

Europass Curriculum Vitae



Personal information

First name(s) / Surname(s)

Adrian, CIOCĂNEA

Address(es) Telephone(s)

E-mail adrian.ciocanea@upb.ro

Nationality Romanian

Date of birth 09.05.1960

Gender Male

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 Independentei, 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

From September 1990 to June 1997 **Dates**

Title of qualification awarded

Principal subjects/occupational skills Hydraulics, Hydraulic Machinery and Equipment, Hydraulic Drives

> Thesis: "The influence of a pipe vibration on the internal flow" - June 1997 covered

Name and type of organisation providing education and training University Politehnica of Bucharest, Faculty of Power Engineering, 313, Splaiul Independentei, RO-

060042 Bucharest, Romania

Level in national and international

classification

Dates From May 1996 to July 1996

Title of qualification awarded Qualify Researcher, Visiting Professor

ISCED 6

Principal subjects/occupational skills Hydraulic Drives and Automotive Test Benches covered

Name and type of organisation

Politecnico di Torino, Torino, Italy

providing education and training

Level in national and international ISCED 6

classification

From May 1995 to July 1995 Dates

Title of qualification awarded Visiting Professor, Researcher

Principal subjects/occupational skills Sustainable Development

covered

Name and type of organisation University of Huddersfield, Huddersfield, England, UK

providing education and training Level in national and international

ISCED 6

classification

Dates From 1992 to 1994

Title of qualification awarded Postgraduated studies

Principal subjects/occupational skills International courses in Ecotechnology

covered

Name and type of organisation Consortium of University of Bucharest, Academy of Economical Studies of Bucharest, University providing education and training 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 Intensive coursed in Ecotechnology

covered

Name and type of organisation University of Deinze, Deinze, Belgium

providing education and training

Level in national and international ISCED 6

classification

Dates From September 1980 to June 1985

Title of qualification awarded Mechanical Engineer

Principal subjects/occupational skills Mechanical Engineering

> Hydraulic and Pneumatic Machinery (design, operation and maintenance) covered

Name and type of organisation University Politehnica of Bucharest, Faculty of Mechanical Engineering, 313, Splaiul Independenței, providing education and training RO-060042 Bucharest, Romania

Level in national and international ISCED 5

classification

Curriculum Vitae of Adrian Ciocanea

Personal skills and competences

Mother tongue(s) Romanian

Other language(s) Self-assessment European level (*)

English

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
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:

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

Annex List of relevant publications

sept. 2024

Prof. PhD. Habil. Eng. Adrian Ciocănea

Universitatea Națională de Știință și Tehnologie POLITEHNICA București

Facultatea de Energetică

Departamentul de Hidraulică, Mașini Hidraulice și Ingineria Mediului

Nume Prenume: Ciocănea Adrian

Gradul didactic: Profesor

LISTA

lucrărilor științifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

T1. **Teza de doctorat în domeniul: Maşini, instalaţii şi acţionări hidraulice şi pneumatice** *Influenţa curgerii interioare asupra vibraţiei ţevilor* (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 București - 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. Cărți si capitole în cărți 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 Aplicații 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., <u>Hachim, D.M.</u>, <u>Ciocănea, A.</u>, <u>Badescu, V.</u>, 2023, The useful heat flux provided by the perforated plate of unglazed transpired collectors under no-wind and windy conditions, <u>Journal of Renewable and Sustainable Energy</u> 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
- 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. Neacşu, R.M.R., Ciocănea, A, **2016**, A direct method for simulation and design of a flatplate type solar collector for water heating, EUROSIS, 14-th Industrial Simulation Conference 2016, Bucureşti, 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, Bucureşti, 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., Burețea, 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., Burețea, 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)

E. Brevete obținute în întreaga activitate

D.

- 2. A.Ciocanea, Sanda Budea Instalație pentru aerarea apei din lacuri, rezervoare și 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:
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