

Chia-Min Yang



Professor

Department of Chemistry

National Tsing Hua University (NTHU)

101, Section 2, Kuang-Fu Road, Hsinchu 300044, Taiwan

Office: Rm225, Chemistry II Bldg.

Tel: +886-3-5731282

Email: cmyang@mx.nthu.edu.tw

Webpage: <https://sites.google.com/view/ymclab/home>

Education:

- 09/1998-07/2002 Ph.D. in Chemistry, NTHU, Hsinchu, Taiwan
09/1994-06/1996 M.S. in Chemistry, NTHU, Hsinchu, Taiwan
09/1990-06/1994 B.S. in Chemistry (major) and Life Science (minor), NTHU, Taiwan

Experience:

- 08/2009-07/2014 Associate Professor, Department of Chemistry, NTHU, Taiwan
08/2004-07/2009 Assistant Professor, Department of Chemistry, NTHU, Taiwan
10/2002-06/2004 Postdoctoral Research Fellow at Max-Planck-Institut für Kohlenforschung, Germany

Selective Honors & Awards:

1. NTHU-Chichen Chen Distinguished Talent Chair (2024-2025)
2. Ta-You Wu Memorial Award (2012)
3. Distinguished Teaching Award of NTHU (2011)
4. Distinguished Young Chemist Award, the Shui-Mu Foundation of Chemistry (2010)
5. The Young Chemist Award, the Chinese Chemical Society (2009)
6. Distinguished Lectureship Award, the Chemical Society of Japan (2009)

Research Areas:

Mesoporous and zeolitic materials for biomedicine and heterogeneous catalysis related to net zero & sustainability

Selective Publications:

1. "Symmetry Distortion Engineering Single-atom Catalysts: Exceptional ORR Activity and Ultra-Stable Zn-Air Batteries" *Chem. Eng. J.*, **2025**, 516, 164156.
2. "An Efficient H₂O₂-based Propylene to Propylene Oxide (HPPO) Reaction Catalyzed by ZnO/ZnO₂ Materials" *J. Mater. Chem. A*, **2025**, 13, 5261-5274.
3. "Ammonia Synthesis over Cesium-Promoted Mesoporous-Carbon-Supported Ruthenium

Catalysts: Impact of Graphitization Degree of the Carbon Support” *Appl. Catal. B: Environ. Energy*, **2024**, 346, 123725.

4. “One-Step Synthesis of Thin-Carbon-Shell-Encapsulated Binary Cobalt Chromium Nitrides for Oxygen Reduction Reaction” *Appl. Surf. Sci.*, **2024**, 644, 158722.
5. “Bridging Li-Ion Batteries and Fuel Cells: From Cathode Leaching Residue to an Atomic-Scale Catalytic System” *ACS Energy Lett.*, **2023**, 8, 1652-1661.
6. “Tuning the Site-to-Site Interaction in Ru–M (M = Co, Fe, Ni) Diatomic Electrocatalysts to Climb up the Volcano Plot of Oxygen Electroreduction” *ACS Nano*, **2022**, 16, 10657-10666.
7. “Unraveling the Active Sites of Cs-Promoted Ru/ γ -Al₂O₃ Catalysts for Ammonia Synthesis” *Appl. Catal. B: Environ.*, **2022**, 310, 121269.
8. “High-Temperature Flame Spray Pyrolysis Induced Stabilization of Pt Single-Atom Catalysts” *Appl. Catal. B: Environ.*, **2021**, 281, 119471.s