



## Curriculum vitae Europass



### Informații personale

**Nume / Prenume** Văireanu, Dănuț-Ionel  
**Adresă(e)** București, România  
**Telefon(oane)** Birou:  
**Fax(uri)** -  
**E-mail(uri)** danut.vaireanu@upb.ro  
**Naționalitate(-tăți)** Română  
**Anul nașterii**  
**Sex** Masculin

### Experiența profesională

<b>Perioada</b>	23 Aprilie 1990 - prezent
<b>Funcția sau postul ocupat</b>	Profesor universitar ( oct. 2004-prezent), Conferențiar (oct. 2001 – sept 2004), S.L. (oct. 1996 – sept 2001), Asistent (apr. 1990 – sept 1996). Cursuri, laboratoare, seminarii, proiecte, tutoriale în limba română și în limba engleză la FCASM și la Faculty of Engineering in Foreign Languages. Conducător de doctorat din 2010, 6 doctoranzi în stagiul și 1 doctorand în cotutela. Administrativ: Prodecan 2004-2005.
<b>Activități și responsabilități principale</b>	Învățământ și cercetare; ca Prodecan responsabil cu cercetarea și problemele studențești
<b>Numele și adresa angajatorului</b>	Universitatea Politehnică din București, Str. Splaiul independenței 313, București, sector 6
<b>Tipul activității sau sectorul de activitate</b>	Învățământ superior și cercetare
<b>Perioada</b>	5 septembrie 1988 – 22 februarie 1990
<b>Funcția sau postul ocupat</b>	Stagiatura obligatorie în producție
<b>Activități și responsabilități principale</b>	Inginer tehnolog și cercetător în programul de elaborare a catalizatorului de depoluare tricomponent Șef secție Agenți de luciu. Sinteze organice fine pentru industria farmaceutică și pentru aditivi folosiți în băile de galvanizare
<b>Numele și adresa angajatorului</b>	1. Dacia Groupe Renault - Automobile Dacia, Str. Uzinei nr 1, Mioveni, jud. Argeș, Romania 2. S.C. Sintofarm S.A., Strada Ziduri Între Vii, Bucuresti Sectorul 2, Romania
<b>Tipul activității sau sectorul de activitate</b>	Industria construcțiilor de mașini și industria chimică

### Educație și formare

<b>Perioada</b>	Sept. 1997 - August 1998
<b>Calificarea / diploma obținută</b>	<b>Stagiu Postdoctoral NATO/Royal Society</b>
<b>Disciplinele principale studiate / competențe profesionale dobândite</b>	- Metode electrochimice de detecție în câmpuri de înalta tensiune, Instrumentație neconvențională. - Lab on a Chip. Stagiu postdoctoral de cercetare finalizat cu succes și raportul de cercetare depus la termenul stabilit.
<b>Numele și tipul instituției de învățământ / furnizorului de formare</b>	<b>University of Manchester Institute of Science And Technology,</b> Dept. of Instrumentation and Analytical Sciences, Anglia;
<b>Nivelul în clasificarea națională sau internațională</b>	

### GB 5A (maxim posibil)



Perioada  
Calificarea / diploma obținută

Disciplinele principale studiate / competențe profesionale dobândite

Numele și tipul instituției de învățământ / furnizorului de formare

Nivelul în clasificarea națională sau internațională

Perioada  
Calificarea / diploma obținută

Disciplinele principale studiate / competențe profesionale dobândite

Numele și tipul instituției de învățământ / furnizorului de formare

Nivelul în clasificarea națională sau internațională

Perioada  
Calificarea / diploma obținută

Disciplinele principale studiate / competențe profesionale dobândite

Numele și tipul instituției de învățământ / furnizorului de formare

Nivelul de clasificarea

Limba(i) străină(e) cunoscută(e)

Autoevaluare  
Nivel european (\*)

Sept. 1992 - Sept. 1995;

**Doctor in Instrumentație și științe analitice (PhD in Instrumentation and Analytical Sciences). Titlul de PhD echivalat cu Doctor in Chimie - specializarea Electrochimie** - atestat echivalare M.I. seria B, nr. 0000080- serie Secretariatul de stat nr. 56 din 27.02.1997 – acordat de Ministerul Învățământului, București, Romania, in 1997.

Examenul de doctorat susținut în ședința publică din 25.08.1995 și trecut cu **calificativul maxim (passed grade A, no corrections)**;

**Șef comisie examinare:**

**Prof.Dr.A. Townsend, (Hull University), Editor Șef Analytica Chimica Acta.**

- Instrumentație și Științe Analitice, Electrochimie, Electroanalitică, Analiză prin injectare în flux

**University of Manchester Institute of Science And Technology,**

Dept of Instrumentation and Analytical Sciences, Anglia.

**GB 5A (maxim posibil)**

Sept. 1991 - Sept. 1992

**Master of Science in Environmental and Pollution Control** acordat de University of Manchester, Anglia in 1993; **Masterat echivalat cu Studii aprofundate in domeniul Chimiei, specializarea Controlul Poluării și Protecția Mediului Înconjurător**, atestat echivalare M.I., seria B, nr. 0000079 - serie Secretariatul de stat nr. 55 din 27.02.1997 – acordat de Ministerul Învățământului, București, Romania, in 1997. Nota la examenul de dizertație în Anglia: **Passed, Grade A (calificativul maxim)**;

- Protecția mediului și controlul poluării. ( 4 pachete modulare, 16 discipline din domeniul protecției mediului, ecologiei, legislația de mediu, economie – terminate cu examene scrise și orale) urmate de 6 luni de cercetare intensă în laborator, finalizată cu dizertație. Dizertație cu evaluare internă și externă, conform standardelor britanice. **Procent de absolvire 23 absolvenți din 52 înscriși!**

**University of Manchester**

School of Biological Science, Manchester, Anglia

**GB 5A (maxim posibil)**

Sept 1983 - iul. 1988

Diplomat inginer. Medie generală (excluzând examenul de diplomă): **9,96 (șef de promoție pe țară)**; Examenul de diplomă: **10**

Peste 44 de discipline din domeniul științelor exacte, ingineriei, social și de management

**Institutul Politehnic Bucuresti,**

Facultatea de Tehnologie Chimica, Secția: Tehnologie Chimica Anorganică

**Top 5 Universități din țară**

Înțelegere				Vorbire				Scriere	
Ascultare		Citire		Participare la conversație		Discurs oral		Exprimare scrisă	
C2	Utilizator experimentat	C2	Utilizator experimentat	C2	Utilizator experimentat	C2	Utilizator experimentat	C2	Utilizator experimentat
C2	Utilizator experimentat	C2	Utilizator experimentat	B1	Utilizator independent	A2	Utilizator elementar	A2	Utilizator elementar
C1	Utilizator experimentat	C1	Utilizator experimentat	B1	Utilizator independent	B1	Utilizator independent	A2	Utilizator elementar
B1	Utilizator independent	B2	Utilizator independent	A2	Utilizator elementar	A2	Utilizator elementar	A1	Utilizator elementar

- Cambridge Certificate IELTS nr. 012/01.02.1991

- Traducător - interpret autorizat și certificat de Ministerul Justiției (1996-2001) (i.d.#491/1996, reconfirmat i.d.#278112.12.2000).

Examen de certificare susținute și trecute la centrul de perfecționare al Ministerului Culturii, Comisia centrală pentru acordarea certificatului de traducător.

- Traducător certificat pentru engleză, domeniul Juridic - Certificat nr.531/2000

- Traducător certificat pentru germană, domeniul Tehnic - Chimie - Certificat nr. 215/2000.

- Traducător certificat pentru franceză, domeniul Tehnic - Chimie - Certificat nr. 198/2000

Competențe și abilități sociale	<ul style="list-style-type: none"> <li>- Experiență de peste 16 ani în poziții de management universitar individuale și colective (Prodecan, Consiliul Facultății, Membru deplin în Consiliul Facultății/Profesorat din 2000, Catedră, Departament);</li> <li>- Spirit de echipă – în majoritatea pozițiilor avute m-am integrat fără dificultate în cele mai variate echipe și medii (interne sau externe); participant la numeroase proiecte complexe de cercetare cu parteneri multipli (CEEX, PN2, Inovare, Posdru etc.).</li> <li>- Negociere și mediere, necesare pentru evitarea sau aplanarea unor fricțiuni apărute în echipe de lucru eterogene</li> </ul>
Competențe și aptitudini organizatorice	<ul style="list-style-type: none"> <li>- Director/Responsabil Proiect pentru un număr de peste 19 proiecte ce necesită aptitudini de proiect manager.</li> <li>- Proiecte complexe de cooperare cu terți (mediul industrial, mediul social, training-uri etc.).</li> <li>- Supravegherea și relațiile de legătură pe parcursul a peste 3 ani de consolidarea a clădirii F prin proiect cu Banca Mondială (laboratoarele de electrochimie, coroziune, procese electrochimice);</li> <li>- Scrierea CS pentru logistică necesară bunei funcționări a laboratoarelor;</li> <li>- Evidența computerizată, BD.</li> </ul>
Competențe și aptitudini tehnice	<ul style="list-style-type: none"> <li>- Menținerea laboratoarelor (întreținere/depanare/reconditionare);</li> <li>- Construirea de sisteme și interfețe de achiziție digitală asistată de calculator a datelor furnizate de sistemele electrochimice de analiză;</li> <li>- Construirea de convertoare curent-tensiune bazate pe amplificatoare operaționale 741N, convertoare capabile să măsoare curenți de ordinul picoamperilor;</li> <li>- Construirea unui sistem computerizat de evaluare a coroziunii de contact în aliajele de uz stomatologic;</li> <li>- Construirea unui microreactor electrochimic de sinteză a hipocloritului de sodiu;</li> <li>- Construirea unui dispozitiv opto-electronic de testare a gradului de luciu la depunerile catodice;</li> <li>- Construirea unui disp. de testare accelerată la desprinderea catodica a acoperirilor anticorozive.</li> </ul>
Competențe și aptitudini de utilizare a calculatorului	<ul style="list-style-type: none"> <li>- Stăpânire fără probleme a pachetelor MsOffice, ACD Systems, Zview, Intel QX3, Coatings 4.1, ElectroCells, Virtual CycVoltam, ChemWin, Electronic WorkBench, Adobe, MathCad, SolvEq etc.</li> <li>- Creator de programe pentru studenți pentru predarea interactivă: VisualGalvanic.</li> <li>- Internet și poșta electronică (pachete Outlook, Pegasus Mail, WebMail etc.)</li> <li>- Experiență în depanare și configurare rețele de calculator;</li> <li>- Experiență în depanare hardware și configurare calculatoare în sistemele Windows și Linux</li> </ul>
Competențe și aptitudini artistice	Proiectare asistată de Calculator (ECAD), Ikebana.
Alte competențe și aptitudini	Hobby: Go, tenis de masă, literatură
Permis(e) de conducere	Categoria B de peste 35 ani.
<b>Activitate didactică</b>	Cursuri, laboratoare, seminarii, tutoriale proiecte predate la materiile: Electrochimie, Electrochimie aplicată, Coroziune și Protecție anticorozivă, Tehnologie electrochimică, Reactoare Electrochimice, Baterii și Acumulatori, Pile de combustie, Electrochemical Conversion and Storage of Electricity using Electrochemical Devices, Electrozi și microelectrozi, Spectroscopie de impedanță electrochimică, Procese electrochimice aplicate în protecția mediului, Metode și tehnici electrochimice de depoluare, Știința materialelor, Biomateriale etc.
<b>Domenii de cercetare abordate</b>	Electrochimie, Coroziune, Metode de evaluare a coroziunii, Electroliza, Sinteze electrochimice, Baterii și Acumulatori, Pile de combustie de tip PEM și SOFC, Vehicule electrice, Microelectrozi, Spectroscopie de impedanță electrochimică, Procese electrochimice aplicate în protecția mediului, Metode și tehnici electrochimice de depoluare, Știința materialelor, Coroziunea Biomaterialelor, Coroziunea indusă microbiologic (MIC), sisteme fotovoltaice etc.
<b>Publicații</b>	<ul style="list-style-type: none"> <li>- 15 manuale universitare, îndrumare de laborator, cărți, monografii ca autor unic sau coautor;</li> <li>- 5 invenții (4 acordată și 1 sub evaluare);</li> <li>- peste 100 articole publicate în reviste cotate ISI sau indexate în baze de date internaționale;</li> <li>- peste 100 de articole publicate în volumele recenzate ale unor conferințe internaționale;</li> <li>- 19 contracte naționale sau internaționale (unele cu bugete multianuale ca director / responsabil / coordonator / Manager și alte 28 ca membru în echipa de cercetare</li> </ul>
<b>Informații suplimentare</b>	Referințele pot fi furnizate la cerere

