

# Guidelines in Practical Training

**Shamsul Sarip**

**UTM Razak School of Engineering and Advanced Technology**

**Kuala Lumpur**

**11/3/2014**



**UTM**  
UNIVERSITI TEKNOLOGI MALAYSIA

**DFRAN**  
Research Technologies Sdn Bhd  
Innovation Through Passion





# CONTENT

- **INTRODUCTION**
- **SITE FIELD EXPERIENCE**
- **MECHANICAL TRAINING SCHEME**
- **BEM MANDATORY COURSE**



# DFRAN Research Technologies

**DFRAN**  
Research Technologies Sdn Bhd  
Innovation Through Passion

- A company that focuses on green technology
- conducts research and development focus on community development
- Located at

**Nadi Manufacturing, Batu 1 1/2, Jalan Sungai Chua,  
43007 Kajang Selangor.**

**+603 8741 0949**





# Job descriptions

- ▶ **Analytical and experimental study of REVOLO Hybrid Kit**
- ▶ **Micro hydro development: Crossflow turbine**





# Proton Inspira with REVOLO Hybrid Kit

- **REVOLO is smart technology, this kit was installed in a Proton Inspira, which allows the motor and engine work smoothly to actually produce an efficient fuel combustion**
- **The system is developed with intelligent battery management system, structured software, and mechanical assembly**
- **Analysis was performed using computer software and compared using experimental methods in order to compare the results of fuel consumption**





# Micro hydro development: Crossflow turbine

- **Micro hydro power is a sustainable energy source that could have an impact on the environmental**
- **Micro-hydro system does not require a high flow rate to produce a continuous supply of energy**
- **Crosflow turbine is an impulse type turbine, the blades are not completely submerged, as conventional reaction turbine**
- **Design has also been drawn to develop a prototype using local expertise with the aim of manufacturing cost savings**





# Industrial Training Experience

- spends time in the site/field either supervising an engineering work, conducting research and development work, or being involved in operation and maintenance work
- demonstrate engineering proficiency and competency like troubleshooting, site situational problem solving, clarifying of design uncertainties, proposing of better alternative designs.





# Mechanical Engineering

Candidates are required to have:

- At least six months of design experience and,
- At least six months of site experience





# 6 months Design Experience

- ▶ the period, of training and experience that the candidate spends in an office environment to plan, manage and execute design work, feasibility study, research and development work, or operation and maintenance work.





## 6 months Site Experience

- ▶ period of training that spends the time in the site/field either supervising an engineering work, conducting research and development work, or being involved in operation and maintenance work.





# Application for Industrial Training

- Borang permohonan latihan ikhtisas PP-F34
- Surat penerimaan dari tempat latihan
- Cadangan mentor dan CV
- Proposal latihan
- Jadual latihan
- Profil tempat latihan





# Kursus Mendatori BEM

Pusat Kepimpinan Akademik dan Pembangunan Profesional  
UTMLead

- **Code of Ethics**
- **Safety and Health at Work**
- **Engineering Management**





BAHAGIAN PEMBANGUNAN MODAL INSAN  
PEJABAT PENDAFTAR

BORANG SENARAI SEMAKAN PERMOHONAN LATIHAN IKHTISAS

NAMA : SHAMSUL BIN SARIP

FAKULTI : UTM RAZAK SCHOOL OF ENGINEERING  
AND ADVANCED TECHNOLOGY

Tandakan ✓ bagi ruangan dokumen yang dilampirkan

Surat sokongan Fakulti

Surat permohonan Latihan Ikhtisas PP-F34

Surat penerimaan dari Tempat Latihan

Cadangan mentor dan CV

Jadual Latihan

Profil tempat latihan

Catatan :

.....

.....

.....

PENGESAHAN FAKULTI/JABATAN

Nama : .....

Fakulti /Jabatan : .....





