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 <https://ch.mathworks.com/matlabcentral/profile/authors/3133835/badges>

Summary

RESEARCH REPORT

"Characterization & Formulation of gtl derived synthetic Jet Fuels". Chapter-7; page 72-92

PUBLISHED PAPER

J. Strohaber, J. Abul, M. Richardson, F. Zhu, A. A. Kolomenskii, and H. A. Schuessler, "Cascade Raman sideband generation and orbital angular momentum relations for paraxial beam modes," Opt. Express 23, 22463-22476 (2015)

Fourth Visualization Development Competition 2012 (organized by Texas A&M university and Qatar Foundation). Topic: "Development of Visualization Models for the Correlations between Synthetic Jet Fuels Hydrocarbon Structure and Their properties. Dr.Nimir Elbashir, and Jahanur Rahman"

Jahanur rahman, abul hasanat muhammad. "Versatile Gate for Artificial Neural Network Circuit." Advanced Materials Research. 433 - 440.7541 (2012): n. page. January. 2012. 10.4028/www.scientific.net /AMR.433-440.7541 .

Abul Rahman, Mariam AlMeer, Dhabia AlMohanadi, Haider Ramadhan, Bilal Raza, Elfatih Elmalik, Nimir Elbashir. "Characterization of synthetic jet fuel blends: Experimental and statistical studies." PETR:76;Chemistry of Petroleum and Emerging Technologies.26th March .2012 <http://sandiego2012onsite.acs.org/i/57789>

Jahanur Rahman, Abul hasanat Muhammad. "Hydrocarbon fuelbased hybrid fusionfission nuclear reactor." Qatar Foundation Annual Research Forum. No. 2012.

"Development of Visualization Models for the Correlations between Synthetic Jet Fuels Hydrocarbon Structure and Their Properties." Pittsburgh, Philadelphia (October 2012). Dr.Nimir Elbashir, and Jahanur Rahman

Nimir Elbashir, Mariam AlMeer, A. H. M. Jahanur Rahman, Dhabia AlMohannadi, Haider Ramadhan,Elfatih Elmalik, and Bilal Raza. (2011). Experimental and Statistical Studies for the Design of Novel Synthetic Jet Fuels Derived from Natural Gas. Qatar Foundation Annual Research Forum Proceedings: Vol. 2011, EGPS3. DOI: 10.5339/qfarf.2011.egps3 <http://www.qscience.com/doi/abs/10.5339/qfarf.2011.egps3>

Experience

 **Operatons and Maintenance Engineer**

VOLAR Trading Company

Nov 2018 - Present (2 years +)

1) Advancement and enhancing new cooling and heating technologies i.e. THERMOELECTRIC cooler/heater, ultrasonic humidifier, variable compression ratio / variable speed multi-stage compressor for high torque with low noise, variable metering devices like thermostatic expansion valves (TXVs) or constant capillary piston tube etc.

2) Installation & Maintenance of Low Voltage and High Voltage appliances like 4k UHD TV (10bit HDR (8bit RGB + 2bit FRC frame control rate), Helmholtz-Kohlrausch effect color saturation, super-resolution, Anti-Blur effect, phase shift array 3D beamforming), Photo-Enhanced (QDEF), Photo-Emissive (QDCF, QDPR), Electro-Emissive (AMQLED, AMOLED), Ceramic Oven, Refrigerator with multi-cooling stages, Central and Non-Central Air conditioners (HVAC), 3-phase & 1-phase BLDC motor etc.

3) Improvement of different starter mechanism and power balancer circuit for high load motor, Delta-Y starter, split capacitor, variable impedance rotor, excitor, Inverter etc.

4) Mechanical stress and strain distribution analysis on products, metallurgy and crystallography etc. SolidWork 3D, AutoCAD, 3D printing, Shielded Metal Arc Welding (SMAW) process (aka MMAW or stick) and the Gas Tungsten Arc Welding (GTAW) process (aka TIG) at CC (constant current), Gas Metal Arc Welding (GMAW) process (aka MIG) and the Flux Cored Arc Welding (FCAW) process (aka flux core) at CV (constant voltage) etc.

