# Curriculum Vitae

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Family name/	Georgees						
Surname Eiget a gas a							
First name	Banipal					3 00	
Middle name	Nanno						
Last Name	Yaqob					eth /	
E-mail	Banipal.yaqob@epu.edu.iq						
Date of Birth	5/1/1976						
Place of birth	Erbil-Iraq					2	
Academic title	Lecturer						
Address	Ankawa, Erbil, Iraqi Kurdistan Region						
Office Address	Mechanical and Energy Engineering Department / Erbil Technical Engineering College / Erbil Polytechnic University / Erbil-Kurdistan Region-Iraq						
Mobile	(00964) 750 745 6638						
Preparatory	Abdul Al-M	lalek Secondary	governorate	Kirkuk	waar.	1992-1993	
graduated from	School		governorate	MITKUK	year	1992-1993	
Date of first assignment in university	1993-1994						
Academic attainments	Certificate	University	College	Department	Graduation year	Country	
	B. Sc.	Tekrit	Engineering	Mechanical Engineering	1996-1997	Iraq/Tekrit	
	M. Sc.	Technology	Engineering	Mechanical Engineering	2000	Iraq/Baghdad	
	Ph. D.	Al- Mustansiriyah	Engineering	Mechanical Engineering	2007	Iraq/Baghdad	
Academic title attained	Academic title				Date of attainment		
	Assistant Lecturer				9/8/2004		
	Lecturer				15/2/2007		
	Assistant Professor				31/10/2022		
General specialization	Mechanical Engineering – Thermal Power						
Specific specialization	Two-Phase Flow						
Ph.D. Thesis Title	A comparative study between the capacitor, auto-transformer, and transformer techniques for void fraction measurements in two-phase flow.						
Languages:				-			
English	High level (writing/speaking/reading)						
Kurdish	Fluent level (writing/speaking/reading)						
Arabic	Fluent level (writing/speaking/reading)						
Turkish		Medium level (speaking)					
Assyrian	Native tong						
Assignment and pos	_						

- Assignment and posts:
- 1. From 4/2000 to 8/2000 / military service period, working as maintenance engineering on military vehicles/ Electrical Instrument Engineering/Kirkuk.
- 2. I worked in Kirkuk Technical College as a lecturer for the following subjects;

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- A. Fluid Mechanics for 2<sup>nd</sup> stage in Refrigeration and Air-Conditioning Engineering Department (2000-2007) and in Fuel and Energy Engineering Department, (2000-2001).
- B. Power Plants for 4<sup>th</sup> stage in Refrigeration and Air-Conditioning Engineering Department, (2001-2007).
- C. Supervising on Summer Training in North Oil Company and Power Plant-DIBIS, (2003-2007).
- D. Teaching a course of Power Plant (Gas and Steam Power Plant), theoretically and experimentally, for the employer of the General Directorate of Electrical Production-Sallahadin-Brach-Kirkuk, for one month, (2006 and 2007).
- 3. Now I am an instructor in Erbil Technical Engineering College/Mechanical and Energy Engineering Department for the following subjects:
  - a. Fluid Mechanics for 2<sup>nd</sup> stage (2008-to present).
  - b. Computer application (MATLAB & FORTRAN) for 3<sup>rd</sup> stage (2009-2012).
  - c. Power Plant for 4th stage (2010-to present).
  - d. Fluid Mechanics for 2<sup>nd</sup> stage (2010-2011 and 2012-2013) for Civil Eng. Department.
  - e. Advanced Fluid Mechanics for M.Sc. students (2014-2015, 2017-2018, 2020-2021, 2023-2024).
  - f. Computational Fluid Dynamic (CFD) for Ph.D. students (2020-2021, 2023-2024).
- 4. Head of Refrigeration and Air-Conditioning Engineering Department / Erbil Technical Engineering College from (1/9/2012) to (1/10/2015)

