Mohammed VI Polytechnic University (UM6P)—MIT Research Program

UMRP Fall Workshop 2022 Launch of Second Round Projects:

Promoting Sustainable Development for Africa

MIT Samberg Conference Center 6th Floor, Dining Room #5 October 14th, 2022 9 am.

- 9:00 am Welcome & Program Overview Elfatih A.B. Eltahir, Faculty Director, UMRP Hicham El Habti, President, UM6P
- 9:15 am Advanced Materials for Solar Photo-molecular Desalination Gang Chen, James Zhang and Abimbola Oluwade, MIT Mohamed Chaker and Motasem Abushaban, UM6P
- 9:35 am Climate Responsive Seed Technology to Enhance Pulse Production in Water-Risk Hotspots Benedetto Marelli and Zeina Barghouti, MIT Manal Mhada and Lamfeddal Kouisni, UM6P
- 9:55 am Climate Change Impact on Water Availability in Africa: Projections and Adaptation Elfatih A.B. Eltahir, MIT Nabil El Mocayd, UM6P
- 10:15 am Greening the Phosphorus Cycle Electrochemical Approaches to Valorizing Phosphates Yogesh Surendranath and Andrew Licini, MIT

Hacking Phosphates Rachid Benhida, Rachid Taakili, UM6P

New Routes from Phosphate to Chemicals Christopher "Kit" Cummins & Tiansi Xin, MIT

- 10:55 am Coffee Break
- 11:10 am Announcement of UMRP + and Keynote Introduction Elfatih A.B. Eltahir, Faculty Director, UMRP
- 11:20 am Keynote Address: Food Security in Africa: The Imperative of Innovation Mostafa Terrab, Chairman and CEO of OCP Group

12:00 pm Adjourn



Mostafa Terrab is Chairman and CEO of OCP Group, a global leader in crop nutrition solutions headquartered in Morocco. Transformed under his guidance since 2006, OCP today develops Morocco's world-leading phosphorus reserves into an increasingly diverse range of products for farmers on five continents. In the process, he has realized substantial growth in the equity value and revenues of OCP to the great benefit of the government and people of Morocco.

At OCP, Terrab has overseen the founding of Mohammed VI Polytechnic University (UM6P), a world-class research and education institution based in Morocco that partners with some of the most prestigious universities in the world and aims to be a major driver of Africa's economic development and diversification, and the strengthening of its human capital.

Mr. Terrab earned Masters and Ph.D. degrees in engineering and operations research from MIT following an engineering degree from the Ecole Nationale des Ponts et Chaussees in Paris. Prior to OCP, he served at the World Bank, led the creation of Morocco's telecom regulatory authority, and was an expert in the Cabinet of the late King Hassan II.

On the Board of Directors of the Peterson Institute for International Economics and the Global Board of Advisors of the Council on Foreign Relations, Terrab is also an Officer in the French Legion of Honor and has been awarded the *Wissam Alaouite*—a high honor from the Kingdom of Morocco.

Keynote Speaker: Mostafa Terrab