



Urim Buzra

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(Work)

WORK EXPERIENCE

24/10/2011 – CURRENT Tirana, Albania

SENIOR LECTURER IN PHYSICS POLYTECHNIC UNIVERSITY OF TIRANA

Full-Time Lecturer at Polytechnic University of Tirana, Faculty of Mathematical Engineering and Physical Engineering, Department of Physical Engineering.

- Lectures, Seminars and laboratories for the course of General Physics, Bachelor degree
- Lectures, Seminars and laboratories for the course of Alternative Energy Sources, Master degree

10/10/2022 – 30/06/2023 Tirana, Albania

SENIOR LECTURER IN PHYSICS EUROPEAN UNIVERSITY OF TIRANA

Part-time lecturer at European University of Tirana

Lectures, Seminar and laboratories for the course of General Physics

05/11/2018 – 30/06/2021 Tirana, Albania

SENIOR LECTURER IN PHYSICS MARIN BARLETI UNIVERSITY

Part-time Lecturer at Marin Barleti University

Lecturer in post-university courses on Audit and Energy Management

17/10/2016 – 29/06/2018 Elbasan, Albania

UNIVERSITY LECTURER IN PHYSICS UNIVERSITY OF ELBASAN

Part-time Lecturer at University of Elbasan, Department of Physics.

Lectures, seminars and laboratories for the course of general physics

EDUCATION AND TRAINING

23/10/2023 Tirana, Albania

ASSOCIATE PROFESSOR Polytechnic University of Tirana, Faculty of Mathematical Engineering and Physical Engineering

Website <https://upt.edu.al/>

20/07/2016 Tirana, Albania

DOCTOR OF SCIENCE Polytechnic University of Tirana, Faculty of Mathematical Engineering and Physical Engineering

11/07/2011 Tirana, Albania

MASTER OF SCIENCE Polytechnic University of Tirana, Faculty of Mathematical Engineering and Physical Engineering

30/09/2009 Tirana, Albania

BACHELOR DEGREE Polytechnic University of Tirana, Faculty of Mathematical Engineering and Physical Engineering

● **LANGUAGE SKILLS**

Mother tongue(s): **ALBANIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C1	C1	C1	C1	C1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

● **DIGITAL SKILLS**

Microsoft Office | Microsoft Powerpoint | Microsoft Word | Solar system planning with PVSOL | pvDesign | Modelling and Simulation Tools: PVsyst, PowerWorld, Simulink | Microsoft Excel | RetScreen Expert

● **RESEARCH EXPERIENCE**

Journal Publications.

1. Serdari E, Buzra U. The bus selection based on PV curve for the photovoltaic integration into power grid. *Journal of Energy Systems*. 2024;8(3):143-52. **(SCOPUS)**
2. Shehu M, Buzra U, Tola S, Abazaj L. A guide to identify operational and financial risk for their success - a case study from Berat, Albania. *Journal of Multidisciplinary Engineering Science Studies*, ISSN:2458-925X (Online) Vol.9 Issue 4, April - 2023, <http://www.jmess.org/wpcontent/uploads/2023/04/JMESSP13420907.pdf>
3. Buzra U. Evaluation of the performance of a 98.4 kWp grid-tied PV system and analysis of the proposed design with different simulation tools. *Journal of Multidisciplinary Engineering Science Studies*, ISSN:2458-925X (Online) Vol.9 Issue 4, April - 2023
4. Buzra U. On grid tied simulation analysis on the terrace of the faculty building. *Journal of Multidisciplinary Engineering Science Studies*, Vol. 8 Issue 2, February 2022; http://www.jmess.org/wp_content/uploads/2022/02/JMESSP13420840.pdf
5. Buzra, U., & Serdari, E. (2023). A comparison analysis of different PV simulation tools using satellite data. *Electrical Engineering*, 105(4), 2485–2492. <https://doi.org/10.1007/s00202-023-01814-6>, **(Impact Factor: 1.63); SCOPUS (CiteScore 3.3)**
6. Buzra, U., MiTrushi, D., Serdari, E., HaliLi, D., & Muda, V. (2022). Fixed and adjusted optimal tilt angle of solar panels in three cities in Albania. *Journal of Energy Systems*, 6(2), 153–164. <https://doi.org/10.30521/jes.952260>, **SCOPUS (CiteScore 1.1)**
7. Serdari, E., Berberi, P., Muda, V., Buzra, U., Mitrushi, D., & Halili, D. (2017). Wind Profile Characteristics and Energy Potential Assessment for electricity generation at the Karaburun Peninsula, Albania. *Journal of Clean Energy Technologies*, 5(4), 310–313. <https://doi.org/10.18178/jocet.2017.5.4.389>
8. Serdari, E., Berberi, P., Muda, V., Buzra, U., Mitrushi, D., & Halili, D. (2017). A Methodology for Optimal Selection of a Wind Power Conversion System Based on Economic Analysis. *Journal of Multidisciplinary Engineering Science and Technology (JMEST)*. Vol. 4 Issue 3, March - 2017

