

# Arab-European Summer School on Energy Education (AESSEE) 19-31 October 2015

(Primary Program)

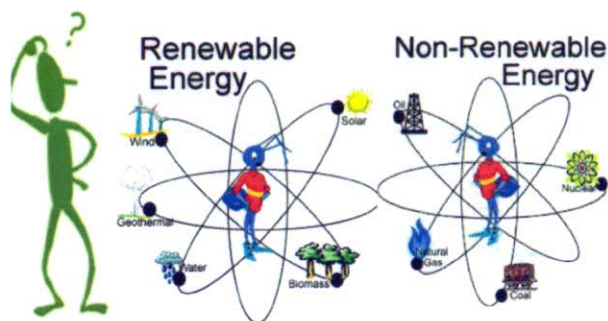
	9-11	11-13	13-14	14-17
Mo 19.10	Welcome/ Ati	Economics of renewable energy sources	Lunch	Introduction to photovoltaic solar energy conversion
Di 20.10	Theory of solar cells	Practical measurements on solar cells-1		Practical measurements on solar cells-2
Mi 21.10	Theory of photovoltaic modules	Practical measurements on PV-modules-1		Practical measurements on PV-modules-2
Do 22.10	Wind-/ Hydro Power	Geothermal- /Bioenergy		Energy efficiency/ conservation
Fr 23.10	PV-module arrays and power plants	Inverters for feed in to the AC-gird		Practical measurements with a small PV power plant
Sa 24.10	Excursion			
Mo 26.10	History of nuclear science	Nuclear power plants	Lunch	Nuclear accidents
Di 27.10	Nuclear safety/security	NPP simulation		Non-Proliferation/ Treaties
Mi 28.10	Radiation Protection-1	Radiation Protection-2		RP (practical measurements)
Do 29.10	Nuclear medicine for diagnostics and treatment	Radiation therapy: from photons to heavy ions		Excursion to the MedAUSTRON
Fr 30.10	Forum (Education of energy related science and technology & North-South cooperation)			
Sa 31.10	Assessment			

30.10 Fr

17:00-19:30

Gala Dinner

# Arab-European Summer School on Energy Education (AESSEE)



19 – 31 October 2015  
Vienna University of Technology  
Atominstut  
Vienna, Austria

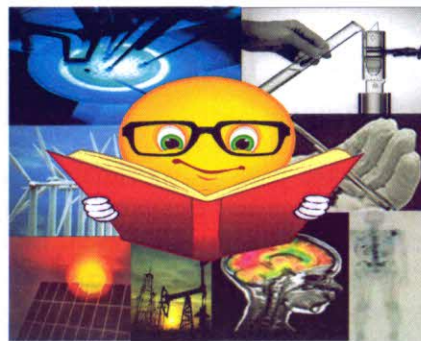


(First Circular)

## About AESSEE

Education is the main key to change the situation in emerging countries; however, schools are overcrowded, tools for experimental training and practical skills are lacking or altogether missing, and teachers' motivations are absent. If we want to make a change, we have first to start with schools, and accordingly with teachers.

Through the summer school and real cooperation, this program is unique in that it bridges the gap and moves the situation forward so as to positively change the situation of energy education and related technologies. We plan to organize the first Summer School for 20-25 participants, each representing a different school; therefore, the benefit is to be reflected to at least 25,000 students. This is the first step.



## Scientific program (2 weeks, 70h)

### Topics:

- Wind -/Geothermal- /Hydro-power
- Solar energy
- Bio- energy
- Energy storage
- Economic of energy resources and technologies
- Energy efficiency / Energy conservation
- Experiments with solar modules
- History of nuclear science
- Technology and safety of NPP
- Medical applications
- Nuclear accidents
- Non-Proliferation and nuclear treaties
- Principles of radiation protection
- Experiments with radiation detectors

AESSEE is organized for Arabic speaking countries, which are members of the Arab-League, so to facilitate a more efficient program and teamwork without language barriers if we will receive a suitable invitation and the necessary technical and financial support, it is possible to organize the school at one of the Arab countries during summer 2016.

