europass Curriculum Vitae

INFORMAŢII PERSONALE **Daniela Diaconu**



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Sexul F | [redacted] | Naţionalitatea Romana

EXPERIENŢA PROFESIONALĂ

Dr. in Fizica (1999) **Ceretator Stiintific Principal II (iulie 2024)** Institutul de Cercetari Nucleare Pitesti, Str. Campului nr.1, Mioveni, 115400, www.nuclear.ro	
26 August 2024 – prezent	***Director***
Dr. in Fizica (1999) **Ceretator Stiintific Principal III (1996 – iulie 2024)** Institutul de Cercetari Nucleare Pitesti, Str. Campului nr.1, Mioveni, 115400, www.nuclear.ro	
26 August 2024 – prezent	***Director RATEN ICN***
1 Februarie 2024 – 25 August 2024	***Secretar Ştiintific*** - Coordonator al activitatii de Cercetare-Dezvoltare privind reactorii de Gen IV și materialele si combustibili nucleari - Coordonator al programului de colaboarea internațională ***Alte responsabilitati curente*** - Expert in cadul Euratom Technical and Scientific Committee (din 2008) - Expert national Programme Committee (Fission) (din 2018) - Coordonator proiect European ECOSENS (2022 – 2025) - Responsabil din partea ICN al proiectelor europene FREDMANS (2022-2026) și EURAD/WP UMAN (2022-2024) - Cadru Didactic Asociat al Universitatii din Pitesti (din 2018) - Disciplinele: - *CNE avansate; reactorul ALFRED; instalatii de testare* (la specialitatea Energetică și Tehnologii Nucleare – ETN) - *Reactoare nucleare avansate – LFR* (la programul de Master Materiale si Tehnologii Nucleare)
Noiembrie 2020 – Ianuarie 2024	***Director Adjunct Stiintific*** - Coordonator al activitatii de Cercetare-Dezvoltare a RATEN ICN ***Alte responsabilități*** - Presedinte al Forumului pentru Increderea Stakeholderilor (FSC) al NEA/OECD (2022 - 2023)

2017 - 2020	***Ceretator Stiintific Principal III*** ***Grupul Management Proiect ALFRED*** ***Coordonator și participant in Proiecte de Cercetare-Dezvoltare nationale si europene in domeniile:*** • reactoare nucleare de Gen IV: ECOSENS (proiect Euratom, 2022 – 2025), PRO-ALFRED (proiect PNCDI III, 2019-2020) • managementul deseurilor radioactive: proiectele europene EURAD (proiect european 2019-2024), CAST (2008-2013), FORGE (2006-2012), CARBOWASTE(2004-2009), IPPA, CIP, COWAM2(2004-2013) • cresterea participarii Noilor State Membre la cercetarea Euratom si promovarea potentialului din cercetare si universitati (NEWLANCER, proiect Euratom 2011-2013) • activitati experimentale, monitorizare si modelare pentru depozitarea deseurilor radioactive la Saligny: MONA (PNCDI II, 2007-2011), NSRAWD (2009-2011), MENER 468/2004(2004-2007) ***Responsabil program de colaborare internationala al ICN***
2000 - 2017	***Ceretator Stiintific Principal III*** ***Secția Materiale Nucleare si Coroziune*** ***Coordonator și participant in Proiecte de Cercetare-Dezvoltare nationale si europene in domeniile:*** • ARCADIA (proiect Euratom, 2013 – 2016) • managementul deseurilor radioactive: proiectele europene EURAD (proiect european 2019-2024), CAST (2008-2013), FORGE (2006-2012), CARBOWASTE(2004-2009), IPPA, CIP, COWAM2(2004-2013) • cresterea participarii Noilor State Membre la cercetarea Euratom si promovarea potentialului din cercetare si universitati (NEWLANCER, proiect Euratom 2011-2013) • activitati experimentale, monitorizare si modelare pentru depozitarea deseurilor radioactive la Saligny: MONA (PNCDI II, 2007-2011), NSRAWD (2009-2011), MENER 468/2004(2004-2007) ***Responsabil program de colaborare internationala al ICN***
1996 – 2000	***Ceretator Stiintific Principal III*** ***Secția Materiale Nucleare si Coroziune*** ***Coordonator al temelor „Caracterizarea amplasamentului Saligny pentru DFDSMA" si „Analiza de performanta a DFDSMA"din programul CD „Managemnetul deseurilor radioactive" (1997 – 2000)*** - Elaborarea metodologiei de caracterizarea a amplasamentului Saligny; evaluarea hidrogeologiei amplasamentului si a eroziunii solului; teste de laborator si in teren - Modelarea numerica a curgerii apei si transportului radionuclizilor in amplasament - Evaluarea impactului radiologic al depozitarii deseurilor slab si mediu active - Analiza de sensitivitate si incertitudine - Comportarea barierelor ingineresti (permeabilitatea la apa si gaz)
1992 - 1996	***Ceretator Stiintific*** ***Secția Materiale Nucleare si Coroziune*** ***Sef Colectiv "Fizico-chimia suprafetelor"*** • Caracterizarea combustibililor avansati prin diferite tehnici de investigare (SEM, XRD, XPS, spectrometrie de raze X, porozimetrie cu Hg, BET) • Studiul comportarii microstructurii combustibilului nuclear CANDU standard si avansat in conditii de operare • Modelarea procesului de sinterizare a grauntilor de UO_2 in prezenta dopantilor • Coordonarea activitatii de cercetare la nivelul colectivului

