

## Curriculum vitae Europass

### Informații personale

Nume/Prenume

**Dobre Tanase**



### Locul de muncă actual

Universitatea Politehnica

### Educație și formare profesională

*Studii:* Liceul teoretic Urlați, județul Prahova (1969), Universitatea Politehnica București, Facultatea Chimie Industrială (1974), Școala de Ofițerii în rezerva București (1975), Academia de Studii Economice București, Facultatea de Cibernetică Economică și Statistică Matematică (1976-1980, studii nefinalizate), Universitatea Politehnica București, Doctorat în Specializarea Inginerie Chimică (1985).

*Specializări și recunoașteri profesionale:* Tehnologia proiectării și realizării circuitelor imprimate (CII-Marseille, Franța (1976), Dynachem Ltd, Anglia (1978)) Proiectarea instalațiilor din industria chimică (IITPICh București 1981-1982), Modelarea și simularea proceselor chimice (Profesor invitat ENSCh Montpellier (2001,2003,2005), Director de cercetare CNRS Franța (2001), Profesor invitat ENSCh Clermont Ferrand (2015), Profesor vizitator Institutul de Cataliza și Petrol Madrid (2009), Profesor asociat –Universitatea Ovidius Constanța, Specializarea Tehnologia Petrolului (2009 -2014)).

Posesie limbi străine

Limba	Înțelegere	Vorbit	Scris
Franceza	Foarte bine	Bine	Bine
Engleza	Bine	Bine	Bine
Rusa	Bine	Satisfăcător	Aproape satisfăcător

### Experiența profesională

1974-1978 Inginer chimist Întreprinderea de Calculatoare Electronice ICE Felix București (repartiție guvernamentală), 1979-1986 Asistent specializarea inginerie chimică Universitatea Politehnica București, 1987-1990 Șef lucrări specializarea inginerie chimică Universitatea Politehnica București, 1991-1996 Conferențiar specializarea inginerie chimică Universitatea Politehnica București, 1997-2022 (prezent) Profesor specializarea inginerie chimică Universitatea Politehnica București. Toate funcțiile didactice au fost obținute prin concurs.

### Responsabilități la locul de muncă (2010-2020)

*Activități didactice* (2021) la disciplinele: Bazele transferului de masă (an III licența specializarea Ingineria și Informatica Proceselor Chimice, CASM, UPB), Curgeri reale în sisteme multifazice (an I master Ingineria Proceselor Chimice, CASM, UPB), Intensificarea transferului de masă (an I master Ingineria Proceselor Chimice, CASM, UPB); Modelarea transportului, transferului și transformării poluanților (an II Master Ingineria Mediului, CASM, UPB); ii) șef de colectiv: Colectivul Fenomene de Transfer din departamentul Inginerie Chimică și Biochimică, ICBI, UPB; iii) Șef de laborator: Laboratorul Transfer de Masă din departamentul Inginerie Chimică și Biochimică, ICBI, UPB; iv) Director de master: Masterul Ingineria Proceselor Chimice de la Facultatea Inginerie Chimică și Biotehnologiei, v) conducător de doctorat în domeniul Științe Tehnice, specializarea Inginerie Chimică, Școala Doctorală ICBI (17 candidați în stagiul în 2022).

*Activități științifice:* i) Conducere lucrări de doctorat în domeniul Științelor Tehnice specializarea Inginerie Chimică (41 candidați înscriși, 21 teze susținute, 17 candidați în stagiul), ii) proiecte de cercetare științifică la nivel național: CE Școala Postdoctorală 2005-2007 (d.p), PN IDEI 2007-2010 (d.p), BIOSPIM 2006-2010 (d.p), COMRETERM 2007-2011)(d.p), iii) îndrumare proiecte de licență, disertație master (peste 56 după 2000); iv) colaborare internațională

### Domenii de interes în Științele Inginerești

În domeniul Științelor Inginerești activitatea fundamentală, exprimată prin realizări științifice de succes, s-a concretizat îndeosebi în specializarea Inginerie Chimică. În cadrul acestei specializări direcțiile de cercetare, menținute permanent în atenție, se referă la :

- modelarea și simularea proceselor chimice și biochimice
- intensificarea transferului de masă și căldură prin utilaje de mare eficiență;
- metode moderne de separare a compușilor chimici din sisteme complexe;
- studiul proceselor de transfer specifice fabricației unor componente și echipamente de uz electronic;

## Realizari profesionale importante ( 2010-2020)

- metode matematice in ingineria chimica;
- ingineria depoluării efluenților industriali;
- interacțiunea transferului de masa cu reacția chimică sau biochimică;
- sinteze de noi materiale cu micro si nanostructurare pentru aplicații speciale de inginerie chimica.

Tot in domeniul Științelor Inginerești este remarcabila promovarea interdisciplinarității între domeniile Ingineria Chimica si Bioreurse-Biosinteze exprimata prin direcțiile:

- tehnologii pentru bioceluloza si compozitele sale cu aplicații biomedicale si industriale;
- ingineria pirolizei materialelor vegetale.

**A.** Continuarea publicării de manuale si tratate științifice specifice cercetării, dezvoltării tehnologice si instruirii in domeniul ingineriei chimice. Pe primul loc se situeaza tratatul *T.Dobre, J.M. Sanchez, Chemical Engineering Modelling Simulatin and Similitude* (547 pagini), publicat de editura Wiley VCH in anul 2007, in care, pe baze științifice moderne, se insista asupra rolului modelarii si simulării in ingineria chimica, insistând asupra metodologiei de dezvoltare si transpunere soft a modelelor bazate pe fenomene de transfer, pe abordări stocastice respectiv statistice respectiv pe similitudine si analiza dimensionala. Tratatul, ajuns in cele mai mari biblioteci cu carte de inginerie chimica din toata lumea, este încă la vânzare la editor ceia ce dovedește ca el este căutat si apreciat. Tot in domeniul publicării de manuale cu specific de inginerie chimica se menționează si: i) Anicuta Stoica, Marta Stroescu, T. Dobre, *Operații de transfer termic in industria alimentara*, Ed. Politehnica Press, 315 pag., București, 2008, ii) Anicuta Stoica, Iuliana Jipa, Marta Stroescu, T. Dobre, *Proiectarea tehnologica a coloanelor de rectificare cu talere*, Ed. Printech, 290 pag., București, 2010, iii) Anicuta Stoica, Marta Stroescu, T.Dobre, *Probleme de transfer termic in industria alimentara*, Ed. Electra, 325 pag., București, 2016 si respectiv iv) T.Dobre, Anicuta Stoica, *Intensificarea transferului de masa*, Editura Electra, București, 2017

**B.** Promovarea unor directii noi de cercetare, de interes, nu doar la nivel national, nominalizate dupa cum urmează: *B1*: introducerea in cercetarea de inginerie chimica din tara a separarilor cu ajutorul polimerilor impreatati moleculari ce a început cu proiectul CEEX *Utilizarea polimerilor impreatati molecular la separarea compuşilor bioactivi din plante (BIOSPIM)*. Proiectul, derulat între 2005 si 2007 cu partenerii ICECHIM București si Plantavorel Patra Neamț, a avut multe consecințe între care se menționează: i) dezvoltarea la ICECHIM București a unui colectiv de cercetare in problema sintezei si separării cu polimeri impreatati moleculari; ii) promovarea, îndeosebi in Universitatea Politehnica București, de teze de doctorat privind caracterizarea ingineriasca a separării cu polimeri impreatati molecular; iii) demonstrarea si promovarea in literatura științifică a faptului ca inversia de faza poate fi folosita in impreatarea moleculara a polimerilor; iv) publicarea pe aceasta tema a unui număr important de articole in reviste ISI, atat de cercetătorii de la ICECHIM București cat si de profesori si doctoranzi de la Universitatea Politehnica București; *B2*: particularizarea metodelor de cercetare specifice ingineriei chimice pentru sinteza, caracterizarea si analiza utilizării practice a unor noi compozite pe baza de polistiren expandat cu aplicații in izolarea termica a clădirilor. Deschiderea acestei aplicații de cercetare in anul 2007, cu proiectul CEEX *Materiale compozite hibride pe baza de polistiren expandata pentru reabilitarea termica a cladirilor (COMRETERM)*, având ca parteneri ICECHIM București si INCERC București, a condus la importante realizări științifice si aplicative menționate dupa cum urmează: i) tehnologii pentru blocheti, placat si sapa cu comportări termoizolante puternice si densitate mica respectiv rezistenta mecanica caracteristica aplicației (3 brevete de invenție); ii) noi proceduri de estimare a conductivității termice si a adsorbției de apa bazate pe considerarea compoziției inițiale in pulberi si granulate a compozitului proiectat (4 comunicări la conferințele RICCCCE, 2 articole ISI), iii) transfer de cunoștințe către linia de microproducție de la INCERC SA București; *B3*: particularizarea metodelor de cercetare specifice ingineriei chimice pentru sinteza, caracterizarea si analiza utilizării practice a biocelulozei si compozitelor pe baza de bioceluloza, exprimata prin direcțiile: i) noi bireactoare si condiții de exploatare a lor in sinteza biocelulozei (2 articole ISI, 1 teza de doctorat, 5 comunicări științifice, 1 brevet de invenție); ii) eliberare controlabila de substanțe active, inclusiv medicamente, din compozite biopolimerice pe baza de bioceluloza (1 teza de doctorat, 5 articole ISI, 4 comunicari stiintifice); iii) ambalaje alimentare active pe bază de bioceluloză și compozite biodegradabile hibride cu utilizări în procese de separare ( 1 teza de doctorat, 5 articole ISI, 3 comunicări științifice)