17.12.2020



## LISTA de LUCRARI

### CARTI

1. **Danut-Ionel Vaireanu**, Anca Cojocaru, Ioana Maior, Ioana-Alina Ciobotaru, *Food packaging interactions in metal cans*, in *Reference Module in Food Science*, Elsevier, 2018, ISBN 9780081005965  
<https://doi.org/10.1016/B978-0-08-100596-5.22398-6>  
<http://www.sciencedirect.com/science/article/pii/B9780081005965223986>
2. Anca Cojocaru, Ioana Maior, Simona Căprărescu, Ioana-Alina Ciobotaru, **Dănuț-Ionel Văireanu**, *Electrochimia aplicată în ingineria economică (Electrochemistry applied in Economic Engineering)*, Ed. Electra, 2015, ISBN: 978-606-507-081-3 (280 pagini)
3. **D.I. Vaireanu**, *Handbook of Experimental Electrochemistry (in English language)*, Ed. Printech, Bucharest, 2008, ISBN 978-606-521-214-5, (268 pages)
4. **D.I. Vaireanu**, *Electrochemistry and Corrosion (in English language)*, Ed. AGIR, Bucharest, 2006, ISBN 973-720-114-0 / 978-973-720-114-0 (182 pages)
5. T. Badea, M. Nicola, **D.I. Vaireanu**, I. Maior, A. Cojocaru, "Electrochimie și Coroziune" (**Electrochemistry and Corrosion - 400 pages**), Ed. MatrixRom, București, 2005, ISBN 973-685-913-4 (400 pages)
6. **T. Visan (co-ordinator)**, T. Badea, I. Demetrescu, G.L. Radu, M.V. Popa, **D.I. Vaireanu**, E. Roman, L. Anicai, N. Ibric, S.Licescu, M. Diaconu, D. Ionita, M. Demetrescu, "Electrochimie și Coroziune pentru doctoranzii ELCOR" (**Electrochemistry and Corrosion for ELCOR PhD students**), Ed. Printech, București, 2004, ISBN 973-718-075-5
7. D.Constantinescu, **D.I. Văireanu**, *Tehnologia proceselor electrochimice, (Technology of Electrochemical Processes)*, Ed. Printech, Buc.,Romania, 2000, ISBN 973-652-182-6 (287 pages)
8. **D.I. Vaireanu**, A. Cojocaru, D. Constantinescu, T. Badea, M. Nicola, I. Maior "Electrochimie, Coroziune si Tehnologia Proceselor Electrochimice" (**Electrochemistry, Corrosion and technology of electrochemical processes, laboratory practical note book**) Ed. University Politehnica of Bucharest, 2<sup>nd</sup> Edition, Bucuresti, 2002, (294 pages),
9. **D.I. Văireanu**, *Depoluarea electrochimică a apelor reziduale, (Electrochemical depollution of waste water - 118 pages)* Ed. Printech, Bucuresti, 2000, ISBN 973-652-211-3,
10. **D.I. Vaireanu**, A. Cojocaru, I. Maior, D. Constantinescu, "Aplicații practice de electrochimie și știința materialelor, (Practical applications of electrochemistry and material science) Ed. Printech, Bucuresti, 2000, ISBN 973-652-064 (140 pages)
11. D. Constantinescu, **D.I. Vaireanu**, I. Maior, *Știința Materialelor (Material Science)*, "Ed. Matrix Rom, București, 2004, ISBN 973-685-726-3, (282 pages)
12. **D.I. Vaireanu**, M. Colesa, Aplicații practice de electrochimia mediului, (**Practical Applications of environmental electrochemistry laboratory practical note book -100 pages** - Ed. Cartea Universitară, Bucharest, 2003, ISBN 973-86042-9-X (100 pages)
13. **D.I. Vaireanu**, "Extracția electrolitică a zincului" (**Electrowinning of zinc**), Ed. University Politehnica of Bucharest, 2002 - **project practical note book (106 pages)**
14. **D.I. Vaireanu**, A. Cojocaru, I. Maior, D. Constantinescu, "Materiale Metalice și Electrochimie" (**Metallic materials and electrochemistry, laboratory practical note book**), Ed. University Politehnica of Bucharest, Bucuresti, 2000, (120 pages)
15. **D.I. Vaireanu**, A. Cojocaru, D. Constantinescu, T. Badea, M. Nicola, "Electrochimie, Coroziune si Tehnologia Proceselor Electrochimice" (**Electrochemistry, Corrosion and technology of electrochemical processes, laboratory practical note book**),Ed. Andor Tipo srl, Bucuresti, 1999, (302 pages)
16. D. Constantinescu, **D.I. Vaireanu**, T. Ștefan, *Tehnologia Proceselor Electrochimice,(Technology of Electrochemical Processes, laboratory practical note book)* Ed. University Politehnica of Bucharest, București, 1991, (74 pages)

### INVENTII

- 1 BREVET DE INVENTIE no. **RO 116129 B / 28.09.2000**  
Author: **Vaireanu Danut Ionel**  
Holder: **Vaireanu Danut Ionel**  
Published in: **BOPI (Romania) no. 10/2000**  
Application field: **Electrochemistry and Analytical Science/Environmental Protection**
- 2 BREVET DE INVENTIE no. **RO 116130 B / 28.09.2000**  
Author: **Vaireanu Danut Ionel**  
Holder: **Vaireanu Danut Ionel**  
Published in: **BOPI (Romania) no. 10/2000**  
Application field: **Electrochemistry and Analytical Science/Environmental Protection**
- 3 BREVET DE INVENTIE no. **RO 116304 B / 28.09.2000**  
Author: **Vaireanu Danut Ionel**  
Holder: **Vaireanu Danut Ionel**  
Published in: **BOPI (Romania) no. 12/2000**

Application field: **Electrochemistry and Analytical Science/Environmental Protection**

P4 BREVET DE INVENTIE no. **RO 126439 B1** /29.03.2013  
Author: **Vaireanu Danut Ionel**, Corina Rradulescu, Mihai Victor Mircea Macavescu, Elisabeta Pasculete, Ioana Predescu  
Holder: **OVM Research Institute**  
Application field: **corrosion and corrosion protection**  
Published in: **BOPI (Romania) no. 3/2013**

#### SELECTIE DE ARTICOLE PUBLICATE IN REVISTE INDEXATE (ISI SAU BDI)

- 1 Peter R. Fielden, Thomas McCreedy, Nigel Ruck and **Danut-Ionel Vaireanu**, *Amperometric Arrays in Flowing Solution Analysis*, Analyst, May 1994, vol. 119, p.953-958, ISSN: 0003-2654 (ISI)
- 2 **Danut-Ionel Vaireanu**, Nigel Ruck and Peter R. Fielden, *Predictive model for coulometric operation in a thin-layer amperometric flow cell*, Analytica Chimica Acta, vol. 306, April 28, 1995, p.115-122, ISSN: 0003-2670 (ISI)
- 3 **Danut-Ionel Vaireanu**, Peter R. Fielden, Richard D. Snook, *Isodispersion curves in flow injection analysis*, Analytical Communication (of London) vol. 12, 1999, p.403-406, ISSN: 1359-7337 (ISI)
- 4 **Danut-Ionel Vaireanu**, Peter R. Fielden, Richard D. Snook, *Similarity and scaling in flow injection analysis*, Analytical Communication (of London), vol. 12, 1999, p.407-410, ISSN: 1359-7337 (ISI)
- 5 **Danut-Ionel Vaireanu**, *A computer controlled injection system for environmental analysis*, Science and Technology of Environmental Protection, vol.7,no.1,2000,p.20-28, ISSN 1221- 6909.
- 6 **Danut-Ionel Vaireanu**, Peter R. Fielden, Bernard J. Treves Brown, *A capacitively Coupled Conductivity Detector for Electroseparations*, Measurement Science and Technology vol. 11, no. 3, March 2000, p.244-251, ISSN: 0957-0233 (ISI)
- 7 **Danut-Ionel Vaireanu**, *Evaluarea dispersiei în celule electrochimice modulare de volum variabil utilizate în sisteme de analiză prin injectare în flux, (Dispersion assessment in modular electrochemical cells of variable volume used in connection with a flow injection analysis system)* Rev. Chimie, vol. 51, no. 10, 2000, p.758-762, ISSN 0034 - 7752 (ISI)
- 8 **Danut-Ionel Vaireanu**, *Electrochemical platinum coating of a disposable multielectrode array*, Metalurgia International, vol. V, no 4, 2000, p.37-41 ISSN 1582-2214.
- 9 **Danut-Ionel Vaireanu**, *Model de simulare numerică a peak-urilor în sisteme de analiză prin injecție în flux, (Simulation model of flow injection analysis peaks)* Rev. Chimie, vol. 51, no. 11, 2000, p.885-888, ISSN 0034 – 7752 (ISI).
- 10 **Danut-Ionel Vaireanu** and Adriana Simion, *A novel silver/silver Chloride - saturated gel reference electrode for electrochemical measurements used in connection with pollution monitoring systems*, Science and Technology of Environmental Protection,vol.7,no.2,2000, p.31-36, ISSN 1221- 6909.
- 11 **Danut-Ionel Vaireanu**, *Achiziția digitală a semnalelor furnizate de celulele electrochimice prin intermediul instrumentelor virtuale, (Digital acquisition by virtual instruments of flow injection response signals)* Rev. Chimie, vol. 51, no. 12, 2000, p.983-985 ISSN 0034 – 7752 (ISI).
- 12 **Danut-Ionel Vaireanu**, *Evaluarea efectului de memorie în acumulatorii Ni-Cd, (Memory effect in Ni-Cd rechargeable batteries)* Rev. Metalurgia, vol. 52, nr.12., 2000, p.20-28, ISSN 0461-9579.
- 13 **Danut-Ionel Vaireanu** și Adriana Simion, *Revitalizarea electrozilor de referință detipul Ag/AgCl, (Revitalisation of Ag/AgCl reference electrodes)* Rev. Chimie, vol. 52, no. 1-2, 2001, p. 34-37 ISSN 0034 – 7752 (ISI).
- 14 **Danut-Ionel Vaireanu**, *Model operațional de exploatare optimă a instalațiilor de rafinare electrolitică a cuprului, (Operational model of Copper refining bath)* Rev. Metalurgia, vol. 53, nr. 1, 2001, p.28-37, ISSN 0461-9579.
- 15 **Danut-Ionel Vaireanu**, *Electric vehicles - a possible future solution for zero emission vehicles*, Metalurgia International, vol. VI, no.1, 2001, p.37-42, ISSN 1582-2214.
- 16 **Danut-Ionel Vaireanu**, *Considerații privind modelarea procesului de extracție electrolitică a zincului. Partea I. Modelul fizic al reactorului de extracție electrolitică, (Consideration regarding the electrowinning process of zinc - Part. I. Physical modelling of the electrochemical reactor)* Rev. Metalurgia vol.53, nr. 3, 2001, p.18-26, ISSN 0461-9579.
- 17 **Danut-Ionel Vaireanu**, *Black platinum coating of platinum wire electrodes used in connection with a flow-through conductivity cell*, Metalurgia International, vol. VI, no.2, 2001, p. 18-24, ISSN 1582-2214.
- 18 **Danut-Ionel Vaireanu**, *Electrochemical cleaning of copper subjected to nickel plating*, Metalurgia International, vol. VI, no.2, 2001, p. 25-30, ISSN 1582-2214.
- 19 **Danut-Ionel Vaireanu**, Cosmin Olteanu și Adriana Simion, *Celulă electrochimică modulară utilizată în analiza prin injectare în flux, (Electrochemical modular cell used in flow injection analysis systems)* Rev. Chimie, vol. 52, no.3, 2001, p.130-133, ISSN 0034 – 7752 (ISI).
- 20 **Danut-Ionel Vaireanu**, *Considerații privind modelarea procesului de extracție electrolitică a zincului. Partea II. Aplicație de calcul privind predimensionarea reactorului de extracție electrolitică, (Consideration regarding the electrowinning process of zinc - Part. II. Application regarding the reactor design)* Rev. Metalurgia vol. 53, nr.4, 2001, p.25-33, ISSN 0461-9579.
- 21 **D.I. Vaireanu**, P.R. Fielden and R.D. Snook *Electrochemical Cells Of Variable Configuration Used In Connection With A Flow Injection Analysis System*, Scientific Bulletin of U.P.B., Series B, vol. 63, no.3, p. 299-308 (Scopus).