5) Differential calorimeter for enthalpy and entropy condition analysis, X-ray diffractometer, Liquid & Gas Chromatography with Ion-Flame analyzer, (Laser Ablation Inductively coupled Plasma Mass spectroscopy) LA-ICP-MS, Reflux Distiller, Collinear Femtosecond absorption spectroscopy, surface plasmonic nonlinear photon analysis etc.



Electrical Electronic Engineer

al amani construction company

Jan 2016 - Oct 2018 (2 years 10 months)

Instrument panel, RTD, SCR, SCS, MCB, DELTA-Y STARTER for 3 phase motor, split phase motor, inverters, PWM, SQUID sensors (Hall effect, Peltier, Pyroelectric), VFD (variable frequency drive), PLC (programmable logic controller), PID, filters, coke, ballast, alternator, converter, inverters, MCB (main circuit breaker), isolator, relay, Solid State Relay, Residual Current Detectors, Overcurrent Protection, Negative Phase Detector, switching transformer, op-amp, modulator/encoder, harmonics etc.



Research Assistant

Texas A&M University

Jan 2013 - Dec 2015 (3 years)

Fast beam collinear laser spectroscopy for isotope analysis, experimental data analysis and software development, TOF and mass spectroscopy, nonlinear optics (light scattering)



Information Technology worker

Texas A&M University College of Engineering

Jan 2008 - Dec 2013 (6 years)

1- Diagnosis and maintenance of client's office computer and printers hardware including support for software, websites, email, network connectivity, account/domain access, and various computer related problems both in person and over the phone. Maintenance of Audio-Visual multimedia equipments for Teleconference including Tamulink-wpa, TTVN-WAN network by Techno-Q and digital classroom equipments.
2- Respond to online customer service inquiries as an IT help desk supporter using TAMUQ KEYSTONE website. Manage the hardware repair and maintenance of mainframe server equipment (Apple Xserver, Dell), Mass Storage blade RAID/SAN, online hard drive (SAS/SATA/SCSI/HDD/SDD) imaging and network connection monitoring and troubleshooting. Programmed and performed high performance computational algorithm

on TAMUQ SUQOOR supercomputer using multithread GPUs and CPUs for research purposes based on Linux server. Hard drive backup. UPS simulation for backup power. FPGA Xilinx programming.

3- Perform other related IT duties as required including programming using PowerShell, UNIX bash, ms-dos script, Xcode, C++, Matlab, java/html, Fortran etc. on Windows, MacOS and Linux. website design – Adobe, Video editing, mobile app programming. (Microsoft ImagineCup 2013 semifinalist for Mobile App creation using Microsoft Visual). TAMUQ Robotics club member and programmed LEGO robots for competition.

4- Skilled in Reprographic techniques like plotter, inkjet/laser jet printer HP, scanning using high end laser, STEM (scanning-tunneling electron microscope), 3D Printing (plastic and powder ink), 3D holographic visualization programming, Video Editing, Color Control, Photography, Digital Art Production, Video Projection, Audio Equalizer and MIDI. Managing DNS, POP/IMAP, LDAP, DHCP, 802.1X, TCP/IP and VOIP protocol. Network ethernet and optical cable patching and connection. Windows driver (*.ini, *.dll) and MacOS driver (Kext) editing, certificate updating, Encryption and compression.



Teaching Assistant (Tutor)

Texas A&M University

Jan 2010 - May 2013 (3 years 5 months)

MATH251 (2010) and Physics222 (2013) at Texas A&M university



Scientific Researcher

Texas A&M University

Jan 2009 - Dec 2012 (4 years)

- Done research under the patronage of Qatar National Research Fund (QNRF) for Chemical department (UREP_11-151-2-057) and Electrical department (UREP_07-100-02-026)
- Chemical lab equipment operation (ion detector, gas chromatography, bomb calorimeter, mass spectrometer etc.)
- Hardware and software troubleshooting for desktop, laptop, printers etc.
- AV (multimedia audio-visual) equipment management
- Helpdesk management and Server installation
- Software and OS installation
- Software programming Experience: Matlab, Microsoft Office, Mac OSX, Windows, Aspen, SolidWork, PowerWorld, MathCAD, C++, Paraview, MultiSim, LabView, Linux, PSIM, PSCAD, UltiBoard, Intel Fortran
- Developing program for optimization and multi-resolution process control by using artificial neural network