Conference Proceedings Publication (Scopus indexed)

1. Buzra, U., Halili, D., Mitrushi, D., Muda, V., Serdari, E., Berdufi, I., & Berberi, P. (2019). Influence of anthropogenic aerosols in near atmosphere in the city of Tirana on ground budget of solar energy. *AIP Conference Proceedings*. <https://doi.org/10.1063/1.5091322>
2. Halili, D., Buzra, U., Mitrushi, D., Bërdufi, I., Muda, V., Serdari, E., & Berberi, P. (2019). Influence of inclination angle on the efficiency of a flat plate solar collector. *AIP Conference Proceedings*. <https://doi.org/10.1063/1.5091323>
3. Serdari, E., Muda, V., Buzra, U., Bërdufi, I., Halili, D., Halili, M., Mitrushi, D., & Berberi, P. (2019). The feasibility study of a 12 MW grid-connected wind power farm in Albania using RETScreen. *AIP Conference Proceedings*. <https://doi.org/10.1063/1.5099035>
4. Mitrushi, D., Serdari, E., Berberi, P., Bërdufi, I., Buzra, U., Topçiu, D., & Muda, V. (2019). Feasibility study of impact of wind energy potential in Karaburun's area in Albania. *AIP Conference Proceedings*, 2075, 200020. <https://doi.org/10.1063/1.5099034>
5. Buzra U, Berberi P, Mitrushi D, Muda V, Halili D, Berdufi I, Serdari E. Modification of solar energy potential due to anthropogenic aerosols in atmosphere of Tirana. *Proceedings of the international conference on renewable electrical power sources- ICREPS, [S.l.]*, v. 4, n. 1, p. 75-84, june 2017.
6. Buzra, U., Berberi, P., Mitrushi, D., Muda, V., Halili, D., & Berdufi, I. (2016). An estimation of impact of anthropogenic aerosols in atmosphere of Tirana on solar insolation. Part I: Clear day variation of ground insolation. *AIP Conference Proceedings*. <https://doi.org/10.1063/1.4944273>

7. Buzra, U., Berberi, P., Mitrushi, D., Muda, V., Halili, D., & Berdufi, I. (2016b). An estimation of impact of anthropogenic aerosols in atmosphere of Tirana on solar insolation. Part II: Modification of solar energy potential. *AIP Conference Proceedings*. <https://doi.org/10.1063/1.4944274>
8. Halili, D., Berberi, P., Mitrushi, D., Muda, V., Bërdufi, I., & Buzra, U. (2016). Effect of local environmental condition on efficiency solar collectors for production of hot water for domestic use in Albania. *AIP Conference Proceedings*. <https://doi.org/10.1063/1.4944283>
9. Mitrushi, D., Berberi, P., Bërdufi, I., Muda, V., Topçiu, D., & Buzra, U. (2016). A comparative study of satellite estimation for solar insolation in Albania with ground measurements. *AIP Conference Proceedings*. <https://doi.org/10.1063/1.4944285>
10. Bërdufi, I., Berberi, P., Mitrushi, D., Muda, V., Topçiu, D., & Buzra, U. (2016). The performance of a grid connected photovoltaic system Part I: Durisch and Evans energetic models. *AIP Conference Proceedings*. <https://doi.org/10.1063/1.4944282>
11. Mitrushi, D., Berberi, P., Bërdufi, I., Muda, V., Topçiu, D., & Buzra, U. (2016b). Use of satellite solar data for assessment of performance of photovoltaic systems installed in different regions of Albania. *AIP Conference Proceedings*. <https://doi.org/10.1063/1.4944284>

