

## **Chia-Hsiang Chen**

Assistant Professor

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### **Education:**

- Ph. D. in Chemistry, 07/2006 - 07/2012  
National Sun Yat-Sen University, Kaohsiung, Taiwan.
- B. S. in Chemistry, 09/2002 - 06/2006  
Kaohsiung Medical University, Kaohsiung, Taiwan.

### **Work Experience:**

- Assistant Professor, 08/2018 - present.  
Department of Medicinal and Applied Chemistry  
Kaohsiung Medical University
- Postdoctoral Fellow, 10/2015 - 07/2018.  
Institute for Solid State Research  
Leibniz Institute for Solid State and Materials Research Dresden, Germany.
- Postdoctoral Fellow, 09/2013 - 09/2015.  
Department of Chemistry  
University of Texas at El Paso, El Paso, TX, United States.
- Postdoctoral Fellow, 08/2012 - 08/2013.  
National Sun Yat-Sen University, Kaohsiung, Taiwan.

### **Research Area:**

Metal-Organic Cages, Single Molecule Magnet, Organometallic Chemistry and Fullerene Chemistry.

### **Publications:**

- (1) Chen, C.-H.;\* Spree, L.; Koutsouflakis, E.; Krylov, D. S.; Liu, F.; Brandenburg, A.; Velkos, G.; Schimmel, S.; Avdoshenko, S. M.; Fedorov, A.; Weschke, E.; Choueikani, F.; Ohresser, P.; Dreiser, J.; Büchner, B.; Popov, A. A.\* "Magnetic hysteresis at 10 K in single molecule magnet self-assembled on gold" *Adv. Sci.* **2021**,8, 202000777.

- (2) Krylov, D.; Velkos, G.; Chen, C.-H. Büchner, B.; Kostanyan, A.; Greber, T.; Avdoshenko, S. M.; Popov, A. A.\* "Magnetic hysteresis and strong ferromagnetic coupling of sulfur-bridged Dy ions in clusterfullerene Dy<sub>2</sub>S@C82" *Inorg. Chem. Front.* **2020**, *7*, 3521-3532.
- (3) Krylov, D.;\* Schimmel, S.; Dubrovin, V.; Liu, F.; Nguyen, T. T. N.; Spree, L.; Chen, C.-H.; Velkos, G.; Bulbucan, C.; Westerström, R.; Studniarek, M.; Dreiser, J.; Hess, C.; Büchner, B.; Avdoshenko, S.,\* Popov, A. A.\* "Substrate-independent magnetic bistability in monolayers of single molecule magnet Dy<sub>2</sub>ScN@C80 on metals and insulator" *Angew. Chem. Int. Ed.* **2020**, *59*, 5756 – 5764.
- (4) Cai, W.;‡ Chen, C.-H.‡ (‡equal contribution); Chen, N.\*; Echegoyen, L.\* "Fullerenes as Nanocontainers that Stabilize Unique Actinide Species Inside: Structures, Formation and Reactivity" *Acc. Chem. Res.* **2019**, *52*, 1824-1833.
- (5) Liu, F.\*; Velkos, G.; Krylov, D. S.; Spree, L.; Zalibera, M.; Ray, R.; Samoylova, N. A.; Chen, C.-H.; Rosenkranz, M.; Schiemenz, S.; Ziegs, F.; Nenkov, K.; Kostanyan, A.; Greber, T.; Wolter, A. U. B.; Richter, M.; Büchner, B.; Avdoshenko, S. M.\*; Popov, A. A.\* "Air-stable redox-active nanomagnets with lanthanide spins radical-bridged by a metal–metal bond." *Nat. Commun.* **2019**, *10*, 571.
- (6) Chen, C.-H.; Krylov, D. S.; Avdoshenko, S. M.; Liu, F.; Spree, L.; Westerström, R. ; Bulbucan, C.; Studniarek, M.; Dreiser, J.; Wolter, A. U. B.; Büchner, B.; Popov, A. A.\* "Magnetic hysteresis in self-assembled monolayers of Dy-fullerene single molecule magnets on gold" *Nanoscale* **2018**, *10*, 11287-11292.
- (7) Chen, C.-H.; Krylov, D. ; Avdoshenko, S.; Liu, F ; Spree, L.; Yadav, R. ; Alvertis, A.; Hozoi, L.; Nenkov, K ; Kostanyan, A.; Greber, T.; Giraud, A. W. ; Popov, A. A. \* "Selective arc-discharge synthesis of Dy<sub>2</sub>S-clusterfullerenes and their isomer-dependent single molecule magnetism" *Chem. Sci.* **2017**, *8*, 6451-6465.
- (8) Chen, C.-H.; Abella, L.; Cerón, M. R.; Guerrero-Ayala, M. A.; Rodríguez-Fortea, A.; Olmstead, M. M.\*; Powers, X. B.; Balch, A. L.\*; Poblet, J. M.\*; Echegoyen, L.\* "A Zigzag Sc<sub>2</sub>C<sub>2</sub> Carbide Cluster inside a [88]Fullerene Cage with One Heptagon, Sc<sub>2</sub>C<sub>2</sub>@C<sub>s</sub>(hept)-C<sub>88</sub>: A Kinetically-Trapped Fullerene Formed by C<sub>2</sub> Insertion?" *J. Am. Chem. Soc.* **2016**, *138*, 13030-13037.
- (9) Chen, C.-H.; Aghabali, A.; Metta-Magana, A. J.; Olmstead, M. M. \*; Balch, L. A. \*; Echegoyen, L.\*. "Synthesis and characterization of a *trans*-1 hexakis-fullerene linker that forms crystalline polymers with silver salts" *Dalton Trans.*, **2015**, *44*, 18487-18491.
- (10) Chen, C.-H.; Ghiassi, Kamran B.; Cerón, M. R.; Guerrero-Ayala, M. A.; Echegoyen, L.\*; Olmstead, M. M.\*; Balch, L. A.\*. "Beyond the Butterfly:

Sc<sub>2</sub>C<sub>2</sub>@C<sub>2v</sub>(9)-C<sub>86</sub>, an Endohedral Fullerene Containing a Planar, Twisted Sc<sub>2</sub>C<sub>2</sub> Unit with Remarkable Crystalline Order in an Unprecedented Carbon Cage” *J. Am. Chem. Soc.* **2015**, *137*, 10116-10119.

- (11) Chen, C.-H.; Aghabali, A.; Suarez, C.; Olmstead, M. M. \*; Balch, L. A. \*; Echegoyen, L. \* “Synthesis and Characterization of Bis-triruthenium Cluster Derivatives of an all Equatorial [60]Fullerene Tetramalonate” *Chem. Commun.* **2015**, *51*, 6489-6492. (cover)