



BALANCE Workshop 2019

Reversible Solid Oxide Cells

Novotel Brugge Centrum
22/23rd May 2019, Brugge (Bruges), Belgium

**UNIVERSITY OF
BIRMINGHAM**



Brief Overview of the workshop:

The objective of the BALANCE project is to accelerate the development of the reversible Solid Oxide Cell (rSOC) technology in order to rapidly reach sufficient maturity and visibility, which will enable its uptake by the renewable energy and fuel cell industry and its recognition as a strategic technology to reach the goal of the European Unions in terms of integration of renewable electricity. For this purpose, the project gathers some of the leading research organisations in the field of both Solid Oxide Fuel Cells (SOFC) and Solid Oxide Electrolyzers (SOE) to leverage their findings and break-throughs obtained in national research programmes and bring them together in an aligned and integrated European Research Agenda.

The current workshop aims at collecting presentations from the project and from the wider community in order to compare results, discuss findings, and build the network of researchers working in the area of rSOC.

Presentations will therefore take about 20 minutes with an added 10 minutes for questions and discussions.

The workshop will follow the 12th Fuel Cell System Workshop taking place on 21/22 May at the same location.

The evening programme will consist of a walk through town or a museum visit (t.b.c. and depending on the weather), followed by a traditional Flemish dinner in a nearby restaurant.

The Balance project has received funding through the ECRIA instrument within the H2020 programme of the European Union under contract number 731 221.

Wednesday, 22 May 2019	
12:30 – 14:00	<i>Lunch</i>
13:30 – 13:55	<i>Registration and uploading of presentations</i>
rSOC stack testing and system issues	
14:00 – 14:30	<i>Electrolysis stack testing - Dominik Schäfer, FZ Jülich</i>
14:30 – 15:00	<i>Development of a reversible Solid Oxide System pilot system at VTT – Olivier Thomann, VTT</i>
15:00 – 15:30	<i>Coffee break</i>
15:30 – 16:00	
16:00 – 16:30	
16:30 – 17:00	<i>Results of testing a 5 kW-rSOC-System – Roland Peters, FZ Jülich</i>
17:30	<i>Tour of town</i>
19:00	<i>Dinner at restaurant</i>

Thursday, 23 May 2019	
8:30 – 8:55	<i>Registration and uploading of presentations</i>
rSOC Fundamentals & Modelling	
9:00 – 9:30	<i>Development and characterization of reversible solid oxide cells for energy storage and grid balancing - Ming Chen, DTU</i>
9:30 – 10:00	<i>testing interconnect steels – t.b.c., UoB</i>
10:00 – 10:30	
10:30 – 11:00	<i>Coffee break</i>
11:00 - 11:30	<i>Modelling approach to system-level analysis of a stack of reversible solid oxide cells (rSOC) – results of BALANCE project - Konrad Motylinsk, IEn</i>
11:30 - 12:00	
12:00 – 13:30	<i>Lunch</i>
13:30	<i>coffee and end-of-meeting discussions and networking: Project brokerage: FCH JU 2020 programme, EERA and other research, demonstration, and funding opportunities and interactions</i>

Registration Details:

To register please use the online shop on the website (www.brugesfcworkshop.eu) or return the attached registration form to John Hooper either by e-mail to j.c.hooper@bham.ac.uk or by fax +44 121 414 5324

The meeting fee is £190 including all meals and coffee breaks on 22/23 May and a special Flemish dinner on 22nd May 2019.

Presenters will receive a discount of 50%.

In case of questions, please ring +44 121 415 8169 (R. Steinberger-Wilckens) or +44 121 414 5275 (John Hooper).

Hotel rooms have to be booked (and paid) directly with the **NOVOTEL Hotel Brugge Centrum**. Find a form for the hotel attached.

In case of problems with bookings, we can send a list of other recommended hotels or help with finding accommodation.

WiFi access is possible within the meeting room for free.

In case of questions about the hotel please phone Tel. +32 50 33 75 33 (NOVOTEL).

The address of the Novotel is :
Katelijnestraat 65B, B-8000 Brugge

which is quite near to the famous Begijnhof (Beguinage), the Onze Lieve Vrouw church (Michelangelo Madonna) and not far from the town centre.