**C.** Continuarea dezvoltării direcției de cercetare in ingineria chimica exprimata de promovarea intensificării transferului de masa si căldură ca metoda de control a vitezei de transfer de căldură si specie fizica in contactarea bifazica sau polifazica, cu exprimare concreta prin: i) caracterizarea schimbului de căldură cu ajutorul tuburilor termice cu si fără cuplare la suprafețe de transfer extinse pentru microdispozitive electronice (1 articol ISI, 2 comunicări științifice, 1 lucrare de laborator); ii) intensificarea transferului de oxigen in bioreactoarele aerobe prin intermediul vectorilor de oxigen pe baza de magnetita si compozit magnetita-bioceluloza (1 teza de doctorat, 1 articol ISI, 1 lucrare de laborator); iii) promovarea utilizării câmpului de microunde si a celui ultrasonor in procese de extracție solid-lichid, inclusiv din medii vegetale (1 teza de doctorat, 5 articole ISI, 3 comunicări

## **Activitatea de elaborare si publicare lucrari**

Lucrari didactice si profesionale

stiintifice)

**D.** Dezvoltarea de noi modele de caracterizare a dinamicii extractiei speciilor active din produse naturale cu mentionare speciala pentru modele cu granita variabila (gonflare) respectiv pentru cele ce urmeaza modelul miezului care se strange (1 teza de doctorat, peste 10 articole ISI)

**E.** Punerea in opera si dezvoltarea programului de instruire didactica in domeniul masterului Ingineria Proceselor Chimice prin sistemul de dubla diploma intre Universitatea Politehnica Bucuresti si Ecole Nationale Supérieure de Chimie din Clermont Ferrand

Lucrari tehnice

5 manuale publicate la editura pentru carte stiintifica Matrix Rom (1996-2008)  
4 manuale publicate la Politehnica Press, Printech Rom respectiv Electra Press (2010-2016)  
2 manuale în format electronic (2005-2007)  
1 tratat publicat de Wiley VCH (2007)

Lucrari stiintifice

14 brevete de inventie din care 3 in domeniul fabricatiei circuitelor imprimate si 11 in domeniul aparate procese si tehnologii in ingineria chimica

Contracte de cercetare stiintifica

Teza de doctorat: Transfer de masa gaz-lichid in utilaje de mare eficacitate (1985)

Peste 130 articole stiintifice publicate in reviste cotate ISI

Peste 35 articole stiintifice in reviste BDI, nationale si internationale

Mai mult de 100 comunicari stiintifice cu publicare in proceedings ca lucrare sau rezumat

## **Apartenenta la asociatii profesionale**

Numar de contracte la care s-a participat : 44

Numar de contracte conduse ca responsabil (director) : 19

## **Alte mentiuni**

Societatea de Inginerie Chimică din România SICR (membru fondator 1995)

Federatia Europeana de Inginerie Chimica EFCE (1997)

Asociatia Managerilor Romani din Industrie AMIR (membru fondator 1996)

Referent în specialitatea de Inginerie Chimica la revistele nationale: Revista de Chimie, Materiale Plastice, Revue Roumaine de Chimie si UPB Scientific Bulletin Series C

Referent stiintific la Certex S.A (1993-1999) si Bioing S.A (1994-1998)

Responsabilitati în catedră si facultate: adjunct sef catedra 1996 - 2004, membru în Consiliul Profesorat CASM (2000-2008, 2012-2016) ;

Membru in grupul de organizare a manifestari RICCCCE edițiile X (1997), XI (1999)

Responsabil organizare Simpozion International de Inginerie Chimica si Materiale la manifestarile SICHEM 2014, SICHEM 2016, SICHEM 2018, SICHEM 2020

Evaluator în specialitatea Inginerie Chimică în programe Finantate de MEC prin ANSTI, CNCSIS

Evaluator in scris la Bruxelles pentru programe FP6 și FP7;

Referent pentru Elsevier Journals: Journal of Membrane Science, Carbohydrate Polymers, Arabian Journal of Chemistry, Chemical Engineering Journal, Journal of Food Engineering, Food

Hydrocolloids, Industrial Crops and Products, Journal of Environmental Chemical Engineering, etc

Referent pentru Israel National Scientific Foundation, USA National Scientific Foundation

Responsabil de program CEEX pentru primele 10 scoli de pregatire postdoctorală din Romania (2005-2007)

Membru titular al Academiei de Stiinte Tehnice din Romania (2005)

Presedinte al Societatii de Inginerie Chimica din Romania (2010)

## **Anexe**

Selectie lista de lucrari pentru perioada 2006-2022

01.09.2022

**Prof.dr.ing. Dobre Tanase**

## Selectie de lucrari publicate in perioada 2006- 2021

### Manuale, tratate, monografiile dupa 2006

1. T. Dobre., J. M. Sanchez., *Chemical Engineering Modelling and Simulation*, Wiley VCH, 540 pag., Weinham, 2007
2. Anicuta Stoica, Marta Stroescu, T. Dobre, Operatii de transfer termic in industria alimentara, Ed. Politehnica Press, 315 pag., 2008.
3. Anicuta Stoica, Iuliana Jipa, Marta Stroescu, T. Dobre, Proiectarea tehnologica a coloanelor de rectificare cu talere , Ed. Printech, 290 pag., Bucuresti, 2010.
4. Anicuta Stoica, Marta Stroescu, T.Dobre, Probleme de transfer termic in industria alimentara, Ed. Electra, 325 pag., Bucuresti, 2016
5. Dobre T., Stoica Anicuta, Intensificarea transferului de masa, Ed. Electra, 305 pag, Bucuresti, 2017

