

FIȘA DE VERIFICARE A ÎNDEPLINIRII STANDARDELOR MINIMALE- Conf. dr. ing. Anamaria TODEA**Candidat: Conf. dr. ing. Anamaria Todea**

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Domeniul pentru care se solicită abilitarea: **Inginerie chimică****FIȘA DE VERIFICARE A ÎNDEPLINIRII STANDARDELOR MINIMALE****COMISIA INGINERIE CHIMICĂ, INGINERIE MEDICALĂ, ȘTIINȚA MATERIALELOR ȘI NANOMATERIALE**

(conform OMECTS 6.129_2016 Anexa nr. 8)

STANDARDE MINIMALE NECESARE SI OBLIGATORII PENTRU CONFERIREA TITLURILOR DIDACTICE DIN ÎNVĂȚĂMÂNTUL SUPERIOR ȘI A GRADELOR PROFESIONALE DE CERCETARE – DEZVOLTARE		Punctaj minim	Punctaj realizat candidat	Raport punctaj realizat/punctaj minim	Standard îndeplinit/ neîndeplinit
NTOP = Numărul total de articole ISI situate în to 25% - ZONA ROȘIE în calitate de autor principal. Se selectează varianta cea mai favorabilă pentru autor	NTOP	4	12	3.00	îndeplinit
NP = număr articole în reviste ISI la care candidatul este autor principal (prim autor sau autor de corespondență)	NP	20	22	1.10	îndeplinit
FIC = factor de impact cumulat (suma factorilor de impact ale revistelor. Se ia în considerare ultimul factor cunoscut.)	FIC	30	103.71	3.457	îndeplinit
NC = număr total de citări (din baza SCOPUS) - se exclud autocitările	NC	120	511	4.26	îndeplinit
NCO = număr de contracte de cercetare-dezvoltare-inovare obținute prin competiție la nivel național sau internațional sau contracte similare cu terți în valoare de min 10000 €	NCO	1	2	2.00	îndeplinit

Nr. crt.	Quartila	Articol publicat in revista cotata ISI	Autor principal	Nr. total autori	Factor de impact ISI (ultimul factor de impact, 2024)	FIC
1	Q2 (2011)	S. Kakasi-Zsurka, A. Todea , A. But, C. Paul, C. G. Boeriu, C. Davidescu, L. Nagy, A. Kuki, S. Keki, F. Péter, Biocatalytic synthesis of new copolymers from 3-hydroxybutyric acid and a carbohydrate lactone Journal of Molecular Catalysis B: Enzymatic, 2011, 71, 22-28.	0	10.00	2.269	0.227
2	Q3 (2019)	S. Kakasi-Zsurka, A. Todea , A. But, C. Paul, C. Boeriu, L. Nagy, F. Péter, Novel enzymatic synthesis of 3-hydroxybutyric acid oligomers with inserted lactobionic acid moieties, Revista de Chimie, 2011, 62(10), 958-963.	0	7.00	1.755	0.251
3	Q3	P. Wildberger, A. Todea , B. Nidetzky, Probing enzyme-substrate interactions at the catalytic subsite of Leuconostoc mesenteroides sucrose phosphorylase with site-directed mutagenesis: the roles of Asp49 and Arg395, Biocatalysis and Biotransformation Journal, 2012, 30(3), 327-337.	0	3.00	1.900	0.633
4	Q4	A. Todea , V. Badea, L. Nagy, S. Keki, C. G. Boeriu, F. Peter, Biocatalytic synthesis of δ -gluconolactone and ϵ -caprolactone copolymers, Acta Biochimica Polonica, 2014, 61(2), 205-210.	1	6.00	1.700	1.700
5	Q3	I. Ledeti, C. Bosca, C. Cosma, V. Badea, A. Todea , V.N. Bercean, Study on Obtaining 3-oxolup-20(29)-en-28-oic Acid (Betulonic Acid) from (3 β)- lup-20(29)-en-3,28-diol (betulin), Revista de Chimie, 2014, 65(11), 1289-1293.	0	6.00	1.755	0.293
6	Q2	S. Muntean, A. Todea , M.E. Rădulescu-Grad, Decontamination of colored wastewater using synthetic sorbents, Pure and Applied Chemistry, 2014, 86(11) 1771-1780.	0	3.00	2.000	0.667
7	Q2	A. Todea , E. Biro, V. Badea, C. Paul, A. Cimporescu, L. Nagy, S. Keki, G. Bandur, C. Boeriu, F. Peter, Optimization of enzymatic ring-opening copolymerizations involving δ -gluconolactone as monomer by experimental design, Pure and Applied Chemistry, 2014, 86(11) 1781-1792.	1	10.00	2.000	2.000