Conferences

- Buzra U., Mitrushi D., Topciu D. Properly design of PV power systems; First Conference organized by the National Institute of Physics (NIP)10 - 11 February 2022 Academy of Sciences of Albani
- Buzra U., Halili D., Muda V., Mitrushi D. Optimum Fixed Tilt Angle of Solar Panels in Different Cities in Albania, 10th International Conference of Ecosystems, June, 25-26, 2020 Tirana, Albania
- Buzra U. Simulation of a PV grid tied PV system in terrace of FIM&IF building. The XXXI International Scientific Online Conference of the Union of Scientists -Stara Zagora, Bulgaria; 3-4 June, 2021
- Buzra U., Halili D., Mitrushi D. Optimal design of hybrid PV-Wind-Battery systems for supply of Microgrids. 1-st International Scientific Conference in Mathematics and Physics, and their applications (1-st ISCMPA), 03 – 04 November 2022. University of Elbasan.
- Buzra U., Mitrushi D., Serdari D., Topciu D., Muda V. Determining of optimal tilt angle of solar panels in three cities in Albania. 9. European Conference on Renewable Energy Systems Ecres 2021 21-23 April 2021 Istanbul / Turkey
- Buzra U., Halili D., Mitrushi D., Muda V., Serdari E., Berdufi I., Berberi P. Influence of anthropogenic aerosols in near atmosphere in the city of Tirana on ground budget of solar energy; jubilee international conference of the balkan physical union 26–30 august 2018 sofia, Bulgaria
- Buzra U., Berberi P., Mitrushi D., Muda V., Halili D., Berdufi I., Serdari E. Modification of solar energy potential due to anthropogenic aerosols in atmosphere of Tirana. The 4th International Conference on Renewable Electrical Power Sources that was held in Belgrade, Serbia, on 17 and 18 October 2016.
- Halili D., Berberi P., Mitrushi D., Muda V., Buzra U., Berdufi I., Serdari E. Influence of Yearly Distribution of Solar Energy on The Feasibility of Solar Collectors in The City of Tirana, The 4th International Conference on Renewable Electrical Power Sources, Sava Center17 and 18 October 2016
- Mitrushi D., Berberi P., Berdufi I., Muda v., Topciu d., Buzra U., Serdari E. Regional Variation LCOE Of Photovoltaic Systems in Albania Using Satellite Solar Data, The 4th International Conference on Renewable Electrical Power Sources, Sava Center17 and 18 October 2016.
- Buzra U., Berberi P., Mitrushi D., Muda V., Halili D., Berdufi I., serdari E. Modification of Solar Energy Potential Due to Anthropogenic Aerosols in Atmosphere of Tirana, The 4th International Conference on Renewable Electrical Power Sources, Sava Center17 and 18 October 2016.
- Muda V., Berberi P., Berdufi I., Mitrushi D., Topciu D., Buzra U., Serdari E. Merging of Ground-Based and Satellite-Derived Data of Surface Solar Radiation in City of Tirana, Albania. The 4th International Conference on Renewable Electrical Power Sources, Sava Center17 and 18 October 2016

Conferences

- Berdufi I., Berberi P., Mitrushi D., Muda V., Topciu D., Buzra U., Serdari E. Empirical Models for Energy Yield of a Photovoltaic System Connected to The Grid The 4th International Conference on Renewable Electrical Power Sources, Sava Center17 and 18 October 2016
- Serdari E., Berberi P., Muda V., Buzra U., Mitrushi D., Halili D., Berdufi I. Wind Profile Characteristics and Energy Potential Assessment for Electricity Generation at the Karaburun Peninsula, Albania, 2nd International Conference on Renewable Energy and Bioenergy (ICREB2016), 29.06-02.07.2016, Constanta, Romania.
- Serdari E., Berberi P., Muda V., Buzra U., Mitrushi D., Halili D., Berdufi I. Feasibility Assessment of a 600 kW Wind Turbine in Sazani Island, Albania, 6 International Conference of Ecosystems (ICE2016), Tirana, Albania
- Buzra U., Berberi P., Mitrushi D., Muda V., Halili D., Berdufi I. An Assessment of Impact of Anthropogenic Aerosols in Atmosphere of Tirana on Solar Insolation 9th International Physics Conference of The Balkan Physical Union, 24-27 August 2015, İstanbul University, İstanbul / Turkey
- Buzra U., Berberi P., Mitrushi D., Muda V., Halili D., Berdufi I. Evolution of Clear Day Solar Radiation as An Indicator of Influence of Anthropogenic Aerosols in Atmosphere on Solar Energy Potential. 9th International Physics Conference of The Balkan Physical Union, 24-27 August 2015, İstanbul University, İstanbul / Turkey
- Berdufi I., Mitrushi D., Berberi P., Muda V., Topciu D., Buzra U. The Performance of a Grid Connected Photovoltaic System Part I: Durisch and Evans Energetic Models. 9th International Physics Conference of The Balkan Physical Union, 24-27 August 2015, İstanbul University, İstanbul / Turkey