### Articole in reviste si alte publicatii cu cotate ISI dupa 2005

1. Calcan, S.I., Părvulescu, O.C.\*, Ion, V.A., Răducanu, C.E., Bădulescu, L., Madjar, R., Dobre, T., Egri, D., Moț, A., Iliescu, L.M., Jerca, I.O. (2022) *Effects of biochar on soil properties and tomato growth*. *Agronomy*, 12, art. no. 1824, 1–14, ISSN:2073-4395 (Q1)
2. Calcan, S.I., Părvulescu, O.C.\*, Ion, V.A., Răducanu, C.E., Bădulescu, L., Dobre, T., Egri, D., Moț, A., Popa, V., Crăciun, M.E. (2022) *Valorization of vine prunings by slow pyrolysis in a fixed-bed reactor*. *Processes*, 10 (1), art. no. 37, 1–17, ISSN:22279717, WOS:000757674900001
3. Diaconu, I., **Părvulescu, O.C.\***, Topală, S.L., Dobre, T. (2021) *Effects of process factors on performances of liquid membrane-based transfer of indole-3-acetic acid*. *Sci. Rep.*, 11 (1), art. no. 23427, ISSN:2045-2322, WOS:000727615800033 (Q1).
4. Ahmed, S.B., Dobre, T., Kamar, F.H., Mocanu, A., Deleanu, I.M., Full factorial design and dynamic modelling of silent and ultrasound-assisted lead and cadmium removal by porous biosorbent, *Scientific Reports*, 12 (1) 8158 (2022). ISSN: 2045-2322. DOI: 10.1038/s41598-022-12454-4. WOS: 000815482800038. (Q2, IF-4.996).
5. Dobre, T., Patrichi, C.A.M., Părvulescu, O.C., Al Janabi, A.A.A. (2021) Pervaporation of aqueous ethanol solutions through rigid composite polyvinyl - alcohol/bacterial cellulose membranes. *Processes*, 9(3), art. no. 437, 1–15, ISSN:22279717, WOS: 000634195500001.
6. Duru, J.M., Părvulescu, O.C., Dobre, T., Răducanu, C.E. (2021) Stochastic modelling of cellulose hydrolysis with Gauss and Weibull distributed transition probabilities. *Sci. Rep.*, 11(1), art. no. 9466, ISSN: 2045-2322, WOS:000656356400003.
7. Cioroiu Tirpan, D.-R., Sterpu, A.E., Koncsag, C.I., Ciufu, A.G., Dobre, T., Enzymatic process for cystoseira barbata valorization: Ethanol production and additional by-products (2021) *Processes*, 9 (5), art. no. 741, WOS:000654498200001.
8. Cican, G., Deaconu, M., Mirea, R., Ceatra, L., Cretu, M., Dobre, T., Investigating the use of recycled pork fat-based biodiesel in aviation turbo engines (2020) *Processes*, 8 (9), art. no. 1196, WOS:000580542700001.
9. Crăciun, M.E., Părvulescu, O.C., Donise, A.C., Dobre, T., Stanciu, D.R. (2020) Characterization and classification of Romanian acacia honey based on its physicochemical parameters and chemometrics. *Sci. Rep.*, 10 (1), art. no. 20690, ISSN:2045-2322, WOS:000596329600046.
10. Dima, A.D., Părvulescu, O.C., Mateescu, C., Dobre, T. (2020) Optimization of substrate composition in anaerobic co-digestion of agricultural waste using Central Composite Design. *Biomass Bioenerg.*, 138, 105602, ISSN:0961-9534, eISSN:1873-2909, WOS:000540918400012.
11. Ciufu, A.G., Răducanu, C.E., Părvulescu, O.C., Cioroiu, D.R., Dobre, T., Natural Wool for Removal of Oil Spills from Water Surface, *Rev. Chim. (Bucharest)*, 70 (11), 3977-3980, 2019, ISSN:0034-7752.
12. Ahmed, S.B., Stoica-Guzun, A., Kamar, F.H., Dobre, T., Gudovan, D., Busuioc, C., Jipa, I. M., Ultrasound enhanced removal of lead from wastewater by hazelnut shell: an experimental design methodology, *International Journal of Environmental Science And Technology*, 16(3), 1249-1260, 2019, WOS:000460696700003.
13. Tirpan, D.R.C., Koncsag, C.I., Ciufu, A.G., Părvulescu, O.C., Dobre, T., Bioethanol Production From Dry Ulva Lactuca Algae By Alcoholic Fermentation, *Cell. Chem. Technol.*, 53(3-4), 341-346, 2019, ISSN:0576-9787, WOS:000472622200014.
14. Trica, B., Delattre, C., Gros, F., Ursu, A.V., Dobre, T., Djelveh, G., Michaud, P., Oancea, F., Extraction and Characterization of Alginate from an Edible Brown Seaweed (Cystoseira barbata) Harvested in the Romanian Black Sea, *Marine Drugs*, 17(7), 405, 2019, WOS: 000478650600012.
15. Ciufu, A.G., Al Janabi, A.A.A., Părvulescu, O.C., Dobre, T., Răducanu, C., Romanian Merino Wool Sorbent for Oil Spill Cleanup, *Rev. Chim. (Bucharest)*, 69 (9), 2575-2577, 2018, ISSN:0034-7752, WOS:000449628400057.
16. Dobre, T., Zicman, L.R., Părvulescu, O.C., Neacșu, E., Ciobanu, C., Drăgolici, F.N., Species Removal from Aqueous Radioactive Waste by Deep-Bed Filtration, *Environ. Pollut.*, 241, 303-310, 2018, ISSN:0269-7491, WOS:000440390800032.
17. Dobre, T., Părvulescu, O.C., Popescu, M., Stoica-Guzun, A., Cozea, A., Processing of Sea Buckthorn Fruits by Electro-osmosis under Pressure, *J. Food Eng.*, 219, 38-51, 2018, ISSN:0260-8774, WOS:000413879300006.
18. Zicman, L.R., Neacsu, E., Dragolici, F.N., Ciobanu, C., Dogaru, G., Părvulescu, O.C., Dobre, T., Experimental and Modelling of Aqueous Radioactive Waste Treatment by Ultrafiltration, *Rev. Chim. (Bucharest)*, 69 (5), 1149-1151, 2018, ISSN:0034-7752.
19. Cioroiu, D.R., Părvulescu, O.C., Dobre, T., Raducanu, C., Koncsag, C.I., Mocanu, A., Duteanu, N., Slow Pyrolysis of Cystoseira Barbata Brown Macroalgae, *Rev. Chim. (Bucharest)*, 69 (3), 553-556, 2018, ISSN:0034-7752, WOS:000430946500004
20. Trică, B., Părvulescu, O.C., Dobre, T., Al Janabi, A.A.A., Răducanu, C., Patrichi, C., Modelling of Ethanol Fermentation Coupled with Product Recovery by Pervaporation, *Rev. Chim. (Bucharest)*, 68 (11), 2708-2715, 2017, ISSN:0034-7752.
21. Cioroiu, D.R., Părvulescu, O.C., Koncsag, C.I., Dobre, T., Răducanu, C., Rheological Characterization of Algal Suspensions for Bioethanol Processing, *Rev. Chim. (Bucharest)*, 68 (10), 2311-2316, 2017, ISSN:0034-7752.
22. Al Janabi, A.A.A., Părvulescu, O.C., Trică, B., Dobre, T., Effect of Process Factors on Pervaporation Dehydration of Isopropanol, *Rev. Chim. (Bucharest)*, 68 (6), 1400-1403, 2017, ISSN:0034-7752