1988 - 1996	***Cercetator Stiintific*** ***Secția Materiale Nucleare*** • Activitati de cercetare asupra comportarii microstructurii combustibilului nuclear CANDU standard si avansat
1984 - 1988	***Fizician*** ***Secția Materiale Nucleare si Coroziune*** • Activitati de cercetare asupra microstructurii combustibilului nuclear si a altor materiale structurale

EDUCAŢIE ŞI FORMARE

1992 – 1999 **Doctorat in Fizica**

Institutul de Fizica Atomica Bucuresti

- Fizica starii condensate; combustibili nucleari avansati

10 – 24 Octombrie 2000 **Certificat**

Department of Energy, Los Alamos National Laboratory, Los Alamos, SUA

- Managementul deseurilor radioactive; modelarea curgerii si transportului

11 – 17 Septembrie 1994 **Certificat de atestare**

French-Romanian Summer School

- Defecte structurale si reactivitatea materialelor

4 martie – 5 Mai 1987 **Certificat de absolvire**

Institutul de Reactori Nucleari Energetici Pitesti

- Proiectarea, tehnologia si controlul combustibilului nuclear

24 Aprilie - 11 Iulie 1989 **Certificat de absolvire**

Institutul de Reactori Nucleari Energetici Pitesti

- Combustibili nucleari

1980-1984 **Diploma de licenta in Fizicia**

Universitatea Bucuresti – Facultatea de Fizica

- Fizica nucleara, Fizica solidului, Fizica moleculara

Limba(i) maternă(e) Scrieţi limba maternă / limbile materne

Alte limbi străine cunoscute

	INTELEGERE		VORBIRE		SCRIERE
	Ascultare	Citire	Participare la conversaţie	Discurs oral	
Engleza	C1/2	C1/2	C1/2	C1/2	C1/2
Franceza	C1/2	C1/2	C1/2	C1/2	C1/2

Niveluri: A1/2: Utilizator elementar - B1/2: Utilizator independent - C1/2: Utilizator experimentat
Cadrul european comun de referinţă pentru limbi străine

Competenţe de comunicare

Competenţe de comunicare bune dobândite prin experienţa proprie de sef de colectiv, coordonator de program, coordonator de proiecte nationale si internationale in parteneriat.

Competenţe organizaţionale/manageriale

Competenţele organizaţionale/manageriale bune dobandite in activitatea de coordonare a colectivelor, programelor si proiectelor pe cafre le-am coordonat.
In prezent, sunt responsabila proiectului european ARCADIA alcatuit dintr-un consortiu de 26 de partneri. Coordonez deasemenea Comitetul de Organizare al Conferintei Internationale anuale „Sustainable Development through Nuclear Research and Education" alcatuit din 12 membri.