- Buzra U., Berberi P., Mitrushi D., Muda V., Halili D., Berdufi I., Mucka A. Temporal Evolution of Solar Energy in Cloudless Days as An Indicator for Changes in Concentration of Aerosols in Atmosphere and In Solar Energy Budget. Septième édition du COLLOQUE FRancophone en Energie, Environnement, Economie et Thermodynamique - COFRET'14 Paris, Cnam - 23 - 24 - 25 avril 2014.
- Berdufi I., Mitrushi D., Berberi P., Jani J., Muda V., Topciu D., Buzra U., Gjonaj M., Hoxhaj F. Estimation Performance of a Photovoltaic System Connected to The Grid by Using Evans and Durisch Models, The 1st International Conference on Research and Education – Challenges Toward the Future (ICRAE2013), 24 - 25 May 2013, University of Shkodra "Luigj Gurakuqi", Shkodra, Albania.

Conferences

- Mitrushi D., Berdufi I., Berberi P., Muda V., Halili D., Buzra U. Comparison of Satellite Estimation of solar Insolation in Albania with Their Ground Estimations, The 1st International Conference on Research and Education – Challenges Toward the Future (ICRAE2013), 24 - 25 May 2013, University of Shkodra "Luigj Gurakuqi", Shkodra, Albania.
- Halili D., Berberi P., Muda V., Mitrushi D., Berdufi I., Kuqali M., Buzra U. Mapping Regional Variation of Cost of Hot Water Produced by Conventional Solar Collectors in Albania, The 1st International Conference on Research and Education – Challenges Toward the Future (ICRAE2013), 24 - 25 May 2013, University of Shkodra "Luigj Gurakuqi", Shkodra, Albania.
- Buzra U., berberi P., Muda V., Halili D., Mitrushi D., berdufi I., Use of Clear Day Solar Radiation for Estimation of Anthropogenic Aerosols in Atmosphere of Tirana. The 1st International Conference on Research and Education – Challenges Toward the Future (ICRAE2013), 24 - 25 May 2013, University of Shkodra "Luigj Gurakuqi", Shkodra, Albania.
- Muda V., Berberi P., Mitrushi D., Halili D., Berdufi I., Buzra U., Kuqali M. An Inventory of Renewable Energy Potential of Region of Karavasta, In Albania. The 1st International Conference on Research and Education – Challenges Toward the Future (ICRAE2013), 24 - 25 May 2013, University of Shkodra "Luigj Gurakuqi", Shkodra, Albania.
- Berberi P., Muda V., Halili D., Mitrushi D., Berdufi I., Buzra U. The Implementation of Bologna Process into Physics in Europe: The Level Master. The 1st International Conference on Research and Education – Challenges Toward the Future (ICRAE2013), 24 - 25 May 2013, University of Shkodra "Luigj Gurakuqi", Shkodra, Albania.
- Berberi P., Muda V., Halili D., Mitrushi D., Berdufi I., Buzra U. The Implementation of The Bologna Process into Physics in Europe: The Doctoral Level. The 1st International Conference on Research and Education – Challenges Toward the Future (ICRAE2013), 24 - 25 May 2013, University of Shkodra "Luigj Gurakuqi", Shkodra, Albania.
- Buzra U., Berberi P. Përdorimi i analizës shumë faktoriale për integrimin e burimeve alternative të energjisë për një rajon të veçuar. Konferenca Kombëtare „Teknologjitë të Avancuara - Rruga Jonë e Zhvillimit “31 Tetor 2011, Universiteti Politeknik – Tiranë.

PROJECTS

01/06/2016 – 01/06/2017

TiNb alloy for biomedical application

- Member of the scientific project, TiNb alloy for biomedical applications
- Measurement of mechanical properties of TiNb alloy by Nanoindentation technique; X-ray spectroscopy etc.
- Scientific visit to the University of Vienna in November 2016.

10/10/2012 – 20/07/2016

Assessment of the potential of the renewable energy in Albania

Member of scientific project

03/09/2015 – 10/09/2015

Materials for Energy Storage and Conversion

Summer school with title, International Summer school on Materials on Energy Storage and Conversion (^mESC-ISS 2015), taken place in the Department of Metallurgical and Materials Engineering (**METU**) from September 3rd to September 6th, 2015.

The 1st International Symposium on Materials for Energy Storage and Conversion was held in Middle East Technical University, Ankara, Turkey from 7th to 9th September 2015.

The school had two bases: one comprised overviews on such topics as SSHS (Solid State Hydrogen Storage), supercapacitors, batteries and fuel cells, and the other encompassed material characterization techniques with an emphasis on in-situ experiments.

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