ENGAGE

5th EDITION OF SUMMER SCHOOL

Engineering Low-Carbon Processes and Emitting Technologies

FROM GERMANY TO SALVADOR-BA, BRAZIL

JULY 24 / AGUST 18

UFBA Universidade Federal da Bahia

PRPPG Pró-Reitoria de Pesquisa e Pós-Graduação

PEI Programa de Pós-Graduação em Engenharia Industrial

b-tu Brandenburgische Technische Universität Cottbus - Senftenberg

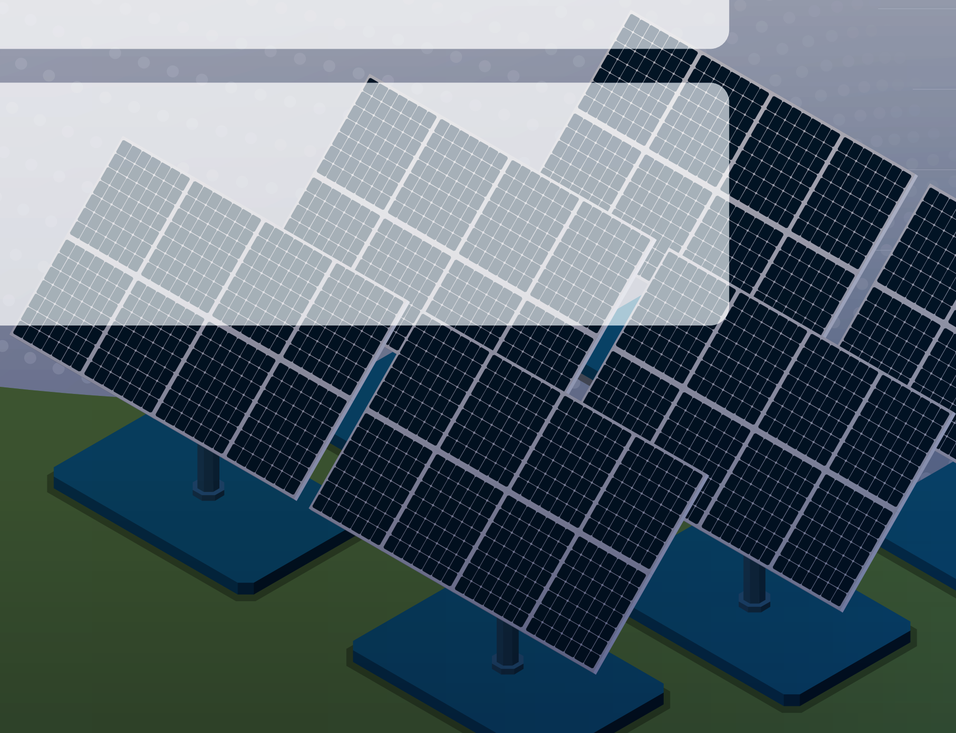
DAAD Brasil

rebralint

hub AGÊNCIA DIGITAL PRPPG

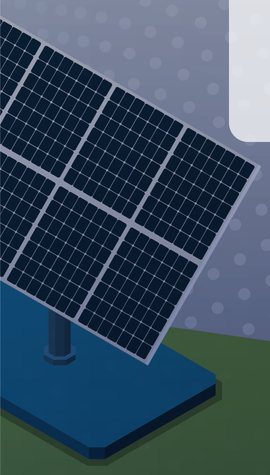
SCHEDULE | JULY 24

09:00 - 10:15	**Module I – General Aspects** Dr. Erik Esche (TU-Berlin)
10:15 - 10:45	**Break**
10:45 - 12:00	**Module I – General Aspects** Dr. Erik Esche (TU-Berlin)
12:00 - 13:30	**Lunch**
13:30 - 15:00	**PC exercise** Modeling in MOSAIC
15:00 - 15:30	**Break**
15:30 - 17:00	**PC exercise** Modeling in MOSAIC