## Committees participated in the college and university:

- 1- Examination committee member (from 2005 to 2006) / Ref. & Air-Cond. Eng. Dept. / Kirkuk Technical College/Foundation of Technical Education.
- 2- Scientific committee member (from 2007 to 2020, 2021-2022, 2023-to present) / Mechanical & Energy Eng. Dept. / Erbil Technical Engineering College/ Erbil Polytechnic University.
- 3- Head of quality assurance committee (from 2010 to 2012) / Mechanical & Energy Eng. Dept. / Erbil Engineering College/ Erbil Polytechnic University.
- 4- Examination committee member (from 2011 to 2018) & (2020 to present) / Mechanical & Energy Eng. Dept. / Erbil Technical Engineering College/ Erbil Polytechnic University.
- 5- Head of examination committee (from 2012 to 2017) / Mechanical & Energy Eng. Dept. / Erbil Technical Engineering College/ Erbil Polytechnic University.
- 6- Postgraduate committee member (from 2015 to 2020, 2021-2022, 2023-to present) / Mechanical & Energy Eng. Dept. / Erbil Technical Engineering College/ Erbil Polytechnic University.
- 7- Inference research committee member in Erbil Polytechnic University (from 2016 to 2020).
- 8- Head of Fourth Grade Graduation Projects committee in Erbil Polytechnic University/Mechanical & Energy Eng. Department (from 2020 to present).

## Published Researches:

- 1- Abdulla A. Kendoush, Ghanim K. Abdul-Sada, and Banipal N. Yaqob, (A Nonintrusive Auto-Transformer Technique for Measuring Phase Volume Ration in Oil-Water Two-Phase Stratified Flow). Journal of Petroleum Science and Engineering, 54 (2006) 25-33.
- 2- Banipal N. Yaqob and Ehsan F. Abbas, (Effect of Crude Oil-Water Two-Phase Flow on Pump Performance). Eng. & Tech. Journal, 27 (9) (2009) 1766-1774.
- 3- Banipal N. Yaqob and Handreen A. Saber, (Investigation of the Overall Efficiency of Steam Jet Ejector over a Range of Working Conditions). Zanco Journal of Pure Applied and Science, 29 (1) (2017) 120-126.
- 4- Reenas Oraha Cannon, Nazar Faraj Antwan, and **Banipal Nanno Yaqob**, (Investigation of Solar Water Heating System in Erbil City: An Experimental and Numerical Study). International Journal of Renewable Energy and Research, 12 (3) (2022): 1225-1233.
- 5- Bahzad Darwesh Darwesh, Idres Azzat Hamakhan, and **Banipal Nanno Yaqob**, (Thermal Enhancement of Solar Energy Storage Using Phase Change Materials), International Journal of Heat and Technology, 40 (3) (2022): 758-766.
- 6- Bashir E. Kareem, Ahmed M. Adham, and **Banipal N. Yaqob**, (Performance Enhancement of a Ventilation System in Hot and Dry Climate Using Air-PCM Heat Exchanger). International Journal of Heat and Technology, 40 (3) (2022): 773-780.
- 7- Zhyan F. Hassan, **Banipal N. Yaqob**, & Ranj S. Abdullah, (A Study of Greenhouse Thermal Management by Flat Plate Solar Collector Using Al<sub>2</sub>O<sub>3</sub>-Water Nanofluid). International Journal of Energy Production and Management, 8 (2) (2023): 71-79.
- 8- Bashir E. Kareem, Ahmed M. Adham, and Banipal N. Yaqob, (Design and Optimization of Air to PCM Heat Exchanger Using CFD). Arabian Journal for Science and Engineering, Published online: 13 October 2022.
- 9- Banipal N. Yaqob (Gas-Liquid Two-Phase Flow Pressure Drop in Flattened Tubes: An Experimental and Numerical Study), Journal of Thermal Engineering, Accepted paper, 2022.
- 10- Aveen T. Mohsin and Banipal N. Yaqob, (Experimental Investigation on Improving Lifetime of Peripheral Pump Impeller under Cavitation Using Different Techniques). International Journal of Heat and Technology, 40 (5) (2022): 1258-1264.
- 11- Bashir E. Kareem, Ahmed M. Adham, and Banipal N. Yaqob, (Experimental analysis of air-multiple PCM heat exchanger in evaporative cooling systems for supply air temperature stabilization). Journal of Building Engineering, 82, 1 April 2024, 108269.
- 12- Bashir E. Kareem, Ahmed M. Adham, and **Banipal N. Yaqob**, (Experimental and numerical investigation of a real-scale air to multiple PCM heat exchanger). Journal of Building Engineering, Volume 89, 15 July 2024, 109323.

