

## Studii, specializari, titluri

Perioada	<b>01/10/1979 - 01/07/1984</b>
Titlu	<b>inginer</b>
Competente	- Sisteme de propulsie
Institutia	<b>Institutul Politehnic din Bucuresti (Fac. de Aeronave)</b>
Nivel clasificare	8.81/10 (Examen de diploma 10/10)
Perioada	<b>01/01/1993 - 01/10/1999</b>
Titlu	<b>Doctor in Stiinte Termice</b>
Competente	- Termodinamica Aplicata - Termodinamica Ireversibila - Transfer de caldura si masa - Procese de ardere
Institutia	<b>Universitatea Politehnica din Bucuresti</b>
Nivel clasificare	Foarte bine
Perioada	<b>01/10/2005 - 01/07/2007</b>
Titlu	<b>-M.Sc.</b>
Competente	- Sisteme Dinamice - Geometrie Diferentiala - Metode ale Fizicii Matematice - Functii Convexe
Institutia	<b>Universitatea Politehnica din Bucuresti (Fac. de Stiinte Aplicate)</b>
Nivel clasificare	10/10

## Experienta profesionala

Perioada	<b>09/01/2017 →</b>
Ocupatie, functie	<b>Profesor</b>
Responsabilitati	- Teaching courses and seminars - Propulsion Systems (graduate) - Design of propulsion systems (undergraduate) - Thermodynamics (undergraduate) - Flight Control (undergraduate) - Turbine Engines (undergraduate) Research activities for several European contracts and national grants.
Angajator	University Politehnica of Bucharest, Fac. of Aerospace Engineering, Chair of Aerospace Sciences "Elie Carafoli" 1, Gheorghe Polizu, 011061 Bucharest (Romania)
Perioada	<b>01/03/2013 → prezent</b>
Ocupatie, functie	<b>Conferentiar</b>
Responsabilitati	Cursuri, seminarii si lucrari de laborator - Geometrie Computationala - Termodinamica - Controlul Zborului - Mecanica Zborului Cercetare pentru diferite proiecte FP6 /FP7, contracte nationale (IDEI), contract pentru institutie europeana.

Angajator **Universitatea Politehnica din Bucuresti, Fac. Inginerie Aerospatiale, Catedra de Stiinte Aerospatiale "Elie Carafoli"**

Perioada **01/10/2009 → 01/03/2013**

Ocupatie, functie **Sef lucrari**

Responsabilitati Cursuri, seminarii si lucrari de laborator
 

- Geometrie Computationala
- Termodinamica
- Controlul Zborului
- Mecanica Zborului
- Programare Paralela
- Metode Spectrale

 Cercetare pentru diferite proiecte FP6 /FP7, contracte nationale (IDEI), contract pentru institutie europeana.

Angajator **Universitatea Politehnica din Bucuresti, Fac. Inginerie Aerospatiale, Catedra de Stiinte Aerospatiale "Elie Carafoli"**

Perioada **10/12/2001 - 01/10/2009**

Ocupatie, functie **Sef lucrari**

Responsabilitati Cursuri, seminarii si lucrari de laborator
 

- Termotehnica
- Geometrie Computationala
- Bazele instalatiilor frigorifice
- Masini Termice

 Cercetare pentru diferite proiecte FP6, contracte nationale

Angajator **Universitatea Politehnica din Bucuresti, Fac. de Inginerie Mecanica, Catedra de Termotehnica, Masini Termice si Instalatii Frigorifice**

Perioada **20/11/2000 - 10/12/2001**

Ocupatie, functie **Post-Doc Research Associate**

Responsabilitati Cercetare

Angajator **Texas A&M University, Dept. of Aerospace Engineering, College Station, Texas (United States)**

Perioada **01/10/1995 - 20/11/2000**

Ocupatie, functie **Sef lucrari**

Responsabilitati Cursuri, seminarii si lucrari de laborator
 

- Termotehnica
- Transfer de caldura
- Masini Termice

 Cercetare pentru doctorat si pentru alte contracte si granturi nationale.

Angajator **Universitatea Politehnica din Bucuresti, Fac. de Inginerie Mecanica, Catedra de Termotehnica, Masini Termice si Instalatii Frigorifice**

Perioada **01/03/1991 - 01/10/1995**

Ocupatie, functie **Asistent universitar**

Responsabilitati Seminarii si lucrari de laborator
 

- Termotehnica
- Dinamica Gazelor
- Transfer de caldura
- Masini Termice

 Cercetare pentru doctorat si alte contracte.