- 22 **Danut-Ionel Vaireanu**, *A novel miniaturised electrochemical reactor for sterilisation of organic fluids loaded with biologically active material*, Science and Technology of Environmental Protection, vol.8,nr.1,2001,p.34-39, ISSN 1221- 6909.
- 23 **Danut-Ionel Vaireanu** and Costin Constantinescu, *Electrochemical Removal of Cupric Ions from Industrial Waste Water*, Science and Technology of Environmental Protection, vol.8,nr.1, 2001, p.50-55,ISSN 1221- 6909.
- 24 **Danut-Ionel Vaireanu**, Adriana Simion and Mirela Colesa, *A disposable screen printed silver/silver chloride electrode array for pollution monitoring systems*, Science and Technology of Environmental Protection, vol. 9, nr.2, 2002, p.17-22, ISSN 1221- 6909.
- 25 Maria Mihailescu, Adrian Mihailescu and **Danut-Ionel Vaireanu** *A novel electrochemical array used for mapping the water infiltration in buildings*, Science and Technology of Environmental Protection, vol. 10, nr.1, 2003, p.12-16, ISSN 1221- 6909.
- 26 Maria Mihailescu, Adrian Mihailescu and **Danut-Ionel Vaireanu** and Mirela Colesa, *Economic efficiency of the electrochemically induced coagulation*, Science and Technology of Environmental Protection, vol. 10, nr.1, 2003, p.17-20, ISSN 1221- 6909.
- 27 **Danut-Ionel Vaireanu** and Simona Caprarescu *Trends And Prospects For The Use Of Biodiesel Products* Science and Technology of Environmental Protection, vol. 12, nr.1, 2005, p.31-36, ISSN 1221- 6909.
- 28 **Danut-Ionel Vaireanu**, Simona Caprarescu, Anca Cojocar and Ioana Maior *Revitalisation of Sealed Lead Acid Rechargeable Batteries*, Science and Technology of Environmental Protection, vol. 12, nr.1, 2005, p.50-56, ISSN 1221- 6909.
- 29 **Danut-Ionel Vaireanu**, *Ion selective electrodes and their environmental applications, Review*, Science and Technology of Environmental Protection, vol. 12, nr.2, 2005, p.87-97, ISSN 1221- 6909
- 30 **Danut-Ionel Vaireanu**, Mirela Stanciu, Simona Caprarescu, *Sistem electrochimic de testare accelerată pentru desprinderea catodică a acoperirilor pentru conducte îngropate*, Revista de Chimie, nr. 3, 2006, pp. 258-260, ISSN 0034 – 7752 (ISI).
- 31 Daniela Simina Ștefan, M. Ștefan and **Danut-Ionel Vaireanu**, *Removal of Cu(II) and Zn(II) Ions on Corn Cobs*, Rev. Roum. Chim., 2006, 51(6), 541-546, ISSN 0035-3930 (ISI)
- 32 A.Cojocar, I.Maior, **D.I.Vaireanu**, G.Badea, S.Caprarescu, *Aniline Electrooxidation on Semiconductor Electrodes and Electrochemical Behavior of Polyaniline Obtained Films*, Analele Univ. din Oradea, fasc. Chimie, Vol. XIV, 2007, 80-84, ISSN 1224-7626
- 33 **D. I. Văireanu**, A.Cojocar, I.Maior, S. Caprarescu, *Standardizarea bateriilor*, Revista Standardizarea, nr. 1, ianuarie 2008, pp. 31-36, Ed. ASRO, București, ISSN 1220-2061
- 34 I.Maior, G.Badea, A.Cojocar and **D-I.Vaireanu**, *The Corrosion of Zinc Chloride Solutions and the Inhibition Effect of Urea and Thiourea/Coroziunea zincului în soluții de clorură de zinc și efectul inhibitor al ureei și tioureei*, *Coroziune și Protecție Anticorozivă-Corrosion and Anticorrosive Protection*, Vol. III, 2008, Nr. 3, pp. 36-40, ISSN 1842-0346
- 35 **D.-I. Vaireanu**, A. Cojocar, I. Maior, and S. Caprarescu, *Practical Considerations Regarding the Measurement of Ionic Conductivity by EIS in Conductive Polymers*, Chem. Bull. "POLITEHNICA" Univ. of Timisoara, Series Chemistry and Environmental Engineering, Volume 53(67), 1-2, 2008, pp. 258-261, ISSN 1224-6018, CNCIS B+ Category Journal, [http://www.chim.upt.ro/buletin\\_chimie/index.htm](http://www.chim.upt.ro/buletin_chimie/index.htm)
- 36 **Dănuț-Ionel Văireanu**, Ioana Maior, Alexandra Grigore and David Săvoiu, *The Evaluation of Ionic Conductivity In Polymer Electrolyte Membranes*, Rev. Chimie, 59, nr. 10, 2008, pp 1140-1142 ISSN 0034-7752 (ISI)
- 37 **Danut-Ionel Vaireanu**, Anca Cojocar, Ioana Maior, Simona Caprarescu, *Calibration System for Furnace Corrosion Monitoring Probes*, Analele Univ. din Oradea, fasc. Chimie, Vol. XV, 2008, pp. 174-178, ISSN 1224-7626
- 38 Mircea Stefan, Simina Daniela Stefan, Ioana Andreea Marinescu, Mihai Belcu, and **Danut-Ionel Vaireanu**, *Simultaneous Sorbtion of Cadmium, Zinc and Lead on Montmorillonit*, Revue Roumaine de Chimie, vol 53(10), 2008, pp.965-971, ISSN 0035-3930 (ISI)
- 39 **Dănuț-Ionel Văireanu**, Editorial: *10 reasons to intensify the corrosion research during a period of crisis (10 motive pentru intensificarea cercetării în domeniul coroziunii într-o perioadă de criză)* Corrosion and Anticorrosive Protection, Vol. IV, 2009, Nr. 1, pp. 5-7, ISSN 1842-0346
- 40 Simona Căprărescu, **Dănuț-Ionel Văireanu**, Anca Cojocar, Ioana Maior, Violeta Purcar, Andrei Sirbu, *Removal of Cu ions from aqueous solutions using cation- and anion-exchange membranes by electrodialysis process*, U.P.B. Sci. Bull., Series B, Vol. 71, Iss. 1, 2009, pp. 33-40, ISSN 1454-2331 B+ Category Journal, Internationally Indexed Journal [http://www.scientificbulletin.upb.ro/\(Scopus\)](http://www.scientificbulletin.upb.ro/(Scopus))
- 41 Simona Caprarescu, **Danut-Ionel Vaireanu**, Anca Cojocar, Ioana Maior, Andrei Sarbu, *Removal of Copper Ions from Electroplating Wastewater by Ion-exchange Membranes*, Rev. Chim., Vol. 60, Nr. 7, 2009, p. 673-677 ISSN: 0034-7752 (ISI)
- 42 **Danut Ionel Vaireanu**, Anca Cojocar, Ioana Maior, Simona Caprarescu, Alexandra Ionescu, Valentin Radu, *Considerations on Reducing the Experimental Duration of Electrochemical Impedance Spectroscopy Measurements used for the Evaluation of Ionic Conductivity in Polymer Electrolyte Membrane Electrolysers and Fuel Cells*, Key Engineering Materials Vol. 415, 2009, p. 61-64, ISSN: 1662-9795 (Scopus indexed)
- 43 Ioana Maior, Gabriela Elena Badea, **Danut-Ionel Vaireanu**, Anca Cojocar, Simona Căprărescu, *Environmental Implications of Energy Production*, Analele Universității din Oradea, Fascicula de Energetică, Vol. 15, 2009, pp. 260-265, ISSN 1224 – 1261
- 44 G.-O. Buica, I. Maior, E.-M. Ungureanu, **D. I. Vaireanu**, E. Diacu, C. Bucher, E. Saint-Aman, *Electrochemical impedance characterization of poly (pyrrole-edta like) modified electrodes*, Rev. Chimie Vol.60, nr. 11, 2009, pp. 1205-1210 (ISI).
- 45 Anca Cojocar, Ioana Maior, **Danut-Ionel Vaireanu**, Iosif Lingvay, Carmen Lingvay, Simona Caprarescu, *Estimation of Inhibition Efficiency for Carbon Steel Corrosion in Acid Media by Using Natural Plant Extracts*, Revista de Chimie Vol.60, nr. 11, 2009, pp. 1175-1180 (ISI).
- 46 I. Pișă, C. Rădulescu, L. Mihăescu, Gh. Lăzăroiu, G. Negreanu, S. Zamfir, **D. Văireanu**, *Evaluation of Corrosive Effects in Co-Firing Process of Biomass and Coal*, Environmental Engineering and Management Journal, Vol. 8, No.6, 2009, pp.1485-1490, ISSN: 1582-9596 <http://omicron.ch.tuiasi.ro/EEMJ/issues/vol8/vol8no6.htm> ISI / <http://omicron.ch.tuiasi.ro/EEMJ/index.htm>

47 Stefan Ioan VOICU, Nicoleta Doriană STANCIU, Aurelia Cristina NECHIFOR, **Danut Ionel VAIREANU**, Gheorghe NECHIFOR, *Synthesis and Characterisation of Ionic Conductive Polysulfone Composite Membranes*, Romanian Journal of Information, Science and Technology,