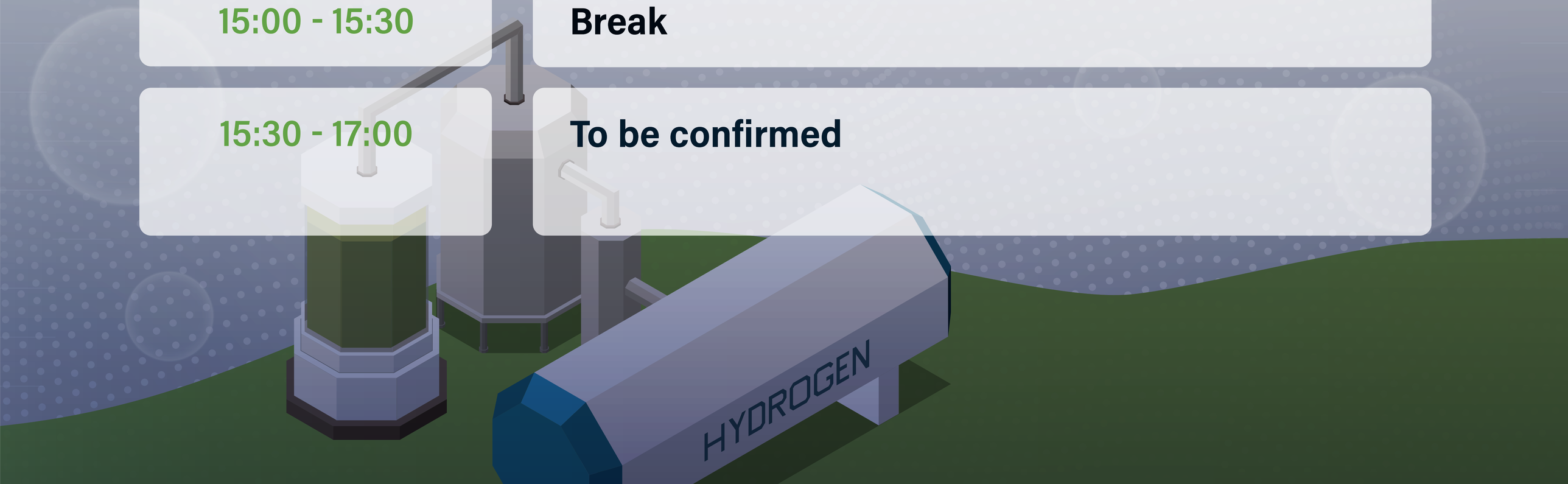
SCHEDULE | JULY 25

09:00 - 10:15	**Module I – General Aspects** Dr. Erik Esche (TU-Berlin)
10:15 - 10:45	**Break**
10:45 - 12:00	**Module I – General Aspects** Dr. Erik Esche (TU-Berlin)
12:00 - 13:30	**Lunch**
13:30 - 15:00	**PC exercise** Modeling in MOSAIC
15:00 - 15:30	**Break**
15:30 - 17:00	**PC exercise** Modeling in MOSAIC



