

# Speaker Sessions

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## **Advanced Materials**

Majid Al-Ruqeishi, Sultan Qaboos University, Oman  
Amal El-Ghazaly, Cornell University, United States

*Soft Matter Engineering for Robotics and Wearables*  
Carmel Majidi, Carnegie Mellon, United States

*From Drones to Dentures: How Novel Materials are Increasing the Adoption of 3d Printing Across Every Industry*

Jennifer Milne, Formlabs, United States

*Envisioning the Future of Novel Metallic Materials for Extreme Applications in the Energy Sector*

Bilal Mansoor, Texas A&M Qatar, Qatar

*Recent Progress in Rechargeable Batteries for Large-Scale Electricity Storage?*

Mouad Dahbi, Mohammed VI Polytechnic University, Morocco

## **e-Health**

Nady el-Hajj, Hamad Bin Khalifa University, Qatar  
Ellie Graeden, Talus Analytics, United States

*Translational Analytics in Healthcare: Bridging the Divide between Data and Clinical Care to Improve Patient Outcomes*

Angela Winegar, Ascension Data Sciences Institute, United States

*Applying Patient and Public Health Data for Pandemic Response and Health Security (TBC)*

Caitlin Rivers, John Hopkins University, United States

*User Generated Health Data: From Algorithms to Implementation and Use*

Mowafa Househ, Hamad Bin Khalifa University, Qatar

*Applications of Smart Wearable Devices in Health: Data, Policy, and Security Considerations*

Mohamed Elshazly, Weill Cornell Medicine – Qatar, Qatar

## **Water, Food, Environment**

Tareq Al-Ansari, Hamad Bin Khalifa University, Qatar  
Emily Kumpel, University of Massachusetts, United States

*Jordan Water Sector: Current Water Strategies, Recent Developments, and Good Practices on  
Agricultural Water Use Efficiency*

Maysoon Al-Zoubi, Higher Population Council, Jordan

*Reimagining Nitrogen Cycling for Food, Water, and the Environment: Selective Electrochemical  
Detection and Recovery in Wastewaters*

Will Tarpeh, Stanford, United States

*Blockchain-based Digital Technologies for Environmental and Energy Management*

Mohamed Abdallah, Hamad Bin Khalifa University, Qatar

*Multi-Scale Systems Analytics for Digitization of Agriculture and Food Systems*

Fengqi You, Cornell University, United States

## **Cybersecurity**

Saif Al-Kuwari, Hamad Bin Khalifa University, Qatar  
Ryan Donaghy, National Risk Management Center, United States

*The Physics of Embedded Security: Tickling Sensors with Malicious Sound Waves, RF, and Lasers*

Kevin Fu, University of Michigan, United States

*Detecting Phishing Domains Using Certificate Transparency*  
Masha'el Al-Sabah, Qatar Computing Research Institute, Qatar

*Using AI and Global Socio-Technical Data to Forecast Cyber Threats*

Ghita Mezzour, International University of Rabat, Morocco

*TBD*

Charles Rath, RS21, United States

## **Emerging Technologies and Society**

Mohamed Bakhouya, International University of Rabat, Morocco  
April Salas, Cybersecurity and Infrastructure Security, United States

*Emerging Technologies for Enabling Smart Mobility: Overview and Use Cases*  
Fethi Filali, Qatar Mobility Innovations Center, Qatar

*Real-time road crash prediction through AI-based driving behavior analysis*  
Hajar Mousannif, Cadi Ayyad University, Morocco

*Architecting New Opportunities for Energy-Water Nexus Management in the Middle East and North Africa*  
Amro Farid, Dartmouth University, United States

*Decarbonizing Electric Power amid a Climate Emergency*  
Ahmed Abdulla, Carnegie Mellon University, United States