8th February 2012

To Whom It May Concern,

APPLICATION FOR A POSITION IN YOUR ESTEEMED COMPANY

I am extremely delightful to take this opportunity to introduce myself and further establish my qualifications and experiences through the CV attached to this letter for your further consideration.

I obtained my degree(s) in Mechanical Engineering from Okayama University of Science, Japan, majoring in thermo-fluids and multiphase flows. The study duration has made me involved in a great deal of collaborative research, academic training and years of experience in process engineering research and this is not limited to undertaking the responsibility in ensuring quality deliverables all at a consistently high standards and success. This had served me well in nurturing my ability to define problems and analysis performance.

Evidenced by my dissertations, it involved the use of numerical and experimental methodologies for various analyses in fluidization technology. Fluidization refers to a gas-solid (multiphase) flow phenomenon which is extensively encountered by petrochemical industries running important conversion process in high temperature reactor that comprises gas-solid complex interaction, such as in the petroleum refinery plant. Fluid catalytic cracking (e.g. the conversion of heavier petroleum cuts into gasoline) is a good example of a process that utilizes the fluidization technology. I also have 2 years of experiences in the mechanical design and part development for several pilot-scale bubbling fluidized beds, hot gas-particle dispersion system and, supervising a double pipe (hairpin) type heat exchanger with switchable countercurrent-parallel flows design. These tasks required me to develop layouts and installation drawings for high-power compressors, to calibrate pressure/temperature sensors as well as to conduct major technical calculations.

In view of the fact that I have co-developed an integrated solution and analysis tool for the above technology in which both robust and applicability requirements were explicitly satisfied, this process has gradually developed my essential skills as to the self-initiative move, self-motivation, strong communication skills, dynamic presentation and collaborative teamwork. Therefore, I believe that I have acquainted myself with range of skills and knowledge that would allow me to provide significant and valuable contribution to your organization mainly in the area of engineering project design, calculation and analysis. It is noteworthy to mention that my technical knowledge and experiences are applicable to the area of plant operation and maintenance as well.

My current job has been exciting, and I am sure the next opportunity will hold even more promise. I am glad about the prospect for change to gain professional and technical experience from your esteemed organization as well as enhancing self-development skill for the better advancement of my career.

Thanking you in advance for your time and consideration. I would welcome a meeting to discuss how my education and experiences will be helpful to you.

I am looking forward to your most favourable response and hope to be part of a winning team.

Thank you.

Sincerely,

Muhammad Arif Bin Mokhtar

CURRICULUM VITAE 2012

Personal Details

Name in Full: Muhammad Arif Bin Mokhtar
Date of Birth: October 1, 1983
Sex: Male
I.C. No: 831001-01-5421
Nationality: Malaysian
Language: English, Malay, and Japanese.
Address: A2-01 Indera Putra Courts
Jalan Indera Putra
80300 Johor Bahru, Johor.
Country of Origin: Malaysia
Driving License: Malaysian and Japanese
Competence Driving License
Valid Intl. Passport: Yes
Mobile: +6012-2701454
Email: m.arif.mokhtar@gmail.com

Formal Educations Background

Doctor of Engineering (System Science) **2008~ 2011**
Okayama University of Science, 700-0005 Okayama, Ridai Cho 1-1, Japan
PhD Thesis: Theoretical Development, Validation and Application of Similar Particle Assembly Model for Large-Scale Discrete Element Method Simulation of Gas-Solid Two-Phase Flow.

Master of Engineering (Mechanical) **2006~ 2008**
Okayama University of Science, 700-0005 Okayama, Ridai Cho 1-1, Japan
Master Thesis: The Analysis of Heat Transfer for Discrete Element Method Simulation of Gas-Solid Two Phase Flow.

Bachelor of Engineering (Mechanical) **2003~ 2006**
Okayama University of Science, 700-0005 Okayama, Ridai Cho 1-1, Japan
Graduation Thesis: The Effects of Electrostatic & Humidity on 2-D Fluidized Bed.