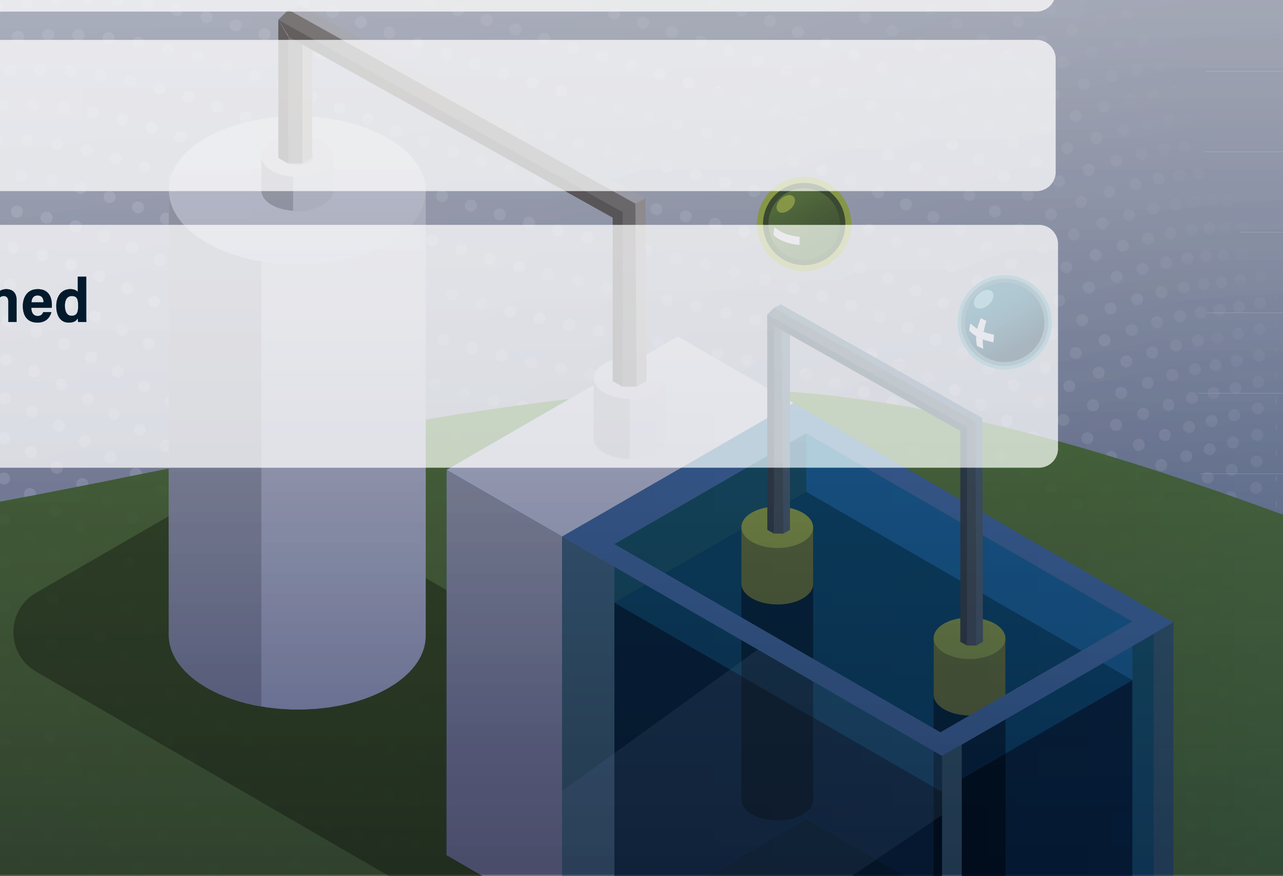
SCHEDULE | JULY 27

09:00 - 10:15	**Module II - Descarbonization** Dr.-Ing. Michael Lockan (DLR)
10:15 - 10:45	**Break**
10:45 - 12:00	**Module II - Descarbonization** Dr.-Ing. Michael Lockan (DLR)
12:00 - 13:30	**Lunch**
13:30 - 15:00	**To be confirmed**
15:00 - 15:30	**Break**
15:30 - 17:00	**To be confirmed**



SCHEDULE | JULY 28

09:00 - 10:15	**Module II - Descarbonization** Dr.-Ing. Michael Lockan (DLR)
10:15 - 10:45	**Break**
10:45 - 12:00	**Module II - Descarbonization** Dr.-Ing. Michael Lockan (DLR)
12:00 - 13:30	**Lunch**
13:30 - 15:00	**To be confirmed**
15:00 - 15:30	**Break**
15:30 - 17:00	**To be confirmed**



