Europass Curriculum Vitae

Personal information

First name(s) / Surname(s)	Adrian, CIOCĂNEA
Address(es)	
Telephone(s)	
E-mail	[redacted]
Nationality	[redacted]
Date of birth	[redacted]
Gender	[redacted]

Occupational field

Professor PhD
PhD Supervisor Habilitation at Doctoral School of Power Engineering - University Politehnica Bucharest

Work experience

Dates	From 1990 - Present
Occupation or position held	Professor (Associated Professor; Lecturer; Assistant)
Main activities and responsibilities	Teaching and research activities Courses for undergraduate studies (Bachelor): Fluid Mechanics; Turbomachinery; Hydraulic Machinery and Systems, Renewable Energies; Courses for postgraduate studies (Master): Hydro and Gas-dynamics of Turbomachinery; Methods for Environmental Management (LCA, EIA); Mechanical Design of Conversion Systems for Renewable Energies; Technologies for 3D printing; Head of the Lab: Pumps, Fans and Compressors at Power Engineering Faculty Dept. Hydraulics, Hydraulic Machinery and Environmental Management Head of the Lab: Renewable Energies at Power Engineering Faculty Dept. Hydraulics, Hydraulic Machinery and Environmental Management
Name and address of employer	University Politechnica of Bucharest, 313, Splaiul Independenţei, RO-060042 Bucharest, Romania
Type of business or sector	Education; Research
Dates	From 1985 to 1990
Occupation or position held	Technological Engineer/Research Engineer
Main activities and responsibilities	Technology and Design Engineer
Name and address of employer	ICA Helicopter Company – Brasov RO / Research Institute for Fine Mechanics (Hydraulic Drives) – Bucharest Ro
Type of business or sector	Aeronautical sector/ Research sector

Education and training

Dates	From September 1990 to June 1997
Title of qualification awarded	PhD
Principal subjects/occupational skills covered	Hydraulics, Hydraulic Machinery and Equipment, Hydraulic Drives Thesis: “The influence of a pipe vibration on the internal flow” – June 1997
Name and type of organisation providing education and training	University Politehnica of Bucharest, Faculty of Power Engineering, 313, Splaiul Independenţei, RO-060042 Bucharest, Romania
Level in national and international classification	ISCED 6
Dates	From May 1996 to July 1996
Title of qualification awarded	Qualify Researcher, Visiting Professor
Principal subjects/occupational skills covered	Hydraulic Drives and Automotive Test Benches
Name and type of organisation providing education and training	Politecnico di Torino, Torino, Italy
Level in national and international classification	ISCED 6
Dates	From May 1995 to July 1995
Title of qualification awarded	Visiting Professor, Researcher
Principal subjects/occupational skills covered	Sustainable Development
Name and type of organisation providing education and training	University of Huddersfield, Huddersfield, England, UK
Level in national and international classification	ISCED 6
Dates	From 1992 to 1994
Title of qualification awarded	Postgraduated studies
Principal subjects/occupational skills covered	International courses in Ecotechnology
Name and type of organisation providing education and training	Consortium of University of Bucharest, Academy of Economical Studies of Bucharest, University Politehnica of Bucharest, Free University of Brussels, University of Huddersfield, Complutense University of Madrid, Dresden University of Technology
Dates	From June 1993 to July 1993
Title of qualification awarded	Visiting Professor, Researcher
Principal subjects/occupational skills covered	Intensive coursed in Ecotechnology
Name and type of organisation providing education and training	University of Deinze, Deinze, Belgium
Level in national and international classification	ISCED 6
Dates	From September 1980 to June 1985
Title of qualification awarded	Mechanical Engineer
Principal subjects/occupational skills covered	Mechanical Engineering Hydraulic and Pneumatic Machinery (design, operation and maintenance)
Name and type of organisation providing education and training	University Politehnica of Bucharest, Faculty of Mechanical Engineering, 313, Splaiul Independenţei, RO-060042 Bucharest, Romania
Level in national and international classification	ISCED 5

Personal skills and competences

Mother tongue(s) Romanian

Other language(s)

Self-assessment	Understanding				Speaking				Writing	
European level (*)	Listening		Reading		Spoken interaction		Spoken production			
English	C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user

(*)http://europass.cedefop.europa.eu/LanguageSelfAssessmentGrid/en

Additional information

Membership of organisations
- The Romanian Academy – Engineering Section – Committee for Renewable Energies
- Member of SPERIN (Society for Promoting Renewable, Inexhaustible and New Energies). Patents
- 5 patents in Romania;
- 1 International Patent;

- National grants - coordinator: 14;
- National grants - as member in research teams: 18. Research contracts
- National research contracts : over 50;

- EcoNet Project – EUTEMPUS Project.
- Ecotehnie Project – EU Education Project Publications
- 10 books and chapters in books;
- more than 100 papers in national and international journals and at conferences.