COMPETENTE PERSONALE

Competenţe dobândite la locul de muncă	Scrieţi competenţele dobândite la locul de muncă şi care nu au fost menţionate anterior. Specificaţi contextul în care au fost acestea dobândite. De exemplu: ▪ o bună cunoaştere a proceselor de control al calităţii (în prezent fiind responsabil cu auditul calităţii)
Competenţe informatice	▪ Cunoaştere f oarte buna a instrumentelor Microsoft Office™; ▪ proiectare si utilizare baze de date Access; ▪ abilitate in utilizarea codurilor de calcul de transport de masa si caldura (FEHM, HYDRUS, ALLIANCE)
Permis de conducere	▪ B
Afilieri	• Membru al Asociatiei Romane pentru Energie Nucleara (AREN)
Anexe	List of publications, projects, courses and presentations

Prezentări	1. Daniela Diaconu, RWM and stakeholders' involvement, NEA Romanian – Bulgarian WORKSHOP, Brasov, July 25-27, 2022 2. Daniela Diaconu, Brief overview of Romanian stakeholders' involvement in RWM, NEA Romanian – Bulgarian WORKSHOP, Brasov, July 25-27, 2022 3. D.Diaconu et al - UMAN –A Pluralistic View of Uncertainties Management, EURADWASTE '22, Lyon, France, May 31 - June 3, 2022 4. D.Diaconu - Key achievements through the PRO-ALFRED project, International Conference "ALFRED Research Infrastructure", October 21-22, 2020 5. D.Diaconu, M.Constantin, "ARCADIA Project in Support to ALFRED", Nuclear 2014, Pitesti, May 27-29 6. Daniela Diaconu, Marin Constantin, Tanja Perko, Catrinel Turcanu, Claire Mays, Geneviève Baumont, Nadja Železnik, Grażyna Zakrzewska-Kołtuniewicz - Good practices for public communication, education, training and information about ionizing radiation, RICOMET 2016 - Risk perception, communication and ethics of exposures to ionising radiations, Romania, June 1-3, 2016 RICOMET 2016 7. D.Diaconu, et al. - Developing Good Practices for a Better Communication of Ionizing Radiation Risks to the Population, Nuclear 2016, 18-20, 2016, Pitesti, Romania 8. Daniela Diaconu, Kay Birdsell, Crina Bucur, Alina Constantin, Cristina Dobrinoiu - FEHM simulations of non-steady flow and transport in the vadose zone of the Saligny site (Romania), MIGRATION 2015, September 13-18, 2015, Santa Fe, USA 9. D. Diaconu - Recipients of the Information: Informed Decision Making Process Related to Ionizing Radiation, RICOMET 2015, June 12-14, 2015, Brdo, Slovenia 10.D. Diaconu M.Constantin, G, Grasso, G. Glinatsis, Al. Alemberti, D.De Bruyn, F.DiGabriele, E. Urbonavicius -The Arcadia Project in Support of the Alfred Concept, *ICONE22,* July 7-11, 2014, Prague, Czech Republic 11.D. Diaconu M.Constantin - ARCADIA: paving the way for ALFRED implementation in Romania, SIEN 2013, Bucharest, Noiembrie 11-14, 2013 12.D. Diaconu - NEWALNCER: Identifying and implementing solutions for an enlarged involvement in Euratom programmes - *Nuclear 2013 – Sustainable Development through Nuclear Research and Education,* May 22-24, 2013, Pitesti, Romania, ISSN 2066-2955 13.D. Diaconu - *New Member States Linking for Advanced Cohesion in Euratom Research,* NUCLEAR 2012, May 16-18, 2012, Pitesti – Romania, ISSN 2066-2955 *14.*L. Cizelj, D.Diaconu, P. Ghitescu, I.Ivanov, I.Tiselj - The NEWLANCER Project: Advancing National and Joint Nuclear Research and Higher Education in the European Union - *21st International Conference Nuclear Energy for New Europe - NENE, Ljubljana, Sept 5-7, 2012* *15.*A. Genty, D. Diaconu, C. Bucur, A. Constantin – *Flow and transport parameters calibration of the Saligny aquifer (Romania) using the Alliances platform, Proceedings of Modelcare 2011, Leipzig. Germany;"* 16.D. Diaconu et all - *Uncertainty Analysis in the Pre-Operational Monitoring Design of the Saligny Site* - Nuclear 2009 – Sustainable Development through Nuclear Research and Education, May 27-29, 2009, Pitesti, Romania, ISSN 2066-2955 17.Daniela Diaconu, Kay Birdsell, George Zyvoloski - Natural and Engineered Barriers in the Romanian Disposal Site for Low and Intermediate Level Waste - *The 9th International Conference on Radioactive Waste Management and Environmental Remediation-ICEM'03*, Oxford, 21-25 September 2003 18.D. Diaconu - Soil porosity distribution and the underground water transport characteristics, 4-th General Conference Balkan Physics Union Conference BPU-2000, Velico-Turnovo, 2000 " 19.Daniela Diaconu, Alice Dinu, Dorel Benga - Grain Growth Modeling In The Presence Of Small Liquid Fraction, Proc. of Romanian Second International Conference on Materials and Manufacturing Technologies, Cluj-Napoca, 1998 (p 577-582)" 20.D. Ohâi, V. Bălan, D. Diaconu, I. Mirion - Large grains size pellets fabrication from thermochemical acive UO2 powder for advanced-CANDU fuel - Proc. of Romanian Conference on Advanced Materials, Analele Universitătii Bucuresti, 1997 (p 128-132)" 21.D. Diaconu, D. Ohai - Sintering Mechanisms Occurring in UO2-Dopant Systems, Proc of Romanian First International and Fourth National Conference on Powder Metallurgy, Cluj, Iulie 1996, (p 249-252)" 22.M. Roth, V. Radu, D. Ohâi, D. Diaconu, V. Bălan, "Mechanical Behaviour Of Large Grains UO2 Pellet" - Proceedings of Romanian First International (4th National) Conference on Powder Metallurgy, 4-7 July 1996, Cluj-Napoca.