SCHEDULE | JULY 31

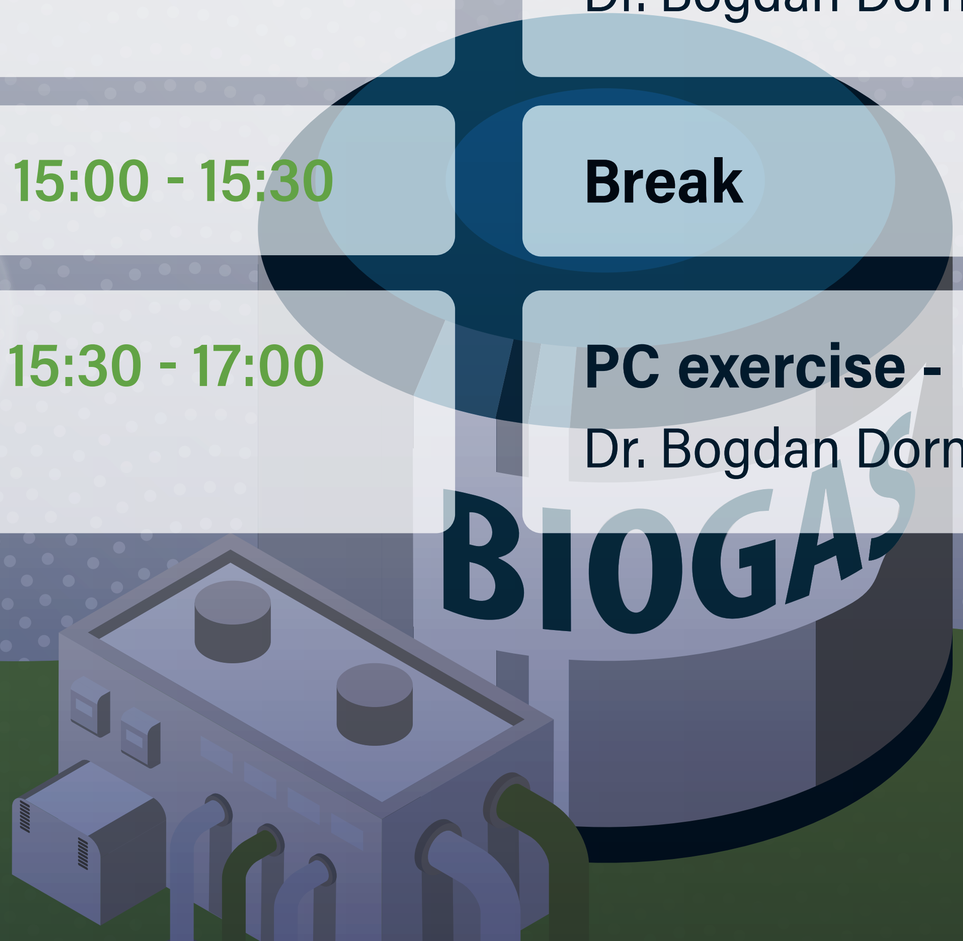
09:00 - 10:15	**Module I - General Aspects** Dr.-Ing. Hoffmann (TU-Berlin)
10:15 - 10:45	**Break**
10:45 - 12:00	**Module I - General Aspects** Dr.-Ing. Hoffmann (TU-Berlin)
12:00 - 13:30	**Lunch**
13:30 - 15:00	**PC exercise** Modeling in MOSAIC
15:00 - 15:30	**Break**
15:30 - 17:00	**PC exercise** Modeling in MOSAIC

SCHEDULE | AUGUST 01

09:00 - 10:15	**Module I - General Aspects** Dr.-Ing. Hoffmann (TU-Berlin)
10:15 - 10:45	**Break**
10:45 - 12:00	**Module I - General Aspects** Dr.-Ing. Hoffmann (TU-Berlin)
12:00 - 13:30	**Lunch**
13:30 - 15:00	**PC exercise** Modeling in MOSAIC
15:00 - 15:30	**Break**
15:30 - 17:00	**PC exercise** Modeling in MOSAIC