23. Zicman L.R., Neacsu E., Done L., Dragolici F.N., Dobre T., Effect of process factors on the performances of reverse osmosis process in an aqueous radioactive waste treatment plant, U.P.B. Sci. Bull. Series B, 79 (4), 143-156, 2017, ISSN:1454-2331
24. Zicman L.R., Neacsu E., Done L., Tugulan G., Alexandru C., Nicu M., Ionascu L.F., Dogaru G., Dobre T., Investigation and modeling of fixed bed cesium sorption on nickel ferrocyanide, precipitated on silica gel, Romanian Journal of Physics, 3-4, A 806, 2017, ISSN: 1221-146X
25. Orbeci, C., Pârvulescu, O.C., Acceleanu, E., Dobre, T., Effects of Process Factors on Carbon Dioxide Reforming of Methane over Ni/SBA-15 Catalyst, Rev. Chim. (Bucharest), 68 (10), 2325-2328, 2017, ISSN:0034-7752
26. Dobre T., Pârvulescu O.C., Jacquemet A., Ion V.A., Adsorption and Thermal Desorption of Volatile Organic Compounds in a Fixed Bed – Experimental and Modeling, Chemical Engineering Communications (2016), 203, 12, 1554-1561
27. Dobre T., Pârvulescu O.C., Stoica-Guzun A., Jipa I., Al Janabi A.A.A., Heat and mass transfer in fixed bed drying of non-deformable porous particles (2016), International Journal of Heat and Mass Transfer, 103, 478-485
28. Ceatra L., Pârvulescu O. C., Rodríguez Ramos I., Dobre T., Preparation, Characterization, and Testing of a Carbon-Supported Catalyst Obtained by Slow Pyrolysis of Nickel Salt Impregnated Vegetal Material (2016), Industrial and Engineering Chemistry Research, 55 6, 1491-1502, 2016
29. Al Janabi A. A., Parvulescu O.C., Dobre T., Ion V.A., Pervaporation of aqueous ethanol solutions through pure and composite cellulose membranes (2016), Revista de Chimie, 67, 1, 150-156, 2016
30. Pârvulescu O.C., Ion V.A., Dobre T., Nitu S.G., The effect of process factors on n-hexane adsorption onto copper impregnated activated carbon (2016), UPB Scientific Bulletin, Series B: Chemistry and Materials Science, 78, 2, 121-130, 2016
31. Dima O., Dobre T., Mathematical modeling and simulation of adsorption process in a fixed bed of molecularly imprinted polymeric pearls, UPB Scientific Bulletin, Series B: Chemistry and Materials Science, 78, 2, 143-154, 2016
32. Dima S.-O., Dobre T., Stoica-Guzun A., Oancea F., Jinga S. I., Nicolae C.A., Molecularly Imprinted Bio-Membranes Based on Cellulose Nano-Fibers for Drug Release and Selective Separations (2016) Macromolecular Symposia, 359 (1), pp. 124-128, DOI: 10.1002/masy.201400177
33. Stroescu M., Stoica-Guzun A., Isopencu G., Jinga S.I., Parvulescu O., Dobre, T., Vasilescu M., Chitosan-vanillin composites with antimicrobial properties (2015) Food Hydrocolloids, 48, pp. 62-71, DOI: 10.1016/j.foodhyd.2015.02.008
34. Stroescu M., Stoica A., Parvulescu O.C., Avram M., Dobre T., A shrinking core model for seeds oil extraction with particularization to Camelina oil separation (2015) Chemical Engineering Research and Design, 97, pp. 1-8. DOI: 10.1016/j.cherd.2015.03.007
35. Pavaloiu R.-D., Stoica-Guzun A., Dobre T., Swelling studies of composite hydrogels based on bacterial cellulose and gelatin (2015) UPB Scientific Bulletin, Series B: Chemistry and Materials Science, 77 (1), pp. 53-62.
36. Dumitriu D., Dobre T., Effects of temperature and hypochlorite concentration on the rate of collagen dissolution (2015) Journal of Endodontics, 41 (6), pp. 903-906, DOI: 10.1016/j.joen.2014.12.020
37. Stoica A., Dobre T., Stroescu M., Sturzoiu A., Pârvulescu O.C., From laboratory to scale-up by modelling in two cases of  $\beta$ -carotene extraction from vegetable products (2015) Food and Bioproducts Processing, 94, pp. 218-228. DOI: 10.1016/j.fbp.2014.02.005
38. Ion V.A., Pârvulescu O.C., Dobre T., Duteanu N., Nitu S., Modelling of thermal desorption of volatile organic compounds from activated carbon (2015) Revista de Chimie, 66 (5), pp. 703-706.
39. Filcenco Olteanu A., Dobre T., Panturu E., Radu A.D., Akcil A., Experimental process analysis and mathematical modeling for selective gold leaching from slag through wet chlorination (2014) Hydrometallurgy, 144-145, pp.170-185, DOI: 10.1016/j.hydromet.2014.02.011
40. Dobre T., Pârvulescu O.C., Iavorschi G., Stroescu M., Stoica A., Volatile organic compounds removal from gas streams by adsorption onto activated carbon (2014) Industrial and Engineering Chemistry Research, 53 (9), pp. 3622-3628, DOI: 10.1021/ie402504u
41. Pavaloiu R. D., Stoica-Guzun A., Stroescu M., Jinga S.I., Dobre T., Composite films of poly(vinyl alcohol)-chitosan-bacterial cellulose for drug controlled release (2014) International Journal of Biological Macromolecules, 68, pp. 117-124, DOI: 10.1016/j.ijbiomac.2014.04.040
42. Pavaloiu R. D., Stroescu M., Parvulescu O., Dobre T., Composite hydrogels of bacterial cellulose - Carboxymethyl cellulose for drug release (2014) Revista de Chimie, 65 (8), pp. 948-951
43. Dima S.O., Dobre T., Chetaru O., Nicolae C. A., Spataru C. I., Sarbu A., Molecularly imprinted poly(acrylonitrile-co-acrylic acid) matrix with sclareol (2014) Polymer Engineering and Science, 54 (7), pp. 1484-1494, DOI: 10.1002/pen.23689
44. Pavaloiu R.D., Stoica-Guzun A., Stroescu M., Dobre T., Use of bacterial cellulose as reinforcement agent and as coating agent in drug release applications (2014) Revista de Chimie, 65 (7), pp. 852-855
45. Ohreac B.S., Dobre T., Parvulescu O.C., Danciu T.D., Integration of ABE solvents fed-batch biosynthesis with their recovery by gas-stripping, (2014) Revista de Chimie, 65 (5), pp. 582-589.
46. Dobre T., Ohreac B.S., Parvulescu O.C., Danciu T.D., Effect of solid carriers on oxygen mass transfer in a stirred tank bioreactor (2014) Revista de Chimie, 65 (4), pp. 489-496
47. Botez A., Dobre T., Panturu E., Filcenco-Olteanu A., Uranium (VI) adsorption equilibrium on purolite resin SGA 600 U/3472 (2014), Central European Journal of Chemistry, 12 (7), pp. 769-773. DOI:10.2478/s11532-014-0506-6
48. Pavaloiu R.-D., Stoica A., Stroescu M., Dobre T., Controlled release of amoxicillin from bacterial cellulose membranes (2014), Central European Journal of Chemistry, 12 (9), pp. 962-967, DOI: 10.2478/s11532-014-0541-3
49. Pavaloiu R.-D., Dobre T., Hlevca C., Use of bacterial cellulose-glycerol-poly(vinyl alcohol) composites in drug release (2013), 2013 E-Health and Bioengineering Conference, EHB 2013, art. no. 6707312, DOI: 10.1109/EHB.2013.6707312
50. Crețu M., Dobre T., Teleaba V., Dragasanu L. Quantification by modeling and measurement of aircraft contribution to air pollution in airport area (2013), UPB Scientific Bulletin, Series B: Chemistry and Materials Science, 75 (4), pp. 129-142
51. Pârvulescu, O.C., Dobre, T., Vasilescu-Mirea, R., Ceatră, L., Iavorschi, G., Statistic and kinetic models for wheat grains pyrolysis coupled with volatiles reforming (2013) UPB Scientific Bulletin, Series B: Chemistry and Materials Science, 75 (4), pp. 53-68.
52. Stoica-Guzun, A., Stroescu, M., Jinga, S.I., Jipa, I.M., Dobre, T., Microwave assisted synthesis of bacterial cellulose-calcium carbonate composites (2013) Industrial Crops and Products, 50, pp. 414-422, DOI: 10.1016/j.indcrop.2013.07.063