Volume 12, Number 3, 2009, pp.410-422, ISSN: 1453-8245, ISI / <http://www.imt.ro/romjist/>

- 48 Anca Cojocar, Ioana Maior, Iosif Lingvay, Carmen Lingvay, Simona Căprărescu, **Dănuț-Ionel Văireanu**, *Carbon Steel Corrosion Inhibition by Plant Extract Based Green Inhibitors*, Studia Universitatis Babeș-Bolyai Chemia, Cluj Napoca, Anul LIV, Vol 1 Special Issue, (2009) pg. 41-54, ISSN 1224-7154, ISI / <http://www.studia.ubbcluj.ro/serii/chemia/> ISI, 520, Science Citation Index Expanded, Chemistry Citation Index®, Journal Citation Reports/Science Edition).
- 49 G. E.-O. Buică, I. Maior, E.-M. Ungureanu, **D.-I. Văireanu**, C. Bucher, E. S.-Aman, *Electrochemical Impedance Characterization of Poly(N,N'-Ethylenebis[N-[(3-(Pyrrole-1-Y)Propyl)Carbamoyl]Methyl]-Glycine]) Modified Electrodes*, Studia Universitatis Babeș-Bolyai Chemia, Cluj, Napoca, Anul LIV, Vol 1 Special Issue, (2009) pg. 113-126 ISSN 1224-7154, ISI, 520, Science Citation Index.
- 50 Corina Radulescu, Tudor Prisecaru, Lucian Mihaescu, Ionel Pâșă, Simona Zamfir, **Danut-Ionel Vaireanu**, Elena Popa, *Research on the negative effects assessment (slagging, clogging, ash deposits) developed at the biomass-coal co-firing*, Environmental Engineering Management Journal, vol 9, nr.1, 2010, pp 17-26 ISSN: 1582-9596 <http://omicron.ch.tuiasi.ro/EEMJ/issues/vol9/vol9no1.htm> ISI / <http://omicron.ch.tuiasi.ro/EEMJ/index.htm>
51. Mihaela Mihai, Gabriel Dabija, Cristina Costache, **Danut - Ionel Vaireanu**, *Complex Formation between Weak Anionic Polyelectrolyte and Medium Cationic Surfactant*, Revista de Chimie, Vol.61, nr. 1, 2010, pp. 36-40 ISSN 0034-7752 (ISI)
52. Mihaela Mihai, Gabriel Dabija, Cristina Costache, **Danut - Ionel Vaireanu**, *Cationic Surfactant Complex Used in the Coagulation and Flocculation Processes*, Revista de Chimie Vol.61, nr. 5, 2010, pp. 449-454, ISSN 0034-7752 (ISI)
53. C. Baicea, A. C. Nechifor, D. I. Vaireanu, O. Gales, R. Trusca, S. I. Voicu, *Sulfonated poly(ether ether ketone) – activated polypyrrole composite membranes for fuel cells*, Optoelectronics And Advanced Materials – Rapid Communications Vol. 5, No. 11, 2011, pp. 1181 – 1185 (ISI)
54. S. Caprarescu, D. I. Vaireanu, A. Cojocar, I. Maior, V. Purcar, *A 3-cell electro dialysis system for the removal of copper ions from electroplating wastewater*, Optoelectronics and Advanced Materials – Rapid Communications Vol. 5, No. 12, 2011, pp. 1346 – 1351 (ISI)
55. Irenne Gabriela Trofin, Gabriel Dabija, Danut – Ionel Vaireanu, Laurentiu Filipescu, *Long - term Storage and Cannabis Oil Stability Rev. Chimie (Bucharest) vol. 63 No. 3, 2012, pp. 293-297 (ISI)*
56. Irenne Gabriela Trofin, Gabriel Dabija, Danut–Ionel Vaireanu, Laurentiu Filipescu, *The Influence of Long-term Storage Conditions on the Stability of Cannabinoids derived from Cannabis Resin*, Chimie (Bucharest) vol 63, No.4 , 2012 pp. 422-427 (ISI)
57. Iosif Lingvay, Danut-Ionel Vaireanu, Kinga Ollerer, Carmen Lingvay, *The Influence of Synthetic and Environmentally Friendly Scale and Corrosion Inhibitors on the Biodegradation of Pollutants*, Environmental Engineering and Management Journal, Vol.11, No. 4, 2012, pp.767-772 (ISI)
58. Simona Caprarescu, Violeta Purcar, Danut-Ionel Vaireanu, *Separation of Copper Ions from Synthetically Prepared Electroplating Wastewater at Different Operating Conditions Using Electrodialysis*, Separation Science and Technology, Volume: 47, Issue: 16, 2012, pp 2273 - 2280. ISSN 0149-6395 (ISI)
59. C.M Baicea, V.I. Luntraru, **D.I. Vaireanu**, E. Vasile, R. Trusca, *Composite membranes with poly(ether ether ketone) as support and polyaniline like structure, with potential applications in fuel cells*, Central European Journal of Chemistry, Volume 11, Issue 3, March 2013, pp. 438-445 ISSN: 1895-1066 (ISI)
60. V.I. Luntraru, **D.I. Vaireanu**, D.L. Ghindeanu, G. Nechifor, *The synthesis and characterization of a new composite material: Polysulfone-Fe<sub>3</sub>O<sub>4</sub>/TiO<sub>2</sub>*, UPB Scientific Bulletin, Series B: Chemistry and Materials Science, Volume 75, Issue 2, 2013, pp 91-98, ISSN:1454-2331, IDB indexed
61. C.-M. Baicea, **D.I. Vaireanu**, L.Naftanaila, G. Nechifor, *Sulfonated polyether etherketonepoly(phenylenediamine derivatives) composite membranes for fuel cell applications*, UPB Scientific Bulletin, Series B: Chemistry and Materials Science, Volume 75, Issue 2, 2013, pp. 33-42, ISSN:1454-2331, IDB indexed
62. Florin Nenciu, Irina-Elena Ciobotaru, **Dănuț-Ionel Vaireanu**, *The Evaluation Of Weston Cell Reliability On The Basis Of The Electromotive Force Drift*, U.P.B. Sci. Bull., Series B, Vol. 75, Iss. 4, 2013, pp. 101-108, ISSN:1454-2331, IDB indexed
63. Andreea Ioana Enache (Bontos), Marius Daniel Bontos, **Danut Ionel Vaireanu**, *A Novel Information System for Studying the Interactions between, Foods, Food Additives and Packaging Materials*, REV. CHIM., 64, No. 10, 2013, pp. 1139-1142, ISSN 0034-7752 (ISI)
64. Irina-Elena Ciobotaru, Florin Nenciu, **Danut-Ionel Vaireanu**, *The Electrochemical Generation of Ozone using an Autonomous Photovoltaic System*, REV. CHIM., 64, No. 11, 2013, pp. 1339-1342, ISSN 0034-7752 (ISI)
65. Andreea Ioana Enache (Bontos), **Danut Ionel Vaireanu**, *The use of electrochemical impedance spectroscopy for interactions between food and/or the food additives and the packaging materials*, Research Journal of Chemistry and Environment, 18 (1), 2014, pp. 7-13, ISSN No.: 2278 - 4527 (ISI)
66. Irina-Elena Ciobotaru, **Danut-Ionel Vaireanu**, *Considerations regarding the polarity reversal in electrochemically generated hypochlorite* Journal of Optoelectronics and Advanced Materials, 16 1-2), 2014, pp. 198-206, ISSN 1454-4164, (ISI)
67. Florin Nenciu, **Danut-Ionel Vaireanu**, *A comparative study for assessing the effectiveness of solar trackers used in conjunction with photovoltaic power autonomous systems*, Journal of Optoelectronics and Advanced Materials,16 (1-2), 2014 pp.02-109,ISSN 1454-4164, (ISI)
68. Irina-Elena Ciobotaru, **Danut-Ionel Vaireanu**, *A computer controlled system for water quality monitoring*, UPB Scientific Bulletin, Series B: Chemistry and Materials Science, 76 (1), 2014, pp. 19-24, ISSN:1454-2331, IDB indexed
69. Irina-Elena Ciobotaru, **Danut-Ionel Vaireanu**, *A logistic model for the electrochemical generation of active chlorine species on platinised platinum electrodes*, Research Journal of Chemistry and Environment, 18 (3), 2014, pp. 41-46, ISSN No.: 2278 - 4527 (ISI)
70. Florin Nenciu, **Danut-Ionel Vaireanu**, *A Versatile System for Indoor Monitoring of Some Volatile Organic Compounds*, REV. CHIM., 65, No. 5, 2014, pp. 565-569, ISSN 0034-7752 (ISI)

