

► Vibhor Jajoo

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Objective

I am looking for a permanent (Ph.D.) or temporary (6-12 months internship) position in a group wherein by exercising my skills I can contribute to quality research as a member starting in May '13.

Education

DEGREE	College/Board/University	CGPA	Completed on
Integrated Bachelor & Masters of Technology in Mechanical Engineering: (4+1yr) Spl: Thermal & Fluid	Indian Institute of Technology B.H.U, IIT-BHU, Varanasi	6.5/10	Expected May - 2013
Senior Secondary School Certificate Examination - 2007 (12 th Grade)	Aligarh Muslim University, Aligarh	79.25%	2007
High School Examination -2005	Saraswati Vidya Mandir, Kasganj	79.16%	2005

Patent (In Application)

- Indian Patent 2112/DEL/2009 "MINIMUMA POLLUTING 12-STROKE INTERNAL COMBUSTION ENGINE" Ordinary individual application, 7 claims, filed on 12th October 2009..
- Indian Patent 384/DEL/2010 "ELLIPTICAL CYLINDER AND PISTON VALVE ARRANGEMENT FOR AN INTERNAL COMBUSTION ENGINE" Ordinary Individual application, 6 claims, filed on 22nd February 2010.

Publication

- "Alternative Fuel for promising future of transportation industry" Submitted in ASME 2012 International Mechanical Engineering Congress & Exposition, IMECE2012-93028; will be held in Houston, 9-15 Nov 2012.
- "A Variable Compression engine with varying crankshaft length" Submitted in ASME 2012 International Mechanical Engineering Congress & Exposition, IMECE2012-93152; will be held in Houston, 9-15 Nov 2012.
- "Promising Biofuels for sustainable mobility industry: A review" in international seminar and workshop on Energy, sustainability and development; Will be held in Guwahati (India); 12-14 October, 2012.
- "Tata Nano: World's Cheapest car future prospect and current market" Extended abstract submitted in SAE Momentum magazine, September 2012 issue.
- "Numerical study of flame over electric wire in microgravity" in 39th COSPAR Scientific assembly; G0.1-0022-12; held in Mysore (India), July 14-22, 2012. COSPAR Grant recipient of € 550 for conference.
- "Numerical analysis of heat transfer for axisymmetric flame in microgravity" in ASME 2012 Summer Heat Transfer Conference, HT2012-58513; held in Puerto Rico (USA), July 8-12, 2012. Submitted in ASME Journal of Heat Transfer; HT-12-1402.
- "Fire Safety in Space" in National conference on Advances in Mechanical engineering and emerging technologies; AMEET -003, held in Sultanpur (India), April 7-8, 2012.
- "Indian Transportation Industry: Environmental Concerns, Issues & Development" in National Seminar on Environmental Concerns and Sustainable Development: Issues and Challenges for India, March 2-4, 2012.
- "Solving the Carbon Problem: promoting a sustainable future for the transportation industry will benefit the welfare of humankind" Extended abstract published in SAE Momentum magazine, March 2012 issue pp. 6-7.
- "Effect of Gravity on Combustion behavior of a wire: Microgravity Combustion" in 26th Indian Engineering Congress, Institution of Engineers', 26IEC/TP/306/2011-12; held in Bangalore, December 15-18, 2011.
- "Experimental Study on Ignition limit of overloaded electric wire in low oxygen microgravity region" in 49th Symposium on combustion, Combustion Society of Japan, D213; held in Tokyo, December 5-7, 2011.
- "Analysis of offset Crankshaft piston arrangement" Combustion Institute (Indian Section) 22nd National Conference on IC Engine & Combustion, NCICEC-2011-1-019, held in Calicut, December 10-13, 2011.
- "Hybrid Adsorption Refrigeration" in 10th National Conference on Industrial Problems on Machines and Mechanisms, IPRoMM-2010-41, held in Jaipur, December 17-18, 2010.

Research Projects

- "Fire Safety in Space: Ignition of wire" Visiting research student supervised by Prof. Osamu Fujita in Hokkaido university, Japan in summer 2011. Goal was to draw flammability map for high current condition & Oxygen concentration below 21% & to analyze effects of residual gases & gravity on ignition limit.
- "Combustion modeling of a Compression Ignition Engine" Goal is develop a computer program for a CI Engine, Project for award of degree Bachelor of Technology supervised by Dr. J. V. Tirkey.
- "EFFI CYCLE" Goal was to design & fabricate an energy efficient, aerodynamic & ergonomic entirely human powered three wheeled cycle driven simultaneously or alternatively by two drivers. I lead the team of eight members and qualified virtual round for the finale organized by SAEINDIA.
- "BAJA SAEINDIA" Goal was to design, build and race off-road rugged vehicle, withstand the harshest elements of rough terrain. Intend for sale to Nonprofessional off road enthusiast. We participated in main event under guidance of Prof. S. K. Sharma, held during 27th – 30th January, 2011, in Pithampur (Indore).
- "ROBOTIC WIRELESS SOCCER PLAYER" Aim was to develop a wireless robot which can play football. Two robots were fabricated as attacker and defender during February 2009. I led the team of ten people.