**BAHAGIAN PEMBANGUNAN SUMBER MANUSIA  
PEJABAT PENDAFTAR**  
*Department of Human Resource Development  
Registrar Office*

**PP-F34  
PP/HRD/LI/12  
Pindaan : 1**

**Gambar**

**BORANG PERMOHONAN LATIHAN IKHTISAS**

**A. MAKLUMAT PERIBADI**

NAMA (HURUF BESAR)	DR. SHAMSUL BIN SARIP	NO. PEKERJA	8268	
ALAMAT RUMAH	J-3-1 VILLA WANGSAMAS, WANGSA MAJU, 53300, KUALA LUMPUR			
		NO. TEL	03-41316180	
ALAMAT TETAP	J93 RUMAH RAKYAT KAMPUNG SAWAH, BUKIT PELANDUK, N.SEMBILAN			
		NO. TEL	013-2503445	
NO. KAD PENGENALAN	LAMA	A 2644338	BANGSA	MELAYU
	BARU	740121055125	WARGANEGARA	MALAYSIA
AGAMA	ISLAM	UMUR	40 THN	
NO. CUKAI PENDAPATAN	SG471031910	E-MAIL	Shamsuls.kl@utm.my	

**B. MAKLUMAT PERKHIDMATAN**

JAWATAN	PENSYARAH KANAN	JABATAN	MEKANIKAL
TARIKH LANTIKAN PERTAMA DI UTM	02/02/2000		
TARIKH LANTIKAN KE JAWATAN SEMASA	01/10/2012		



"Predicting the Future by Creating the Future"

1<sup>st</sup> April 2014

**DR. SHAMSUL BIN SARIP**  
Engineering Department  
Razak School of Engineering and Advanced Technology  
UTM Kuala Lumpur  
Jalan Semarak  
54100 Kuala Lumpur, MALAYSIA

**RE: OFFER TO UNDERGO A YEAR OF INDUSTRIAL ATTACHMENT AT DFRAN RESEARCH TECHNOLOGIES SDN. BHD**

Dear Dr. Shamsul,

Referring to the above matter, on behalf of DFRAN Research Technologies Sdn. Bhd I would like to offer you to undergo a year of Industrial Attachment. Details of the offer are as follows:

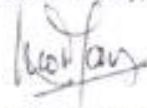
**Workplace** : DFRAN Research Technologies Sdn. Bhd.  
Batu 1 1/2, Jalan Sungai Chua, P. O. Box 3,  
43007 Kajang, Selangor Darul Ehsan.

**Duration** : 12 months - effective start upon reporting date  
Tentative training programme :  
a) 2<sup>nd</sup> May 2014 – 1<sup>st</sup> November 2014 (6 months of design work)  
b) 2<sup>nd</sup> November 2014 – 30<sup>th</sup> April 2015 (6 months of site work)

**Workscope** : will be defined by DFRAN for the duration of the training.

2. This offer is valid subject to the university's approval on permission to participate in this Industrial Attachment.

Yours Sincerely,



(MOHD FAUZY AHMAD)  
Vice President,  
DFRAN Research Technologies Sdn Bhd.  
☎ : +603 8741 0949  
✉ : fauzy@dfran.com.my



## About Us

DFRAN Research Technologies of Malaysia is an independent R&D company conducting innovative research and product development focus on meeting important needs of our clients, partners, the market, and the community. DFRAN integrates People and technologies into High-value Innovative Product And Solutions and we bring the Invention to the marketplace through Smart partnership, IP licensing and Exclusive product

**BUILDING THE LEADING R&D COMPANY IN MALAYSIA THROUGH BUILDING PEOPLE AND INNOVATIVE SOLUTION.**



We seek to improve the quality of people's lives through focusing on advanced and innovative solution. Quite simply Aspire Creativity & Passion toward Science and Technology to help people live in prosperity , fulfilled life.

### Vision & Mission

- VISION : "To be the Profitable Leading Source of High Value Innovative Product and Solution Provider
- MISSION : "To Promote Innovative & Conducive Working Environment Aspiring Creativity & Passion toward Science and Technology"

### Core Values

Customer and Market Needs: Our focus on meeting important needs, instead of focusing only on interesting research topics, helps assure that the results of our work will have positive impact for our clients and partners, the market, and the community.

### Innovation:

Each project is driven by a passionate advocate to advance the value creation process. We believe having a champion for each initiative is critical to success. Champions build productive teams. Our multidisciplinary, team-based approach taps into the collective genius of DFRAN, our clients, and our





OMAHAMS  
CCRP®

048/14

LEMBAGA JURUTERA MALAYSIA

## Sijil Kehadiran

Adalah disahkan bahawa

**DR. SHAMSUL BIN SARIP**

telah berjaya mengikuti kursus

**ENGINEERING MANAGEMENT**

pada 27 – 28 Januari 2014

LAKSMANA PERTAMA DATO' Ir. HJ. AHMAD MURAD BIN HJ. OMAR (BERSARA)  
Pengerusi Eksekutif  
Omahams Corporation Sdn Bhd

Dianjurkan oleh Omahams Corporation Sdn. Bhd. (969370-M)