- 71 Andreea Ioana Enache (Bontos), **Danut - Ionel Vaireanu**, Anca Cojocaru, A novel approach for identifying potential interactions between alcoholic beverages and their polyethylene terephthalate (PET) packaging materials, *Revista de Chimie*, Volume 65, Issue 5, May 2014, Pages 570-573, Pages 565-569, ISSN:0034-7752, (ISI)
- 72 Caprarescu, S., Radu, A.-L., Purcar, V., Sarbu, A., **Vaireanu, D.-I.**, Ianchis, R., Ghiurea, M., Removal of Copper Ions from Simulated Wastewaters Using Different Bicomponent Polymer Membranes, *Water, Air, & Soil Pollution*, Volume 225, Issue 8, 19 July 2014, ISSN 0049-6979, IF=1,802, Springer International Publishing Switzerland 2014, 10.1007/s11270-014-2079-6 <http://link.springer.com/article/10.1007/s11270-014-2079-6/fulltext.html>, (ISI)
- 73 Ioana-Alina Ciobotaru and **Danut-Ionel Vaireanu**, Considerations Regarding A Novel Coefficient For Electrochemical Impedance Spectroscopy Data Validation, *Bulletin of Romanian Chemical Engineering Society*, Vol 1, Nr 2, 2014, p. 123-134, ISSN 2360-4697, IDB
- 74 Enache, A.I., Bontos, M.D., **Vaireanu, D.-I.**, An information system based on the modern technologies of data acquisition and data processing in food industry, *UPB Scientific Bulletin, Series B: Chemistry and Materials Science* Volume 76, Issue 2, 2014, Pages 105-112, ISSN:1454-2331, IDB indexed
- 75 Irina-Elena Ciobotaru, Ioana-Alina Ciobotaru, **Dănuț-Ionel Văireanu**, Solar Powered Pem Electrolyser Used As Ozone Generator For Tertiary Water Treatment, *U.P.B. Sci. Bull., Series B*, Vol. 76, Iss. 4, 2014, p.27-34, ISSN:1454-2331, IDB indexed
- 76 Caprarescu, S., Radu, A.-L., Purcar, V., Ianchis, R., Sarbu, A., Ghiurea, M., Nicolae, C., Modrogan, C., **Vaireanu, D.-I.**, Périchaud, A., Ebrasu, D.-I., Adsorbents/ion exchangers-PVA blend membranes: Preparation, characterization and performance for the removal of Zn<sup>2+</sup> by electro dialysis *Applied Surface Science*, Volume 329, 28 February 2015, Pages 65-75, ISSN: 0169-4332, (ISI)
- 77 Ioana-Alina Ciobotaru, **Danut-Ionel Văireanu**, Ioana Maior, Anca Cojocaru, Simona Căprărescu, *Electrochemical techniques as a useful aid for deposition and characterisation of silane coatings*, *Bulletin of Romanian Chemical Engineering Society*, vol. 2, nr. 1, 2015, p. 56-64; ISSN: 2360-4697, IDB indexed, Copernicus,
- 78 Vaszilcsin, Nicolae, **Vaireanu, Danut-Ionel**, Considerations Regarding the Mechanism of Electrical Energy Generation in Karpen's Cells, *Rev. CHIMIE*, Volume: 66, Issue: 9, Pages: 1293-1298, 2015, ISSN 0034-7752 (ISI) WOS:000363359700008
- 79 Maior, Ioana, Ciobotaru, Ioana-Alina, Caprarescu, Simona, Cojocaru, Anca, **Vaireanu, Danut-Ionel**, Electrochemical Studies On Modified Organo-Silanes Composite Coatings For Aluminium Corrosion Inhibition, *Studia Universitatis Babes-Bolyai Chemia*, Volume: 60, Issue: 3, SEP 2015, Pages: 87-98, ISSN 1224-7154, *Revista ISI* / <http://www.studia.ubbcluj.ro/serii/chemia/> (ISI) WOS:000369162200008
- 80 Ciobotaru, I.-A., Maior, I., **Vaireanu, D.-I.**, Cojocaru, A., Caprarescu, S., Ciobotaru, I.-E., The determination of the optimum hydrolysis time for silane films deposition, *Applied Surface Science*, Volume 371, 15 May 2016, Pages 275-280, ISSN: 0169-4332, (ISI) WOS:000375052200034
- 81 Bontos, Marius Daniel, Enache Andreea, **Vaireanu Danut Ionel**, An Electrochemical Impedance Spectroscopy Based Method to Reveal the Potential Interactions Between Fizzy Drinks and Their Packaging Materials, *Rev. CHIMIE*, Volume: 67, Issue: 5, Pages: 897-901, 2016, ISSN 0034-7752 (ISI) WOS:000378158100017
- 82 Nenciu Florin, **Vaireanu Danut-Ionel**, Manea Doru-Lucian, Robescu Lacramioara Diana, Manea Elena Elisabeta, A Selection Process For The Most Suitable Rechargeable Batteries Associated With Autonomous Power Supplies, *Energy And Clean Technologies Conference Proceedings, Sgem 2016, Vol I*, Pages: 91-98, 2016, (ISI) WOS:000391348600012
- 83 Rikabi Abbas Abdul Kadhim Klaif, Nechifor Aurelia Cristina, Mohammed Thamer, Oprea Ovidiu, Miron Alexandra Raluca, Segarceanu Mircea, **Vaireanu Danut Ionel**, Nano Composite Membrane on Polysulphone Matrix, *Rev. CHIMIE*, Volume: 67, Issue: 8, Pages: 1489-1497, 2016, ISSN 0034-7752 (ISI) WOS: 000384514200017
- 84 Ciobotaru I.A., Benga F.M., Barbu O.C., Lazar G.C., Campureanu C., Rus T., **Vaireanu D.I.**, Conductivity Cell Constant Revisited, *Bulletin Of Romanian Chemical Engineering Society*, Volume:3, No:1 Pages:35-47, ISSN: 2360-4697. IDB Indexed Copernicus
- 85 Ioana Alina Ciobotaru, **Danut Ionel Vaireanu\***, Irina Elena Ciobotaru, Oana Claudia Ciobotea Barbu, The Influence of the Curing Temperature on the Properties, of Some Silane Films, *Rev. CHIMIE*, Volume: 68, Issue: 7, Pages: 1413-1418, 2017, ISSN 0034-7752 (ISI)
- 86 N. Vaszilcsin1, **D.-I. Vaireanu\***, Could one achieve a self-recharging double layer capacitor?, *Bulgarian Chemical Communications*, Volume 49, Special Issue, C, pp. 263 - 269, 2017, ISSN 0324-1130 (ISI) WOS:000418299200032
- 87 Ioana-Alina Ciobotaru, Irina-Elena Ciobotaru, **Danut-Ionel Vaireanu\***, Florin-Mihai Benga, Food-packaging interactions investigated by electrochemical impedance spectroscopy, *Journal of Food Process Engineering*, DOI: 10.1111/jfpe.12615, pp.1-5, 2017, ISI, ISSN: 1745-4530, <https://doi.org/10.1111/jfpe.12615>
- 88 Traian Rus, Alina Ruxana Caramitu, Livia Carmen Ungureanu, Virgil Marinescu, Adriana Mariana Bors, **Danut Ionel Vaireanu**, Ageing of Some Painting Materials Subjected To Thermal Treatment In Natural Esters, *Materiale Plastice*, Vol. 55, Issue: 1, 2018, pp28-32, ISSN: 0025-5289, WOS:000444129500007
- 89 E. Moraru, O. Dontu, A. Petre, **D. Vaireanu**, F. Constantinescu, D. Besnea, Some Technological Particularities On The Execution Of Dental Prostheses Realized By Selective Laser Deposition, *Journal Of Optoelectronics And Advanced Materials* Vol. 20, No. 3 - 4, March - April 2018, pp. 208 - 213, ISSN 1454-4164, WOS:000435669100018
- 90 Mircea Segărceanu, Alexandra Raluca Miron, Szidonia Katalin Tanczos, Abbas Abdul Kadhim Klaif Rikabi, Ion Marius Nafliu, **Dănuț-Ionel Văireanu\***, *Dynamic Membranes on Polysulfone Support for Fuel Cells*, *Revista Materiale Plastice* 55(2), 2018 pp. 137-140, ISSN: 0025-5289, WOS:000433223000004,
- 91 Mircea Segărceanu, Alexandra Raluca Miron, Carmen Georgiana Lică, Ovidiu Oprea, Abbas Abdul Kadhim Klaif Rikabi, **Dănuț-Ionel Văireanu\***, Comparative Study of Polysulfone Matrix Based Composite Membranes Designed for Fuel Cells, *Revista de Chimie*, 69(4), 2018 pp. 772-776 ISSN 0034-7752 (ISI) WOS: WOS:000433223000004,
- 92 Florin Mihai Benga, **Danut Ionel Vaireanu** Ioana Alina Ciobotaru, Irina Elena Ciobotaru, A Novel Jump-start System Based on Reconditioned Li-polymer Batteries, *Revista deChimie*, 69(4), 2018 pp. 772-776, ISSN 0034-7752 (ISI) WOS: WOS:000433223000020,



- 93 Traian Rus, Adriana Mariana Bors, Alina Ruxana Caramitu, Iosif Lingvay, **Danut Ionel Vaireanu**, Comparative Studies on the Thermal Ageing of Some Painting Materials, *Materiale Plastice*, Vol. 55, Issue: 2, 2018, pp 167-175, ISSN: 0025-5289, WOS:000444147100007
- 94 Iosif Lingvay, Gabriela Oprina, Emilia Simona Apostol, Daniel Lipcinski, Ion Patru, Virgil Marinescu, Ana Maria Luchian, **Danut Ionel Vaireanu**, Comparative Studies on the Behaviour of Copper in Various, Electrically Insulating Fluids, 69(8), 2018 pp. 2029-2034, ISSN 0034-7752 (ISI) WOS:000444602300021
- 95 Ciobotaru, IA; Barbu, OCC; Benga, FM; Vaireanu, DI, Characterisation of Reinforced BTSE Films Deposited on Anodized Aluminium Substrate, *Rev Chimie*, Volume: 69, 2018, Issue: 11, 2018, Pages: 2964-2968, (ISI) WOS:000451931500002, IF= 1,605
- 96 Ioana-Alina CIOTOTARU, Oana-Claudia CIOTOTEA BARBU, Anca COJOCARU, Ioana MAIOR, Florin-Mihai BENGA, Danut-Ionel VAIREANU, Electrochemical studies on reinforced BTSE coatings deposited on anodized aluminium, *Bulletin of Romanian Chemical Engineering Society*, Volume:5, No:1, 2018, p.75-83, ISSN: 2360-4697. IDB Indexed Copernicus
- 97 Barbu Oana Claudia Ciobotea, Ciobotaru Ioana Alina, Benga Florin Mihai, Vaireanu Danut Ionel, The Influence of the Deposition Parameters on the Properties of Ni-Cu Deposition, *Rev Chimie*, Volume: 70, Issue: 1, 2019, Pages: 45-49, (ISI) WOS:000460428100010, IF 1,605
- 98 Oana Claudia Ciobotea Barbu, Ioana Alina Ciobotaru, Anca Cojocaru, Florin Mihai Benga, Danut-Ionel Vaireanu Practical Considerations Regarding the Electrodeposition of Ni-Cu Layers as Potential Supercapacitors Plates, *Rev Chimie*, Volume: 70, Issue: 7, 2019, Pages: 2339-2339, (ISI) IF 1,605
- 99 O.C. Ciobotea Barbu, I.A. Ciobotaru, D.-I. Vaireanu, D.G. Dumitras, C. Nicolae, XRD, Raman and SEM surface analysis on Ni-Cu electrodeposited layers, *Journal of Optoelectronics and Advanced Materials*, Volume: 21, No. 7-8, 2019, 536-540, ISSN 1454-4164, (ISI)
- 100 Ioana-Maria Nicola, Danuț-Ionel Vaireanu, Cristiana Alexandra Danes, Leonard Zaharia, Dragoș Vladimir Budei, Ioana Maior, Comparative Studies Regarding Cyanide And Sulphite Electrolytes For Brush Electroplating Of Gold Thin Films, *U.P.B. Sci. Bull., Series B*, Vol. 82, Iss. 1, 2020, P.3-14, ISSN:1454-2331, (ISI)