Angajator **Universitatea Politehnica din Bucuresti, Fac. de Inginerie Mecanica, Catedra de Termotehnica, Masini Termice si Instalatii Frigorifice**

Perioada **15/11/1989 - 01/03/1991**

Ocupatie, functie **Inginer proiectant**

Responsabilitati	Dezvoltare coduri comanda numerica
Angajator	<b>Uzinele "23 August" Bucuresti</b>
Perioada	<b>01/03/1988 - 15/11/1989</b>
Ocupatie, functie	<b>Asistent universitar</b>
Responsabilitati	Seminarii si lucrari de laborator - Turbine cu aburi si gaze - Termotehnica Cercetare pentru diverse contracte.
Angajator	<b>Universitatea "Dunarea de Jos", Fac. de Mecanica, Catedra de Termotehnica</b>
Perioada	<b>01/09/1986 - 01/03/1988</b>
Ocupatie, functie	<b>Inginer stagiar/proiectant</b>
Responsabilitati	-Proiectare termodinamica pentru turbosuflanta unui motor Diesel de 1500 CP -Participare la programul de teste pentru dezvoltarea motorului VIPER 632-41 (licenta Rolls-Royce) ca motor auxiliar naval
Angajator	<b>Institutul National de Motoare Termice</b>
Perioada	<b>01/09/1984 - 01/09/1986</b>
Ocupatie, functie	<b>Inginer stagiar</b>
Responsabilitati	- Traducere si adaptare documentatie pentru motorul turbopropulsor TV-0100 (licenta URSS) - Participare la proiectarea nabcului de probe pentru motorul TV-0100.
Angajator	<b>Intreprinderea Turbomecanica Bucuresti</b>

## Abilitati personale si competente

Limbi straine	<b>Engleza, Franceza</b>
Comunicare si dialog	- abilitate de lucru in echipa in diferite medii de cercetare (proiecte FP6, FP7, cercetare post-doc, burse TEMPUS etc.) - abilitatea de a pregati si prezenta lucrari de cercetare comune la conferinte internationale si in jurnale de specialitate
Competente si abilitati manageriale	- <b>director de grant</b> 1) <i>Intensificarea proceselor de ardere si reducerea poluarii prin ionizarea chimica suplimentara a flacarilor</i> , grant CNCSU 22-95-05/1997, (1.000.000 ROL) 2) <i>Modelarea arderilor turbulente</i> , grant CNCSU 22-99-03/1999, (4.000.000 ROL) a) <b>Dragos Isvoranu</b> , Mircea Marinescu, Dorin Stanciu, <i>A thermodynamic approach towards turbulent diffusive reactive flows</i> , ECOS 2000, University of Twente, Enschede, The Netherlands, 5-7 July 2000, Proceedings of Conference, part I, pp. 313-324, ISBN 9036514665. b) Dorin Stanciu, Mircea Marinescu, <b>Dragos Isvoranu</b> , <i>Entropy generation rate in reacting flows</i> , ECOS 2000, University of Twente, Enschede, The Netherlands, 5-7 July 2000, Proceedings of Conference, part I, pp. 333-343, ISBN 9036514665. c) Dorin Stanciu, <b>Dragos Isvoranu</b> , Mircea Marinescu, Yalcin Gogus, <i>Second Law Analysis of Diffusion Flames</i> , Int.J. Applied Thermodynamics, ISSN 1301-9724, Vol. 4, (No.1), pp.1-18, 2001. d) Dorin Stanciu, Mircea Marinescu, <b>Dragos Isvoranu</b> , <i>Second Law Analysis of a Turbulent Flat Plate Boundary Layer</i> , Int.J. Applied Thermodynamics, ISSN 1301-9724, Vol. 3, (No.3), pp.99-104, 2000. 3) <i>Cercetari privind reducerea poluarii chimice a turbomotoarelor prin injectie multietajata de combustibil in turbina</i> , Grant CNCSIS, Tema 17, Cod 502, 2006, Nr. Intern UPB -ME-16-06-04. (134000 RON) a) <b>Dragos Isvoranu</b> , Parvu Petrisor, Virgil Stanciu, Corneliu Berbente, Viorel Badescu, <i>Numerical Simulation of Turbine 'in-situ' combustion based on multi-step reaction mechanism</i> , SET2006, 5th Intl. Conference, LCT048, ISBN 88-89884-05-3, pp. 671-676, 30 Aug.-1 Sep., 2006, Vicenza, Italy.

