

**Three Days training program on  
Solar PV system design & installation**

**22,23,24 March 2013, Albertian Institute Of Science & Technology,  
Kalamassery, Ernakulam, India**

\_\_\_\_\_ (Name) wish to register for the above training program please find attached my brief profile and my expectation from the training program

Please find the attached participation fee by the demand draft/by online transfer towards course fees to kraftwork Solar Pvt. Ltd ,cochin payable at Ernakulam

**Participation fee** includes training fee, course material, lunch on the training day.

Time : **10 am to 5 pm**

Participation fee	Rs 5000/-
-------------------	-----------

Name & designation \_\_\_\_\_

Organization & institution

Phone/fax/email/

NOTE : fee once paid will be non refundable

**Please contact** Mr. Ajit Kottara (9995868803)

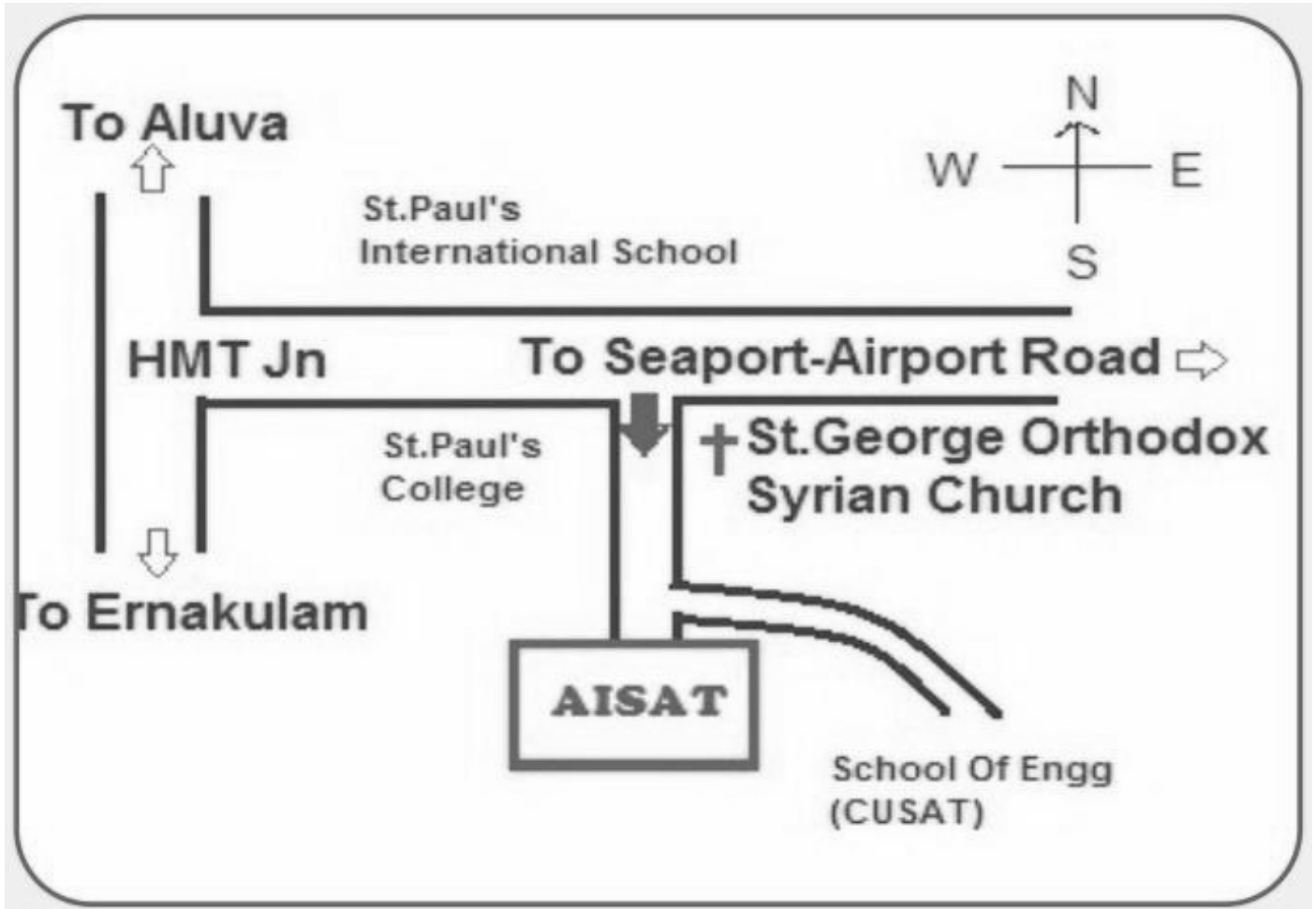
Signature of the participant

**Bank Remittance details:**

**In favor of Kraftworksolar Pvt Ltd, State Bank of India,**

**Branch Petta (A/C No -32637782248)**

## Location Map



Course outline for  
**Three day Training Programme On  
Solar P V System Design & Installation**

23rd, 24th and 25th March 2013 at  
Albertian Institute Of Technology, Kalamassery, Ernakulam

1. Introduction
  - 1.1. Solar Fundamentals
  - 1.2. Utilization of Solar Energy
  - 1.3. Power generation using Solar Energy
  - 1.4. National Solar Mission - Introduction
2. Basic Components of SPV system
  - 2.1. Solar Cell/ Module
  - 2.2. Module Mounting Structure
  - 2.3. Charge Controller/Inverter
  - 2.4. Battery
3. Charge Controller/Inverter
  - 3.1. Function of Charge controller
  - 3.2. Types of charge controllers in present Market
  - 3.3. Inverter /PCU
  - 3.4. Types of Solar Inverters/PCU
  - 3.5. Selecting Inverter/PCU
4. System sizing
  - 4.1. Load Calculation (Power, Energy Consumption)
  - 4.2. Charge controller/Inverter/PCU sizing
  - 4.3. Solar Module sizing
  - 4.4. Battery sizing
  - 4.5. Cables and other protection equipment Selection
5. Solar Lantern
  - 5.1. Components
  - 5.2. LED and CFL based luminaries
  - 5.3. Selection of Lantern (Backup Hours, Luminous Intensity, Battery)
  - 5.4. Assembling and Disassembling components (Practical)
6. Solar Home Lighting system
  - 6.1. Load Estimation
  - 6.2. Shadow analysis
  - 6.3. Tilt angle
  - 6.4. System Sizing
  - 6.5. Assembling of components (Practical)
7. Solar Street lighting system
  - 7.1. Area selection
  - 7.2. System Sizing
  - 7.3. Selection of Pole
  - 7.4. Assembling of components (Practical)
8. Operational safety and health Hazards
9. Exam – Theoretical and Practical at the end of the course.