



*Joint European Summer School on Fuel Cell,
Electrolyser, and Battery Technologies
JESS 2018*

***Week 1 - Introductory Courses
10 – 14 September 2018***

*Hotel Amarilia,
Vouliagmeni, Athens, Greece*



sponsored by



INTRODUCTION

The increase in energy production from renewable sources creates a demand for energy storage technologies. Storage and conversion can be accomplished electrochemically: in batteries or through electrolysis and fuel cells. Therefore, these technologies are poised to play a major role in the energy supply infrastructure of the near future.

The Joint European Summer School JESS 2017 addresses these issues by offering high quality graduate level courses on selected topics of fuel cells, electrolyser, and battery technologies. This series of summer schools has been ongoing since 2004 and targets an audience of **university students** (MSc and PhD levels), and **post-doctoral researchers**. We also welcome more **experienced researchers and engineers** wishing to review these technologies and expand their general knowledge, for instance, to suit a newly acquired position or collect credits for a Continuous Professional Development (CPD) scheme. The topical content is tailored to the needs of a diverse audience: **newcomers to the field, experienced students, and young professionals** working at the forefront of fuel cell, electrolyser, and battery applications.

Week 1 (10 – 14 Sept 2018) offers three introductory courses to

- High temperature fuel cells and electrolysers (SOFC and SOE),
- Low temperature fuel cells and electrolysers (PEM and alkaline),
- Battery technology.

During the first week of Summer School, the main focus will be on the scientific and technological aspects. Starting from the fundamental principles of electrochemistry and thermodynamics, the entire spectrum of materials, design and balance of plant will be covered both from a scientific and an engineering point of view. In addition to the lectures, the participants will be asked to join in student projects where the content of the lectures is applied to a case study to be presented at the end of the week.

These courses are accredited at the three universities organising the Summer School and each carry 3 ECTS points (see below).

The following week (Week 2) will offer the Modelling Master Class, and modules on Fuel Cell Vehicles, Business Development and Innovation, and Hydrogen Safety for more advanced students (please refer to the separate programme). The two weeks are conducted independently of each other and students can choose the courses most appropriate to their studies.

NETWORKING WITH EXPERTS IN THE FIELD

The school draws on the knowledge and expertise of a carefully selected group of lecturers currently working at the leading edge of fuel cell, hydrogen, and battery research and development in Europe and associated to universities, national research centres, and industry.

Informal networking is a key element of science and scientific work in general. JESS offers ample opportunity for networking with peers and seasoned scientists. Students will be asked to give a short introduction to themselves and briefly present the research work they are doing (or expect to be doing).

CERTIFICATE OF ATTENDANCE

A Certificate of Attendance will be issued to all students of JESS. This Certificate of Attendance can be used for acquiring CPD points. The courses are accredited at the Technical University of Denmark and the universities of Aachen and Birmingham. On taking the optional final exam of their respective course, students can be attributed 3 ECTS points (10 credits in the UK system) for use in their studies.

ORGANISING COMMITTEE

Prof Rüdiger-A. Eichel (Forschungszentrum Jülich, Germany)

Prof Jens Oluf Jensen (DTU Energy Conversion, Denmark)

Prof Robert Steinberger-Wilckens (U Birmingham, United Kingdom)

LECTURERS

The following distinguished lecturers have already confirmed their participation in JESS 2018:

Jens Oluf Jensen	Technical University of Denmark
Rüdiger-A. Eichel	Research Centre Jülich, Germany
Robert Steinberger-Wilckens	University of Birmingham, UK
Anke Hagen	Technical University of Denmark
Karin Kleiner	Technical University of Munich, Germany
Shangfeng Du	University of Birmingham, UK
Lars N. Cleemann	Technical University of Denmark
Marcelo Carmo	Research Centre Jülich, Germany
Oliver Posdziech	SunFire, Germany

You can find brief CV's of the lecturers, programme updates, and information on past events on the JESS web site: <http://www.jess-summerschool.eu>

The current status of the programme with the general lectures for all participants and the specialised talks has been included in this brochure.

LOCATION & VENUE

Athens is the capital and largest city of Greece. Athens dominates the Attica region and is one of the world's oldest cities, with its recorded history spanning around 3,400 years. Classical Athens was a powerful city-state. A centre for the arts, learning and philosophy, home of Plato's Academy and Aristotle's Lyceum, it is widely referred to as the cradle of Western civilisation and the birthplace of democracy, largely due to the impact of its cultural and political achievements during the 5th and 4th centuries BC on the rest of the European continent. The heritage of the classical era is still evident in the city, represented by ancient monuments and works of art, the most famous of all being the Parthenon, considered a key landmark of early Western civilisation. The city also retains Roman and Byzantine monuments, as well as a smaller number of Ottoman monuments. It is home to two UNESCO World Heritage Sites, the Acropolis of Athens and the medieval Daphni Monastery. Landmarks of the modern era, dating back to the establishment of Athens as the capital of the independent Greek state in 1834, include the Hellenic Parliament (19th century) and the Athens Trilogy, consisting of the National Library of Greece, the Athens University and the Academy of Athens.