53. Dima S.O., Meouche W., Dobre T., Nicolescu T.V., Sarbu A. Diosgenin-selective molecularly imprinted pearls prepared by wet phase inversion (2013) *Reactive and Functional Polymers*, 73(9), pp. 1188-1197, DOI: 10.1016/j.reactfunctpolym.2013.05.014
54. Crisan C.C., Calinescu I., Dobre T., Zalaru C., Calculation of separation processes used for the extraction of active principles from fruits of *coreopsis tinctoria nutt*(2013, *Revista de Chimie*, 64 (4), pp. 366-371
55. Stroescu M., Stoica-Guzun A., Jinga S.I., Dobre T., Jipa I.M., Dobre L.M., Influence of sodium dodecyl sulfate and cetyl trimethylammonium bromide upon calcium carbonate precipitation on bacterial cellulose(2012), *Korean Journal of Chemical Engineering*, 29 (9), pp. 1216-1223, DOI: 10.1007/s11814-011-0290-3
56. Dima S.-O., Sarbu A., Dobre T., Purcar V., Nicolae C.A., Diosgenin selective molecularly imprinted polymers with acrylonitrile-methacrylic acid matrix(2012), *Materiale Plastice*, 49 (2), pp. 106-113
57. Dima S. O., Dobre T., Sarbu A., Mass transfer in a special type of nanomaterials: MIPs (2012), *Journal of Optoelectronics and Advanced Materials*, 14 (7-8), pp. 619-623.
58. Stoica-Guzun A., Stroescu M., Jinga S., Jipa I., Dobre T., Dobre L., Ultrasound influence upon calcium carbonate precipitation on bacterial cellulose membranes(2012), *Ultrasonics Sonochemistry*, 19 (4), pp. 909-915, DOI: 10.1016/j.ultsonch.2011.12.002
59. Kibédi-Szabó C.Z., Stroescu M., Stoica-Guzun A., Jinga S.I., Szilveszter S., Jipa I., Dobre T., Biodegradation Behavior of Composite Films with Poly (Vinyl Alcohol) Matrix (2012), *Journal of Polymers and the Environment*, 20 (2), pp. 422-430, DOI: 10.1007/s10924-011-0391-4
60. Dobre L.M., Dobre T., Ferdes M., Biodegradation kinetics of antimicrobial composite films based on polyvinyl alcohol-bacterial cellulose (2012), *Revista de Chimie*, 63 (5), pp. 540-544
61. Jipa I.M., Stroescu M., Stoica-Guzun A., Dobre T., Jinga S., Zaharescu T., Effect of gamma irradiation on biopolymer composite films of poly(vinyl alcohol) and bacterial cellulose (2012), *Nuclear Instruments and Methods in Physics Research, Section B: Beam Interactions with Materials and Atoms*, 278, pp. 82-87, DOI: 10.1016/j.nimb.2012.02.024
62. Dobre T., Pârvulescu O.C., Ceatră L., Stroescu M., Stoica A., Fixed bed pyrolysis of untreated and Ni (II) impregnated corn grains: Experiment and modelling (2012, *UPB Scientific Bulletin, Series B: Chemistry and Materials Science*, 74 (1), pp. 143-158.
63. Dobre L.-M., Stoica-Guzun A., Stroescu M., Jipa I.M., Dobre T., Ferdeş M., Ciumpiliac Ş., Modelling of sorbic acid diffusion through bacterial cellulose-based antimicrobial films(2012, *Chemical Papers*, 66 (2), pp. 144-151, DOI: 10.2478/s11696-011-0086-2
64. Jipa I.M., Stoica A., Stroescu M., Dobre L.-M., Dobre T., Jinga S., Tardei C., Potassium sorbate release from poly(vinyl alcohol)-bacterial cellulose films(2012) *Chemical Papers*, 66 (2), pp. 138-143, DOI: 10.2478/s11696-011-0068-4
65. Jipa I., Dobre L., Stroescu M., Stoica-Guzun A., Jinga S., Dobre T., Preparation and characterization of bacterial cellulose-poly(vinyl alcohol) films with antimicrobial properties (2012), *Materials Letters*, 66 (1), pp. 125-127, DOI: 10.1016/j.matlet.2011.08.047
66. Dobre T., Parvulescu O.C., Ramos I.R., Ceatra L., Stroescu M., Stoica A., Mirea R., Global reaction kinetics and enthalpy in slow pyrolysis of vegetal materials (2012), *Revista de Chimie*, 63 (1), pp. 54-59.
67. Dobre T., Pârvulescu O.C., Sanchez-Marcano J., Stoica A., Stroescu M., Iavorschi G., Characterization of gas permeation through stretched polyisoprene membranes (2011), *Separation and Purification Technology*, 82 (1), pp. 202-209. DOI: 10.1016/j.seppur.2011.09.019
68. Chiciudean T.G., Stoica-Guzun A., Dobre T., Van Tooren M., High-strength epoxy bacterial cellulose based composites (2011), *Materiale Plastice*, 48 (2), pp. 159-163.
69. Sturzoiu A., Stroescu M., Guzun A.S., Dobre T., Empirical models applied for kinetics extraction of carotene from *Rosa canina* (2011), *Revista de Chimie*, 62 (3), pp. 344-348.
70. Parvulescu O.C., Dobre T., Ceatra L., Iavorschi G., Mirea R., Characteristics of corn grains pyrolysis in a fixed bed reactor (2011), *Revista de Chimie*, 62 (1), pp. 89-94.
71. Dobre T., Parvulescu O.C., Ceatra L., Stoica A., Iavorschi G., Modelling of vegetal materials pyrolysis in a fixed bed reactor (2010), 19th International Congress of Chemical and Process Engineering, CHISA 2010 and 7th European Congress of Chemical Engineering, ECCE-7, 9 p., Conference Paper.
72. Ciumpiliac S., Stroescu M., Stoica-Guzun A., Dobre L., Dobre T., Sturzoiu A., Antimicrobial agar particles for food preservation (2010), *Revista de Chimie*, 61 (11), pp. 1076-1079.
73. Dobre T., Pârvulescu O.C., Stoica A., Iavorschi G., Characterization of cooling systems based on heat pipe principle to control operation temperature of high-tech electronic components (2010), *Applied Thermal Engineering*, 30 (16), pp. 2435-2441., DOI: 10.1016/j.applthermaleng.2010.06.014
74. Dobre T., Parvulescu O.C., Iavorschi G., Stoica A., Stroescu M., Catalytic effects at pyrolysis of wheat grains impregnated with nickel salts (2010), *International Journal of Chemical Reactor Engineering*, 8, art. no. 103
75. Tache F., Stoica A., Stroescu M., Dobre T., Rheokinetic investigations on CFRAI matrix (2010), *Materiale Plastice*, 47 (1), pp. 16-23.
76. Dobre T., Parvulescu O.-C., Stoica A., Stroescu M., Experimental investigation and modelling of inulin and glycyrrhizin extraction (2010), *Revista de Chimie*, 61 (1), pp. 82-86. #
77. Dobre T., Parvulescu O.C., Calota L., Jipa I., Modelling of fixed bed multicomponent ion exchange (2010), *Revista de Chimie*, 61 (2), pp. 213-217.
78. Filcenca-Olteanu A., Dobre T., Panturu E., Radulescu R., Groza N., Recovery of gold from alluvial sand by wet chlorination (2010), *Revista de Chimie*, 61 (2), pp. 223-226.
79. Dima S.-O., Sarbu A., Dobre T., Radu A.-L., Nicolescu T.-V., Lungu A., Rheological behaviour of lightweight concrete with embedded EPS beads (2009), *Materiale Plastice*, 46 (3), pp. 224-229.
80. Dima S.-O., Sarbu A., Dobre T., Bradu C., Antohe N., Radu A.L., Nicolescu T.-V., Lungu A., Molecularly imprinted membranes for selective separations(2009), *Materiale Plastice*, 46 (4), pp. 372-378.
81. Kapás A., Ábrahám B., András C.D., Lányi S., Dobre T., Obtaining and identification of bioactive compounds from *Ligularia sibirica* (L.) (2009) *Studia Universitatis Babeş-Bolyai Chemia*, (spec.issue 2), 21-26.
82. Sarbu A., Dima S.-O., Dobre T., Udrea I., Bradu C., Avramescu S., Mihalache N., Radu A. L., Nicolescu T.-V., Lungu A., Melinte S., Polystyrene wastes recycling by lightweight concrete production (2009), *Revista de Chimie*, 60 (12), pp. 1350-1356.

83. Jipa I., Dobre T., Stroescu M., Stoica A., Acetic acid extraction from fermentation broth: Experimental and modelling studies (2009), *Revista de Chimie*, 60 (10), pp. 1084-1089.
84. Tache A.A., Stoica-Guzun A., Stroescu M., Dobre T., Tache F., Tetracycline release from composite cryogels (2009), *Annals of DAAAM and Proceedings of the International DAAAM Symposium*, pp. 421-422.
85. Gheorghe A., Stoica-Guzun A., Stroescu M., Jecu L., Dobre T., Epure G., Emulsion liquid membranes to remove volatile organic compounds from surface and underground waters (2009), *Revista de Chimie*, 60 (1), pp. 55-58.
86. Dobre T., Floarea O., Researches concerning the intake of carbon dioxide resulted from the fossil carbon burning (2008), *Revista de Chimie*, 59 (10), pp. 1092-1100.
87. Dobre T., Stoica A., Parvulescu O.C., Stroescu M., Iavorschi G., Factors influence on bacterial cellulose growth in static reactors (2008), *Revista de Chimie*, 59 (5), pp. 591-594.
88. Dobre T., Ciuculescu C., Stoica A., Stroescu M., Modelling of water consumption in a spent fuel storage facility (2008), *International Journal of Nuclear Energy Science and Technology*, 4 (1), pp. 45-64, DOI: 10.1504/IJNEST.2008.017547
89. Ciuculescu C., Dobre T., On the corrosion of spent fuel aluminium cladding during wet storage (2008), *Revista de Chimie*, 59 (2), pp. 178-180.
90. Tache F., Dobre T., Chirilus A.A., Enhanced hybrid composite for advanced aerospace applications (2008), *Annals of DAAAM and Proceedings of the International DAAAM Symposium*, pp. 1343-1344.
91. Tache F., Silivestru V., Dobre T., Rugescu R.D., Composites fuel tank technology for the NERVA launcher (2008), *Annals of DAAAM and Proceedings of the International DAAAM Symposium*, pp. 1345-1346.
92. Chirilus A.A., Stoica Guzun A., Stroescu M., Dobre T., Tache F., Encapsulation of vanillin in agar beds for controlled release (2008), *Annals of DAAAM and Proceedings of the International DAAAM Symposium*, pp. 241-242, Conference Paper
93. Dobre T., Sandu I., Stroescu M., Stoica A., Modelling of acetic acid biosynthesis at low acid concentration (2007), *Revista de Chimie*, 58 (2), pp. 251-253.
94. Stoica A., Stroescu M., Chiciudean T.G., Tache F., Dobre T., Tetracycline diffusion through bacterial cellulose - Polyvinyl alcohol membranes(2007) *Annals of DAAAM and Proceedings of the International DAAAM Symposium*, pp. 717-718. Conference Paper
95. Tache F., Stanciu V., Chiciudean T.G., Toma A.C., Stoica A., Dobre T., Fuiorea I., Statistical risks in high performance nano-composites technology for space structures (2006), *AIAA 57th International Astronautical Congress, IAC 2006*, 8, pp. 5531-5540.
96. Sturzoiu A., Stroescu M., Stoica-Guzun A., Iavorschi G., Dobre T., Solid -liquid extraction from different vegetable sources - Experimental study and modeling (2006) *CHISA 2006 - 17th International Congress of Chemical and Process Engineering*, 9 p, Conference Paper
97. Dobre T., Pârvulescu O.C., Iavorschi G., Dobrea I., Aspects regarding pyrolysis of waste tyres rubber mixtures and PET particles (2006), *Revista de Chimie*, 57 (7), pp. 749-754.
98. Stanciu V., Dobre T., Stoica A., Tache F., Toma A.C., Chiciudean T.G., Carbon fiber aluminum matrix composite for advanced aerospace (2006), *Annals of DAAAM and Proceedings of the International DAAAM Symposium*, pp. 391-392.