494/14

**LEMBAGA JURUTERA MALAYSIA**

## *Sijil Kehadiran*

Adalah disahkan bahawa

**DR. SHAMSUL BIN SARIP**

telah berjaya mengikuti kursus

**HEALTH, SAFETY & ENVIRONMENT (HSE)**

Yang telah diadakan di

**CTL HALL, UTM JOHOR BAHRU**

pada 18 dan 19 Ogos 2014

LAKSMANA PERTAMA DATO' Ir. HJ. AHMAD MURAD BIN HJ. OMAR (BERSARA)  
Pengerusi Eksekutif  
Omahams Corporation Sdn Bhd





588/14

**LEMBAGA JURUTERA MALAYSIA**

## *Sijil Kehadiran*

Adalah disahkan bahawa

**DR. SHAMSUL BIN SARIP**

telah berjaya mengikuti kursus

**CODE OF ETHICS / REGULATIONS**

Yang telah diadakan di

**CTL HALL, UTM JOHOR BAHRU**

pada 25 dan 26 Ogos 2014

LAKSMANA PERTAMA DATO' Ir. HJ. AHMAD MURAD BIN HJ. OMAR (BERSARA)  
Pengerusi Eksekutif  
Omahams Corporation Sdn Bhd



PERAKUAN PENDAFTARAN SEBAGAI JURUTERA SISWAZAH

INI ADALAH UNTUK MEMPERAKUI BAHAWA


Nama: SHAMSUL BIN SARIP  
No. Kad Pengenalan: 740121055125 No Pendaftaran : 80083A  
Alamat: J-3-1 VILLA WANGSAMAS  
WANGSA MAJU  
53300 KUALA LUMPUR W. PERSEKUTUAN (K.L)

Cawangan Kejuruteraan: \*\* MECHANICAL \*\*

yang telah mematuhi kehendak-kehendak Akta Pendaftaran Jurutera 1967 didaftarkan sebagai seorang JURUTERA SISWAZAH tertakluk kepada syarat-syarat yang dinyatakan di bawah.

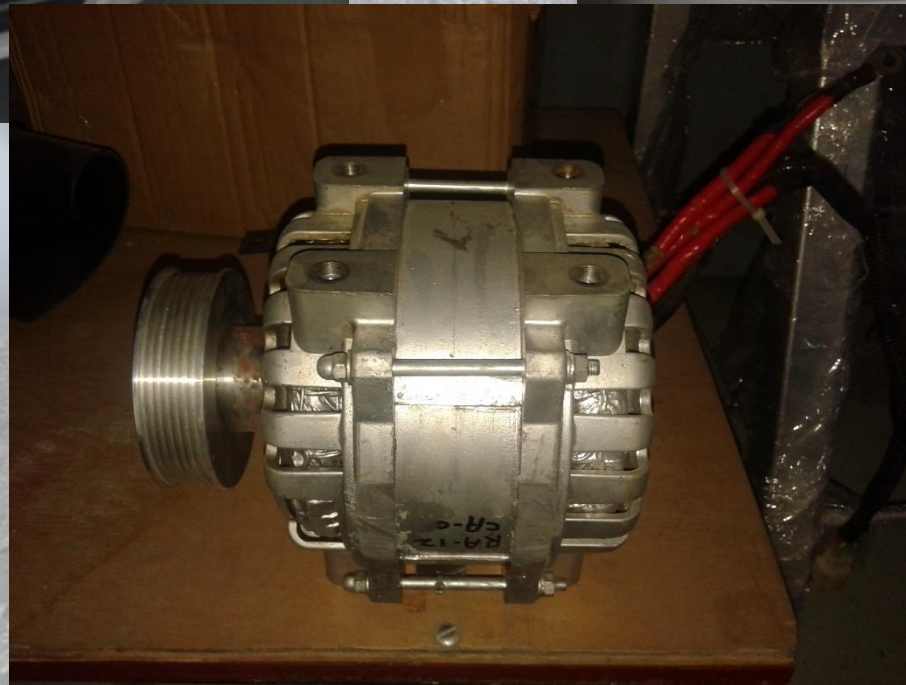
- Syarat-syarat:
- (i) Pendaftaran lulus mulai 18-October-2012
  - (ii) Mematuhi seksyen 10(2) Akta Pendaftaran Jurutera 1967 (Pindaan 2007) dan peraturan-peraturan Pendaftaran Jurutera 1990 (Pindaan 2003) seperti di lampiran untuk kelayakan pendaftaran sebagai Jurutera Profesional.