### Important Dates

Registration:	01.06 - 24.07.2015
Invitation letters:	01 August
Welcome Reception:	18.10 (18:00 - 20:00)
Closing Ceremony:	30.10 (18:00 - 21:00)

### language

Official language: English



## General objectives

Improve the scientific and environmental skills of technical and secondary schools teachers in regard to renewable /non-renewable energy.

Teachers will be in direct contact with international organizations and experts from Austria and EU.

Provide the opportunity to work in an international team to solve problems and develop educational programs while reducing costs through cooperation.

Develop programs for optimal use of available resources and multimedia on the Internet after adaptation to the national language & curriculum.

Prepare and support students for higher education and careers in the field of energy and related technologies.

Help teachers to set-up a platform via the Internet for those teachers and students working on energy education and outreach programs.

Practical experience with modules and laboratory kits provides teachers with the necessary skills to use such facilities in schools for further development and efficient education.



The Arab-European Summer School will be held at Atominstitut, TU, Vienna, Austria

### Fee

Registration Fee	1900 €
Students	500 €

The registration fee includes the following:

Welcome reception  
Participation in all sessions  
Print materials/Excursions  
Gala Dinner /Coffee Breaks

### Who should attend?

- Teachers (i.e. Secondary Technical Schools)
- Interested scientists /Students

### Financial support

A financial support is possible for some teachers (age: max. 40 years) at technical/ industrial schools from emerging countries to attend AESSEE.

To be selected, the participants should send their CVs and a short proposal (300-400 words) about the "School-based initiatives to improve energy efficiency and renewable energy culture".

Based on the CVs and the provided proposals, some candidates (max. 3 from each country) will get financial supported (up to 2200 € + participation fee) to cover a part of their travel and accommodation expenses.



### Welcome to Vienna

<http://www.wien.info/en>

### Contact

Tel: +43 1 58801141102 (English)

Tel: +43 1 58801141387 (Arabic)

Fax: +43 1 5880114199

E-mail: [office-aessee@ati.ac.at](mailto:office-aessee@ati.ac.at)

Web: [www.ati.ac.at](http://www.ati.ac.at)

### Chairmen

Prof. Saleh Ismail

Prof. Helmuth Böck

Prof. Johann Summhammer

### Registration

Please send your registration to the following

Email: [office-aessee@ati.ac.at](mailto:office-aessee@ati.ac.at)

### Sponsors / Cooperation

OPEC Fund for International Development  
(OFID)

We acknowledge OFID for the strong financial support to enable the participation of some teachers from several Arab countries

Austro-Arab Chamber of Commerce  
(AACC)

# **ARAB-EUROPEAN FORUM FOR ENERGY EDUCATION**

**30 October 2015**

**(9:00-17:00)**

Education is the main key to change the situation in emerging countries; however, public schools are overcrowded, tools for experimental training and practical skills are lacking. If we want to make a change, we have first to start with schools and accordingly with teachers through intensive cooperation. The forum provides the opportunity to work together to set-up the suitable frames, programs and the north-south bridge to improve the educational programs to reflect the principles of non-renewable/renewable energy and related technologies.

## **Primary Program**

08:30 - 09:00 Registration  
09:15 - 11:30 Invited Guests  
11:30 - 12:00 Coffee Break  
12:00 - 14:00 Invited Speakers (8 oral presentations, 15 min.)  
14:00 - 14:30 Coffee Break  
14:30 - 16:30 Panel Discussion (Energy education with North-South cooperation)  
17:00 - 19:00 Dinner (Music)

## **Important dates and information**

Registration: until 31.08.2015 (Registration is necessary by email:  
[office-aessee@ati.ac.at](mailto:office-aessee@ati.ac.at))  
Abstract: until 30.06.2015 8 selected abstracts will only be considered for oral  
presentations and 12 posters (90x120 cm)  
Invitation letters: 15.07.2015  
Final program: 15.08.2015  
Participation Fee: 100 € includes the coffee breaks/ dinner  
(free for oral and poster presentations)  
Contact: [office-aessee@ati.ac.at](mailto:office-aessee@ati.ac.at)  
Saleh Ismail +43 1 58801141387