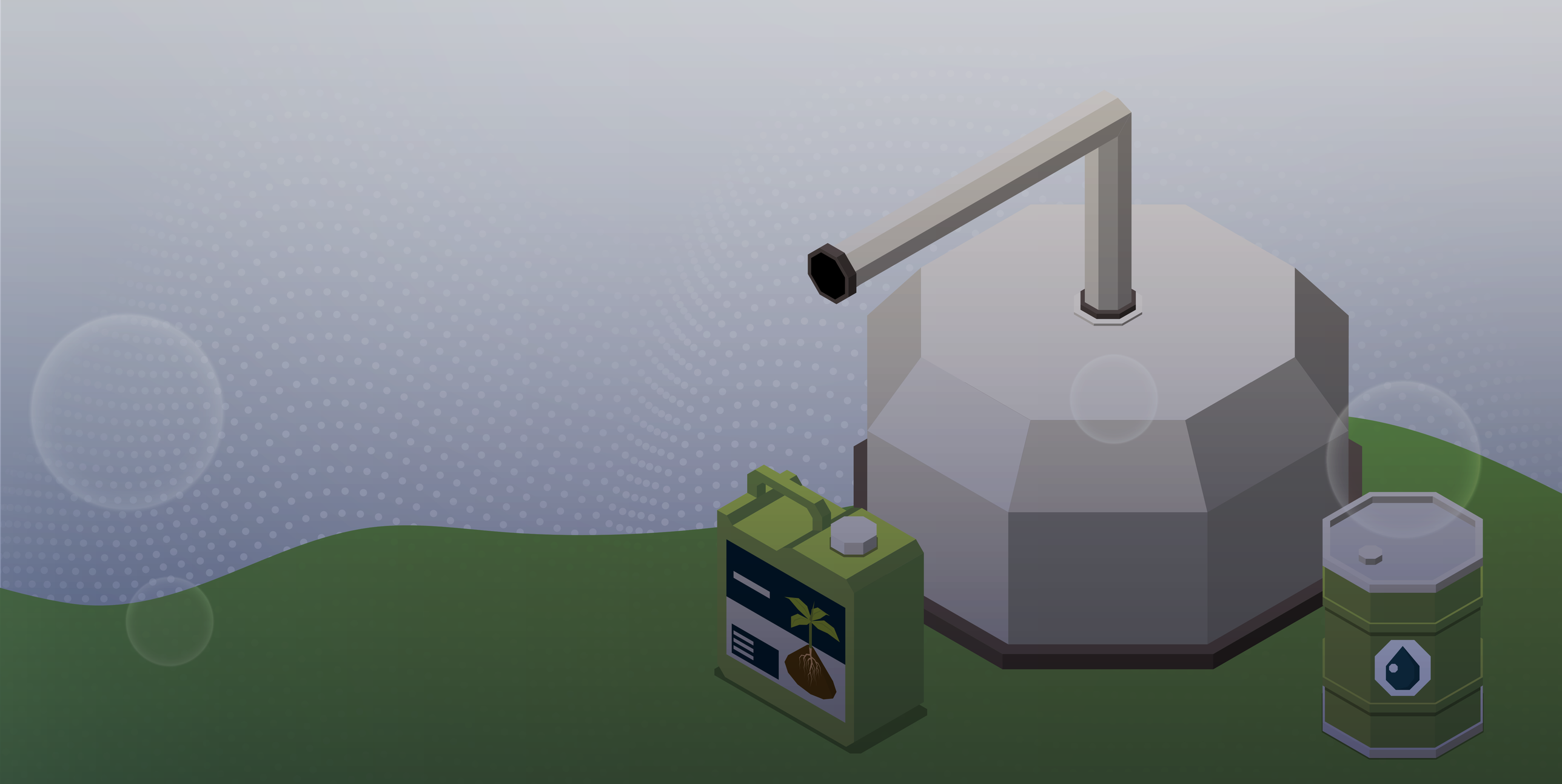
SCHEDULE | AUGUST 03

09:00 - 10:15	**Module III – Sustainable energy carriers** Prof. Dr.- Ing. Harvey Arellano-Garcia (BTU)
10:15 - 10:45	**Break**
10:45 - 12:00	**Module III – Sustainable energy carriers** Prof. Dr.- Ing. Harvey Arellano-Garcia (BTU)
12:00 - 13:30	**Lunch**
13:30 - 15:00	**PC exercise - Decentralized Energy Systems** Dr. Bogdan Dorneanu (BTU)
15:00 - 15:30	**Break**
15:30 - 17:00	**PC exercise - Decentralized Energy Systems** Dr. Bogdan Dorneanu (BTU)