## Conferences:

- 1- Ghanim K. Abdul-Sada and Banipal N. Yaqob, (Water turbidity effect upon performance of solar pond), Sharjah Solar Energy Conference, Sharjah, UAE, 19-22 February 2001: incorporating the 7th Arab International Solar Energy Conference and Regional World Renewable Energy Congress.
- 2- Abdulla A. Kendoush and **Banipal N. Yaqob**, (A Comparative Study between the Methods of Measuring Void Fraction in Air-Water Two-Phase Flow), ASME Fluids Engineering Division Summer Conference, August 10-14, 2008, Jacksonville, Florida, USA.
- 3- Banipal N. Yaqob and Iyd E. Maree (Effect of Clarity of Water upon Performance of Solar Pond in Iraq). 1<sup>st</sup> Scientific Research Conference of Technical Education, 20-21 October 2010, Duhok, Kurdistan Region, Iraq.
- 4- **Banipal N. Yaqob** (Experimentally Investigation the Effect of Oil-Water Phase Inversion on Pump Performance) 7<sup>th</sup> International Conference on Computational Heat and Mass Transfer, July 18-22, 2011, Istanbul, Turkey.
- 5- Banipal N. Yaqob (Experimental Investigation of Two-Phase Flow Pressure Drop In Flattened Tube), 9<sup>th</sup> European Fluid Mechanics Conference, 9-12 September 2012, Rome, Italia.

#### Postgraduate Supervision:

- 1. Experimental and theoretical study of solar water heating system in Erbil city. Reenas (M. Sc. Thesis) 2016-2017.
- 2. Thermal Enhancement of Solar Energy Storage Using Phase Change Materials. Bahzad (M. Sc. Thesis) 2021-2022.
- 3. A Comprehensive Analysis of Cavitation Effect on a Centrifugal Pump Performance and Impeller Lifetime Under Different Operation Conditions. Aveen (M. Sc. Thesis) 2021-2022.
- 4. Thermal Performance Analysis of a Flat Plate Solar Collector for Greenhouse Heating System Using Nano-Fluid. Zhyan (M. Sc. Thesis) 2021-2022.
- 5. Investigation of Using PCMs in Residential Building for Improving Indoor Thermal Comfort in Hot and Dry Climate. Bashir (Ph.D. Student) 2021-2023.
- 6. Experimental and Numerical Study on Thermal Performance and Thermocline Structure Optimization of Thermal Storage Tank with PCM Included. Ahmed (International Ph.D. student), 2023-

#### Evaluation committee of M.Sc. or Ph.D. Theses:

# Curriculum Vitae

- 1. Sirwan Faroug Omer "Wind Turbine Driven Heat Pump System", M.Sc. Thesis, 16-9-2020.
- 2. Sawan Hawro Khaleel "Thermodynamic Optimization of Solar Water Heating System in Erbil City", M.Sc. Thesis, 16-6-2022.
- 3. Saman Jalal Saleh "Enhancement of Automobile Cabin Using An Auxillary Solar Assisted Lithium-Bromide Absorption Air Cooling System", M.Sc. Thesis, 16-4-2023.
- 4. Darawan Bazyan Dhahir "Performance Enhancement of a Household Refrigeration System Using Phase Change Materials (PCMs) and Nanoparticles", M.Sc. Thesis, 17-5-2023.
- 5. Sally Afram Polus "Performance Enhancement of Photovoltaic (PV) Using Solar Tracking System and Cooling Panel Surface.", Ph.D. Dissertation, 19-10-2023.
- 6. Shaswar Omer Osman "Experimental and Numerical Analysis of the Mixed Convection Heat Transfer from Two Aligned Horizontal Heated Cylinders in a Vented Square Enclosure." M.Sc. Thesis, 11-01-2024.
- 7. Kawa AbdulAlkhany Abdullah "Study of Thermal Plume of VRF Air Conditioners for Cooling Season in Semi-Closed Spaces in High-Rise Buildings." Ph.D. Desertation, April 2, 2024. (Scintific evaluation).

### Computer and Software Skills:

- 1- Proficiency with Microsoft software (Word, Excel, Power point)
- 2- Proficiency with Auto CAD, Matlab, and FORTRAN language.

## Memberships:

- 1- Member of Iraqi Engineers Union, ID No. 82844
- 2- Member of Kurdistan Engineers Union, ID No. 6479
- 3- Member of Kurdistan Teachers Union, ID No. 11041

## Interests:

- 1. Sport in general (football, basketball, tennis ... est.)
- 2. Reading scientific papers and spiritual books.