8	Q3	I. Ledeti, G. Vlase, T. Vlase, I. Ciucanu, T. Olariu, A. Todea , A. Fulas, L.M. Suta, Instrumental Analysis of Potential Lovastatin - excipient Interactions in Preformulation Studies, Revista de Chimie, 2015, 66 (6), 879-882.	0	8.00	1.755	0.219
9	Q2	I. Ledeti, G. Vlase, T. Vlase, L.M. Suta, A. Todea , A. Fulas, Selection of solid-state excipients for simvastatin dosage forms through thermal and nonthermal techniques, Journal of Thermal Analysis and Calorimetry, 2015, 121(3), 1093-1102.	0	6.00	3.100	0.517
10	Q3	A. Todea , L.G. Otten, A.E. Frissen, I. Arends, F. Peter, Carmen Boeriu, Selectivity of lipases for estolides synthesis, Pure and Applied Chemistry, 2015, 87(1) 51-58.	1	6.00	2.000	2.000
11	Q3	A. Todea , A. Hiseni, L.G. Otten, I. W.C.E. Arends, F. Peter, C. G. Boeriu, Increase of the stability of oleate hydratase by appropriate immobilization technique and conditions, Journal of Molecular Catalysis B: Enzymatic 2015, 119, 40-47.	1	6.00	2.269	2.269
12	Q3	D. Aparaschivei, A. Todea , I. Păușescu, V. Badea, M. Medeleanu, E. Șîșu, M. Puiu, A. Chiriță-Emandi F. Peter, Synthesis, characterization and enzymatic degradation of copolymers of ϵ -caprolactone and hydroxy-fatty acids, Pure and Applied Chemistry, 2016, 88, 1191-1201.	0	9.00	2.000	0.222
13	Q3	E. Biró, D. Budugan, A. Todea , F. Péter, S. Klébert, T. Feczkó, Recyclable solid-phase biocatalyst with improved stability by sol-gel entrapment of β -D-galactosidase, Journal of Molecular Catalysis B: Enzymatic 2016, 123, 81-90	0	6.00	2.269	0.378
14	Q4	S.G. Muntean, A. Todea , S. Bakardjieva, C. Bologa, Removal of non benzidine direct red dye from aqueous solution by using natural sorbents: Beech and Silver Fir, Desalination and Water Treatment, 2017, 10.5004/dwt.2016.0154.	0	4.00	1.000	0.250
15	Q2	A. Cimporescu, A. Todea , V. Badea, C. Paul, F. Péter, Efficient kinetic resolution of 1,5-dihydroxy-1,2,3,4-tetrahydronaphthalene catalyzed by immobilized Burkholderia cepacia lipase in batch and continuous-flow system, Process Biochemistry, 2016, 51, 2076-2083	0	5.00	4.000	0.800

16	Q2	SG Muntean, MA Nistor, E Muntean, A. Todea , R Ianoş, C Păcurariu, Removal of colored organic pollutants from wastewaters by magnetite/carbon nanocomposites: single and binary systems, Journal of Chemistry, 2018, 6249821	0	6.00	2.600	0.433
17	Q2 (2019)	D. Aparaschivei, A. Todea* , A. E. Frissen, V. Badea, G. Rusu, E. Sisu, M. Puiu, C. G. Boeriu, F. Peter, Enzymatic synthesis and characterization of novel terpolymers from renewable sources, Pure Appl. Chem., 2019, https://doi.org/10.1515/pac-2018-1015 .	1	9.00	2.000	2.000
18	Q1	A. Todea , P. Borza, A. Cimporescu, C. Paul, F. Peter, Continuous kinetic resolution of aliphatic and aromatic secondary alcohols by sol-gel entrapped lipases in packed bed bioreactors, Catalysis Today, 2018, 306, 223-232.	1	5.00	5.300	5.300
19	Q1 (2018)	A. Todea , D. Aparaschivei, V. Badea, C. G. Boeriu, F. Peter, Biocatalytic route for the synthesis of oligoesters of hydroxy-fatty acids and ϵ -caprolactone, Biotechnology Journal, 2018, 13(6),1700629 https://doi.org/10.1002/biot.201700629 .	1	5	3.100	3.100
20	Q1	C. Vasilescu, A. Todea* , A. Nan, M. Circu, R. Turcu, I.-C. Benea, F. Peter, Enzymatic synthesis of short-chain flavor esters from natural sources using tailored magnetic biocatalysts, Food chemistry, 2019, 296, 1-8	1	7	9.800	9.800
21	Q1	A. Todea , I. Bîţcan, D. Aparaschivei, I. Păuşescu, V. Badea, F. Péter, V. D. Gherman, G. Rusu, L.Nagy, S. Kéki, Biodegradable Oligoesters of ϵ -Caprolactone and 5-Hydroxymethyl-2-Furancarboxylic Acid Synthesized by Immobilized Lipases, Polymers 2019, 11(9), 1402, https://doi.org/10.3390/polym11091402	1	10	4.900	4.900
22	Q4	V. Ordodi, A. Pană, A. Dumitrel, D. Hădărugă, A. Tămas, V. Pode, A. Todea , V. Păunescu, Ş. Negru, An ecological treatment method for ifosfamide contaminated waste water resulting from oncological therapy, Studia Universitatis Babes-Bolyai, Chemia, 2020, 3, 1.	0	9	0.500	0.056