Publicaţii

1. **Daniela Diaconu,** Valéry Detilleux, Agnieszka Strusińska-Correia, Astrid Göbel, Julien Dewoghelaere and Dirk-Alexander Becker, *UMAN – a pluralistic view of uncertainty management*, EPJ Nuclear Sci. Technol, Volume 9, 2023 (https://doi.org/10.1051/epjn/2022049)
2. **D. Diaconu,** M.Constantin, M.Niţoi, I.Turcu, D.Gugiu, M.Apostol, R.Preduţ,,D.Chirleşan, G.Plăiaşu, D.Dupleac, M.Drăguşin, I.Purica - *PRO ALFRED: Towards an Increased Romanian Participation in the ALFRED Infrastructure Development*, Journal of Nuclear Research and Development, No. 19, May 2020 (46-53)
3. Roger Garbil, Christophe Davies and **Daniela Diaconu** - *Euratom Research and Training in 2019: challenges, achievements and future perspectives*, EPJ Nuclear Sci. Technol, Volume 6, 2020, https://doi.org/10.1051/epjn/2019035
4. Walter Ambrosini, Rosa Lo Frano, Leon Cizelj, Pedro Dieguez-Porras, Egidijus Urbonavicius, Iskren Cvetkov, **Daniela Diaconu**, Jan Leen Kloosterman and Rudy J.M. Konings - *Euratom Research and Training in 2019: challenges, achievements and future perspectives*, EPJ Nuclear Sci. Technol., Volume 6, 2020, https://doi.org/10.1051/epjn/2019018
5. M. Constantin, G. Grasso, M. Tarantino, I. Turcu, C. Paunoiu, A. Toma, M. Caramello, M. Frignani, A. Alemberti, **D. Diaconu**, M. Nitoi, M. Apostol, D. Gugiu, P. Agostini - *The Development of the Research Infrastructure in Support of ALFRED Demonstrator Implementation in Romania,* Proceedings of FOREN2020, 2020
6. **Daniela Diaconu**, Marin Constantin, Tanja Perko, Catrinel Turcanu, Claire Mays, Geneviève Baumont, Grażyna Zakrzewska-Kołtuniewicz, Agnieszka Miśkiewicz, Nadja Železnik (REC) and Metka Krallj, *Public Education, Training and Information on Ionizing Radiation*, Lambert Academic Publishing, 2018
7. **D. Diaconu,** M. Constantin, T. Perko, C. Turcanu, C. Mays, G. Baumont, G. Zakrzewska-Kołtuniewicz, A. Miśkiewicz, N. Železnik, M. Kralj, *Good practices in public education, training and information on ionizing radiation* (2018), ISBN: 978-613-9-84887-4 [Google Scholar]
8. T. Beattie, R. Kowe, J. Delay, G. Buckau, **D. Diaconu** - *RD&D Planning Towards Geological Disposal of Radioactive Waste*, SecIGD2 Project DELIVERABLE (D-N°: 2.3), Guidance for less-advanced Programmes, 2015
9. **D. Diaconu,** M. Constantin, G. Grasso, G. Glinatsis, F.Di Gabriele, A.Alemberti, D.De Bruyn, E.Urbonavicius - *The ARCADIA Project in Support of the ALFRED Concept,* ICONE22, International Conference on Nuclear Engineering, 2014, Prague, July 7-11
