

# International RD20 Summer School



Creating an annual International RD20 Summer School was an important recommendation from the 2019 RD20 Leaders Statement that codified the urgency to significantly increase international collaboration to accelerate research and development (R&D) and to enable clean energy transformation. The 4th International Summer School will be held in Ben Guerir (close de Marrakech), Morocco on May 17–23, 2026, providing an opportunity for RD20 early career researchers to come together with senior leaders and globally recognized keynote speakers to learn, discuss, and establish relationships for future collaboration.

## RD20 Summer School Agenda ↓



# Sunday, May 17: Arrival and Welcome



**12:00 – 20:00**  
Summer School housing available for  
check-in (Residential areas at UM6P)



**12:45 – 15:00**  
Lunch for confirmed arrivals at Hilton  
Hotel



**18:00 – 20:00**  
Breaking the Ice – Team-building  
activity at UM6P Bowling



**20:00 – 22:00**  
Dinner at Hilton Hotel



# Monday, May 18: Opening Renewable Energies Solutions

7:30 – 9:00



Breakfast at the Hilton Hotel  
(UM6P Benguerir Campus)

9:00 – 10:30

Opening Ceremony:

- **Mr. Hicham EI HABTI, UM6P President – Welcome Address (10 min)**
- **Pr. Abdelilah SLAOUI (CNRS) – RD2O Summer School – Potential & Challenges (10 min)**
- **Pr. Abdessamad FAIK (UM6P) – Driving the Energy Transition: Global Perspectives and African Opportunities (15min)**
- **Program Overview and Technical Orientation (10 min)**

Panel Discussion with Guests: 45 mins

- **Distinguished Leaders from Industry and Academia,**

10:30 – 11:00



Coffee break

11:00 – 11:30



Global Energy Outlooks and Deployment Pathways (30 min),  
• **Pr. Akito Ozawa (AIST, Japan)**

11:30 – 13:00



Photovoltaics technology in the Global Energy Mix (30 min),

- **Pr. Khotimatul Fauziah (BRIN, Indonesia)**

Wind turbine technology as a Pillar of Clean Energy (30 min),

- **Pr. Jamie Speirs (University of Strathclyde, UK)**

Grid/power systems (modeling and overview) (30 min),

- **Pr. Hiroshi Kikusato (AIST, Japan)**



13:00 – 15:00

Lunch at the Hilton Hotel  
(UM6P Benguerir Campus)



15:00 – 17:00

Visits to UM6P Labs, 1337, Green Energy Park & Team Building



19:00 – 21:30



Poster Session & Dinner at the swimming pool of Hilton Hotel

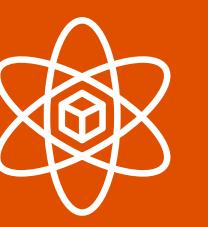


# Tuesday, May 19: Renewable Energy Storage & Beyond

	<p><b>7:30 – 9:00</b> Breakfast at the Hilton Hotel</p>		<p><b>12:30 – 14:30</b> Lunch at the Hilton Hotel (UM6P Benguerir Campus)</p>
	<p><b>9:00 – 10:30</b> Understanding and Advances in Battery Energy Storage (30 min), • <b>Pr. Tony Burrell (NREL, USA)</b></p> <p>Storing Heat, Cutting Emissions: Thermal Energy Storage in Action for Industry (30 min), • <b>Pr. Alain Ruby (CEA, France)</b></p> <p>Biofuels/bioenergy: potential and limits (30min) • <b>Pr. Sanjukta Subudhi (TERI, India)</b></p>		<p><b>14:30 – 17:30</b> Case Study 1 – Grid Integration &amp; Power-to-X Pathways, (40 min), • <b>Speakers: Pr. Claire Gauthier / Pr. Pierre Gavoille (CEA, France) / Pr. Mourad NACHTANE</b></p> <p>• <b>Experts:</b></p> <ul style="list-style-type: none"><li>• <b>Pr. Pierre SERRE-COMBE (CEA, France)</b></li><li>• <b>Pr Zakaria CHCHIYAI (UM6P)</b></li><li>• <b>Dr Said SAIR (UM6P)</b></li><li>• <b>Dr Hassan NAANANI (UM6P)</b></li></ul> <ul style="list-style-type: none"><li>◦ <b>Group Work, (2 h)</b></li><li>◦ <b>Wrap-up, (20 min)</b></li><li>◦ <b>Coffee available during the session</b></li></ul>
	<p><b>10:30 – 11:00</b> Coffee break</p>		<p><b>18:30 – 20:30</b> Team Building activity at Club de tir</p>
	<p><b>11:00 – 12:30</b> Panel Discussion 1: Understanding Sustainability Transitions: Systems Thinking for Net Zero <b>Moderator : Pr Bill Tumas (NREL, USA)</b></p> <p><b>Experts:</b></p> <ul style="list-style-type: none"><li>• <b>Pr. Oki Muraza (PT. PERTAMINA – Indonesia)</b></li><li>• <b>Tony Burrell or Katie Harrison (NREL, USA)</b></li><li>• <b>Pr. Pierre SERRE-COMBE (CEA, France)</b></li><li>• <b>Pr. Christian Thiel (JRC, EU)</b></li><li>• <b>Senior OCP Business Units representative (Morocco)</b></li></ul>		<p><b>20:30 – 22:00</b> Dinner at Club de tir and UM6P Music band</p>