23	Q1 (2020)	I. Păușescu, A.Todea , V. Badea, F. Peter, M. Medeleanu, I. Ledeti, G. Vlase, T. Vlase, Optical and thermal properties of intelligent pH indicator films based on chitosan/PVA and a new xanthylum dye, Journal of Thermal Analysis and Calorimetry, 2020, 141, 999-1008.	0	8	3.100	0.388
24	Q4	P. Borza, I. C. Benea, I. Bitcan, A. Todea* , S. G. Muntean, F. Peter Enzymatic degradation of azo dyes using peroxidase immobilized onto commercial carriers with epoxy groups, Studia Universitatis Babes-Bolyai, Chemia, 2020, 65, 1.	1	6	0.500	0.500
25	Q1 (2020)	A. Todea , D. Aparaschivei, I. Bîtcă, I.V.Ledeti, G. Bandur, F. Péter, L. Nagy, S. Kéki, E. Biró, Thermal behavior of oligo[(ϵ -caprolactone)-co- δ -gluconolactone] enzymatically synthesized in reaction conditions optimized by experimental design, Journal of Thermal Analysis and Calorimetry, 2020, 1-10.	1	9	3.100	3.100
26	Q1	A.Todea , I. C. Benea, I. Bîtcă, F. Péter, S. Klébert, T. Feczko, Z. Károly, E. Biró, One-pot biocatalytic conversion of lactose to gluconic acid and galacto-oligosaccharides using immobilized β -galactosidase and glucose oxidase, Catalysis Today, 2021, doi.org/10.1016/j.cattod.2020.06.090.	1	8	5.300	5.300
27	Q2 (2020)	A. R. Buzatu, A. E Frissen, L. AM van den Broek, A. Todea* , M. Motoc, C. G. Boeriu, Chemoenzymatic synthesis of new aromatic esters of mono-and oligosaccharides, Processes, 2020, 8, 12, 1638.	1	6	2.800	2.800
28	Q1	I. Kántor, D. Aparaschivei, A. Todea , E. Biró, G. Babosa, D. Szerényi, B. Kakasi, F. Péter, E. Şişu, T. Feczko, Biocatalytically synthesized poly[ϵ -caprolactone-co-(12-hydroxystearate)] copolymer nanoparticles for sorafenib drug delivery, Catal. Today 2021, 366, 195-201	0	10	5.300	0.530
29	Q2 (2021)	D. Dreavă, I. Benea, I. Bîtcă, A. Todea* , E. Sisu, M. Puiu, F. Peter, Biocatalytic approach for novel functional oligoesters of ϵ -caprolactone and malic acid, Processes 2021, 9, 232	1	7	2.800	2.800
30	Q2 (2021)	A. Todea , D. Dreavă, I. Benea, I. Bîtcă, F. Peter, Carmen G. Boeriu, Achievements and trends in biocatalytic synthesis of speciality polymers from biomass-derived monomers using lipases, Processes 2021, 9(4), 646	1	6	2.800	2.800