Articole publicate in reviste de specialitate cu recunoastere in BDI (selectie dupa 2006)

1. Dobre T., Ofiteru Tatiana, Sturzoiu Aurelia, *Liquid-Liquid Extraction by Continuous Solvent Recycling for Acetic Acid Separation*, U.P.B. Sci. Bull., Series B, Vol. 68, No. 1, 39-53, 2006
2. Dobre T., Calotă Laura, Pârvulescu Oana Cristina, Iavorschi G., *Use of Experimental Breakthrough Curves for Ion Exchange Process Optimization*, U.P.B. Sci. Bull., Series B, Vol. 68, No. 4, 13-26, 2006
3. Ciuculescu Cristina, Dobre T., Margeanu C., Kelly J.J., *Source term of spent fuel in wet storage*, U.P.B. Sci. Bull., Series B, Vol.69, No.1, 3-10, 2007
4. T. Dobre, Cristina Ciuculescu, Anicuta Stoica, Marta Stroescu, *Modelling of water consumption in a spent fuel storage facility*, *Int. J. Nuclear Science and Technology*, 4, 1, 45-64, 2008
5. Dobre T., Pârvulescu Oana Cristina, Iavorschi G., *Analysis of Sol Evolution in Sol-Gel Synthesis by Use of Rheological Measurements*, U.P.B. Sci. Bull., Series B, Vol. 71, Iss. 3,55-66, 2009
6. Dima S.O., Dobre T., Sarbu A., Ghiurea M., Corina Bradu, *Proofs for molecular imprinting of an acrylic copolymer by phase inversion*, # U.P.B. Sci. Bull., Series B: Chemistry and Materials Science, 71,4, 21-30, 2009
7. Tache F., Dobre T., Tache Alina Alexandra, *Hybrid Composite for High-Demanding Applications*, U.P.B. Sci. Bull., Series B, Vol. 72, Iss. 2, 21-37, 2010
8. Filenco – Olteanu Antoneta, Dobre T., Rădulescu Rozalia, Panțuru Eugenia, Panțuru R., *Selective Recovery of Gold from Hydrochloric Solutions with Amberlite XAD-7 Ion-Exchange Resin*, U.P.B. Sci. Bull., Series B, Vol. 72, Iss. 3,233-242, 2010
9. Dobre Loredana – Mihaela, Stoica Anicuța, Stroescu Marta, Jinga S., Jipa Iuliana, Dobre T., *Characterization of Composite Materials Based on Biocellulose Membranes Impregnated with Silver Particles as Antimicrobial Agent*, U.P.B. Sci. Bull., Series B, Vol. 72, Iss. 4, 55-64, 2010
10. Dobre T., Oana Cristina Parvulescu, Iavorschi G., Marta Stroescu, Anicuta Stoica, *Experimental Study of Vocs Adsorption Onto Fixed Bed Activated Carbon*, *Analele Universitatii din Oradea, Fascicula Ecotoxicologie, Zootehnie si Tehnologii de Industrie Alimentara*, vol VIII, an 9, 1241-1246, 2010, ISSN 1583-4301
11. Antoaneta Filenco- Olteanu, Dobre T., Radu Rozalia, Eugenia Panturu, Grigoras L., *Eco-technologies for recovery of gold from secondary sources*, *Buletinul Institutului Politehnic din Iasi, Tom LV(LIX), Fasc. 1*, 2010, p.231-238, ISSN 143-1690,
12. Sturzoiu Aura, Stroescu Marta, Stoica Anicuța, Dobre T., *Betanine Extraction from Beta Vulgaris – Experimental Research and Statistical Modeling*, U.P.B. Sci. Bull., Series B, Vol. 73, Iss. 1, 145-156, 2011
13. Chiciudean T.G., Stoica Anicuța, Dobre T., Michel van Tooren, *Synthesis and Characterization of Poly(vinyl alcohol)- Bacterial Cellulose Nanocomposite*, U.P.B. Sci. Bull., Series B, Vol. 73, Iss. 2,17-30, 2011
14. Kapás Á., Csaba D. A., Dobre T., Vass Erika, Székely Gabriella, Stroescu Marta, Szabolcs Lanyi, Beáta Ábrahám, *The Kinetic of Essential Oil Separation from Fennel by Microwave Assisted Hydrodistillation (MWHd)*, U.P.B. Sci. Bull., Series B, Vol. 73, Iss. 4,113-121, 2011

15. Dobre T., Oana Cristina Parvulescu, Ceatră L., Marta Stroescu, Anicuta Stoica, *Fixed bed pyrolysis of untreated and Ni (II) impregnated corn grains: experiment and modelling*, U.P.B. Sci. Bull., Series B, Vol. 74, Iss. 1, 143-156, 2012
16. Cretu Mihaiella, Dobre T., Teleaba Victoria, Luminița Dragusanu, *Quantification by modeling and measurement of aircraft contribution to air pollution in airport area*, U.P.B. Sci. Bull., Series B, 75, 4, 129-141, 2013
17. Parvulescu Oana Cristina, Dobre T., Vasilescu-Mirea R., Laurențiu Ceatra L., Iavorschi G., *Statistic and kinetic models for wheat grains pyrolysis coupled with volatiles reforming*, U.P.B. Sci. Bull., Series B, 75, 4, 54-67, 2013
18. Anicuța Stoica-Guzun, Marta Stroescu, Gabriela Isopencu, Jinga S., Dobre T., *Superabsorbent materials for agricultural uses starting from bacterial cellulose*, Bulletin of Romanian Chemical Engineering Society, 1, 2, 96-103, 2014, ISSN 2360-4697
19. Violeta Alexandra Ion, Oana Cristina Parvulescu, Dobre T., *Gas-liquid absorption of volatile organic compounds from gas stream in a packed-bed column: Modelling and Simulation*, Bulletin of Romanian Chemical Engineering Society, 1, 2, 70-87, 2014), ISSN 2360-4697
20. Dima Ș-O., Dobre T., Octavian Floarea, *Mathematical modelling of mass transfer in molecularly imprinted polymers with diosgenin in poly(acrylonitrile-methacrylic acid) matrix*, Bulletin of Romanian Chemical Engineering Society 1, 1, 96-104, 2014, ISSN 2360-4697
21. Avram Malina, Stoica Anicuta, Dobre T., Stroescu Marta, *Extraction of vegetable oils from ground seeds by percolation techniques*, U.P.B. Sci. Bull., Series B, Vol. 76, Iss. 2, 13-22, 2014
22. Brandusa (Sandu) Ohreac, Dobre T., Oana Cristina Parvulescu, *Modeling and simulation of acetone-butanol-ethanol fed batch biosynthesis*, U.P.B. Sci. Bull., Series B, Vol. 76, Iss. 4, 45-58, 2014

#### Brevete de inventie dupa 2005

1. T.Dobre, Marta Stroescu, Anicuta Stoica, A.Sarbu, O.S.Dima. I.Udrea, A.S.Melinte, Silvana Constantin, Iuliana Jipa, *Bicomponent Composite With Polymeric Matrix for the Thermal Rehabilitation of Buildings*, RO126952-A2; OSIM Romania, Accesion Number: DIIDW: 2012D53495
2. T.Dobre, Marta Stroescu, Anicuta Stoica, A.Sarbu, O.S.Dima. I.Udrea, A.S.Melinte, Silvana Constantin, S.Ionescu, *Novel Component for Thermal Rehabilitation of Buildings* RO126951-A2; OSIM Romania, Accesion Number: DIIDW: 2012D53497.
3. T.Dobre, Marta Stroescu, Anicuta Stoica, G.Iavorschi, J.M. Sanchez, M.Rivallin, *Membranes and sorbents developed from the composite system cellulose/biocellulose-silica gel*; RO127026-A2; Accesion Number: DIIDW: 2012D53498.
4. T.Dobre, Anicuta Stoica, Marta Stroescu, G.T Chiciudean, M. vanTorren, G.Iavorschi, Oana Parvuiescu, Loredana Dragne, *Method for preparing biocellulose composites, involving the imprinting of membranes obtained from cultivation of Acetobacter xylinium*, RO126644-A2; OSIM Romania, Accesion Number: DIIDW 2011Q12882.
5. A. Ciripoiu, T. Dobre, A. Sarbu, S.Iancu, Anicuta Stoica, Marta Stroescu, *Process for producing hybrid hydrogels based on bacterial cellulose and acrylic copolymers*, Patent Number: RO130152-A2, OSIM Romania, Accesion Number: DIIDW 2013C41882.