The hotel hosting the school is located only steps away from a sandy beach in the Vouliagmeni area, 17 km from Athens city centre and 19 km from Athens international airport. All rooms have individual controlled A/C, free WiFi internet access, hairdryer, mini fridge, LCD TV and DVD player. More details can be found at <http://www.amarilia.gr/>.

HOW TO REGISTER

To register, fill in one of the forms attached at the end of this document, scan, and send to the e-mail addresses on the form. Or follow the registration links on the web site

<http://www.jess-summerschool.eu/JESS-2018>

The final deadline for registration is **31 August 2018**.

PARTICIPATION FEE

The registration fee is 1.435,- €/course and covers tuition fees, and accommodation in single room from Sunday 09 to Saturday 15 Sept. 2018. This includes full board (all meals and coffee breaks), the drinks reception, end-of-week banquet, and excursion. A tourist tax payment of €3 per night will be due at the hotel directly.

Double room occupancy is charged at 1.235,- €/course and person. Accompanying persons sharing a double room with a participant and not taking part in the lectures are charged at 590 € for the 6-day stay (including all meals and events).

All prices include Greek V.A.T.

An **Early Bird Discount of 150 €** is offered on registrations up until **30 April 2018**.

Participants wishing to arrive early or stay longer should make their own arrangements with our booking partner, Panhellas Tourism & Congress (see below). They can offer special rates for additional nights.

CORRESPONDENCE

For issues concerning registration and payment please contact Ms Manuela Drape-Stathoglou at Panhellas Tourism & Congress:

Mail to: manuela@panhellas.gr, Tel: +30 2810 300847.

She is also the contact person for any issues relating to the hotel, booking additional nights, and for questions about meals and the excursion.

If you have any dietary requirements with respect to food choice or food allergies, please contact Mrs. Drape in due time before the Summer School.

Lecturer information and arrangements - r.steinbergerwilckens@bham.ac.uk

Student and general information - J.C.Hooper@bham.ac.uk, Phone +44 121 414 5275.

CANCELLATION POLICY

To cancel your registration with JESS, send an email stating your intent to:
manuela@panhellas.gr

Refunds will be subject to a cancellation fee. If your request arrives by 01 September 2018, the registration fee will be refunded after the school applying a cancellation fee of 350,00 € off the processed registration fee.

No reimbursement will be made for cancellations received after 01 September 2018.

LIABILITY

The school secretariat and organisers cannot accept liability for personal accidents, loss of or damage to private property of participants and/or accompanying persons, either during, or directly arising from the JESS 2018. Participants should make their own arrangements with respect to health and travel insurance.

Reaching Amarilia Hotel from Athens international airport 'Eleftherios Venizelos'

By bus and/or/ metro

There is a bus service X96 from the arrivals terminal in Athens International Airport (Eleftherios Venizelos). The trip to the closest bus station to Amarilia Hotel (named 'Pegadakia') takes approx. 35-40 minutes and the cost is ~ € 5,00. From the bus station 'Pegadakia' you turn left onto the main avenue and walk 10 minutes before you turn right off the avenue into street Ag. Nikolaou and arrive at Amarilia Hotel, on the left side after 100 m.

You can also take the metro from the airport (blue line), change at 'Syntagma' to the red line to terminus 'Helleniko'. From there you can take a bus no. 122 to the stop 'Ag. Nikolaos' on the avenue close to the hotel. Walk back from the bus stop for about 20 m and turn left into Ag. Nikolaou. Or take a taxi from 'Helleniko' – about 5 to 10 minutes ride.

By car

You drive on the highway until the KOROPI - MARKOPOULO sign and you exit to the left. Then you follow the signs to GLYFADA and drive along the Vari - Koropi Avenue at the end of which there is a sign VOULIAGMENI where you turn left. After 300m, you reach a traffic light; you turn right in the small street 15m after the traffic lights, then right in the first street and then right to Agiou Nikolaou street. This is VOULIAGMENI area and it is where our hotel is located. The distance from the Airport is 19km (20 minutes driving distance).

