010. (IF – 5.664)
32. Bencs L, Krata A, Horemans B, Buczyńska AJ, **Dirtu AC**, Godoi AFL, Godoi RHM, Potgieter-Vermaak S, Van Grieken R. Atmospheric nitrogen fluxes at the Belgian coast: 2004-2006, *Atmospheric Environment* 43 (24), 3786-3798, 2009. (IF – 3.062)
33. Covaci A, Roosens L, **Dirtu AC**, Waegeneers N, Van Overmeire I, Neels H, Goeyens L, Brominated flame retardants in Belgian home-produced eggs: Levels and contamination sources. *Science of the Total Environment* 407 (15), 4387-4396, 2009. (IF – 3.163)
34. Weijs L, **Dirtu AC**, Das K, Gheorghe A, Reijnders PJH, Neels H, Blust R, Covaci A, Inter-species differences for polybrominated diphenyl ethers in marine top-predators from the Southern North Sea: Part II. Biomagnification in harbour seals and harbour porpoises. *Environmental Pollution* 157 (2), 445-451, 2009. (IF – 3.902)
35. Weijs L, **Dirtu AC**, Das K, Gheorghe A, Reijnders PJH, Neels H, Blust R, Covaci A, Inter-species differences for polybrominated diphenyl ethers in marine top-predators from the Southern North Sea: Part I. Accumulation patterns in harbour seals and harbour porpoises. *Environmental Pollution* 157 (2), 437-444, 2009. (IF – 3.902)
36. Horemans B, Krata A, Buczynska A, **Dirtu AC**, Van Meel K, Van Grieken R, Bencs L, Major ionic species in size-segregated aerosols and associated gaseous pollutants at a coastal site on the Belgian North Sea, *Journal of Environmental Monitoring* 11, 670-677, 2009. (IF – 2.109)
37. Van den Sten E, Eens M, Covaci A, **Dirtu AC**, Jaspers VLB, Neels H, Pinxten R, An exposure study with polybrominated diphenyl ethers (PBDEs) in female European starlings (*Sturnus vulgaris*): toxicokinetics and reproductive effects, *Environmental Pollution* 157 (2), 430-436, 2009. (IF – 3.902)
38. Roosens L, **Dirtu AC**, Goemans G, Belpaire C, Gheorghe A, Neels H, Blust R, Covaci A, Brominated flame retardants and polychlorinated biphenyls in fish from the river Scheldt, Belgium, *Environment International* 34 (7), 976-983, 2008. (IF – 5.664)
39. Jaspers VLB, **Dirtu AC**, Eens M, Neels H, Covaci A, Predatory bird species show different patterns of hydroxylated polychlorinated biphenyls (HO-PCBs) and polychlorinated biphenyls (PCBs), *Environmental Science & Technology* 42 (9), 3465-3471, 2008. (IF – 5.481)
40. Covaci A, Hura C, Gheorghe A, Neels H, **Dirtu AC**, Organochlorine contaminants in hair of adolescents from Iassy, Romania, *Chemosphere* 72 (1), 16-20, 2008. (IF – 3.499)
41. **Dirtu AC**, Roosens L, Geens T, Gheorghe A, Neels H, Covaci A, Simultaneous determination of bisphenol A, triclosan and tetrabromobisphenol A in human serum using solid-phase extraction and gas chromatography-electron capture negative ionization-mass spectrometry, *Analytical and Bioanalytical Chemistry* 391 (4), 1175-1181, 2008. (IF – 3.578)
42. Ravindra K, **Dirtu AC**, Covaci A, Low pressure – gas chromatography: Recent trends and developments, *TrAC – Trends in Analytical Chemistry*, 27 (4), 291-303, 2008. (IF – 6.612)



43. Harrad S, Ibarra C, Diamond M, Melymuk L, Robson M, Douwes J, Roosens L, **Dirtu AC**, Covaci A, Polybrominated diphenyl ethers in domestic indoor dust from Canada, New Zealand, United Kingdom, and United States, *Environment International* 34 (2), 232-238, 2008. (IF – 5.664)
44. **Dirtu AC**, Ravindra K, Roosens L, Van Grieken R, Neels H, Blust R, Covaci A, Fast analysis of decabrominated diphenyl ether (BDE 209) using low-pressure gas chromatography-electron capture negative ionization-mass spectrometry, *Journal of Chromatography A* 1186 (1-2), 295-301, 2008. (IF – 4.258)
45. Dragan D, Cucu-Man S, **Dirtu AC**, Mocanu R, Van Vaeck L, Covaci A, Occurrence of organochlorine pesticides and polychlorinated biphenyls in soils and sediments from Eastern Romania, *International Journal of Environmental Analytical Chemistry* 86 (11), 833-842, 2006. (IF – 1.321)
46. **Dirtu AC**, Cernat R, Dragan D, Mocanu R, Van Grieken R, Neels H, Covaci A, Organohalogenated pollutants in human serum from lassy, Romania and their relation with age and gender, *Environment International* 32(6), 797-803, 2006. (IF – 5.664)
47. Drochioiu G, Mangalagiu I, Avram E, Popa K, **Dirtu AC**, Druta I, Cyanide Reaction with Ninhydrin: Elucidation of Reaction and Interference Mechanisms, *Analytical Sciences* 20, 1443-1447, 2004. (IF – 1.403)