  
(DATO' SERI Ir. MOHD NOOR BIN YAACOB)  
Yang Dipertua

  
(Ir. HIZAMUL-DIN BIN AB. RAHMAN)  
Pendaftar

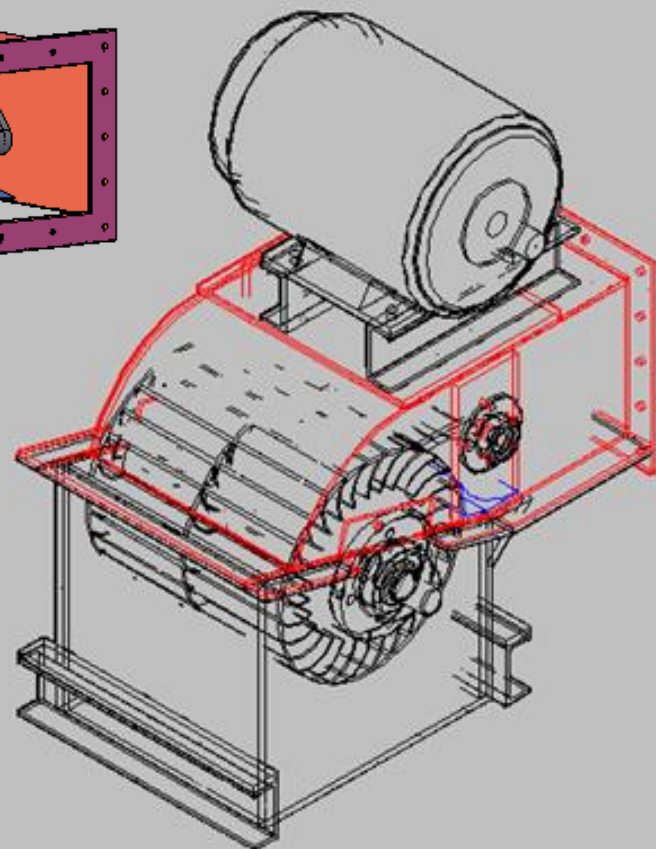
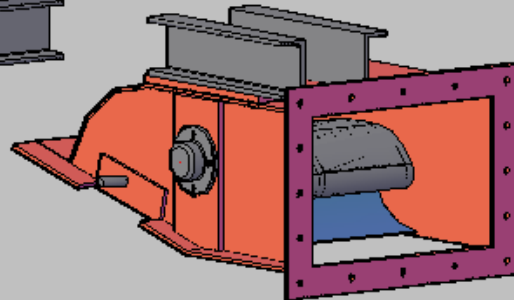
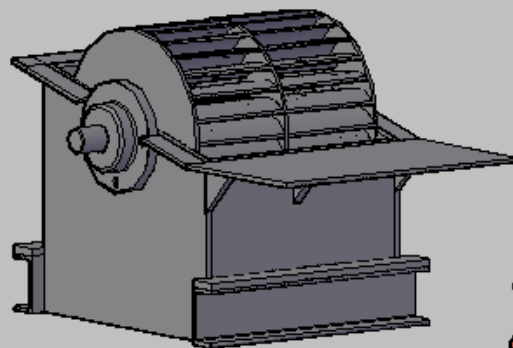
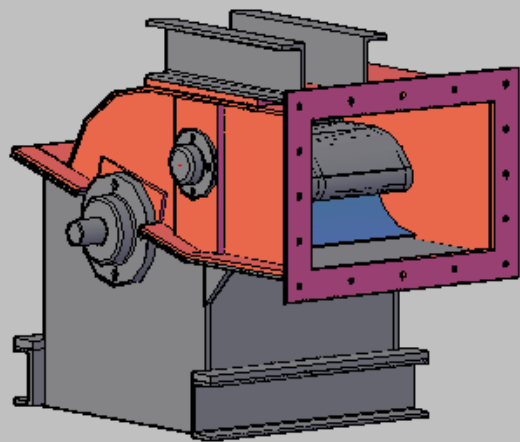














A photograph of a waterfall in a tropical forest. The water is cascading over several large, mossy rocks. The surrounding area is lush with green foliage, including ferns and other tropical plants. In the background, a person can be seen standing near a small structure. The overall scene is serene and natural. The text "Thank You" is overlaid in the center in a bold, red, sans-serif font. There is a red arrow pointing right in the top left corner and some thin, dark lines in the bottom left corner.

Thank You