Research impact:
ISI - H index: 11;
Scopus - H index: 8;

Annex

List of relevant publications

sept. 2024

Prof. PhD. Habil. Eng. Adrian Ciocănea

Universitatea Națională de Știință și Tehnologie POLITEHNICA Bucureşti
Facultatea de Energetică
Departamentul de Hidraulică, Mașini Hidraulice și Ingineria Mediului
Nume Prenume: Ciocănea Adrian
Gradul didactic: Profesor

L I S T A
lucrărilor științifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

T1. **Teza de doctorat în domeniul: Mașini, instalații și acționări hidraulice și pneumatice** *Influența curgerii interioare asupra vibrației țevilor* (The influence of pipes vibration on the internal flow) –Univ. POLITEHNICA Buc. 1997.

L1. **Lucrare de disertație curs postuniversitar – Ecotehnie – Dezvoltare Durabilă:**
O analiză asupra dezvoltării durabile în România (A survey on sustainable development in România) – Universitatea Bucuresti - Catedrele UNESCO-Cousteau de Ecotehnie din : Universitatea din București, Academia de Studii Economice din București, Vrije Universiteit - Belgia, Huddersfield University - U.K., Friedrich Schiller Universitat Jena - Germania, Universidad Complutense Madrid– Spania, University Szeged – Ungaria – 1995; European Postgratuate Programme in Ecotechnie, Buc. 1995.

B. Cărţi si capitole în cărţi publicate în ultimii 10 anii

1. Jafar Mehdi Hassan, Salman Hussien Omran, Laith Habeeb, Alamas lamani Ammar Fadhil Shnawa and **Adrian Ciocănea**, **2021,** Hydraulic Power Plants Including Solved Problems being published by Bentham eBooks -DOI: 10.2174/97898114941231210101; ISBN: 978-981-14-9410-9; eISBN: 978-981-14-9412-3 (Online);229 pag.
2. Sanda Budea, V. Badescu, A. Ciocanea, I, Soriga, **2018**, Energia si mediul in context contemporan, capitolul Comentarii privind utilizarea sistemelor termosolare actuale la climatizarea spatiilor in cladiri, Ed. Universitara Ion Mincu, Buc. ISBN 978-606- 638-171-0, 22 pagini;
3. Ciocănea A., Bădescu, V., Catheart, R.B., Finkl, C.W., **2013**, Coastal Hazards, Chapter 12: Reducing the Risk Associated to Desalination Brine Disposal on the Coastal Areas of Red Sea. C.W. Finkl (ed.), Coastal Research Library 6, pg. 285-319,ISBN 978-94- 007-5233-7, DOI 10.1007/978-94-007-5234-4_12, Springer Science and Business Media Dordrecht;
4. Ciocănea, A., **2013**, Surse regenerabile de energie – Aplicaţii si studii de caz, (Renewable energy sources – Applications and case studies), Politehnica Press, ISBN 978-606-515- 530-5, 212 p.

C. Lucrări indexate ISI/BDI publicate în ultimii 10 anii

1. Abed, Q.A., ***Hachim, D.M.***, ***Ciocănea, A.***, ***Badescu, V.***, **2023**, ***The useful heat flux provided by the perforated plate of unglazed transpired collectors under no-wind and windy conditions,*** **Journal of Renewable and Sustainable Energy** ***Volume 15, Issue 51 September 2023 Article number 053703***
2. Badescu, Viorel; Soriga, Iuliana; Ciocanea, Adrian, **2019**, Solar air collector performance in transient operation under radiative regimes with different levels of stability, SOLAR ENERGY Volume: 177 Pages: 200-212 Published: JAN 1 2019, WOS:000456222500018;
3. Ciocănea, A., Dragomirescu, A., Tofan, B., Toti, M., **2019**, Pedestrian-level ventilation in an urban environment adjacent to a river channel: A case study for Bucharest city - Romania, E3S Web of Conferences, Volume 85, 22 February 2019, Article number 07007, 2018 Sustainable Solutions for Energy and Environment, EENVIRO 2018; Cluj Napoca; Romania; 9 October 2018 through 13 October 2018; Code 145542,