Travelling to Brugge

By Air:

To Brussels Airport, from there take a train into Brussels (they run every 10 to 20 minutes, travel approx. 30 minutes). You can change at any of the stations Bruxelles Nord, Central or Midi. From there take an IC train to Bruges (directions of Oostende or Knokke) which runs every half hour around the full and half hour (depending on the station you change at). Travel time to Bruges is 1 hour.

From station into town: see below.

By train:

most connections will run through Brussels, the fast trains only through Brussels-Midi (Zuid). From there take an IC train to Bruges (directions of Oostende or Knokke) which runs every half hour around the full and half hour (depending on the station you change at). Travel time to Bruges 1 hour.

Currently there are considerable diversions of bus services. And no buses currently pass the hotel. So I propose the best thing to do is walk (see below) or take a taxi.

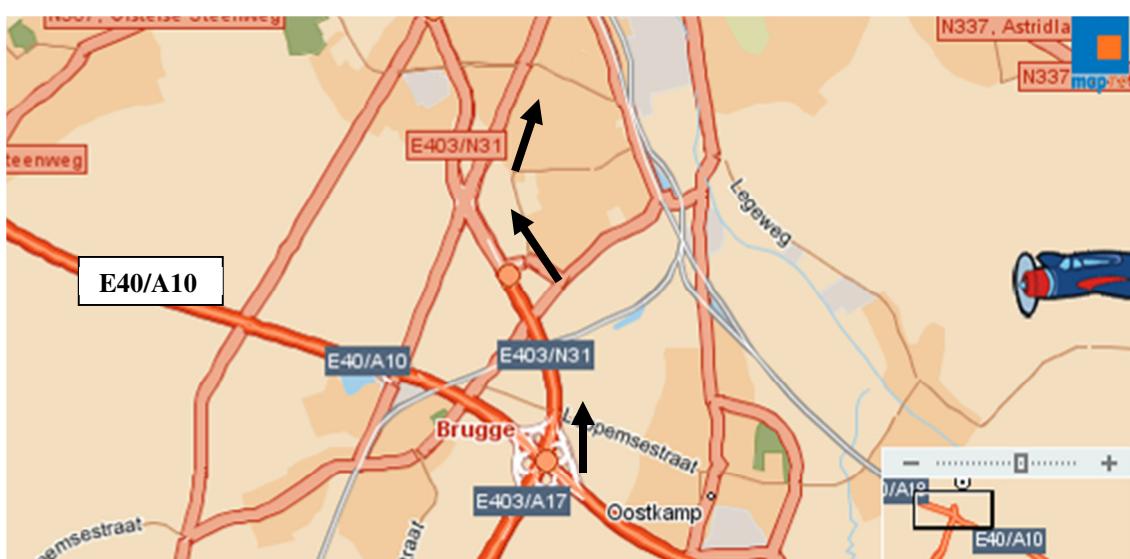
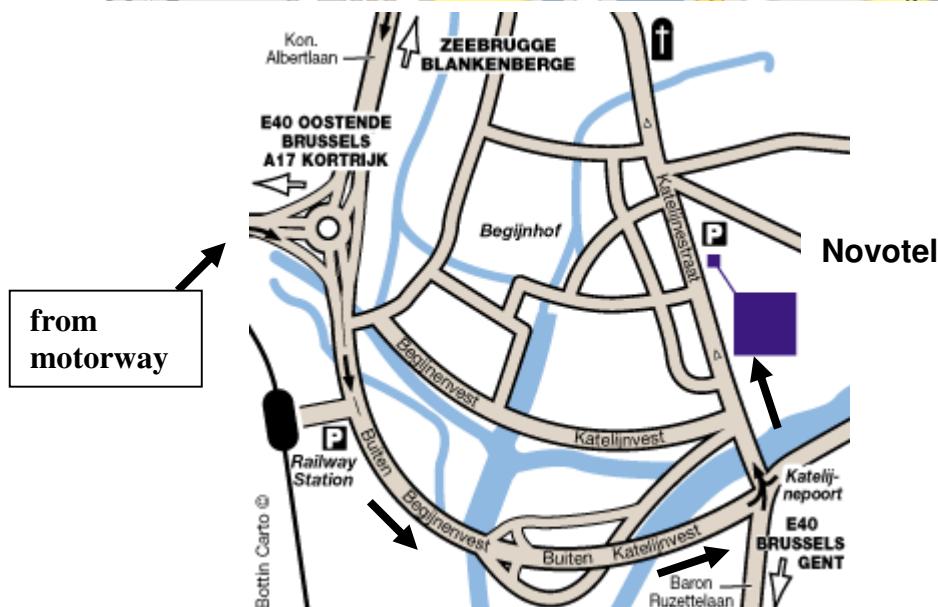
You can also walk (see map below) by directly crossing the street at the station, take the direction of the Minnewater, pass the Begijnhof and walk through to the Katelijnestraat. You will find yourself near the hotel. 15 to 20 Minutes on foot (with luggage, black route). In good weather and with light luggage you can also follow the red arrows through more park-like terrain.

