







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

Week 2 - Advanced Courses & The Modelling Master Class 17 - 21 September 2018

Hotel Amarilia, Vouliagmeni, Athens, Greece



sponsored and supported by







INTRODUCTION

Increasing environmental problems with conventional energy technology are stimulating the demand for alternative energy solutions. With air quality reaching catastrophic levels in large cities worldwide, Fuel Cell Electric Vehicles offer the ideal combination of clean power with the amenities of electric drives. Hydrogen use on vehicles, nevertheless, also raises some issues about safe handling. As fuel cells and hydrogen applications, including vehicles, approach technological maturity, developing their business cases becomes crucial in introducing them to the consumer markets.

The Joint European Summer School JESS 2018 addresses these issues by offering high quality graduate level courses on selected topics of vehicle technology, innovation & business development, safe handling of hydrogen, and modelling. 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 expand their general knowledge, for instance, to suit a newly acquired position or collect credits for Continuous Professional Development (CPD). The course 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 and hydrogen applications.

Week 2 (17 – 21 Sept 2018) offers four advanced courses in

- Fuel Cell Electric Vehicles.
- Innovative Technology Business Development,
- Hydrogen Safety, and
- The Modelling Master Class.

During the second week of Summer School the main focus will be on the technological and innovation aspects. Building on previous student experience, these courses will offer specialised insights into vehicle technology, how to create an own business, and safe handling of hydrogen. The Master Class will give students the opportunity to present their own research projects and discuss problems in modelling and simulation with their lecturers and peers in order to get valuable impulses for their work. 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 University of Birmingham and each carry 3 ECTS points (see below).

The previous week (Week 1) will offer three introductory courses to high and low temperature fuel cells and electrolysers, and battery technology (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 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 Robert Steinberger-Wilckens (U Birmingham, United Kingdom)

Prof Vladimir Molkov (Ulster University, United Kingdom)

LECTURERS

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

Robert Steinberger-Wilckens University of Birmingham, UK

Birgit Thoben Stuttgart, Germany

Ferdinand Panik University of Esslingen, Germany

Murat Peksen Multiphysics Energy Solutions, Jülich, Germany

Alessio Alexiadis University of Birmingham, UK

Vladimir Molkov Ulster University, UK Dmitriy Makarov Ulster University, UK

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/JESS-2018

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 aera, 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, accommodation in single room from Sunday 16 to Saturday 22 Sept 2018. This includes full board (meals and coffee breaks), the drinks reception, end-of-week banquet, and excursion.

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. There are special rates for additional nights; please enquire, if interested. Participants wishing to arrive early or stay longer should make their own arrangements with our booking partner, Panhellas Tourism & Congress (see below).

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 <u>dietary requirements</u> with respect to food choice or food allergies, please contact Mrs. Drape-Stathoglou 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).

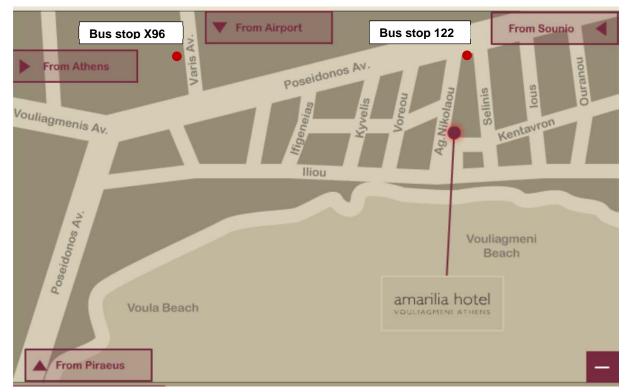
By taxi

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 <u>not</u> 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 2

Fuel Cells Electric Vehicles

Innovative Technology Business Development

Hydrogen Safety

The Modelling Master Class

Hotel Amarila 16 – 22 September 2018, Vouliagmeni (Athens), Greece Early Bird rates apply until 30 April 2018

Deadline for registration: 31 August 2018

Male □ Female □	
standard rate (all rates incl. Greek VAT)	
☐ single room 1.435 € (*)	
☐ double room 1.235 € per person (*)	
□ 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	
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.