Industrial Experience

- Summer Internship at Diesel Locomotive Works, Indian Railways during summer 2010. Done detailed study on Engine erection & testing, Locomotive assembly and testing, Heat treatment process, Mechanical Gauge, design & development of different parts of railways diesel engine, Expertise in failure of Engine.

Software Proficiency

Programming Language	C, C++, FORTRAN
Design Software	AutoCAD, CATIA
Vehicle Simulation	MSC Adams, Lotus Engine & Suspension, Engine Analyzer
Other Simulation Tool	Fluent, Mathematica, Cyclepad, Nastran
Astronomy	The Sky 6, Stellarium, Orbiter
Operating System & Special Software	Windows, Macintosh, Ubuntu, Microsoft Office, Adobe Photoshop

Standard Examination

Examination	Organizing body	Year	Rank	Percentile
Joint Entrance Examination (JEE)	Indian Institute of Technology (IITs)	2008	3954	98.75
All India Engineering Entrance Examination (AIEEE)	National Institute of Technology (NITs)	2007	7032	99.10
Engineering Entrance Examination	Aligarh Muslim University (AMU)	2007	–	99.68
+2 Entrance Examination	Aligarh Muslim University (AMU)	2005	–	99.88

Awards & Honors

- Awarded Murlidhar Indernath Scholarship for Proven ability in model making, technical papers in 2011.
- Awarded Scholarship by Aligarh Muslim University under Merit Scheme of University in 2006.
- Awarded in field of "VEDIC Mathematics" by Saraswati Schools in 2005.

Extra Circular Activities

Leadership

- Nominated Overseas Champion for India, The Chartered Institution of Highways & Transportation in 2010.
- Elected to Council of Representative, IIT-BHU Global alumni association for two years Jan 2011–Dec 2012.
- Elected Chairperson of SAE IIT-BHU Collegiate Chapter, BHU Varanasi for one year July 2011 - June 2012.
- Elected Co Convener, Institute Of Engineer's, IIT-BHU Students' chapter for one year July 10 - June 2011.
- Nominated Captain, Contract Bridge, Sports & Games Wing, IT-Gymkhana for two years July 10 - June 12.
- Nominated Secretary, Astronomy Club, Co Circular A. Wing, IT-Gymkhana for one year July 10-June 2011.
- Elected General Secretary, Institute Of Engineer's, IIT-BHU Students' chapter for year July 09 -June 10.
- Member of ASME, SAE, IMechE, ELGRA, RAeS, IAENG, ite, CIHT, IStructE, SPE, IE(I), MES-ITBHU.

Distinction

- Gold Medal Award in Contract Bridge organized during Spardha 2011(Annual Sport Fest) by IT-Gymkhana.
- Participated in International Food Festival in Sapporo, Japan organized by HUISA, Hokkaido University.
- Won 1st prize in Human Robotics Modeling competition organized by Robotics club in 2009-2010.
- Won 1st prize in IT-Open quiz organized by literary club in 2009-10.
- Won 1st prize in IT-Open Chess organized by Chess club in 2009-10.

Student Conferences

- Effect on a Spark Ignition Engine using blends of Gasoline fuels in COMET 2010. (Best Paper Award)
- Redesign of road transportation vehicles for improved aerodynamics in COMET 2010. (Best Paper Award)
- Effect on environment by engines running on Diesel & Gasoline Blends with Kerosene in Anveshan-10.
- Simulation & Numerical analysis of Composite structure damage in Anveshan 2011.
- Alternative Hybrid fuels for Compression Ignition engine in Mettle 2011.
- Effect of Gravity on electrical resistance in short term low current supply in Prastuti 2012 (Best Paper Award)

Management & Social Activities

- Campus Ambassador and Bindass Markatee of Printbindaas.com for one year Aug 2011- June 12.
- Campus Ambassador of JustGRE (a part of Interview Bay Ltd., London - UK) for one year 2012.
- Volunteer for Padhaaro.com – your friends in India. (A volunteer organization for foreign tourist)
- Campus Ambassador for Elan Adventure, working for promotion of safe adventures sports in India.
- Active Member of PETA (People for Ethical treatment of Animals) India.
- Active Member of Green Initiative in Green Yatra, Environmental Expert.

Personal skills

- Hard innovative core Research worker.
- Fine verbal and written communication skills.
- Ability to deal with people diplomatically.
- Excellent leadership Qualities.

Personal Profile

Full Name (as in Documents)	Vibhor Jajoo
Father's Name, Education & Occupation	Shri Vinit Jajoo, Commerce Graduate, Dealer – Bharat Petroleum
Mother's Name, Education & Occupation	Smt. Gunjan Jajoo, Post Graduate in Sanskrit, Housewife
Date Of Birth	April 15, 1991
Sex	Male
Nationality & Citizenship	Indian
Language known	Fluent English, Hindi & Urdu & Elementary Sanskrit, Japanese
Contact E-mail Id	vibhor.jajoo.bhu@gmail.com

References furnished upon request.

Vibhor Jajoo

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