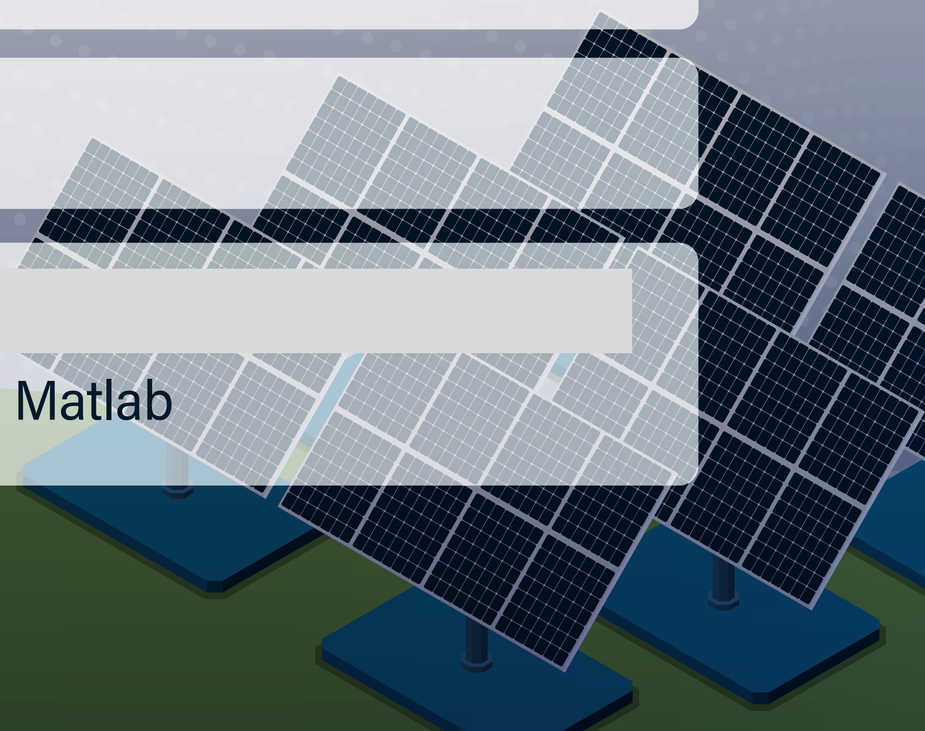
SCHEDULE | AUGUST 04

09:00 - 10:15	**Module III – Sustainable energy carriers** Prof. Dr.- Ing. Harvey Arellano-Garcia (BTU)
10:15 - 10:45	**Break**
10:45 - 12:00	**Module III – Sustainable energy carriers** Prof. Dr.- Ing. Harvey Arellano-Garcia (BTU)



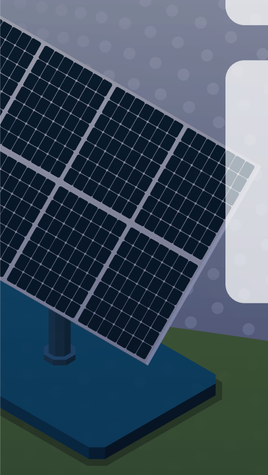
SCHEDULE | AUGUST 07

09:00 - 10:30	**Model-based experimental analysis of chemical processes** Prof. Dr. Adel Mhamdi (RWTH-Aachen)
10:30 - 11:00	**Break**
11:00 - 12:30	**Model-based experimental analysis of chemical processes** Prof. Dr. Adel Mhamdi (RWTH-Aachen)
12:30 - 13:30	**Lunch**
13:30 - 15:00	**PC exercise** Solving estimation problems in Matlab
15:00 - 15:30	**Break**
15:30 - 17:00	**PC exercise** Solving estimation problems in Matlab