#### Articole publicate in volumele unor manifestari stiintifice (2006-2011)

1. Tache F., Stanciu V., Chiciudean T., Toma Adina, Stoica Anicuta, Dobre T., Fuiorea I., *Statistical Risk in High Performance Nano-Composites Technology for Space Structures*, IAC-06-C2.8.04, 57<sup>th</sup> International Astronautical Congress of the International Astronautical Federation, the International Academy of Astronautics, and the International Institute of Space Law in Valencia, Spain, October 2006.
2. Stanciu V., Dobre T., Stoica Anicuta; Tache F., Toma Adina., Chiciudean T. G., *Carbon fiber aluminium matrix composite for advanced aerospace structures*, Annals of DAAAM for 2006& Proceedings of the 17-th International DAAAM Symposium, ISSN 1726-9679; ISBN 3-901509-57-7, Editor B. Katalinic, Vienna, Austria, 2006, p. 391-392.
3. Stoica, A.; Stroescu, M.; Chiciudean, T. G.; Tache, F. & Dobre, T. *Tetracycline Diffusion through Bacterial Cellulose – Polyvinyl Alcohol Membranes* presented in October 2007 at the 18<sup>th</sup> International DAAAM Symposium in Zadar, Croatia and published in Annals of DAAAM for 2007 & Proceedings of the 18<sup>th</sup> International DAAAM Symposium, ISSN 1726- 9679, ISBN 3-901509-58-5, Editor B. Katalinic, Published by DAAAM International, Vienna, Austria 2007.
4. Stoica Anicuta, Stroescu Marta, Iavorschi G., Dobre T., *Kinetic studies on methylene blue adsorption on various activated carbons*, Proceedings 34rd International Conference of the Slovak Society of Chemical Engineering, May 21 - 25, 2007, Tatranske Matliare, Slovakia, ISBN 978-80-227-2640-5, pag. 223.1-223.5
5. Dobre T., Sandu (Jipa) Iuliana, Stoica Anicuta si Stroescu Marta; *The coupling of liquid-liquid extraction with solvent recovery by distillation: Case of acetic acid extraction from water solution*, Proceedings 34rd International Conference of the Slovak Society of Chemical Engineering, May 21 - 25, 2007, Tatranske Matliare, Slovakia, ISBN 978-80-227-2640-5, pag.218.1-218.8;
6. Dobre T., Stroescu Marta, Parvulescu Oana, Ichim Mihaela si Sandu (Jipa) Iuliana; *Use of ion exchange in nicotine separation*, Proceedings 34rd International Conference of the Slovak Society of Chemical Engineering, May 21 - 25, 2007, Tatranske Matliare, Slovakia, ISBN 978-80-227-2640-5, pag.220.1-220.10;
7. Dobre T., Parvulescu Oana, Calota Laura, Iavorschi G.; *Use of individual breakthrough curves for prediction of ion removal by fixed bed ion exchange*; Proceedings 34rd International Conference of the Slovak Society of Chemical Engineering, May 21 - 25, 2007, Tatranske Matliare, Slovakia, ISBN 978-80-227-2640-5, pag.221.1-221.10;
8. Dobre T., Patachia Silvia, Stoica Anicuta, Stroescu Marta, Sanchez J., *Ion exchange and impinted polymers for membrane separation technology: simillitude and differences*, Proceeding RICCE XV, 19-22.09.2007, Sinaia, S4-38, Ed. Printech, Bucuresti, ISBN 978-973-718-785-7 (publicat numai rezumatul).
9. Dobre T., Iavorschi G., Stefan D. N., *Liquid flow and mass transfer in a rotating disc contactor* Proceeding RICCE XV, 19-22.09.2007, Sinaia, S4-30, Ed. Primtech, Bucuresti, ISBN 978-973-718-785-7(publicat numai rezumatul).
10. Dobre T., Stoica Anicuta, Tache F., Chiciudean T.G., *Bacterial cellulose fiber reinforced epoxy laminates*, Proceeding RICCE XV, 19-22.09.2007, Sinaia, S4-47, Ed. Printech, Bucuresti, ISBN 978-973-718-785-7 (publicat numai rezumatul).



11. Dobre T., Calota Laura, Parvulescu Oana, *Use of fixed bed multicomponent sorption models for simulation of breakthrough curves at ion exchange water demineralization*, Proceeding RICCE XV, 19-22.09.2007, Sinaia, S4-40, Ed. Primtech, Bucuresti, ISBN 978-973-718-785-7, (publicat numai rezumatul).
12. Dobre T., Parvulescu Oana, Stroescu Marta, lavorschi G., *Characterization of vegetal materials pyrolysis assisted by impregnated Ni*, Proceeding RICCE XV, 19-22.09.2007, Sinaia, S4-20, Ed. Primtech, Bucuresti, ISBN 978-973-718-785-7.
13. Dobre T., Stroescu, M., Jipa, I. M., Parvulescu, O. C., lavorschi, G., *Characterization of gas diffusion in stressed elastic membranes*, Proceedings 35th International Conference of the Slovak Society of Chemical Engineering, May 26 - 30, 2008, Tatranske Matliare, Slovakia, ISBN 978-80-227-2903-1, p. 256.1-6.
14. Dobre T., Stoica, A., Parvulescu O. C., Stroescu, M., Ofiteru, T., *Modelling of biocellulose film growth in reactors without stirring*, Proceedings 35th International Conference of the Slovak Society of Chemical Engineering, May 26 - 30, 2008, Tatranske Matliare, Slovakia, ISBN 978-80-227-2903-1, p. 255.1-8.
15. Tache F., Dobre T., Chirilus A. A., *Optimization and Modeling of CFRAL Properties and Manufacturing Technology (IAC-08-C2.1.5)*, The 59<sup>th</sup> International Astronautical Congress of the International Astronautical Federation, the International Academy of Astronautics and the International Institute of Space Law în Glasgow, published on IAC 2008 DVD proceedings
16. Dobre T., Pârvescu O.C., Stroescu M., Ofiteru T., Jipa I.M., 2008. *Experimental investigation and modelling of inulin batch extraction from chicory roots*. Proceedings of 18<sup>th</sup> International Congress of Chemical and Process Engineering (CHISA), Prague, vol. 2, p. 519, ISBN 978-80-02-02049-3.
17. Pârvescu O.C., Dobre T., lavorschi G., Mirea R., 2008. *Characterization of cereal grains pyrolysis with volatiles post-processing*, Proceedings of 18<sup>th</sup> International Congress of Chemical and Process Engineering (CHISA), Prague, vol.1, p. 217, ISBN 978-80-02-02048-6.
18. Anicuta Stoica, Marta Stroescu, Mariana Ferdes, Iuliana Jipa, Tatiana Ofiteru, Dobre T., *Functional yoghurt containing encapsulated Lactobacillus acidophilus*, published in Proceeding of International Symposium BIOTECHNOLOGY 2008, USAMV, November 2008, Bucharest, ISSN 1224-7774, pag. 260-266.
19. Pârvescu O.C., Dobre T., lavorschi G., Mirea R., 2008. *Characterization of cereal grains pyrolysis with volatiles post-processing*. Proceedings of 18<sup>th</sup> International Congress of Chemical and Process Engineering (CHISA), Prague, vol.1, p. 217, ISBN 978-80-02-02048-6.
20. A. Stoica-Guzun, C. Constantin, M. Stroescu, Dobre T., *Cryogels of Bacterial Cellulose and Polyvinyl Alcohols for Immobilized Yeast*, International Conference on Ecological Materials and Technologies, (ECOMAT), Bucharest, Sept 2008, Published in ECOMAT 2008 Proceedings, pp. 87-89, Editura Printech 2008, ISBN 978-606-521-079-0
21. Dobre T., Marta Stroescu, Oana C. Pârvescu, Anicuța Stoica, Mihaela Mihalcea, *Thermal conductivity of multicomponent granular beds used as composites support for heat loss control*, The 16<sup>th</sup> Romanian International Conference of Chemistry and Chemical Engineering RICCE 16, septembrie 2009, Sinaia, ISBN 978-606-521-349-4, pag. S.IV 53-62
22. Dobre T., Marta Stroescu, Oana C. Pârvescu, Anicuța Stoica, M. Moraru, Iuliana Jipa, *The effect of the freezing-thawing cycles on the water sorption of a composite used for heat loss control*, The 16<sup>th</sup> Romanian International Conference of Chemistry and Chemical Engineering RICCE 16, septembrie 2009, Sinaia, ISBN 978-606-521-349-4, pag.S.IV 100-106
23. Dobre T., Oana C. Pârvescu, Iuliana Rogoveanu, G. lavorschi, Marta Stroescu; *Characteristic aspects of water demineralization by mixed bed ion exchange*, The 16<sup>th</sup> Romanian International Conference of Chemistry and Chemical Engineering RICCE 16, septembrie 2009, Sinaia, ISBN 978-606-521-349-4, pag. S.IV 40-52
24. L. Dobre, A. Stoica, M. Stroescu, S. Jinga, S. Ciumpiliac, I. Jipa, O. Parvulescu, Dobre T., *Antimicrobial packaging material based on bacterial cellulose membranes*, The 7<sup>th</sup> European Congress of Chemical Engineering and the 19<sup>th</sup> International Congress of Chemical and Process Engineering, CHISA 2010, august 2010, Praga, CD-ROM of Full text, no.2053
25. Ceatra L., Dobre T., Parvulescu O. C., lavorschi G., Stoica A., *Modelling of vegetal materials pyrolysis in a fixed bed reactor*, The 7<sup>th</sup> European Congress of Chemical Engineering and the 19<sup>th</sup> International Congress of Chemical and Process Engineering, CHISA 2010, august 2010, Praga, CD-ROM of Full text, no.1998
26. Dobre T., O. C. Parvulescu, I. Jipa, L.-M. Dobre, E. Dumitrache, G. lavorschi, *Process variables effect on mixed bed ion exchange dynamics at water demineralization*, The 7<sup>th</sup> European Congress of Chemical Engineering and the 19<sup>th</sup> International Congress of Chemical and Process Engineering, CHISA 2010, august 2010, Praga, CD-ROM of full text no. 2009
27. O. C. Parvulescu, Dobre T., Qin J., lavorschi G., *VOCs adsorption on activated carbon: experiment and modelling*, The 7<sup>th</sup> European Congress of Chemical Engineering and the 19<sup>th</sup> International Congress of Chemical and Process Engineering, CHISA 2010, august 2010, Praga, CD-ROM of full text no. 2038
28. Dobre T., Inmaculada Rodriguez Ramos, Antonio Guerrero-Ruiz, Ceatră L., Oana Cristina Pârvescu, Marta Stroescu, Iuliana Jipa, *Obtaining and characterization of a new carbon-supported nickel catalyst and precursor*, Editor: Markoš, J., Proceedings of the 38<sup>th</sup> International Conference of Slovak Society of Chemical Engineering, Tatranské Matliare, Mai 2011, 1311-1320
29. Dobre T., Parvulescu O.C., Ceatra L., Stroescu M., Stoica A., lavorschi, G., *Process parameters estimation at the vegetal materials pyrolysis: I global kinetics*, Editor: Markoš, J., Proceedings of the 38<sup>th</sup> International Conference of Slovak Society of Chemical Engineering, Tatranské Matliare, Slovakia, 2011, 1321-1332
30. Dobre T., Rodriguez Ramos Inmaculada., Parvulescu O.C., Ceatra L., Stroescu M., Stoica A., Jipa I. M., *Process parameters estimation at the vegetal materials pyrolysis :II global reaction enthalpy*, Editor: Markoš, J., Proceedings of the 38<sup>th</sup> International Conference of Slovak Society of Chemical Engineering, Tatranské Matliare, Slovakia, Mai 2011, 1333-1340
31. Jipa I.M., Dobre L., Stoica A., Stroescu M., Dobre T., Jinga S., Tardei C., *Potassium sorbate release from polyvinylalcohol-bacterial cellulose films*, Editor: Markoš, J., Proceedings of the 38<sup>th</sup> International Conference of Slovak Society of Chemical Engineering, Tatranské Matliare, Slovakia, Mai 2011, 615-622
32. Dobre L., Jipa I.M., Stoica A., Stroescu M., Dobre T., Ferdes M., Ciumpiliac S., *Modeling of sorbic acid diffusion through bacterial cellulose based antimicrobial films*, Editor: Markoš, J., Proceedings of the 38<sup>th</sup> International Conference of Slovak Society of Chemical Engineering, Tatranské Matliare, Slovakia, Mai 2011, 455-464