Japanese Associated Degree Program **2001~ 2003**
Yayasan Pelajaran MARA College, Bangi, Selangor, Malaysia

Sijil Pelajaran Malaysia (SPM) **1996~ 2000**
Segamat High School, 85000 Segamat, Johor, Malaysia.

Academic Research/Interest Keywords

Thermodynamics, Fluid Mechanics, Control Systems, Gas-Solid Multiphase Flows, Heat Transfer, Fluidization, Fluidized Bed, Powder Technology, Computational Fluid Dynamic Analysis, Numerical Modeling, FORTRAN programming, Biomass, Thermal Conversion Technologies, Combustion, Pyrolysis, Gasification.

Key Technical Skills

Computer Skills/Technical Softwares
LaTeX, GnuPlot
Microsoft Office Packages
TECPLOT Data Visualization Software
FORTRAN Language Programming
RFLOW CFD Simulation Package
AutoCAD Software
FLUENT ANSYS CFD Software

Special Tool/Equipment Handling Skills
Ultra-violet Laser Microscope 3D Profile
Particle Image Velocimetry (PIV) System
NEC Thermal Visualization IR Camera
Ultimate-Fast High Speed Video Camera
Double Pipe (Hairpin) Heat Exchanger

Credited Courses during Academic Years

Mathematics	Fourier analysis	Heat & Flows
Physics	Materials Science	Tribology
Dynamics	Strength of Materials	Technology Management
Fluid Mechanics	Precision Machining	Precision Machining
Thermodynamics	Machining Elements	Machining Elements
Control Engineering	CAD/CAM	Automation Control
Industrial Mathematics	Quality Control Tech.	Production Systems

Working/Practical Experiences

University Tun Hussein Onn Malaysia, Faculty of Mechanical and Manufacturing Engineering.
(September 2011~Present, Salary: MYR2, 599.00)

- Works as a Tutor (Academic Instructor) at the Department of Plant and Automotive Engineering. Also, an associate member of Energy Technologies Research Group.
- Instructs and supervises students during practical application of thermal-fluid engineering devices such as rotating equipment (compressors and turbines), hydraulic benches installed with flow measurement apparatus, pilot-scale steam boiler with super-heater, heat pump as well as pressure and temperature measuring apparatus. Provides advice and guidance on hand-on skills and, facilitates students to understand the theories and fundamental principles underlying device operation.
- Teaches Thermodynamics and Heat Transfer to undergraduate/graduate students.

Okayama University of Science, Department of Mechanical Systems Engineering
(April 2008~ September 2011, Salary: JPY60, 000.00)

- Worked as a research assistant (R.A) in Heat and Flows Laboratory.
- Performed and supervised large scale rectangular fluidized bed operations for undergraduate/post-graduate compulsory experiments and research projects.
- Systematically programmed FORTRAN sub-routine codes for industrial simulation of fluidization. Successfully co-developed a new computational model in which large-scale fluidization simulation can be performed with less computational time.
- Delivered several technical talks and presentations in the international conferences and symposiums.
- Published a number of technical reports/articles related to engineering works in international journals and proceedings.

Okayama University of Science, Department of Mechanical Systems Engineering (April 2006~ March 2008, Salary: JPY15, 000.00)

- Worked as a teaching assistant (T.A) at the Department.
- Directly involved in the mechanical design and part development for several pilot-scale bubbling fluidized beds and hot gas-particle dispersion system.
- Performed and managed heat exchanger devise operations for undergraduate compulsory experiments and research projects.
- Instructed and supervised students during heat transfer experiments using a pilot scale water cooling system. The system comprises a double pipe (hairpin) type heat exchanger with switchable countercurrent-parallel flows design.
- Investigated the contact heat transfer between particles and identified several key problems in the industrial combustion fluidized beds.