10. **D. Diaconu,** M. Constantin, G. Glinatsis, G. Grasso, F. DiGabriele, D. DeBruyn - *ARCADIA: A Regional Approach for ALFRED Implementation in Romania*, FOREN 2014, Bucharest, June 23-27
11. Nadja Železnik, Marin Constantin, Nina Schneider, Claire Mays, Grazyna Zakrzewska and **Daniela Diaconu** - *Lay public mental models of ionizing radiation: representations and risk perception in four European countries*, Journal of Radiological Protection, Volume 36, Number 2, J. Radiol. Prot. 36 (2016) S102–S121, Published 6 June 2016 https://doi:10.1088/0952-4746/36/2/S102
12. Claire Mays, Jaroslav Valůch, Tanja Perko, Irena Daris, Chiara Condi, Agnieszka Miśkiewicz, Grazyna Zakrzewska, Marin Constantin, **Daniela Diaconu**, Metka Kralj and Nadja Železnik - *Looking for citizen-centered communication: Dialogues between radiological protection or nuclear safety specialists and media professionals*, J. Radiol. Prot. 36 (2016) S143-S159 • June 2016, https://doi:10.1088/0952-4746/36/2/S143
13. A. Constantin, M. Constantin, and **D. Diaconu** - *Investigation of the attitudes, needs, and expectations of the Saligny community* - Mineralogical Magazine, November 2015, v. 79, p. 1573-1580, published online December 23, 2015, https://doi:10.1180/minmag.2015.079.6.32
14. **D. Diaconu,** I. Ivanov, N. Železnik, M. Kralj, and G. Zakrzewska - *Overview of less advanced programmes and their requirements*, Mineralogical Magazine, November 2015, v. 79, p. 1599-1606, published online December 23, 2015, https://doi:10.1180/minmag.2015.079.6.35
15. Nadja Zeleznik, Marin Constantin, Nina Schneider, Claire Mays, Grazyna Zakrzewska, **Daniela Diaconu**, *Radiation perception in Europe*, Nuclear Engineering International, 2015
16. A. Constantin, **D. Diaconu,** C. Bucur – *Performance assessment for disposal of irradiated graphite from research reactors in a near surface repository*, JNRD, no. 4/2012
17. D. Ohâi, **D. Diaconu** - *Pore distribution variation in UO_2-dopant systems* - Balkan Physics Letters, no. 5,1997 (p 2234-2237)"
18. **Daniela Diaconu,** Dumitru Ohâi - *Dopant distribution in additived UO2 fuel* - Proc. of Romanian Conference on Advanced Materials, Analele Universitãtii Bucuresti, 1997 (p 137-141)
19. D. Ohâi, **D. Diaconu,** V. Bãlan, I. Mirion - *Sintered Pellets Having Large Grains Structure For Advanced Nuclear Fuels*, Proceedings of National Energy Conference CNE'94-Neptun, 1994, Romania
20. **D. Diaconu,** D. Ohâi, V. Bãlan - *Microstructural Aspects Of Grain Growth Induced By The Dopants In UO2 Sintered Pellets*, Mat.Sci.Forum 126-128 (1993), 427

