

Farid Vahedi (B.Sc.)

Position

Member of Engineering Unit

Address

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Date of Birth

07/Jun/1990

Qualification

- Bachelor of Engineering in Mechanical Engineering – Thermo Fluid - Azad University, Tehran South Branch, Iran. 2008 - 2012
GPA: 16.19/20 (3.2/4) - Last Two years GPA: 16.70/20 (3.5/4)
- National Diploma in Mathematics and Physics - The “Moallem” Educational Complex. 2003 - 2007
GPA: 18.73/20

Research Interests

- Energy Conversion, Sustainable Energy Systems, Energy Harvesting & Conservation, Clean Energy technologies
- IC engines, Combustion, Energy efficient vehicles, Bio-fuel and Natural gas Flames and Engines, Air pollution formation and control
- HVAC Systems, Building Ventilation, Double Façade Buildings, Net-zero Energy buildings, Refrigeration, Heat Transfer, Thermodynamics, Steam Systems, Hydronics Systems
- Computational Fluid Dynamics - Fluid Mechanics and Fluid sciences - Thermo fluids Modeling

Language

- English: Fluent
- Farsi: Native
- Arabic: Familiar

Awards:

- Golden Merit Awards from Invention & New Product Exposition (INPEX) 2012
As a member of Bio-fuel Research Team (BRTeam) - Agriculture Biotechnology Research Institute of Iran (ABRII).

Specific Qualification

- CATIA
- MATLAB
- ANSYS Fluent
- AutoCAD
- Carrier
- SKF Software
- Industrial Safety, Industrial standards, Overhaul maintenance and bearing Fault Diagnoses, Industrial maintenance and repairing, High pressure and low pressure Electrical Enclosure

Research Experiences

- Bio-fuel Production Technology - Machinery - Production - Applications - Engines Mar./ 2011 – Present
Bio-fuel Research team (BRTEAM) - Agriculture Biotechnology Research Institute of Iran (ABRII)
- Variable Geometry Turbo Charging in Internal Combustion Engines Nov. / 2011 – Mar. / 2012
An Overview Study in Increase of Fuel Efficiency and Reduction of the Environmental Impacts
- Cold storage with Ammonia refrigeration systems - Two-Circuit - 5000 Ton Feb. / 2012 – Jun / 2012
Calculations - Insulations - Equipments selection - Plant Layout
- Bearing and Shaft Analysis Feb. / 2011 – May / 2011
Calculation - Loading consideration - Static and Dynamic Balancing - Bearing Selection (SKF) -
Determination of Variable Centre of Gravity - Friction and Fatigue Analysis
- Refrigeration Cycle Analysis Dec. / 2011 – Feb. / 2012
Thermal efficiency - CFD analysis, Optimization and Various Fluids Comparison using FLUENT
- Effects of Static and Dynamic Balancing of an Automotive Chassis Subsystem Mar. / 2012 – Jun / 2012
Calculation, Demonstration and Fault Diagnosing
- Investigation of the advantages and disadvantages of fuel Injector and Carburetor performances in
Internal Combustion Engines. Mar. / 2011 – May / 2011
- CAD Project- Disc Coupling Modeling Apr. / 2010 – Jun / 2010
Part Modeling, Assembly and Drafting using CATIA
- Experimental Analysis of Various Metals Deformation and Strain Measurement in Metals
Dec. / 2011 – Feb. / 2012
Griffith Theory – Literature Review - Experimental Set-up including Strain Gauge Arrangement Study

Work Experiences

- Researcher - Simulator and Designer in first production of Bio-Fuel machinery in IRAN.
Bio-fuel Research Team (BR TEAM) – Agriculture Biotechnology Research Institute of Iran (ABRII)
Engineering team - (part Time) Mar. /2011 – Oct. /2012
- CFD Analyzer (Part Time)
AZMOON SAN'AT PAYA GOSTAR Co. Sep. /2011 – Feb. /2012
- Employee (Part Time)
Business department - "PARS POLISH IRANIAN Co." Oct. /2009 – May /2010
- Internship at "GHADARKAR E.P.C Co." (Part Time) Oct./2012 – Present
Building Workshop- Mechanical Department - Ventilation and Mechanical Room- Double Façade building

Teaching Experiences

- Fundamentals of Electrical circuits (Teacher Assistant) Feb. / 2011 – May / 2011
- Teacher
Physics department – “Twenty “Educational Group
Private Physics Tutor Sep. /2008 – Oct. /2009
- Tutor and School Counselor
“JOKAR” Educational Group Mar. /2009 – Jun. /2009
“TWENTY “Educational Group Sep. /2008 – Sep. /2009

Publications

- Double Façade Buildings
CFD, Heat Transfer and Overheating Analysis, HVAC Design, Energy Efficiency, Shading and Glazing (To be published on 2013)

Related Links

- **The Bio-fuel Research Team (BRTeam)**, Agricultural Biotechnology Research Institute of Iran (ABRII)
www.brteam.ir/

Personal Information

Gender: Male

Nationality: Iranian

Marital Status: Single