31	Q2	S. Fortuna, M. Cespugli, A. Todea , A. Pellis, L. Gardossi, Criteria for Engineering Cutinases: Bioinformatics Analysis of Catalophores, Catalysts, 2021, 11, 7, 748	0	5	4.000	0.800
32	Q1	A. Todea , C. Deganutti, M. Spennato, F. Asaro, G. Zingone, T. Milizia, L. Gardossi, Azelaic Acid: A Bio-Based Building Block for Biodegradable, Polymers, 2021, 1, 13, 23, 4091	1	7	4.900	4.900
33	Q2	V. Ferrario, A. Todea , L. Wolansky, N. Piovesan, A. Guarneri, D. Ribitsch, G. M Guebitz, L. Gardossi, A. Pellis, Effect of Binding Modules Fused to Cutinase on the Enzymatic Synthesis of Polyesters, Catalyst, 2022, 12, 3, 303.	0	9	4.000	0.444
34	Q1	A. Todea , S. Fortuna, C. Ebert, F. Asaro, S. Tomada, M. Cespugli, F. Hollan, L. Gardossi, Rational guidelines for the two-step scalability of enzymatic polycondensation: experimental and computational optimization of the enzymatic synthesis of poly (glycerolazelate), ChemSusChem, 2022, 2, 23.	1	8	6.600	6.600
35	Q2	Păușescu I, Todea A , Dreavă DM, Boboescu T, Pațcan B, Pațcan L, Albulescu D, Badea V, Peter F, Tóth R, Ursu D, Szolga L, Medeleanu M. , Experimental and Computational Studies on Bio-Inspired Flavylum Salts as Sensitizers for Dye-Sensitized Solar Cells, Materials 2022, 15, 6985	0	13	3.200	0.246
36	Q2	Kántor I, Dreavă D, Todea A , Péter F, May Z, Biró E, Babos G, Feczkó T. ,Co-Entrapment of Sorafenib and Cisplatin Drugs and iRGD Tumour Homing Peptide by Poly["-caprolactone-co-(12-hydroxystearate)] Copolymer, Biomedicines 2022, 10, 43	0	8	3.900	0.488
37	Q2	I. Rădoi, D. Eva Bedolla, L. Vaccari, A.Todea, F. Zappaterra, A. Volkov, L. Gardossi, FTIR microscopy for direct observation of conformational changes on immobilized ω -transaminase: effect of water activity and organic solvent on biocatalyst performance, Catal. Sci. Technol., 2023, 13, 4955-4967	0	8	4.20	0.525
38	Q2	I. Bîțcan, A. Petrovici, A. Pellis, S. Klébert, Z. Károly, L. Bereczki, F. Péter, F., A. Todea* Enzymatic route for selective glycerol oxidation using covalently immobilized laccases, Enzyme and Microbial Technology, 2023, 163, https://doi.org/10.1016/j.enzmictec.2022.110168 ,	1	8	3.70	3.70

39	Q1	F. Zappaterra, M. Renzi, M. Piccardo, M. Spennato, F. Asaro, M. Di Serio, R. Vitiello, R. Turco, A. Todea* , L. Gardossi, Understanding Marine Biodegradation of Bio-Based Oligoesters and Plasticizers, Polymers 2023, 15(6), 1536, https://doi.org/10.3390/polym15061536	1	10	4.90	4.90
40	Q1	I. Bîţcan, A. Pellis, A. Petrovici, D. Dreavă, I. Păușescu, F. Peter, L. Nagy, S. Kéki, L. Gardossi, A. Todea* , One-pot green synthesis and characterization of novel furan-based oligoesters, Sustainable Chemistry and Pharmacy, 35, 2023, 101229	1	10	5.80	5.80
41	Q1	I. C. Benea, I. Kántor, A. Todea , A. Pellis, I. Bîţcan, L. Nagy, S. Kéki, D. Maria Dreavă, F. Péter, T. Feczko, Biocatalytic synthesis of new polyesteramides from ϵ -caprolactam and hydroxy acids: Structural characterization, biodegradability, and suitability as drug nanocarriers, Reactive and Functional Polymers, 2023, 191, 105702	0	9	5.1	0.57
42	Q2	Koch, D.-M. Dreavă, A. Todea, F. Péter, M. Medeleanu, I. Păușescu, C. Samoilă, I. O. Sîrbu, Synthesis, Characterization, and Antiproliferative Properties of New Bio-Inspired Xanthylium Derivatives, Molecules 2023, 28 (3), 1102, https://doi.org/10.3390/molecules28031102 ,	0	8.00	4.60	0.51
43	Q1	A. R. Buzatu, M. A. Soler, S. Fortuna, O. Ozkilinc, D. M. Dreavă, I. Bîţcan, V. Badea, P. Giannozzi, F. Fogolari, L. Gardossi, F. Peter, A. Todea* , C.G. Boeriu, Reactive natural deep eutectic solvents increase selectivity and efficiency of lipase catalyzed esterification of carbohydrate polyols, Catalysis Today, 2023, 114373, https://doi.org/10.1016/j.cattod.2023.114373 ,	1	13.00	5.30	5.30
44	Q2	A. R. Buzatu, M.A. Soler, O.Ozkilinc, S. Fortuna, D. M. Dreavă, I. Bîţcan, P. Giannozzi, F. Fogolari, L. Gardossi, F. Peter, A. Todea, C. G. Boeriu, Lipase-catalysed esterification in a reactive natural deep eutectic solvent leads to lauroylcholine chloride rather than glucose ester, Reaction Chemistry & Engineering, 9, 2623-2634, 2024	0	12	3.1	0.26