WOS:000468021200066

4. Budea, S., Badescu, V., Ciocanea, A., Croitoru, C.V.,Nastase, I., **2019**, The stability of the radiative regime in Bucharest during 2017-2018, Conference: Conference on Sustainable Solutions for Energy and Environment (EENVIRO) Location: Cluj Napoca, ROMANIA Date: OCT 09-13, 2018 SUSTAINABLE SOLUTIONS FOR ENERGY AND ENVIRONMENT (EENVIRO 2018) Book Series: E3S Web of Conferences Volume: 85 Article Number: 04001 Published: 2019 , WOS:000468021200034
5. Badescu, V.,Ciocanea, A., Budea, S., Soriga, I., **2019**, Regularizing the operation of unglazed transpired collectors by incorporating phase change materials, ENERGY CONVERSION AND MANAGEMENT Volume: 184 Pages: 681-708 Published: MAR 15 2019 , WOS:000461728300055
6. Badescu, V Abed, QA Ciocanea, A Soriga, I, **2017**, The stability of the radiative regime does influence the daily performance of solar air heaters, RENEWABLE ENERGY, Volume: 107Pages: 403-416, DOI: 10.1016/j.renene.2017.02.011, WOS:000396946900035
7. "Abed, QA, Badescu, V, Ciocanea, A, Soriga, I, Buretea, D, **2017**, Models for New Corrugated and Porous Solar Air Collectors under Transient Operation, JOURNAL OF NON-EQUILIBRIUM THERMODYNAMICS, Volume: 42 Issue: 1 Pages: 79-97, DOI: 10.1515/jnet-2016-0013, WOS:000392302500004"
8. Adrian Ciocănea, Dorin Laurențiu Burețea, **2016**, The influence of flow tube vibrations over the efficiency of solar water heating collectors , Energy Procedia 112 (2017), pp. 330 – 335, ScienceDirect Sustainable Solutions for Energy and Environment, EENVIRO 2016, 26-28October 2016, Bucharest, Romania, WOS:000404848300040
9. Adrian Ciocănea , Sergiu Nicolaie , Corina Băbuţanu, **2016**, Reverse engineering for the rotor blades of a horizontal axis microhydrokinetic turbine, Energy Procedia 112 (2017), pp. 35 – 42, doi.org/10.1016/j.egypro.2017.03.1056, ScienceDirect Sustainable Solutions for Energy and Environment, EENVIRO 2016, 26-28 October 2016, Bucharest, Romania, WOS:000404848300005
10. Iordache, S.M., Ciocanea, A., Stamatin, I., Bălan, A., Budea, S., Ceaus, C., Trefilov, A. M. I., **2016**, Recovering hydrogen sulfide from sulfurous waters with PEM fuel cells, Energy Procedia, 85, 273-278, http://dx.doi.org/10.1016/j.egypro.2015.12.252 - WOS:000377911100035
11. Cucu, A., Tiliakos, A., Tanase, I., Serban, C.E., Stamatin, I., Ciocanea, A., Nichita C., **2016**, Microbial Fuel Cell for Nitrate Reduction/ Energy Procedia, 85, 156-161, http://dx.doi.org/10.1016/j.egypro.2015.12.286 - WOS:000377911100019
12. Cristescu, C., Dumitrescu, C., Popescu, T.C., Krevey, P., Ciocănea, A.**2016**, Research on the hydrostatic systems used in order to control rotational speed at the hydraulic turbines within small-scale hydropower plants, SGEM2016 Conference Proceedings, Book4 Vol. 1, Albena, BG - WOS:000391348600077
13. Badescu V, Ciocanea A, Cathcart R.B., Finkl, C.W., 2012, Desalination brine disposal by submerged pipes in Red Sea, Journal of Coastal Research, DOI:10.2112/JCOASTRES-D-12-00060.1.; Journal of Coastal Research ISSN 0749- 0208 , 29-6A, p.81-92, nov. 2013. WOS:000327567200009
14. Cucu, A., Costache, T. A., Divona, M., Tiliakos, A., Stamatin, I., Ciocănea, A., **2013**, Microbial Electrolysis cell: Hydogen Production using microbial consortia from Romanian waters, Digest Journal of Nanomaterials and Biostructures, ISSN 1842-3582, Vol. 8, No. 3, July - September 2013, p. 1179 – 1190. WOS:000327816300026
15. Cucu, A., Costache, T. A., Stamatin, I., Ciocănea, A., **2013**, Microalgae as native oxygen suppliers in bicameral microbial fuel cells, Digest Journal of Nanomaterials and Biostructures, ISSN 1842-3582, Vol. 8, No. 3, July - September 2013, p. 1301 – 1312. WOS:000327816300038

