



Kyle E. Cordova

Position:	Executive Director of Scientific Research & Senior Assistant to HRH Princess Sumaya bint El Hassan for Scientific Affairs at the Royal Scientific Society, Amman (Jordan)
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ORCID:	orcid.org/0000-0002-4988-0497
Education:	2010 BA, University of San Diego, San Diego (USA) 2012 MSc, University of California, Los Angeles (USA)
Research:	Reticular chemistry, porous materials metal-organic frameworks, carbon capture and conversion, water harvesting from desert air
Hobbies:	Travel, reading fiction, golf

I chose chemistry as a career because it allows me to attempt to satiate my intellectual curiosity, be continuously creative, mentor emerging scholars, and work with some of the brightest minds in the world.

A key experience in my career was leaving my PhD program and being supported by Prof Omar M. Yaghi to return to his group to build research centers in countries around the world.

The most important quality of a role model is unselfish transfer of know-how and experience.

The biggest challenge facing my generation of scientists is solving, once and for all, inequitable access to science that so many people face.

My greatest achievement has been supporting the establishment of research centers of excellence in South Korea, Japan, Vietnam, Malaysia, Saudi Arabia, United Arab Emirates, Jordan, Mexico, Argentina, and China that train emerging scholars.

My favorite painter is Kazimir Malevich because he represents geometric shapes in their purist forms.

My favorite band is Radiohead or, on some days, New Order.

My favorite books are Halldór Laxness's Independent People, Jean-Paul Sartre's Nausea, Haruki Murakami's The

Wind-Up Bird Chronicle, and Ronald Cordova's poetry (my father).

The most exciting thing about my research is the discovery of structural design principles that lead to new functional porous materials.

If I were not a scientist, I would be a science diplomat.

My biggest motivation is leaving a mark on this world, whether that be through advancing my science, providing opportunities to emerging scholars, or simply supporting good human beings.

The natural talent I would like to be gifted with is singing. I think I may be tone-deaf.

My favorite time of day is weekend afternoons because that is when I get all my serious writing done.

Young group leaders are not prepared for managing personalities (inter- and intra-group) and the importance of continuously securing research funding (especially in research-weak countries).

The advice I wish I had received when I was an emerging scholar is that I am good enough to be successful as a scientist.

Behind the Science

Our work was, by definition, a journey. The program started with the serendipitous synthesis of a zeolitic imidazolate framework, termed ZIF-1001, that adopted a topology known in zeolite structures, but previously unseen in ZIF chemistry. The material discovery was exciting, and we wanted to elucidate the underlying design principle that led to its formation. Over 5 years across 5 laboratories in 4 countries, we solved this puzzle by unraveling the fourth working principle for designing new ZIF structures that combine attractive properties (ultra-high thermal and chemical stability) with exceptional functions (practical gas separation under high-humidity and -acidity conditions).

*The author presented on this page has published his **first article** as a submitting corresponding author in Angewandte Chemie:*

"Zeolite NPO-Type Azolate Frameworks": X. Zha, X. Li, A. A. Al-Omari, S. Liu, C.-C. Liang, A. Al-Ghourani, M. Abdellatif, J. Yang, H. L. Nguyen, B. Al-Maythaly, Z. Shi, K. E. Cordova, Y.-B. Zhang, *Angew. Chem. Int. Ed.* **2022**, doi.org/10.1002/anie.202207467; *Angew. Chem.* **2022**, doi.org/10.1002/ange.202207467.

International Edition: DOI: 10.1002/anie.202210614
 German Edition: DOI: 10.1002/ange.202210614

Introducing...



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Find out more about Kyle E. Cordova in his Introducing ... Profile.