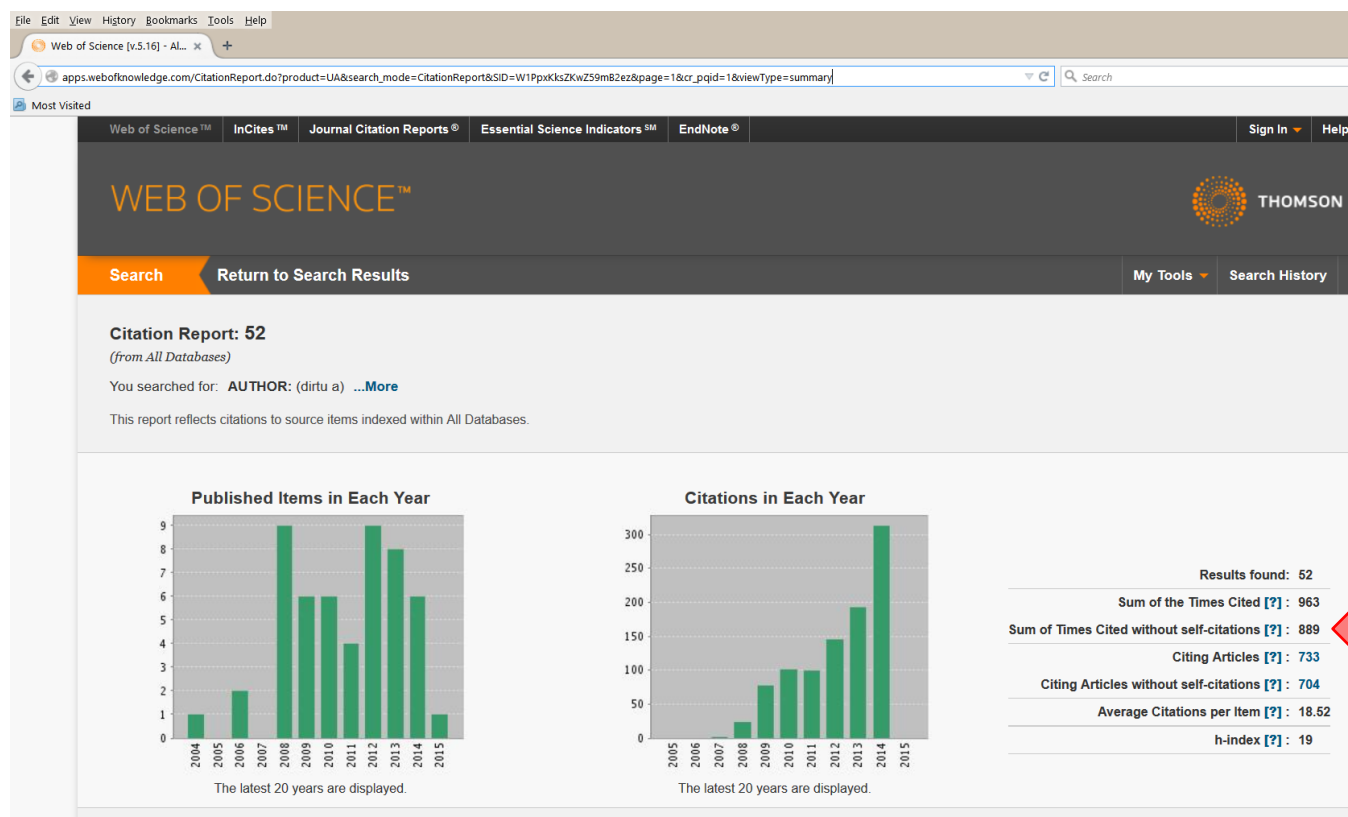
2.2 Granturi/Proiecte castigate prin competiție

1. *In vitro* PBDEs metabolism by pet-animals liver microsomes – evaluation of their potential on assessing human exposure to indoor contaminants. University of Antwerp, Belgium. Research Grant BOF-UA, 2013, **director**.
2. Human exposure to new chemicals from indoor environments. Research Foundation Flanders – FWO, Belgium (University of Antwerp-host Institution) FA010200 – 5261, 2011-2013, **director**.
3. European FP7 Research & Development “NEPHRON+”, Partnership research project with Netherlands Organization for Applied Scientific Research (TNO) and University of Antwerp, Belgium, A11/0236, 2011-2012, **membru**.
4. Endocrine-disrupting environmental chemicals: From accumulation to their role in the global “neuro-endocrine” epidemic of obesity and its metabolic consequence. University Hospital of Antwerp and University of Antwerp, Toxicological Centre, Belgium, GOA-UA, 3565, 2009-2012, **membru**.
5. Contamination of Eggs from Free Range Chickens. Toxicological Centre, University of Antwerp, Belgium, CONTEGG RT-06/9 – 2007, **membru**.
6. Cercetări privind decolorarea unor soluții de coloranți prin noi procedee oxidative, microbiologice și de sorbție în scopul reabilitării și recirculării apelor uzate din industria textilă. CEEX, P-CD – COLODEC, 2006, Universitatea “Al. I. Cuza” Iași, România, CEEX, P-CD – COLODEC, 2006, **membru**.



3.1 Citări în reviste ISI și BDI

- căutare corespunzătoare datei 06.01.2015; baza de date accesată: ISI Web of Knowledge (http://apps.webofknowledge.com/CitationReport.do?product=UA&search_mode=CitationReport&SID=W1PpxKksZKwZ59mB2ez&page=1&cr_pqid=1&viewType=summary)
- nume autor: "**DIRTU A**"; cu excluderea autocitărilor pentru perioada 2006-2014
- lista explicită a citărilor articolelor științifice este inclusă în Fișa de Autoevaluare (conform Anexei 1) inclusă în dosarul candidatului



Lect. Dr. Alin C. DÎRȚU