45	Q1	A. Todea , I. Bîţcan, M.Giannetto, I. I. Rădoi, R. Bruschi, M. Renzi, S. Anselmi, F. Provenza, T. Bentivoglio, F. Asaro, E.Carosati, L. Gardossi, Enzymatic Synthesis and Structural Modeling of Bio-Based Oligoesters as an Approach for the Fast Screening of Marine Biodegradation and Ecotoxicity, International Journal of Molecular Sciences, 2024, 25, 10	1	11	4.9	4.90
46	Q2	Alina Ramona Buzatu, Anamaria Todea, Francisc Peter, Carmen Gabriela Boeriu, The Role of Reactive Natural Deep Eutectic Solvents in Sustainable Biocatalysis, ChemCatChem, 2024, 16, 13	0	4	3.9	0.98
47	Q1	Diana Ionela Dăescu, Diana Maria Dreavă, Anamaria Todea, Francisc Peter, Iulia Păușescu, Intelligent Biopolymer-Based Films: Promising New Solutions for Food Packaging Applications, Polymers, 16, 16	0	5	4.9	0.98
48	Q1 (2023)	A. Tămaş, I. Bîţcan, S. Niţu, C.Paul, I. C. Benea, G. I.Rusu, E. Perot, F.Peter, A.Todea, Novel Aromatic Estolide Esters from Biobased Resources by a Green Synthetic Approach, Applied Sciences, 2024, 14, 17	0	9	2.5	0.28
49	Q1	I. C. Benea, D. Dăescu, A. Todea , L. Nagy, S. Keki, I. Păușescu, A. Pellis, F. Peter, Efficient biotransformation of biobased raw materials into novel polyesters/polyesteramides; comparative investigation of enzymatic synthesis of block and random copolymers and terpolymers, International Journal of Biological Macromolecules, 2024, 282	0	8	8.5	1.06
50	Q2	D.I. Dăescu, I. M. Păușescu, I.C. Benea, F. Peter, A. Todea, F. Zappaterra, A.A. Alexa, A.R. Buzatu, Natural and Synthetic Flavylum Derivatives: Isolation/Synthesis, Characterization and Application. Molecules 2025, 30, 90, doi.org/10.3390/molecules30010090.	1	8	4.6	0.58
51	Q1	N. Schulte, G. Damonte, V. M. Rocca, A.Todea , O. Monticelli, A. Pellis, Bis-pyrrolidone structures as versatile building blocks for the synthesis of bio-based polyesters and for the preparation of additives, Green Chemistry, 2025, 27, 1984-1996, doi: 10.1039/D4GC04951A	0	6	9.2	1.53

52	Q2	A. R. Buzatu, A. Todea, R. Pop, D. M. Dreavă, C. Paul, I. Bîtcă, M. Motoc, F. Peter, C. G. Boeriu, Designed Reactive Natural Deep Eutectic Solvents for Lipase-Catalyzed Esterification. Molecules. 2025 Feb 7;30(4):778. doi: 10.3390/molecules30040778.	0	9	4.6	0.51
53	Q1	G. Lombardo, C. M. Warne, G. Damonte, A. Todea, L. Nagy, G. M. Guebitz, F. Allais, S.Fadlallah, A. Pellis, Sustainable synthesis of terpolyesters based on a levoglucosenone-derived cyclic acetal diol, ACS Sustainable Chem. Eng. 2025, 13, 10, 4068–4077, doi: 10.1021/acssuschemeng.4c10010.	0	9	7.3	0.81
54	patent	C. G. Boeriu, A Todea, I.W.C.E Arends, L.G. Otten, Production of fatty acid estolides, US11414684B2	0	4	3	0.75
55	patent	Ordodi L.V., Dumitrel G.A., Pană A.-M., Todea A., Mățiu-Iovan L., Ionel R.C., Săndesc D., Bedreag O.H., Păpurică M., Rogobete A.F., Simion I., Motica A., Groapă D.S., Păunescu V., Bojin M.F. și Gavriliuc O.I., Dispozitiv pentru reducerea încărcăturii microbiologice a aerului expirat de pacienții ventilați mecanic	0	16	1	0.06