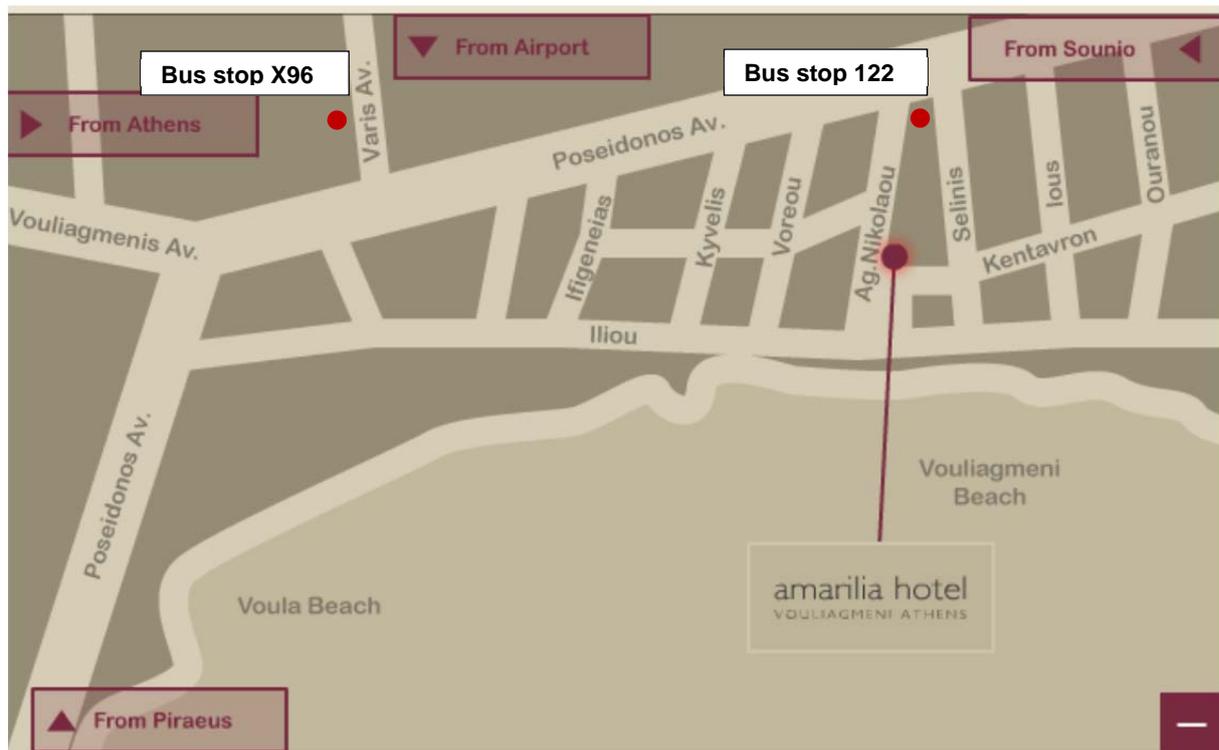
By taxi

Either take one of the taxis from the airport or pre-book a taxi from Panhellas mail: manuela@panhellas.gr, Tel: +30 2810 300847.

Both will cost around € 50,00 (one way). This fee is not included in the registration fee and has to be paid separately.

Manuela Drape-Stathoglou can arrange for shared taxis, depending on when participants arrive. Please contact her in case you want to use this option.

The full address of the hotel is: Hotel Amarilia, 13 Agiou Nikolaou, 16671 Vouliagmeni, Greece



Registration Form

Joint European Summer School for Fuel Cell, Electrolyser, and Battery Technologies JESS 2018, Week 1

Solid Oxide Fuel Cells & Electrolysers

Low Temperature Fuel Cells & Electrolysers

Battery Technology

Hotel Amarila

09 – 15 September 2018, Vouliagmeni (Athens), Greece

Early Bird rates apply until 30 April 2018

Deadline for registration: **31 August 2018**

Title	
First name	
Last name	
Gender	Male <input type="checkbox"/> Female <input type="checkbox"/>
University/Institution/Company Name	
Street / P.O. Box	
Postal code	
Town/City	
Country	
V.A.T. number (if applicable)	
Phone	
E-mail :	
Athens arrival date and time	
Athens departure date and time	
Please note any <u>special dietary requirements</u> , disabilities etc. that we may need to know about	
early bird rate (until 30/04/2018)	standard rate (all rates incl. Greek VAT)
<input type="checkbox"/> single room 1.285 € (*)	<input type="checkbox"/> single room 1.435 € (*)
<input type="checkbox"/> double room 1.085 € per person (*)	<input type="checkbox"/> double room 1.235 € per person (*)
Shared with:	
<input type="checkbox"/> accompanying person 590 € (*), name:	

(*) An additional 'hotel tax' payment of €3 per night will be due to the hotel on arrival; please see applicable payment fees overleaf

Place & date Signature

PLEASE RETURN BY E-MAIL OR FAX TO

Ms Manuela Drape-Stathoglou

manuela@panhellas.gr, Fax: +30 2810 300848

Or follow the registration link on the Summer School web site

<http://www.jess-summerschool.eu/JESS-2018>

You will then receive a confirmation and an invoice for the registration fee.

Please be advised of the following:

payments can be arranged by Bank transfer or by Credit Card

In case of Bank transfer from any bank outside Greek territory, the paying party will be charged with bank transaction fees (cost per transaction: € 5.00).

When making payments by bank transfer please state the below, otherwise the payment cannot be accepted and your registration will be cancelled:

- JESS 2018 and the name of the participant
- To whom should the invoice be issued

In case of payment by Credit Card, there will be a commission of +3,5%

Registration fees must be paid within 10 days from the day of invoicing.

In case that the registration fee is not paid within 10 days, the registration will have to be cancelled. Participants will receive a confirmation upon registration as well as a proforma invoice with all payment instructions.

A final invoice will be sent (based on the Greek law) after the closing of JESS 2018.