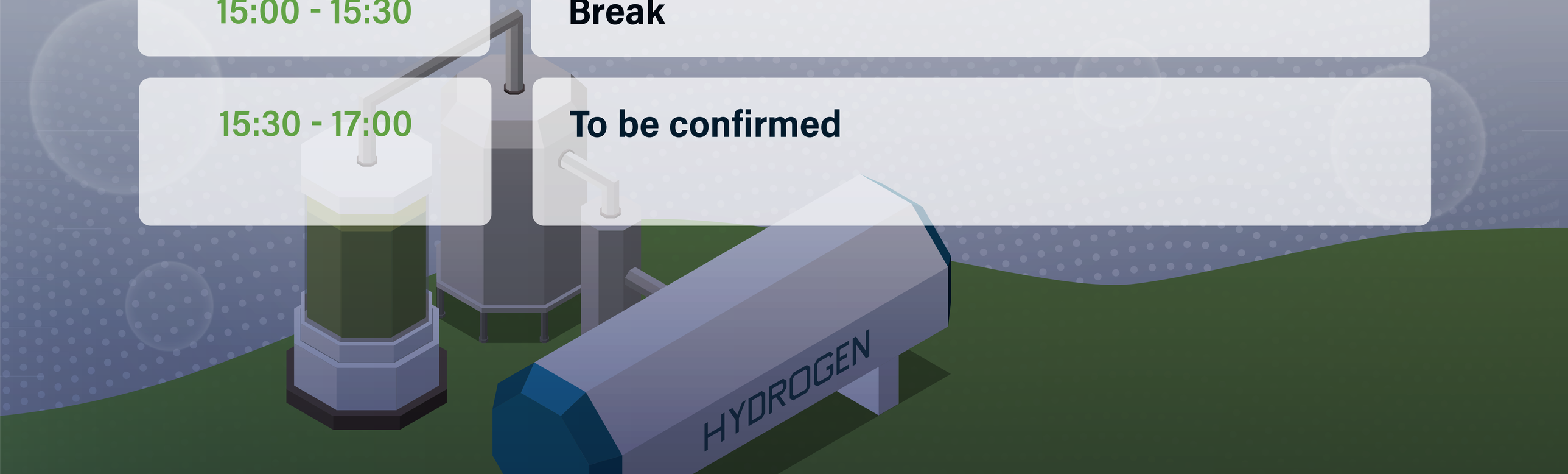
SCHEDULE | AUGUST 08

09:00 - 10:30	**Model-based experimental analysis of chemical processes** Prof. Dr. Adel Mhamdi (RWTH-Aachen)
10:30 - 11:00	**Break**
11:00 - 12:30	**Model-based experimental analysis of chemical processes** Prof. Dr. Adel Mhamdi (RWTH-Aachen)
12:30 - 13:30	**Lunch**
13:30 - 15:00	**PC exercise** Solving estimation problems in Matlab
15:00 - 15:30	**Break**
15:30 - 17:00	**PC exercise** Solving estimation problems in Matlab