By car:

take the motorway via Brussels to Oostende (E40/A10) and leave at **Exit No. 8** (should be labelled 'Torhout/Brugge/St. Michiels) (see map below). Follow the main road to a large crossing and then do not drive straight on, as signs may indicate, but turn right and follow the old main road directly into town (direction St. Michiels). Carry straight on until you reach the rear of the station, follow the road under the railway bridge and at the next traffic roundabout leave next possibility right. You then pass the front of the station. Drive over a flyover and after that immediately turn left into the Katelijnestraat (across a canal bridge). A parking facility is located next to the hotel.

From the North (Antwerp, Netherlands etc.) follow the motorway (E17/A14) to Gent. There take the motorway to Oostende and proceed as above. From the South pass Lille (Flandre) and take the E403/A17 to Brugge/Bruges.





REGISTRATION FORM

BALANCE Workshop

Novotel Brugge Centrum
22 / 23 May 2019, Bruges, Belgium

Title*	Mrs <input type="checkbox"/>	Mr <input type="checkbox"/>	Dr <input type="checkbox"/>	Prof <input type="checkbox"/>
Family name*				
First name*				
University / Institution / Company*				
P.O. Box or Street Address*				
Postal Code*				
City*				
Country*				
Phone*				
Fax				
E-mail*				
Presenter*	Yes (reduced fee 95 £) <input type="checkbox"/> No (full fee 190 £) <input type="checkbox"/>			

*Fields marked with an asterisk * must be filled in*

PLEASE RETURN BY E-MAIL OR FAX TO

John Hooper at j.c.hooper@bham.ac.uk or +44 121 414 5324

**You will then receive a confirmation, an invoice for the meeting fee or instructions
how to book and pay via the University of Birmingham e-shop**

Novotel Brugge Centrum

Reservation Request

Balance Workshop 2019

In order to benefit this special rate, please complete the requested information and send it by email to:

H1033-SB@accor.com

Reservation possible as long as rooms are available (first reserved-first served). A blockbooking has been made for 22-23/05/2019.

Latest Reservation date: **21/04/2019**

Name: [Click here to enter text.](#)

Company address (if needed): [Click here to enter text.](#)

Telephone number: [Click here to enter text.](#)

E-mail: [Click here to enter text.](#)

Check-in date: [Click here to enter a date.](#)

Check-out date: [Click here to enter a date.](#)

Requested room:

Single room, breakfast included (per night) at 122 Euros + City tax 2.12 Euros p.p.p.n.

Double room, breakfast included (per night) at 142 Euros + City tax 2.12 Euros p.p.p.n.

Extra nights can be booked at the same congress rate - except for an overnight stay on a Saturday, where a supplement of €20.00 / night is requested upon proposed room rates for

Free cancellation is possible until 7 days prior to arrival. After this deadline, the deposit of the first night will be charged. In case of no show or cancellation within 24 hours prior to the whole stay will be charged.

Credit Card Details

No reservation will be confirmed without credit card. In that case room is guaranteed for late arrival and will be kept available the whole night.

Name of Cardholder as it appears on the card [Click here to enter text.](#)

Full address of cardholder: [Click here to enter text.](#)

Contact telephone number: [Click here to enter text.](#)

Credit Card Number:  (16 digits)

For security reasons, the blacked out digits can be communicated by telephone only !

Card Type & Expiry Date: [Choose an item.](#) [Click here to enter text.](#)

The name of the Bank/ Financial Institution that issued the card [Click here to enter text.](#)

I authorise **Novotel Brugge Centrum** to use my credit card as per the above details.

Your contact person:

Philine Cloet
Sales & Banqueting
H1033-SB@accor.com
+32 (0)50 47 21 81

Date : _____

Signature :