- b) **Dragos Isvoranu**, Virgil Stanciu, Corneliu Berbente, Viorel Badescu, Parvu Petrisor, *Numerical simulation of pollutant emissions in a turbine-combustor*, 4<sup>th</sup> Intl. Colloquium "Mathematics in Engineering and Numerical Physics", Oct. 6-8, 2006, Bucharest, Romania, Editura Printech, Bucharest, 2007, pp. 215-218, ISBN 978-973-718-761-1.
- c) **Dragos Isvoranu**, Viorel Badescu, Parvu Petrisor, Corneliu Berbente, Daniel Crunteanu, *Numerical simulation of NOx emissions in the exhaust gas re-burn process*, 4<sup>th</sup> Intl. Colloquium "Mathematics in Engineering and Numerical Physics", Oct. 6-8, 2006, Bucharest, Romania, Editura Printech, Bucharest, 2007, pp. 219-220, ISBN 978-973-718-761-1.
- d) **Dragos Isvoranu**, *NOx reburn simulation in a double-jet counter-flow flame*, Special issue: Computational Fluid Dynamics simulations in Energy Technologies and Processes. International Journal of Energy Technology and Policy, DOI: 10.1504/IJETP.2008.017026, ISSN 1472-8923, Vol. 6, Nos. 1/2, pp 5-16, 2008.

4) *Turbina cu gaze utilizand combustia in situ*, contract 286/01.07.2014, Program Parteneriate (154000 RON)

- a) **Dragos Isvoranu**, Sterian Danaila, Constantin Leventiu, Florian Vladulescu, *Combined POD and Field Analysis of a Turbine Stage with in Situ Reheat*, Applied Mechanics & Materials, Vol. 841, pp. 266-271, (2016).
- b) Constantin Leventiu, Bruno Renou, Sterian Dănăilă, **Dragoș Isvoranu**, *Accurate measurements and analysis of the thermal structure of turbulent methane/air premixed flame*. In: Radu Mircea Damian (ed.). Energy Procedia 85, pp 329-338 (2016).
- c) S. Danaila, **D. Isvoranu**, C. Leventiu, *Preliminary Simulation of a 3D Turbine Stage with In Situ Combustion*, Applied Mechanics and Materials, Vol. 772, pp. 103-107, Jul. 2015.
- d) **Dragos Isvoranu**, Sterian Danaila, Paul Cizmas and Constantin Leventiu. (2017). *Proper Orthogonal Decomposition Applied to a Turbine Stage with In-Situ Combustion*. In Ahmet Yavuz Oral, Bahsi Oral, Banu Zehra (Eds.), *3rd International Congress on Energy Efficiency and Energy Related Materials (ENEFM2015) Proceedings*, pp. 11-17, Springer Proceedings in Energy. ISBN 978-3-319-45677-5 (e-book), ISBN-978-1-60876-360-3, 8 pg.

Abilitati computationale - OS : MS Windows, Linux  
 - CFD: Ansys, Fluent  
 - CAD : SolidWorks  
 - Limbaje: Fortran  
 - Medii de calcul: Matlab, Mathematica, Maple.

Alte competente Cercetari colaterale multidisciplinare:

- Microfluidica
- MEMS
- Termodinamica Geometrica

Am publicat 5 carti de autor, 6 capitole in lucrari de specialitate pe plan national, coautor la 3 capitole in lucrari de specialitate pe plan international.

Am colaborat 21 articole in jurnale si conferinte ISI, alte 29 in jurnale indexate BDI si conferinte internationale.

Am participat in 6 contracte de cercetare internationale si 24 nationale, atat cu mediul academic cat si cu cel economic.

## Recunoastere, premii

- Citat in Leading Engineers of the World, International Biographical Center, Cambridge, England, 2006.

- Premiul Air Navigation 2011 Award pentru performante remarcabile ca lider in comunitatea academica, Air Navigation Convention 2011.

- recenzor:

- 1) Engineering Applications of Computational Fluid Mechanics (ISI),
- 2) Computational and Applied Mathematics (ISI)
- 3) American Journal of Mechanical Engineering (BDI)
- 4) American Journal of Fluid Dynamics (BDI)

- editor:

- 1) Energy Science and Technology, International Journal of Energy Science
- 2) International Journal of Energy Science
- 3) American Journal of Mechanical Engineering

Lucrarile mele au fost citate in 52 articole ISI, de 17 ori in reviste din alte BDI, in teze de doctorat si masterat pe plan international si in diverse rapoarte de cercetare.

19.05.2024