


## Curriculum Vitae

<i>Family name/ Surname</i>	<i>Georgees</i>						
<i>First name</i>	<i>Banipal</i>						
<i>Middle name</i>	<i>Nanno</i>						
<i>Last Name</i>	<i>Yaqob</i>						
<i>E-mail</i>	<i>Banipal.yaqob@epu.edu.iq</i>						
<i>Date of Birth</i>	<i>5/1/1976</i>						
<i>Place of birth</i>	<i>Erbil-Iraq</i>						
<i>Academic title</i>	<i>Lecturer</i>						
<i>Address</i>	<i>Ankawa, Erbil, Iraqi Kurdistan Region</i>						
<i>Office Address</i>	<i>Mechanical and Energy Engineering Department / Erbil Technical Engineering College / Erbil Polytechnic University / Erbil-Kurdistan Region-Iraq</i>						
<i>Mobile</i>	<i>(00964) 750 745 6638</i>						
<i>Preparatory graduated from</i>	<i>Abdul Al-Malek Secondary School</i>	<i>governorate</i>	<i>Kirkuk</i>	<i>year</i>	<i>1992-1993</i>		
<i>Date of first assignment in university</i>	<i>1993-1994</i>						
<i>Academic attainments</i>	<i>Certificate</i>	<i>University</i>	<i>College</i>	<i>Department</i>	<i>Graduation year</i>	<i>Country</i>	
	<i>B. Sc.</i>	<i>Tekrit</i>	<i>Engineering</i>	<i>Mechanical Engineering</i>	<i>1996-1997</i>	<i>Iraq/Tekrit</i>	
	<i>M. Sc.</i>	<i>Technology</i>	<i>Engineering</i>	<i>Mechanical Engineering</i>	<i>2000</i>	<i>Iraq/Baghdad</i>	
	<i>Ph. D.</i>	<i>Al-Mustansiriyah</i>	<i>Engineering</i>	<i>Mechanical Engineering</i>	<i>2007</i>	<i>Iraq/Baghdad</i>	
<i>Academic title attained</i>	<i>Academic title</i>					<i>Date of attainment</i>	
	<i>Assistant Lecturer</i>					<i>9/8/2004</i>	
	<i>Lecturer</i>					<i>15/2/2007</i>	
	<i>Assistant Professor</i>					<i>31/10/2022</i>	
<i>General specialization</i>	<i>Mechanical Engineering – Thermal Power</i>						
<i>Specific specialization</i>	<i>Two-Phase Flow</i>						
<i>Ph.D. Thesis Title</i>	<i>A comparative study between the capacitor, auto-transformer, and transformer techniques for void fraction measurements in two-phase flow.</i>						
<i>Languages:</i>							
<i>English</i>	<i>High level (writing/speaking/reading)</i>						
<i>Kurdish</i>	<i>Fluent level (writing/speaking/reading)</i>						
<i>Arabic</i>	<i>Fluent level (writing/speaking/reading)</i>						
<i>Turkish</i>	<i>Medium level (speaking)</i>						
<i>Assyrian</i>	<i>Native tongue</i>						
<i>Assignment and posts:</i>							
<ol style="list-style-type: none"> <li><i>1. From 4/2000 to 8/2000 / military service period, working as maintenance engineering on military vehicles/ Electrical Instrument Engineering/Kirkuk.</i></li> <li><i>2. I worked in Kirkuk Technical College as a lecturer for the following subjects;</i></li> </ol>							

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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,).*
  - f. *Computational Fluid Dynamic (CFD) for Ph.D. students (2020-2021).*
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).*

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### 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  $Al_2O_3$ -Water Nanofluid). *International Journal of Energy Production and Management*, Accepted article, 2022.
- 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.

### 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*,

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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-**

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

1. **Sirwan Farouq 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.**

### 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**

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*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.*