

## Hoydoo You

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### Professional Experience

- 1994-present: Physicist, Argonne National Laboratory, Materials Science Division, Synchrotron Radiation Studies group.
- 1988-1993: Assistant Physicist, Argonne National Laboratory, Materials Science Division, Synchrotron Radiation Studies group.
- 1985-1988: Assistant Physicist and postdoc: Brookhaven National Laboratory, Physics Department, X-ray scattering studies.

### Recent Professional Activities

- Co-organizer with Dr. D. Fong, APS, CNM, EMC joint workshop, "Workshop on in situ reactivity studies", May 10, 2007, user facilities workshop.
- Organizing Committee, "Workshop on Catalysis Research at the Advanced Photon Source", with C. Marshall (ANL), P. Stair (NWU), S. Bare (UOP), R. Winans (ANL), S. Heald (PNNL), September 12-13, 2005.

### Education

- Ph.D. in Physics (December, 1985), University of Washington, Department of Physics
- M.S. in Physics (June, 1982), University of Washington, Department of Physics
- B.S. in Physics (August, 1979), Seoul National University, Department of Physics Education

### Invited Talks

- Lateral water ordering on TiO<sub>2</sub> (110) surface, H. You, D. Hennessy, K.-C. Chang, M. Pierce, K. Uosaki, International Conference on Electrified Interfaces, Hokkaido, Japan, June 24-30, 2007
- Studies of Model Electrocatalysts for Fuel-Cell Cathodes, H. You, N. Markovic, P. Zapol, D. Myers, G. Karapetrov, W. Halley, Y. Tolmachev, DOE hydrogen contractors meeting, Washington, DC, May 15-18, 2007
- Synchrotron X-ray Studies of Surfaces under Extreme Conditions, K.-C. Chang, H. You, B. Yildiz, D. Myers, J.D. Carter, B. Ravel (ANL), M. McKelvy and H. Barak (ASU), Symposium "In situ studies of interfacial reactivity", in APS-CNM-IPNS-EMC users week, Argonne National Laboratory, IL, May 7-11, 2007
- X-ray Scattering Applications for in-situ Investigation of Electrochemical Interfaces, K.-C. Chang, A. Menzel, V. Komanicky, H. You, Symposium on

Surface/Imaging/Spectroscopy at the Solid/Liquid Interface, Krakow, Poland, 28 May - 1 June 2006.

- In situ X-ray Characterization of Nanoscale Catalysts, H. You, Nanomaterials for Energy, 2006 Users Meetings for DOE/BES facilities at Argonne National Laboratory.
- High-resolution X-ray Resonance Fluorescence Technique for Study of Electrochemical Interfaces, H. You, K.C. Chang, A. Menzel, V. Komanicky, Pacificchem2005, "Structures, Dynamics and Reactivity at the Electrochemical Interface," Hawaii, December 2005.
- Growth and Electrochemical behavior of Nanofaceted Platinum Single Crystals - V. Komanicky, A. Menzel, and H. You, The 207th Electrochemical Society Meeting, Symposium "Electrocatalysis", ELECTROCATALYSIS, Quebec City, Canada, May 2005.

### Select Publications

- CO-induced lifting of Au (001) surface reconstruction, M.S. Pierce, K.-C. Chang, D.C. Hennessy, V. Komanicky, A. Menzel, H. You, J. Phys. Chem. C Lett., 112, 2231 (2008).
- Electrosorbed carbon monoxide monolayers on Pt(111), K.-C. Chang, A. Menzel, V. Komanicky, and H. You, Electrochimica Acta, 52, 5749 (2007).
- High-Density Electrosorbed Carbon Monoxide Monolayers on Pt(111) under Atmospheric Pressure, A. Menzel, K.-C. Chang, V. Komanicky, Y. V. Tolmachev, A. V. Tkachuk, Y. S. Chu, and H. You, Phys. Rev. B75, 035426 (2007).
- Polarization-dependent resonant anomalous surface x-ray scattering of CO/Pt(111). A. Menzel, Y. V. Tolmachev, K.-C. Chang, V. Komanicky, Y. S. Chu, J. J. Rehr, H. You, Euro Phys. Lett. 74, 1032 (2006).
- Resonance Anomalous Surface X-Ray Scattering, A. Menzel, K.-C. Chang, V. Komanicky, H. You, Y.S. Chu, Y. V. Tolmachev, J. J. Rehr, Radiation Physics and Chemistry, 75, 1651 (2006)
- Fabrication of Platinum Nano-Array Model Catalysts, V. Komanicky, K.-C. Chang, A. Menzel, D. Hennessy, G. Karapetrov, H. You, Proc. SPIE. Vol. 6340, 634010 (2006)
- In-situ Synchrotron X-ray Spectroscopy of Ruthenium Nanoparticles Modified with Selenium, H. You, J. Inukai, A. Wieckowski, K.-C. Chang, and V. Komanicky, ECS Trans., 3, 161 (2006)
- Stability and Dissolution of Platinum Surfaces in Perchloric Acid, V. Komanicky, K. C. Chang, A. Menzel, N. M. Markovic, H. You, X. Wang, D. Myers, J. Electrochem. Soc. 153(10), B446-B451 (2006)
- Investigation of Oxygen Reduction Reaction Kinetics at (111)-(100) Nanofaceted Platinum Surfaces in Acidic Media, V. Komanicky, A. Menzel, H. You, J. Phys. Chem. B, 109, 23550 (2005).
- Nanofaceted Platinum Surfaces: A New Model System for Nanoparticle Catalysts, V. Komanicky, A. Menzel, K.-C. Chang, H. You, J. Phys. Chem. B, 109, 23543 (2005).