33. Kapas A., Dobre T., Stroescu M., Stoica A., *Consideration of modeling of countercurrent extraction of species from vegetal materials*, The 17<sup>th</sup> Romanian International Conference of Chemistry and Chemical Engineering RICCCCE 17, septembrie 2011, Sinaia, ISBN 978-606-521-349-4, pag.S.IV.51-60
34. Dobre T., Rodrigues Ramos Inmaculada, Parvulescu O.C., Ceatra L., Stroescu M., Stoica A., *Modeling of vegetal materials pyrolysis*, The 17<sup>th</sup> Romanian International Conference of Chemistry and Chemical Engineering RICCCCE 17, septembrie 2011, Sinaia, ISBN 978-606-521-349-4, pag.S.IV.61-72
35. Dobre T., Rodrigues Ramos Inmaculada, Antonio Guerrero Ruiz, Parvulescu O.C., Ceatra L., *Preparation and characterization of new carbon-supported nickel catalysts*, The 17<sup>th</sup> Romanian International Conference of Chemistry and Chemical Engineering RICCCCE 17, septembrie 2011, Sinaia, ISBN 978-606-521-349-4, pag.S.IV.73-82

Director contracte de cercetare dupa 2003

A) Director contracte de cercetare stiintifica prin competitie la nivel national (2007 -2016)

1. Grant CE/Proiecte dezvoltare Resurse Umane pentru Cercetate/Scoli Postdoctorale CF3164/12/10/2005, *Modelarea, simularea si experimentarea micro si nanoimplantarii chimice in structuri vegetale poroase*, Beneficiar: Universitatea Politehnica Bucuresti, 2005-2007, T.Dobre (D), Anicuta Stoica, Marta Stroescu, Jipa Iuliana, Aurelia Sturzoiu, Oana Cristina Parvulescu (post doc position), G. Iavorschi (post doc position)
2. Grant PN II IDEI CF 177/1.10.2007, *Analysis by modeling, simulation and experimental investigation of fundamental sol-gel processes with biocellulose matrix*, 2007- 2010, Beneficiar: Universitatea Politehnica Bucuresti, 2007-2010, T.Dobre (D), Anicuta Stoica, Marta Stroescu, Jipa Iuliana, Aurelia Sturzoiu, Oana Cristina Parvulescu (post doc position), G. Iavorschi (post doc position)
3. Grant CEEEX 148/20.07/2006-2008 (49-05-18), *Structuri polimerice impregnate pentru recunoasterea moleculara a compusilor bioctivi din plante (BIOSPIM)*, 2006-2009, Beneficiar: ICECHIM Bucuresti, Plantavorel Piatra Neamt, S.C Incerplast Bucuresti, T.Dobre (D), Anicuta Stoica, Marta Stroescu, G. Iavorschi, Jipa Iuliana, Aurelia Sturzoiu, Oana Cristina Parvulescu
4. Grant PN II/PC/D2 nr.21027/2007-2010 (CH 45-07-14), *Materiale compozite hibride pe baza de polistiren expandat destinate reabilitarii termice a cladirilor (COMRETERM)*, 2007- 2010), Beneficiar: ICECHIM Bucuresti, INCERC Bucuresti, T.Dobre (D), Anicuta Stoica, Marta Stroescu, G. Iavorschi, Jipa Iuliana, Aurelia Sturzoiu, Oana Cristina Parvulescu

B) Director (Responsabil parte romana) contracte de cercetare stiintifica si mobilitati la nivel international

1. Grant NATO/CLC 3/2003, *Catalytic Inorganic Membrane Reactors: Membrane Synthesis Characterization, Reaction and Modeling*, 2003-2005, Director SUA Y Hua Ma (Worcester Polytechnic Institute, Worcester), Responsabil Romania Tanase Dobre (Universitatea Politehnica Bucuresti, Bucuresti), Responsabil Franta Anne Julbe (European Membranes Institute, Montpelier), Responsabil Spania Inmaculada Ramos (Catalysis and Petrochemistry Institute, Madrid)
2. Grant Brancusi Romania – Franta, PHC-Brancusi N°38365QK Contract 79 BM, 2017 *On the advanced processing of marine algae from Romanian Black Sea edge*, 2017-2018, Responsabil Franta Reza Djelveh (Institut Pascal UMR 6602 Université Blaise Pascal/CNRS/IFMA, Clermont Ferrand), Responsabil Romania Tanase Dobre (Universitatea Politehnica Bucuresti, Bucuresti)

C) Director contracte importante cu terti

1. Contract UPB T 45-13-01, 2013, *Cercetari de laborator privind caracterizarea pirolizei masei vegetale, proprii beneficiarului, si caracterizarea masei lichide obtinuta (piroliza si piroliza rapida)*, Beneficiar S.C ICE Blink Consulting SRL, Bucuresti

D) Contracte in finantare 2021-2022

1. *Cărbune pirolitic din deșeuri vegetale modificat în beneficiul agronomiei și mediului – BIOCHAR* (2020-2022), 372PED/2020, nr. UPB: CH 45-20-04 (Membru echipa UPB).
2. *Sustainable utilization of MARine resources to foster GREEN plant production in Europe – MARIGREEN*, ERA-NET BLUE BIO (2021-2024), parteneri: România (UPB, USAMV–București), Norvegia [Centre for Organic Agriculture (NORSØK)–Tingvoll, Norwegian Research Centre (NORCE)–Bergen, Fjordlaks AS–Ålesund, Algea AS–Kristiansund, Sigurd Folland AS–Averøy, Snadder & Snaskum AS–Rissa], Danemarca (DTU Aqua–Hirtshals, University of Copenhagen (UC)–Frederiksberg, Norlex Systems A/S–Birkerød) și Grecia [University of Thessaloniki (AUTH)] (*acceptat la finanțare*) (Membru echipa UPB).

Dobre Tanase

01.09.2022/ Bucuresti