Professional Memberships

Board of Engineers Malaysia (BEM)

- *Registered Graduate Engineer since 2011*

The Institution of Engineers, Malaysia (IEM)

- *Graduate Member since 2011*

The Japan Society of Mechanical Engineers (JSME)

- *Member since 2010*

American Institute of Mechanical Engineers (ASME)

- *Member since 2009*

Honors, Awards & Scholarships

Research Fund from Ministry of Education, Cultural, Sports, Science and Technology of Japan

- *Research was funded by the Financial Assistance Program of the Social Cooperation Study (2006–2010)*

The Best Paper Award

- Article titled *"Modelling of Thermal Contact Resistance Model for Two Contacting Particles"*
  Bin Alias A., **Bin Mokhtar, M. A. (*presenter*)**, Kuwagi K., Hirano H. and Takami, T., The 21th International Symposium on Transport Phenomena, ISTP-21(2010), Paper No. 219, Kaw Sung, Taiwan.

Higher Education Loan Project (HELP) III sponsored by Yayasan Pelajaran MARA

- *Scholarship awarded for Doctoral Degree in System Science.*

Higher Education Loan Project (HELP) III sponsored by Yayasan Pelajaran MARA

- *Scholarship awarded for Master Degree in Mechanical Engineering.*

Higher Education Loan Project (HELP) II sponsored by Yayasan Pelajaran MARA

- *Scholarship awarded for Bachelor Degree in Mechanical Engineering.*

The Best Student Award in Science Stream Class

- *Awarded in the year of 2000 (SPM, Form 5) at Sekolah Kebangsaan Tinggi Segamat.*
- *Awarded in the year of 1999 (Form 4) at Sekolah Kebangsaan Tinggi Segamat.*

Extra Activities

Active member of ESS (English Speaking Society) 2003~2006

- Joined weekly meeting with Japanese students to improve English vocabulary and writing, but mainly in the communication skills.
- Interviewed by Okayama 79.0 FM Studio in a radio broadcasting program. The 30 minutes interview mostly about foreign students lifestyle in Japan and how important is English presently and in the upcoming era.

Chairman of Innovation Club –1999~2000

- Organized activities for students such as rigid body free-fall, and straw based building as well as science competition.
- Designed an automated grains/seeds feeder for a general application in dry food markets. A mechanical feeder will automatically stop the feeding process once the customer's desired amount of grains/seeds (in kilograms) is reached.

Competitions

- *Inter-schools Science and Mathematics Quiz 2000*
  Winner/1st Place
- *Australian Chemistry Quiz 2000*
  By Royal Australian Chemical Institute-Participation
- *The National Physics Competition 2000*
  By Malaysian Institute of Physics-Participation

Interests & Hobbies

Currently include:

Photography, football, reading, computer technology/updates, mountain biking, traveling, listening to music, futsal, soccer, karaoke and cooking.

Job Preferences

Preferred Work Location(s): Anywhere in Malaysia, Anywhere in Singapore
Preferred Job Type(s): Full-Time, Permanent.
Expected Monthly Salary: MYR2, 500.00 to MYR3, 000.00 (fully negotiable)
Transportation: Own a personal passenger car
Willingness to Relocate: Yes, internationally and domestically

Referees

1) **Associate Professor Dr. Kuwagi Kenya**
   Dept. of Mechanical Systems Engineering
   Okayama University of Science,
   Ridai-cho, 700-0005 Okayama, Japan.
   Tel/Fax: +81-86-256-9574
   kuwagi@mech.ous.ac.jp

2) **Professor Dr. Takami Toshihiro**
   Dept. of Mechanical Systems Engineering
   Okayama University of Science,
   Ridai-cho, 700-0005 Okayama, Japan.
   takami@mech.ous.ac.jp

3) **Mokhtar Ab. Rahman (Father)**
   No. 4A Kampung Sermin, 85000 Segamat,
   Johor, Malaysia
   Tel: +6012-7256747