26. A.Ciocanea, V. Badescu, Sanda Budea, **2019**, A numerical analiysis on increasing the heat- exchange efficiency for unglazed transpired solar collectors, 18th International Multidisciplinary Scientific GeoConference Surveying Geology and Mining Ecology

Management, SGEM 18(4.1), pp. 81-88, ISSN 1314-2704, SCOPUS

27. Qahtan, A. A., Ciocănea, A., Soriga, I., Burețea, D.L.**2016**, Dynamic thermal performance analysis of two solar air collectors with and without porous media, Renew. Energy and Environ. Sustain, 1, 24 (2016), 1-4
28. Neacșu, R.M.R., Ciocănea, A, **2016**, A direct method for simulation and design of a flat-plate type solar collector for water heating, EUROSIS, 14-th Industrial Simulation Conference 2016, București, România, 2016, 121-125, 978-90-77381-93-9121-125
29. Budea S., Ciocanea A. Sisman A., **2016**, A direct method for the re-engineering by simulation of radial and mixed flow impellers, EUROSIS, 14-th Industrial Simulation Conference 2016, București, România, 2016, 73-77, 978-90-77381-93-9
30. Qahtan Adnan ABED, Adrian CIOCANEA, Viorel BADESCU, An experimental comparison between corrugated and porous plates of solar air heaters at various flow rates, 4th International Conference on Thermal Equipment, Renewable Energy and Rural Development 4-6 iunie **2015**, pag. 107-112, Conference Proceedings TE-RE-RD 2015 ISSN 2457–3302, ISSN 2359-7941.
31. Ciocănea, A., Bureţea, D. L., **2014**, Experimental research on high efficiency solar air heating collectors, Hidraulica No.4, ISSN 1453-7303, p. 56-60 (fluidas.ro. Google Scholar, IndexCopernicus).
32. Ciocănea, A., Bureţea, D. L., **2014**, Cabin Heat Removal from Parked Cars, Hidraulica No.3, ISSN 1453-7303, p. 52-58. (fluidas.ro. IndexCopernicus).
33. Ciocanea, A., Dragomirescu A., Budea S., **2013**, Hydraulic Installation for Water Aeration, Journal of Mechanics Engineering and Automation, ISSN 2159-5275, 3 (2013) 141-145. http://www.davidpublishing.com.
34. Ciocănea, A., **2013**, Hydraulic braking energy recovery of heavy automotives, Hidraulica nr.3, ISSN 1453-7303, pag. 101-107. (fluidas.ro. IndexCopernicus)

D.

E. Brevete obținute în întreaga activitate

2. A.Ciocanea, Sanda Budea – Instalaţie pentru aerarea apei din lacuri, rezervoare şi râuri cu viteze reduse de curgere, RO129465-A2/30.05.2014, Derwent Class Code(s): Q42 (Hydraulic engineering, soil shifting and sewerage (E02, 3)); Q46 (Building aids, special structures, ladders (E04G,H, E06C)), nr 129645 B1 / 28.12.2018
3. Ciocănea, A., Floating platform and method for reducing the urban heat effect by using a floating platform. (RO126677-A1 ; RO126677-B1; Derwent 2011-Q12792 [75]).
4. Ciocănea, A., Lepădatu, I., Rădulescu, G., Equipement for depolluting the air in the open spaces of urban agglomerations with intense vehicle traffic. (RO125585-A2 ; RO125585- B1; Derwent 2010-K02772 [24]).
5. Cazacu, M., Ciocănea A., Pena, O., Rotor de turbină eoliană. (RO 117635 B1. Derwent Manual Code(s): X15-B01A).

Data: sept.2024 **Semnătura:**