#### SELECTIE DE ARTICOLE PUBLICATE IN PROCEEDINGURI DE CONFERINTE INTERNATIONALE

- 1 P.R. Fielden, S.J. Baldock, N.J. Goddard, L.W. Pickering, J.E. Prest, R.D. Snook, B.J. Treves Brown, and **D.I. Vaireanu**, *A Miniaturized Planar Isotachophoresis Separation Device for Transition Metals with integrated conductivity detection*, Proc. uTAS '98, Editors. D.J. Harrison and A. van den Berg, 13-16 October 1998, Banff, Canada, p. 323-326.
- 2 S.J. Baldock, N. Bektas, P.R. Fielden, N.J. Goddard, L.W. Pickering, J.E. Prest, R.D. Snook, B.J. Treves Brown, and **D.I. Vaireanu**, *Isotachophoresis on Planar Polymer Substrates*, Proc. uTAS '98, Editors. D.J. Harrison and A. van den Berg, 13-16 October 1998, Banff, Canada, p. 359-362.
- 3 **Dănuț-Ionel Vaireanu** and Cosmin Olteanu, *Considerations regarding the accumulation of impurities during the electrochemical refining of copper*, Proc. of the 2<sup>nd</sup> International Symposium in Chemical Engineering, Bucharest, 3-6 October 2000, p. 328-337.
- 4 **Dănuț-Ionel Vaireanu**, *A novel coefficient for dispersion assessment in flow injection systems with variable injection volume*, Proc. of the 2<sup>nd</sup> International Symposium in Chemical Engineering, Bucharest, 3-6 October 2000, p. 357-363.
- 5 Bernard J. Treves Brown, **Danut-Ionel Vaireanu**, Peter R. Fielden, *Conductivity Detectors for Microscale Analytical Chemistry*, Proc. of the World Microtechnologies Congress Applications, MICRO.tec 2000 - 25-27 September, 2000 Expo 2000 Hannover - volume 2, p. 793-799
- 6 A. Simion, A. Manoiu, M.Mistrieanu and **D.I. Vaireanu**, *The Manufacture and Characterisation of Disposable Sensors Used for Biopotential Monitoring*, Proceedings of the 12<sup>th</sup> Romanian International Conference on Chemistry and Chemical Engineering, 13-15 Sept.2001, Bucharest, Ed. Printech, vol. "Quality Control and Analytical Chemistry, Corrosion and Electrochemistry", p.265-270, ISBN:973-652-384-5
- 7 A. Manoiu, M.Mistrieanu, A. Simion and **D.I. Vaireanu**, *The Reduction of Electrochemical Noise by Computer-Controlled Data Acquisition Systems*, Proceedings of the 12<sup>th</sup> Romanian International Conference on Chemistry and Chemical Engineering, 13-15 September 2001, Bucharest, Ed. Printech, vol. "Quality Control and Analytical Chemistry, Corrosion and Electrochemistry", p.271-276, ISBN: 973-652-384-5
- 8 A. Simion, M.Mistrieanu, A. Manoiu and **D.I. Vaireanu**, *The Evaluation of a Silver/Silver Chloride Electrode Stability*, Proceedings of the 12<sup>th</sup> Romanian International Conference on Chemistry and Chemical Engineering, 13-15 September 2001, Bucharest, Ed. Printech, vol. "Quality Control and Analytical Chemistry, Corrosion and Electrochemistry", p.281-286, ISBN: 973-652-384-5
- 9 C. Olteanu, A. Simion and **D.I. Vaireanu**, *Configurable Miniaturised Electrochemical Cell for Flow Injection Analysis*, Proceedings of the 12<sup>th</sup> Romanian International Conference on Chemistry and Chemical Engineering, 13-15 September 2001, Bucharest, Ed. Printech, vol. "Quality Control and Analytical Chemistry, Corrosion and Electrochemistry", p.277-280, ISBN: 973-652-384-5
- 10 D. Serban, I. Parvu, and **D.I. Vaireanu**, *Sterilisation of Biologically Loaded Fluids with Electrochemically Generated Silver Ions*, Proceedings of the 12<sup>th</sup> Romanian International Conference on Chemistry and Chemical Engineering, 13-15 September 2001, Bucharest, Ed. Printech, vol. "Inorganic Chemical Technology, Environmental Protection and Ec. Engineering", p.241-243, ISBN: 973-652-384-5
- 11 C. Suvergel and **D.I. Vaireanu**, *Computer-Controlled System Used for Cupric Ions Monitoring from Industrial Effluents*, Proceedings of the 12<sup>th</sup> Romanian International Conference on Chemistry and Chemical Engineering, 13-15 September 2001, Bucharest, Ed. Printech, vol. "Inorganic Chemical Technology, Environmental Protection and Ec. Engineering", p.213-216, ISBN: 973-652-384-5
- 12 A. Ruse, D. Angelescu and **D.I. Vaireanu**, *A Dynamic Recursive Model for Production Forecast*, Proceedings of the 12<sup>th</sup> Romanian International Conference on Chemistry and Chemical Engineering, 13-15 September 2001, Bucharest, Ed. Printech, vol. "Inorganic Chemical Technology, Environmental Protection and Ec. Engineering", p.234-239, ISBN: 973-652-384-5

- 13 **Dănuț-Ionel Vaireanu**, *Parallel-opposed Dual Electrode Cell of Variable Geometry used in Conjunction with a Flow Injection Analysis System* The 9<sup>th</sup> National Conference on Chemistry and Chemical Engineering, Bucharest, 16-18 October 1997, vol. V, p. 11-129 to 11-134.
- 14 D. Angelescu, A. Ruse și **Dănuț-Ionel Vaireanu**, *Criterii tehnico-economice în alegerea sistemelor electrochimice autoconduse, (Technical and economic criteria in choosing self-sustained electrochemical systems)* Proceedings of the Scientific Conference of "Petru Maior" University, Targu-Mures 27-28 October 2000, vol. I, p. 33-38, ISBN-973-8084-13-x.
- 15 A. Ruse, D. Angelescu și **Dănuț-Ionel Vaireanu**, *Determinarea coeficienților funcției Performanță - Cost aplicată sistemelor electrochimice autoconduse, (The evaluation of Cost - Benefit function coefficients applied to self-sustained electrochemical systems)* Proceedings of the Scientific Conference of "Petru Maior" University, Targu-Mures 27-28 October 2000, vol. I, p. 181-188, ISBN-973-8084-13-x.
- 16 **Dănuț-Ionel Vaireanu**, D. Angelescu și A. Ruse, *Prognoza dinamică a producției unităților cu specific electrochimic, (Dynamic production forecast of electrochemical plants)*, Proceedings of the Scientific Conference of "Petru Maior" University, Targu-Mures 27-28 October 2000, vol. V, p.119-126, ISBN-973-8084-17-2.
- 17 **Dănuț-Ionel Vaireanu**, A. Ruse și D. Angelescu, *Model logistic dinamic pentru prognoza producției de aluminiu, (Dynamic logistic model used in aluminium production forecast)* Proceedings of the Scientific Conference of "Petru Maior" University, Targu-Mures 27-28 October 2000, vol. V, p.127-134, ISBN-973-8084-17-2.
- 18 **Dănuț-Ionel Vaireanu**, Cosmin Olteanu, *Celulă de conductibilitate în strat subțire utilizată în sisteme de analiză prin injectare în flux, (Thin layer conductivity cell used in flow injection analysis)*, Proc. Of the 4<sup>th</sup> Symposium on Ecology, Metallic coatings and Corrosion, 14-16 November 2001, Bucharest, Ed.Printech, p.55-58, ISBN 973-652-425-6
- 19 **Dănuț-Ionel Vaireanu**, *Evaluarea structurată a lucrărilor practice de electrochimie și tehnologia proceselor electrochimice, (Structured assessment of electrochemical practical works)*, Proc. Of the 4<sup>th</sup> Symposium on Ecology, Metallic coatings and Corrosion, 14-16 November 2001, Bucharest, Ed.Printech, p.71-74, ISBN 973-652-425-6
- 20 **Dănuț-Ionel Vaireanu**, *Impactul Internetului asupra cursurilor de electrochimie, (The impact of internet on electrochemistry courses)* Proc. Of the 4<sup>th</sup> Symposium on Ecology, Metallic coatings and Corrosion, 14-16 November 2001, Bucharest, Ed.Printech, p.55-58, ISBN 973-652-425-6
- 21 **Dănuț-Ionel Vaireanu**, *Electrod de referință miniaturizat utilizat în sisteme de analiză prin injectare în flux, (Miniaturised reference electrode used in flow injection analysis systems)* Scientific Bulletin of Northern University Nord Baia Mare - series C, 2001, p.80-85, ISSN-1224-3248
- 22 **D.-I. Văireanu**, C. Olteanu, A. Mănoiu and M. Mistrianu, *A variable geometry electrochemical cell for heavy metals pollution monitoring*, Proceedings of the 33<sup>rd</sup> International Scientific Symposium of the Military Equipment and Technologies Research Agency, May 23<sup>rd</sup> - 24<sup>th</sup> 2002, Bucharest, Ed. Ministry of National Defence, vol.4, Military Chemistry, Ecology and Environmental Protection, p.81-88, ISBN:973-0-02649-1
- 23 **D.-I. Văireanu**, C. Olteanu, A. Mănoiu and M. Mistrianu, *An integrated system for copper ions pollution monitoring*, Proceedings of the 33<sup>rd</sup> International Scientific Symposium of the Military Equipment and Technologies Research Agency, May 23<sup>rd</sup> - 24<sup>th</sup>, 2002, Bucharest, Ed. Ministry of National Defence, vol.4, Military Chemistry, Ecology and Environmental Protection, p.89-92, ISBN:973-0-02649-1
- 24 **D.-I. Văireanu** and M. Coleșa, *An electrochemical array to visualise the velocity profile in flow injection analysis*, Proceedings of the 34<sup>th</sup> International Scientific Symposium of the Military Equipment and Technologies Research Agency, May 29-30, 2003, Bucharest, Ed. Ministry of National Defence, Military Printing House, vol.1, Radioelectronics, lasers and optoelectronic systems, Section Sensors, p.228-231, ISBN:973-0-03046-4
- 25 **D.-I. Văireanu**, G.E. Badea, A. Cojocaru, and M. Coleșa, *VisualGalvanic - A simulation and calculation software with potential applications in the field of galvanic depositions*, Proceedings of the 34<sup>th</sup> International Scientific Symposium of the Military Equipment and Technologies Research Agency, May 29-30, 2003, Bucharest, Ed. Ministry of National Defence, Military Printing House, vol.1, Radioelectronics, lasers and optoelectronic systems, Section Informatic systems, communications and comand control systems, p.313-316, ISBN:973-0-03046-4
- 26 M. Coleșa and **D.-I. Văireanu**, *A computerised electrochemical system used for the determination of rechargeable battery capacity*, Proceedings of the 34<sup>th</sup> International Scientific Symposium of the Military Equipment and Technologies Research Agency, May 29-30, 2003, Bucharest, Ed. Ministry of National Defence, Military Printing House, vol.2, NBC defence and environment protection, Section Chemical technologies, p.415-420, ISBN:973-0-03046-4
- 27 C. Olteanu and **D.-I. Văireanu**, *An opto-electronic device used for the evaluation of brightening degree of electrodeposited metals*, Proceedings of the 34<sup>th</sup> International Scientific Symposium of the Military Equipment and Technologies Research Agency, May 29-30, 2003, Bucharest, Ed. Ministry of National Defence, Military Printing House, vol.2, NBC defence and environment protection, Section Chemical technologies, p.421-426, ISBN:973-0-03046-4
- 28 C. Olteanu, M. Colesa and **D.-I. Văireanu**, *Hypochlorite based portable generator for drinking water disinfection*, Proceedings of the 34<sup>th</sup> International Scientific Symposium of the Military Equipment and Technologies Research Agency, May 29-30, 2003, Bucharest, Ed. Ministry of National Defence, Military Printing House, vol.2, NBC defence and environment protection, Section Chemical technologies, p.427-430, ISBN:973-0-03046-4
- 29 T. Badea, **D.-I. Văireanu**, G.E. Badea, A. Cojocaru, *Electrochemical oxydation of aromatic hidrocarbons from waste water*, Proceedings of the 34<sup>th</sup> International Scientific Symposium of the Military Equipment and Technologies Research Agency, May 29-30, 2003, Bucharest, Ed. Ministry of National Defence, Military Printing House, vol.2, NBC defence and environment protection, Section Ecology and environment protection, p.317-322, ISBN:973-0-03046-4