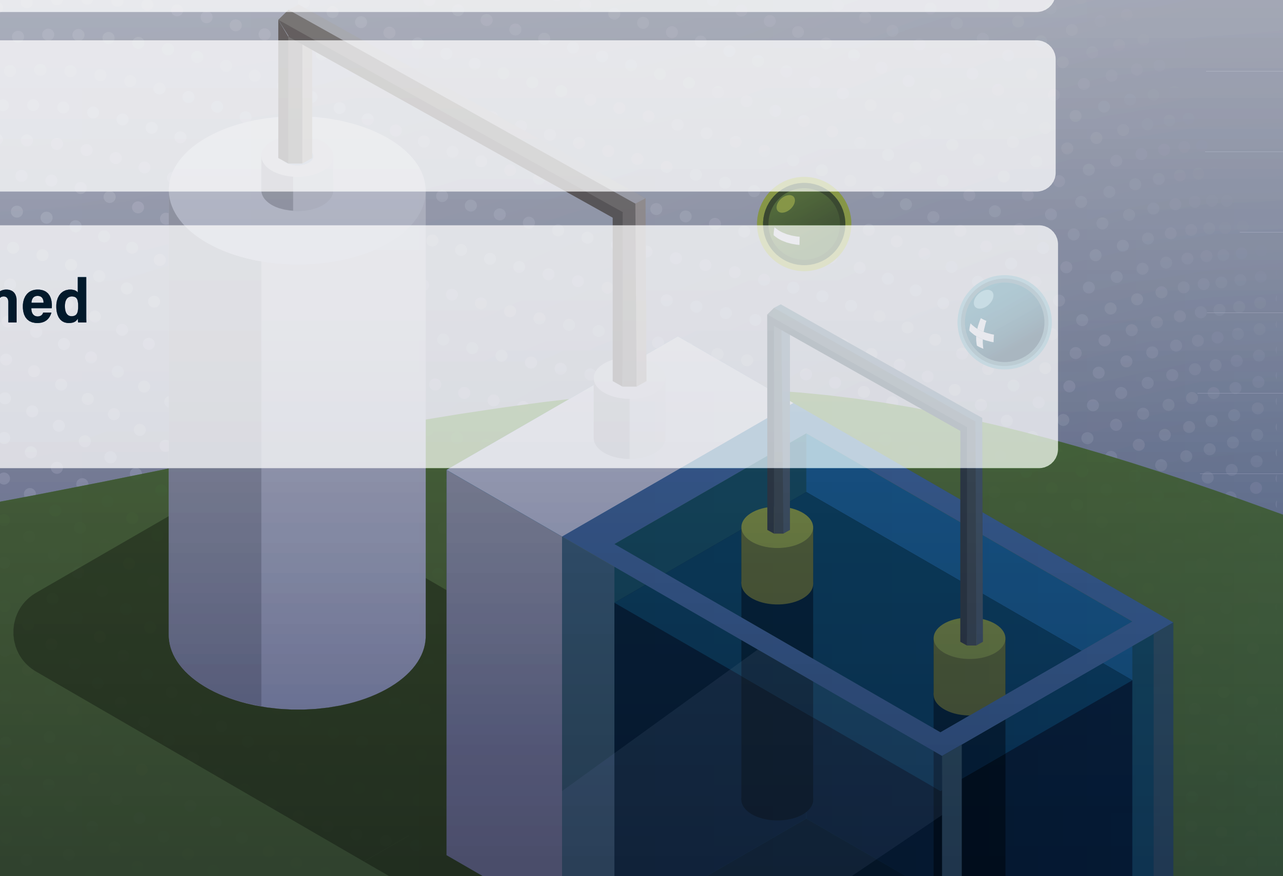
SCHEDULE | AUGUST 10

09:00 - 10:30	**Module IV – Electrochemistry / Water electrolysis** Prof. Dr. Anna Mechler (RWTH)
10:30 - 11:00	**Break**
11:00 - 12:30	**Module IV – Electrochemistry / Water electrolysis** Prof. Dr. Anna Mechler (RWTH)
12:30 - 13:30	**Lunch**
13:30 - 15:00	**To be confirmed**
15:00 - 15:30	**Break**
15:30 - 17:00	**To be confirmed**



SCHEDULE | AUGUST 11

09:00 - 10:30	**Module IV – Electrochemistry / Water electrolysis** Prof. Dr. Anna Mechler (RWTH)
10:30 - 11:00	**Break**
11:00 - 12:30	**Module IV – Electrochemistry / Water electrolysis** Prof. Dr. Anna Mechler (RWTH)
12:30 - 13:30	**Lunch**
13:30 - 15:00	**To be confirmed**
15:00 - 15:30	**Break**
15:30 - 17:00	**To be confirmed**



SCHEDULE | AUGUST 14

09:00 - 10:15	**Module IV – Carbon Cycle** Prof. Dr.-Ing. Jan Schoeneberger (BHT)
10:15 - 10:45	**Break**
10:45 - 12:00	**Module IV – Carbon Cycle** Prof. Dr.-Ing. Jan Schoeneberger (BHT)
12:00 - 13:30	**Lunch**
13:30 - 15:00	**PC exercise** Modeling biogas processes in CHEMCAD
15:00 - 15:30	**Break**
15:30 - 17:00	**PC exercise** Modeling biogas processes in CHEMCAD

SCHEDULE | AUGUST 15

09:00 - 10:15	**Module IV – Carbon Cycle** Prof. Dr.-Ing. Jan Schoeneberger (BHT)
10:15 - 10:45	**Break**
10:45 - 12:00	**Module IV – Carbon Cycle** Prof. Dr.-Ing. Jan Schoeneberger (BHT)
12:00 - 13:30	**Lunch**
13:30 - 15:00	**PC exercise** Modeling biogas processes in CHEMCAD
15:00 - 15:30	**Break**
15:30 - 17:00	**PC exercise** Modeling biogas processes in CHEMCAD

SCHEDULE | AUGUST 17

09:00 - 10:30	**Module IV – H2 Production, Storage, Transport and Safety** Prof. Dr. Lars Röntzsch (BTU)
10:30 - 11:00	**Break**
11:00 - 12:30	**Module IV – H2 Production, Storage, Transport and Safety** Prof. Dr. Lars Röntzsch (BTU)
12:30 - 13:30	**Lunch**
13:30 - 15:00	**To be confirmed**
15:00 - 15:30	**Break**
15:30 - 17:00	**To be confirmed**

SCHEDULE | AUGUST 18

09:00 - 10:30	**Module IV – H2 Production, Storage, Transport and Safety** Prof. Dr. Lars Röntzsch (BTU)
10:30 - 11:00	**Break**
11:00 - 12:30	**Module IV – H2 Production, Storage, Transport and Safety** Prof. Dr. Lars Röntzsch (BTU)
12:30 - 13:30	**Lunch**
13:30 - 15:00	**To be confirmed**
15:00 - 15:30	**Break**
15:30 - 17:00	**To be confirmed**