Proiecte	- **ECOSENS** – Economic and Societal Considerations for the Future of Nuclear Energy (2022-2025) - Proiect Euratom - **Coordonator proiect** (https://ecosens-project.eu/) - **EURAD** – European Radioactive Waste Management (2019 – 2024) – Proiect Euratom – Leader Pachet Lucru UMAN - **ORIENT NM** - Organisation of the Ruropean research community on nuclear materials (2020-2023) - Proiect Euratom - **FREDMANS** - Fuel Recycle and Experimentally Demonstrated Manufacturing of Advanced Nuclear Solutions for Safety (2022-2026), leader Pachet de lucru - **PRO-ALFRED** – Activităţi de pregătire a realizării infrastructurii de cercetare ALFRED în România – Proiect PNCDI III, 2019-2020)- **coordonator proiect** dedicat realizarii documentelor de viziune si strategice pentru realizarea ALFRED precum si a unor documentatii tehnice aferente instalatiilor experimentale suport. - **ARCADIA** - Assessment of Regional CApabilities for new reactors Development through an Integrated Approach, Proiect PC7-Euratom, Grant Agreement 605116 (2013-2016) - **coordonator proiect** dedicat crearii competentelor pentru implementarea demonstratorului ALFRED in Romania (https://cordis.europa.eu/project/id/605116) - **CAST** – C CArbon-14 Source Term, Proiect PC7-Euratom, (2013-2018) - **EAGLE** - Enhancing educAtion, traininG and communication processes for informed behaviors and decision-making reLatEd to ionizing radiation risks (2013 – 2016) – cercetator stiintific principal responsabil cu imbunatatirea procesului de educare si comunicare a informatiilor despre radiatiile ionizante - **NEWLANCER -** New MS Linking for an Advanced Cohesion in Euratom Research , Proiect PC7-Euratom, Grant Agreement 295826 (2011-2013) – **Coordonator proiect** – dedicat cresterii participarii cercetarii romanesti la proiecte europene din domeniul nuclear (https://cordis.europa.eu/project/id/295826) - **NSRAWD** - Simulari numerice pentru depozitarea deseurilor radioactive – Contract IFA-CEA 03/2010 (2010-2013)– coordonator proiect - **FORGE** - Fate of Repository Gases –, Proiect PC7-Euratom, Contract EC 2 (2009-2013)- cercetator stiintific principal responsabil cu experimentarea la scara de laborator a migrarii gazului prin bentonita compactata la grade mari de saturare - **CARBOWASTE** - Treatment and Disposal of Irradiated Graphite and Other Carbonaceous Waste- Proiect PC7-Euratom, Grant Agreement EC 211333 (2008-2013)- cercetator stiintific principal responsabil cu stabilirea unei strategii de management a grafitului iraduat in colana termica a reactorilor de cercetare - **COWAM2**- Improving the governance of nuclear waste disposal in Europe–" Proiect PC6-Euratom, Contract EC FP6W 508856 (2009-2013)- cercetator stiintific principal responsabil cu initierea procesului de implicare a publicului in dedpozitatrea deseurilor radioactive - **MONA** - Cercetari pentru dezvoltarea unui program de monitorizare a amplasamentelor de depozitare a deseurilor radioactive. Studiu de caz: DFDSMA Saligny, PN II 71-009 (2007-2010)– coordonator proiect - Experimente si modelari pentru caracterizarea hidrologiei amplasamentului propus pentru depozitarea deseurilor slab si mediu active provenite de la CNE Cernavoda » Proiect MENER, Contract 468/2004 (2004-2006) –coordonator proiect - Model functional de masina de sudura dop-grila pt fabricatia combustibilului nuclear avansat compatibil cu reactorul CANDU 600, Contract 015/2001 MENER (2001-2003)

Cursuri

- **D. Diaconu** – Student pre-requisites prior to ESDRED course - ESDRED Course on Radioactive Waste Management, Bucharest, November 2006
- **D. Diaconu** – CNE avansate; reactorul ALFRED; instalatii de testare, 2019
- **D. Diaconu** – Reactoare nucleare de Gen IV, LFR, 2020