- 30 A. Cojocaru, G.E. Badea, **D.-I. Văireanu**, T. Badea, *Anodic oxidation of methanol on Pt-10% Rh alloy in 0.1 m NaOH solution*, Proceedings of the 34<sup>th</sup> International Scientific Symposium of the Military Equipment and Technologies Research Agency, May 29-30, 2003, Bucharest, Ed. Ministry of National Defence, Military Printing House, vol.2, NBC defence and environment protection, Section Ecology and environment protection, p.311-316, ISBN:973-0-03046-4
- 31 **D.-I. Văireanu**, A. Cojocaru and M. Coleșa, *A novel computer assisted method for the determination of the internal resistance of batteries*, Proceedings of the 35 International Scientific Symposium of the Military Equipment and Technologies Research Agency, May 27 - 28, 2004, Bucharest, Ed. Ministry of National Defence, Military Printing House, vol.II, Weapons Systems, NBC Defense & Environment Protection, Section Chemical Technologies, p.669-672, ISBN:973-0-03501-6
- 32 **D.-I. Văireanu**, G.E. Badea, A. Cojocaru, M. Colesa, G.E. Badea *An environmental friendly procedure for rechargeable lead-acid battery reconditioning*, Proceedings of the 35 International Scientific Symposium of the Military Equipment and Technologies Research Agency, May 27 - 28, 2004, Bucharest, Ed. Ministry of National Defence, Military Printing House, vol.II, Weapons Systems, NBC Defense & Environment Protection, Section Ecology and Environment Protection, p.587-590, ISBN:973-0-03501-6
- 33 M. Colesa, A. Cojocaru, **D-I Văireanu**, G.E. Badea, C. Stanciu, *Autocatalytic polymerization of aniline on platinum electrodes*, Proceedings of the 35 International Scientific Symposium of the Military Equipment and Technologies Research Agency, May 27 - 28, 2004, Bucharest, Ed. Ministry of National Defence, Military Printing House, vol.II, Weapons Systems, NBC Defense & Environment Protection, Section Chemical Technologies, p.673-678, ISBN:973-0-03501-6
- 34 A. Cojocaru, **D.-I. Văireanu**, G. E. Badea, M. Colesa, T. Badea, *Parachloroaniline oxidation on SnO<sub>2</sub> semiconductor electrodes*, Proceedings of the 35 International Scientific Symposium of the Military Equipment and Technologies Research Agency, May 27 - 28, 2004, Bucharest, Ed. Ministry of National Defence, Military Printing House, vol.II, Weapons Systems, NBC Defense & Environment Protection, Section Chemical Technologies, p.714 - 719, ISBN:973-0-03501-6
- 35 T. Badea, G. E. Badea, A. Cojocaru, **D.I.Văireanu**, *Ni-P alloy's electrodeposition at controlled current*, Proceedings of the 35 International Scientific Symposium of the Military Equipment and Technologies Research Agency, May 27 - 28, 2004, Bucharest, Ed. Ministry of National Defence, Military Printing House, vol.II, Weapons Systems, NBC Defense & Environment Protection, Section Chemical Technologies, p.710 - 713, ISBN:973-0-03501-6
- 36 T. Badea, A. Cojocaru, M. Colesa, **D. I. Văireanu**, G.E.Badea, *Copper and welded copper corrosion under cyclic/alternante steam/condensed water action*, RICCCCE 14, Septembrie 2005, Bucuresti, Ed. Printech, Physical Chemistry, Analytical Chemistry and Quality Control, Electrochemistry and Corrosion, vol. 2, pag. S.10.69-76 ISBN 973-718-286-3.
- 37 S. Căprărescu, A. Cojocaru, **D.-I. Văireanu**, *The Evaluation of Rechargeable Battery Lifespan Based on Thevenin's Internal Resistance Measurements*, Proceeding of the 14<sup>th</sup> RICCCCE, september 2005, Bucharest, Ed. Printech, Physical Chemistry, Analytical Chemistry and Quality Control, Electrochemistry and Corrosion, vol. 2, pag. S.10.129-S.10-134, ISBN 973-718-286-3.
- 38 **D.-I. Văireanu**, *An electrochemical assisted method for the investigation of copper cementation on zinc* Proceeding of the 14<sup>th</sup> RICCCCE, september 2005, Bucharest, Ed. Printech, Inorganic Chemical Technology and Environmental Protection, vol. 3, pag. S.6.252-258, ISBN 973-718-286-3.
- 39 S. Căprărescu, **D.-I. Văireanu**, A. Cojocaru, I. Maior, *Electrochemical destruction of highly toxic hazardous contaminants*, in Proceedings of the 36-th International Scientific symposium of METRA, May 2006, Bucharest, Ed. Ministry of National Defence, Military, vol. 1, NBC Defence and Environment Protection, Section: NBCE Defence. Collective Protection, s3d3l3, pp.115-118, ISBN-10 973-0-04429-5
- 40 I. Maior, A. Cojocaru, **D.-I. Văireanu**, S. Căprărescu, *The anticorrosive protection of the Zn/ZnCl<sub>2</sub> system in presence of several organic inhibitors*, in Proceedings of the 36-th International Scientific symposium of METRA, May 2006, Bucharest, Ed. Ministry of National Defence, Military, vol. 1, NBC Defence and Environment Protection, Section: NBCE Defence. Collective Protection, s3d3l11, pp.125-131, ISBN-10 973-0-04429-5
- 41 A. Cojocaru, **D.-I. Văireanu**, S. Caprarescu, I. Maior, G. E. Badea, *Electrochemical and electrochemical impedance spectroscopy studies on snO<sub>2</sub> electrodes in chloride solutions*, in Proceedings of the 36-th International Scientific symposium of METRA, May 2006, Bucharest, Ed. Ministry of National Defence, Military, vol. 1, NBC Defence and Environment Protection, Section: NBCE Defence. Collective Protection, s3dl2, pp. 121-124, ISBN-10 973-0-04429-5,
- 42 **D.-I. Văireanu**, S. Căprărescu, A. Cojocaru, I. Maior, *Consideration regarding the modelling of high energy consuming electrochemical reactors*, in Proceedings of the 36-th International Scientific symposium of METRA, May 2006, Bucharest, Ed. Ministry of National Defence, Military, vol. 1, Radioelectronics, lasers and optoelectronic systems, Section: Modelling and Simulation, s1d3l8, pp. 214-218, ISBN-10 973-0-04429-5
- 43 **D.-I. Văireanu**, *A computerised procedure for processing high-level noise data from data acquisition*, in Proceedings of the 36-th International Scientific symposium of METRA, May 2006, Bucharest, Ed. Ministry of National Defence, Military, vol. 1, Radioelectronics, lasers and optoelectronic systems, Section: Signal Processing, s1d5l1, pp. 235-238, ISBN-10 973-0-04429-5
- 44 A.Cojocaru, I.Maior, **D-I.Văireanu**, G.Badea, S.Caprarescu, *Aniline Electrooxidation on Semiconductor Electrodes and Electrochemical Behavior of Polyaniline Obtained Films*, Analele Univ. din Oradea, fasc. Chimie, Vol. XIV, 2007, 80-84, ISSN 1224-7626 – indexed in Chemical Abstracts
- 45 Viorica Părvulescu, Nicoleta Cioateră, Simona Șomăcescu, P. Osiceanu, Anca Cojocaru and **D.I. Văireanu**, *Nanostructured complex oxides for fuel cells* in Proceeding of Conferince Excellence Research, Brasov 2007, Editura Tehnica ISSN 1843-5904, pag. 267.1 – 267.6.

- 46 **Dănuț-Ionel Văireanu**, Ioana Maior, Anca Cojocaru, Simona Căprărescu, *The Effect of Sampling Frequency and Shielding on the Measurement of Ionic Conductivity by EIS in Conductive Polymers used for PEM Electrolysers and Fuel Cells*, Proceedings of The second European Conference eHYDROGENIA, Bucharest, Romanian Academy, September 22-23, 2008, pp.93-98, Ed. IPA, ISBN-10:973-1704-12-4, ISBN-13:978-973-1704-12-8.
- 47 **Dănuț-Ionel Văireanu**, Viorica Părvulescu, Anca Cojocaru, Ioana Maior, Simona Somăcescu, Simona Căprărescu, *A Parallel Opposed Dual Electrode Cell for Temperature Testing of SOFC materials*, Proceedings of The second European Conference eHYDROGENIA, Bucharest, Romanian Academy, September 22-23, 2008, pp.99-106, Ed. IPA, ISBN-10:973-1704-12-4, ISBN-13:978-973-1704-12-8.
- 48 Ioan Stamatini, **Dănuț-Ionel Văireanu**, Corina Radulescu, Elisabeta Pasculete, Radu Marin, Lili Pasare, *Romanian Achievements in the Field of Advanced Materials and Equipment for Electrolytic Hydrogen Production*, Proceedings of The second European Conference eHYDROGENIA, Bucharest, Romanian Academy, September 22-23, 2008, pp.114-121, Ed. IPA, ISBN-10:973-1704-12-4, ISBN-13:978-973-1704-12-8.
- 49 Elisabeta Pasculete, **Dănuț-Ionel Văireanu**, Radu Marin, Corina Radulescu, *Ion Changing Membrane used in Advanced Water Electrolysis Cells*, Proceedings of The second European Conference eHYDROGENIA, Bucharest, Romanian Academy, September 22-23, 2008, pp.122-129, Ed. IPA, ISBN-10:973-1704-12-4, ISBN-13:978-973-1704-12-8.
- 50 Anca Cojocaru, **Dănuț-Ionel Văireanu**, Ioana Maior, Simona Căprărescu, *Electrochemical Impedance Study for Polymer Electrolyte Membranes Characterization*, Proceedings of The second European Conference eHYDROGENIA, Bucharest, Romanian Academy, September 22-23, 2008, pp.130-137, Ed. IPA, ISBN-10:973-1704-12-4, ISBN-13:978-973-1704-12-8.
- 51 **Dănuț-Ionel Văireanu**, Ioana Maior, Anca Cojocaru, Simona Căprărescu, *A New Technique for Evaluation of Thickness and Thickness Distribution for Polymer Conductive Membranes used in PEMFC*, Proceedings of The second European Conference eHYDROGENIA, Bucharest, Romanian Academy, September 22-23, 2008, pp.143-150, Ed. IPA, ISBN-10:973-1704-12-4, ISBN-13:978-973-1704-12-8.
- 52 S.I. Voicu, N.D. Stanciu, A.C. Nechifor, **D.I. Văireanu**, G. Nechifor, *Polysulfone-doped Polyaniline Composite Membranes. Synthesis and Electrochemical Characteristics*, CAS 2008 Proceedings of The International Semiconductor Conference, October 13-15, Sinaia, Romania, IEEE (Institute of Electronics and Engineering) Publishing House, New Jersey, USA, IEEE Catalog Number: mCFP08CAS-PRT, ISBN: 978-1-4244-2004-9, ISSN: 1545-827X.
- 53 S.I. Voicu, A.C. Nechifor, **D.I. Văireanu**, G. Nechifor, *Composite membranes polysulfone-polyaniline obtained by phase inversion with chemical reaction. Synthesis, characterization and applications*, Proceedings of Fuel Cells Science & Technology 2008, Scientific Advances in Fuel Cell Systems, 8th – 9th October 2008, Copenhagen, Denmark, p.2-10
- 54 **Dănuț-Ionel VĂIREANU**, Anca COJOCARU, Ioana MAIOR, Simona CAPRARESCU, *Calibration System for Furnace/Boilers Corrosion Monitoring Probes*, Proceedings of The 7th International Conference URB-CORR 2008, Study and Control of Corrosion in the Perspective of Sustainable Development of Urban Distribution Grids, Baile Felix, 25-27 June 2008, pp. 150-154, Ed. Printech, Bucharest, ISBN 978-606-521-032-5
- 55 M. Mihai, G. Dabija, C. Costache, **D.I. Văireanu**, *Anionic Polyelectrolytes – Cationic Surfactant Complexes used in the Coagulation and Flocculation Processes*, Proceedings of The International Conference on Ecological Materials and Technologies, ECOMAT 2008, September 25-26, 2008, Bucharest, Romania, Ed. Printech, pp. 49-53, ISBN: 978-606-521-079-0
- 56 M. Mihai, G. Dabija, C. Costache, **D.I. Văireanu**, *Anionic Polyelectrolytes and Cationic Surfactants Complex Formation*, Proceedings of The International Conference on Ecological Materials and Technologies, ECOMAT 2008, September 25-26, 2008, Bucharest, Romania, Ed. Printech, pp. 54-60, ISBN: 978-606-521-079-0
- 57 Viorica Parvulescu, Simona Somăcescu, Petre Osiceanu, Anca Cojocaru, Ioana Maior, **Dănuț-Ionel Văireanu**, *Mesoporous Composite Anode Materials with catalytic and Electrochemical Properties for low Temperature SOFCs*, Proc. Of International Conference „Excellence researcher - A way to innovation” editors: N. Vasiliu, S. Lany, vol. III, Ed. Tehnica, Bucharest, 2008, p.267.1-267.6
- 58 **Dănuț-Ionel Văireanu**, Anca Cojocaru, Ioana Maior, Simona Caprarescu, Alexandra Maria Ionescu, Valentin Radu, *A Six-Electrode Configuration Electrochemical Cell Employed for the Evaluation of Ionic Conductivity of Polymer Membranes Used In Fuel Cells and Electrolysers* Proc. of the 16<sup>th</sup> Romanian International Conference on Chemistry and Chemical Engineering, Sinaia, 9-12 September 2009, Ed. Printech, pp. S.III.16-S.III.21, ISBN 978-606-521-349-4
- 59 Anca Cojocaru, Ioana Maior, Iosif Lingvay, Carmen Lingvay, **Dănuț-Ionel Văireanu**, Simona Caprarescu *Inhibition of Copper Corrosion by Environmentally Friendly Plant Extracts*, Proc. of the 16<sup>th</sup> Romanian International Conference on Chemistry and Chemical Engineering, Sinaia, 9-12 September 2009, Ed. Printech, pp. S.III.30-S.III.37, ISBN 978-606-521-349-4
- 60 Ioana Maior, Anca Cojocaru, **Dănuț-Ionel Văireanu**, Simona Căprărescu, *Electrochemical Investigations on Green Inhibitors With Antiscalent Properties*, Proc. of the 16<sup>th</sup> Romanian International Conference on Chemistry and Chemical, Engineering, Sinaia, 9-12 September 2009, Ed. Printech, pp. pp. S.III.93-S.III.100, ISBN 978-606-521-349-4
- 61 Valentin Radu, Alexandra Maria Ionescu, **Dănuț-Ionel Văireanu**, *A Versatile Electronic Board for Electrochemical Impedance Spectroscopy Circuit Emulation*, Proc. of the 16<sup>th</sup> Romanian International Conference on Chemistry and Chemical Engineering, Sinaia, 9-12 September 2009, Ed. Printech, pp. S.III.117-S.III.122, ISBN 978-606-521-349-4
- 62 Corneliu Trisca-Rusu, Stefan Ioan Voicu, Sorina Alexandra Garea, Cristian Parvu, **Dănuț-Ionel Văireanu**, Gheorghe Nechifor, *Morphological, Structural And Processcharacteristics of Polysulfone – Polyaniline Composite Membranes*, Proc. of the 16<sup>th</sup> Romanian International Conference on Chemistry and Chemical Engineering, Sinaia, 9-12 September 2009, Ed. Printech, pp. S.III.148-S.III.153, ISBN 978-606-521-349-4
- 63 Rodica Stănescu, Claudia Maria Simonescu, **Dănuț-Ionel Văireanu**, *Impact Assesment of the REACH Regulation (No. 1907/2006) on the Romanian Companies*, Proc. of the 16<sup>th</sup> Romanian International Conference on Chemistry and Chemical Engineering, Sinaia, 9-12 September 2009, Ed. Printech, pp. S.V.2-S.V.8, ISBN 978-606-521-349-4