# Wednesday, May 20: Green Fuels & CCUS

	<p><b>7:30 – 9:00</b> Breakfast at Hilton Hotel</p>		<p><b>12:30 – 14:30</b> Lunch at the Hilton Hotel (UM6P Benguerir Campus)</p>
	<p><b>9:00 – 10:30</b> Green Hydrogen Production: A Clean Molecule for a Net-Zero World (30 min), • Pr. Julie Mougin (CEA, Franca) Green Ammonia Production: A Clean Molecule for a Carbon-Free Future (30 min), • Pr. Yuichi Manaka (AIST, Japan) Solar fuels—photosynthesis to artificial photosynthesis (30 min), • Pr. Bill Tumas (NREL, USA)</p>		<p><b>14:30 – 17:30</b> ◦ Case Study 2 – Hydrogen &amp; Ammonia in the Value Chain: Calculating the True Climate Cost (40 min), • Speaker: Pr. Deebadjeet BORA ( UM6P ) • Experts: • Pr Ghulam ABBAS ( UM6P ) • Pr Shahid MAHMOUD ( UM6P ) ◦ Group Work, (2 h) ◦ Wrap-up, (20 min) ◦ Coffee available during the session</p>
	<p><b>10:30 – 11:00</b> Coffee break</p>		<p><b>18:30 – 20:00</b> Team Building Activity – Bowling Competition</p>
	<p><b>11:00 – 11:30</b> Carbon Capture, Utilization &amp; Storage: From Emissions to Solutions (30 min), • Pr Tata Sutardi (BRIN, Indonésia)</p>		<p><b>20:00 – 21:30</b> Poster Session 2 and Dinner at the Swimming Pool of Hilton Hotel</p>
	<p><b>11:30 – 12:30</b> Panel Discussion 2: Scaling Power-to-X: From Innovation to Industrial Transformation Moderator : Pr. Akito Ozawa (AIST, Japan) Experts: • Pr Claire Gauthier / Pr. Pierre Gavoille (CEA, France) • Pr. Sanjukta Subudhi (India) • Pr. Tata Sutardi (BRIN, Indonésia) • Senior OCP Business Units representative (Morocco)</p>		



# Thursday, May 21:

## Materials, AI & Sustainability

	<b>7:30 – 9:00</b> Breakfast at Hilton Hotel		<b>12:45 – 14:30</b> Lunch at Hilton Hotel
	<b>9:00 – 10:30</b>  Supply chain analysis, including but not limited to critical materials, (30 min), • <b>Pr. Margaret Mann, (NREL, USA)</b>  Faster, Smarter, Cleaner: AI-Driven Innovation in Materials Science, (30 min), • <b>Pr. Romain Gautier (CNRS, France)</b>  Cities Leading the Transition: Climate-Neutral and Smart Cities (30 min), • <b>Pr. Christian Thiel (JRC, EU)</b>		<b>14:30 – 17:30</b>  Case Study 3 – Reducing the Carbon Footprint of Material Extraction (40 min), Speakers: • <b>Pr. Stéphanie Riche (CEA, France)</b> • <b>Pr. Debadjeet BORA (UM6P)</b> Experts: • <b>Pr. Mourad NACHTANE (UM6P)</b> • <b>Pr Abdechafik ELHARRAK (UM6P)</b> • <b>Dr Hassan NAANANI (UM6P)</b>  ○ Group Work, (2 h) ○ Wrap-up, (20 min) ○ Coffee available during the session
	<b>10:30 – 11:00</b> Coffee break		<b>18:30 – 19:45</b> Departure to Marrakech
	<b>11:00 – 12:00</b>  Safety (30 min), • <b>Pr Ghulam ABBAS (UM6P, Morocco)</b>  Sustainability 30 min, • <b>Pr Myriam Merad (CNRS, France)</b>		<b>20:00 – 22:30</b> Gala Dinner
	<b>12:00 – 12:45</b>  Panel Discussion 3: Sustainability, Financing and Engaging for a Just Energy Transition. Moderator : <b>Pr Stéphanie Riché (CEA, France)</b> Experts: • <b>Jamie Speirs (STRATH, UK)</b> • <b>Abdelilah Slaoui (CNRS)</b> • <b>Senior OCP Business Units representative (Morocco)</b>		<b>22:30</b> Departure to Ben Guerir



# Friday, May 22: Project Presentations & Graduation



**7:30 – 9:00**  
**Breakfast at Hilton Hotel**



**9:00 – 10:30**  
**Group project presentations – Set 1**



**10:30 – 11:00**  
**Coffee Break**



**11:00 – 12:00**  
**Group project presentations – Set 2**



**12:00 – 12:30**  
**Award Session & Graduation Session**  
**Official closing**



**12:30 – 14:30**  
**Lunch at Hilton Hotel**



**15:00 – 16:15**  
**Departure to Marrakech**



**16:30 – 21:30**  
**Free Tour & Dinner (on your own)**



**21:30**  
**Departure to Ben Guerir**



# Saturday, May 23: Departure



7:30 – 9:00

**Breakfast at Hilton Hotel**



9:00 – 12:00

**Check out**