SUMMER INTERNSHIP EXPERIENCE:

1. Qatar National Cement Company in Qatar (Q.N.C.C)(2007)
2. RasGas Company (RG) (2008)
3. Qatar Construction & Engineering Company (Qcon.)(2010)



Researcher

Texas A&M University

Dec 2009 - Dec 2011 (2 years 1 month)

- Worked as research student for Dr. Hans Schuessler (Project: Utilizing Laser Spectroscopy of Noble Gas Tracers for Mapping Oil and Gas Deposits). (2009-2010)
- Worked as research student for Dr. Haitham Abu-Rub (TECHNO-ECONOMIC ANALYSIS OF SOLAR PV/BATTERY/ FUEL ENGINE BASED HYBRID SYSTEM FOR TELECOM SECTOR IN QATAR) (2010-2011)
- Worked as research student for Dr. Abdel Wahab, Dr. Patrick Linke and Lawen Johannes (Industrial Water Discharge and Biocide Fate Simulations with Nonlinear Conversion) (2010)
- Worked as research student for Dr. Nimir Elbashir (Characterizations and Formulation of Synthetic Jet Fuels) and (Development of Novel Fischer-Tropsch Reactor Technology for Operation in Near Critical and Supercritical Fluids Condition) (2011-2012)



Summer Intern

Qatar Engineering & Construction Company W.L.L

Jul 2010 - Aug 2010 (2 months)

Worked with arc welding, diesel engine overhaul in car machine shop, analysis of pipe and valve fitting, hydrodynamic testing of oil tank, observe catalysis process FT reactor in ORYX GTL co. and Urea process in QAFCO



Summer Intern

ExxonMobil Rasgas Inc

Jul 2008 - Aug 2008 (2 months)

- 1- (Electrical section) Analyse system process in substation like SF6 switchgear and power control panel for tap changing transformers, performance of gas turbine generator and its NOx effect, VFD (variable frequency drive) for controlling 3-phase motors
- 2- (Chemical section) Observe LNG cooling process, Air separation unit, slug catcher, Selexol and Claus process.



Summer Intern

QATAR NATIONAL CEMENT COMPANY

Jul 2007 - Aug 2007 (2 months)

- 1- (Electrical section) Analyse power distribution switch panel; HV, MV and LV switchgears; 3-phase transformers, electroplate separation unit for filtering dust.
- 2- (Chemical section) Observe calcination process, kiln process, vertical cylinder and horizontal ball system crusher mill for converting lime stone, sand etc into powder

Education



Texas A&M University

Bachelor of Science (BSc), Electrical (power, telecomm and electronics) and Chemical Engineering
2007 - 2012
minor (math and chemistry)



College of the North Atlantic

Associate's degree, Electronic and Telecommunications Engineering Technology/Technician
2004 - 2007
Technology diploma (Telecommunication & electronic eng.)

Licenses & Certifications



Technology Innovation and Entrepreneurship Program - Qatar Science & Technology Park
Issued Nov 2013 - Expires May 2014



TOC Fundamentals and Critical Chain Project Management - CGR Group, (MENA & MINDS)
Issued Jun 2014 - Expires Jun 2014



Introduction to Cybersecurity - Cisco Networking Academy
1010237770

Skills

Research • Information Technology • Engineering • Research Projects • Programming • Quantitative Research • Scripting • Solidworks • Data Visualization • Matlab

Honors & Awards



Exxonmobile Scholarship - Exxonmobile
2006



Presidential award (Dean's list, honor)



Microsoft ImagineCup award - Microsoft
2013



3D visualization award - Texas A&M university
2012



3rd International Gas Processing Symposium Award - Qatar University
2011



Chemical Engineering Excellence Research Award - Texas A&M university
2012