- 64 **Danut-Ionel Vaireanu**, Anca Cojocaru, Ioana Maior, Simona Caprarescu, A Novel Method for the Evaluation of a PEM Fuel Cell Internal Resistance, Proc. of the 3<sup>rd</sup> EUROPEAN CONFERENCE H2-FUEL-MILLENIUM-CONVERGENCE 2009, Bucharest, September 21 – 22, 2009, pp. 220-224, IPA Publishing House, ISBN-10: 973-1704-15-9, ISBN-13: 978-973-1704-15-9
- 65 Ioana Maior, **Danut-Ionel Vaireanu**, Anca Cojocaru, Alina Melinescu, Simona Caprarescu, Determination of Equivalent Circuits Using EIS Data of Oxidic Materials Used in Solid Oxide Fuel Cells, Proc. of the 3<sup>rd</sup> EUROPEAN CONFERENCE H2-FUEL-MILLENIUM-CONVERGENCE 2009, Bucharest, September 21 - 22, 2009, pp. 237-246, IPA Publishing House, ISBN-10: 973-1704-15-9, ISBN-13: 978-973-1704-15-9
- 66 C. Muscalu, R. David, S.A. Garea, A.C. Nichifor, **D.I. Vaireanu**, S.I. Voicu, G. Nechifor, *Polysulfone-Polypyrrole Ionic Conductive Composite Membranes Synthesized by Phase Inversion with Chemical Reaction*, CAS 2009 Proceedings of The International Semiconductor Conference, October 12-14, Sinaia, Romania, IEEE (Institute of Electronics and Engineering) Publishing House, New Jersey, USA, vol. 1, pp. 557-560, IEEE Catalog Number: mCFP08CAS-PRT, ISBN: 978-1-4244-2004-9, ISSN: 1545-827X, indexat ISI.
- 67 **Danut-Ionel Vaireanu**, Anca Cojocaru, Ioana Maior, Simona Caprarescu and Valentin Radu *New Challenges in Evaluating Polymer Conductive Membranes for Fuel Cell Applications*, in Trends in Membranology, Editors S.I. Voicu and Gh. Nechifor, pp.95-99, Ed. Printech, Bucharest, 2010, ISBN 976-606-521-525-2
- 68 **D.I. Vaireanu**, A. Cojocaru, I. Maior, S. Caprarescu, D. Savoiu, M. Deaconescu, *Considerations Regarding the Effect of the Compression Factor of the HHO Mixture on the Electromotive Force under the Equilibrium Conditions*, Proceedings of the 4 - th EUROPEAN CONFERENCE H2-FUEL-MILLENIUM-CONVERGENCE 2010, Bucharest, September 20-21, 2010, IPA Publishing House, Bucharest, ISBN-10: 973-1704-17-5, ISBN-13: 978-973-1704-17-3, pp. 119-126
- 69 **D.I. Vaireanu**, A. Cojocaru, I. Maior, S. Caprarescu, D. Savoiu, M. Deaconescu, *The Effect of the Compression Factor of the HHO Mixture on Various Electrolysis Parameter under the Non-Equilibrium Operating Conditions*, Proceedings of the 4 - th EUROPEAN CONFERENCE H2-FUEL-MILLENIUM-CONVERGENCE 2010, Bucharest, September 20-21, 2010, IPA Publishing House, Bucharest, ISBN-10: 973-1704-17-5, ISBN-13: 978-973-1704-17-3, pp. 127-134
- 70 C. Baicea, A. Ivan, C. Trisca-Rusu, A.C. Nichifor, **D.I. Vaireanu**, S.I. Voicu, G. Nechifor, *Ionic Conductive Silica-PolyPyrrole composites obtained by in-situ Polymerization*, CAS 2010 Proceedings of The International Semiconductor Conference, October 11-13, Sinaia, Romania, IEEE (Institute of Electronics and Engineering) Publishing House, New Jersey, USA, vol. 2, pp. 359-366, IEEE Catalog Number: CFP10CAS-PRT, ISBN: 978-1-4244-5781-6, ISSN: 1545-827X, indexat ISI.
- 71 Anca Cojocaru, Ioana Maior, **Danut-Ionel Vaireanu**, Iosif Lingvay, Carmen Lingvay, Simona Caprarescu, Gabriela Badea, *A Comparative Study On The Corrosion Inhibition Properties Of Fagus Sylvatica As Influenced By Extraction Solvent*, Proceedings Of The 17<sup>th</sup> International Conference On Chemistry And Chemical Engineering, Sinaia, Romania, September 7-10, 2011, Ed. Politehnica Press, Pp. S.3.35-S.3.44, Issn: 2247-5389
- 72 Ioana Maior, Anca Cojocaru, Iosif Lingvay, Carmen Lingvay, **Dănuț-Ionel Văireanu**, Gabriela Elena Badea, Simona Căprărescu, *Electrodeposition Of Mineral Scales: Influence Of Natural Extracts Composition On Antiscalent Properties*, Proceedings of the 17<sup>th</sup> International Conference On Chemistry And Chemical Engineering, Sinaia, Romania, September 7-10, 2011, Ed. Politehnica Press, Pp. S.3.7-S.3.18, ISSN: 2247-5389
- 73 **Danut-Ionel Vaireanu**, Anca Cojocaru, Ioana Maior And Simona Caprarescu, *Stability And Instability Factors Associated With The Electrochemical Impedance Spectroscopy Measurements*, Proceedings Of The 17<sup>th</sup> International Conference On Chemistry And Chemical Engineering, Sinaia, Romania, September 7-10, 2011, Ed. Politehnica Press, Pp. S.3.51-S.3.57, Issn: 2247-5389
- 74 Simona Caprarescu, Violeta Purcar, Anca Cojocaru, Ioana Maior, **Danut-Ionel Vaireanu**, *Removal Of Copper Ions By Electrodialysis Process From Electroplating Wastewater*, Proceedings Of The 17<sup>th</sup> International Conference On Chemistry And Chemical Engineering, Sinaia, Romania, September 7-10, 2011, Ed. Politehnica Press, Pp. S.5.9-S.5.16, Issn: 2247-5389
- 75 Irina-Elena CIOBOTARU, **Danut-Ionel VAIREANU**, *Electrochemical Generation of Some Chemical Compounds Used for Water Treatment*, Proceedings Of The 17<sup>th</sup> International Conference On Chemistry And Chemical Engineering, Sinaia, Romania, September 7-10, 2011, Ed. Politehnica Press, Pp. S.3.29-S.3.34, ISSN: 2247-5389
- 76 Florin NENCIU, **Danut-Ionel VAIREANU**, *Novel Gas Sensors Used For Environmental Monitoring*, Proceedings Of The 17<sup>th</sup> International Conference On Chemistry And Chemical Engineering, Sinaia, Romania, September 7-10, 2011, Ed. Politehnica Press, Pp. S.3.19-S.3.28, ISSN: 2247-5389
- 77 Andreea Ioana Bontos, **Danut-Ionel Vaireanu**, *New Developments In Assessing The Interaction Of Some Food Additives With The Packing Materials*, Proceedings Of The 17<sup>th</sup> International Conference On Chemistry And Chemical Engineering, Sinaia, Romania, September 7-10, 2011, Ed. Politehnica Press, Pp. S.3.44-S.3.50, ISSN: 2247-5389

## RESEARCH CONTRACTS / PROJECTS

**19 NATIONAL AND INTERNATIONAL RESEARCH CONTRACTS (SOME OF THEM WITH MULTI-ANNUAL BUDGETS) as Director / Co-ordinator / Project Leader) AND OTHER 28 AS RESEARCHER / MEMBER OF THE RESEARCH TEAM.**



