

Hsin-Hsiung Huang
Full Time Tenured Professor
Metallurgical and Materials Engineering
Montana Tech, 1300 West Park Street, Butte MT 59701
406-496-4139 hhuang@mtech.edu

Education:

Ph.D. Chemical & Extractive Metallurgy, Applied Earth Sciences, Sanford University 1975
M.S. Chemical & Extractive Metallurgy, Applied Earth Sciences, Sanford University 1974
B.S. Metallurgical Engineering, Cheng-Kung University (Taiwan) 1969

Work Experience:

1992-Present Professor, Metallurgical & Materials Engineering, Montana Tech
1989 Tenure, Metallurgical & Materials Engineering, Montana Tech
1986-1992 Associate Professor, Metallurgical & Materials Engineering, Montana Tech
1982-1986 Assistant Professor, Metallurgical & Materials Engineering, Montana Tech
1978-1982 Visiting Professor, Metallurgical & Materials Engineering, Montana Tech
1975-1978 Post Doctoral Research, Metallurgical Engineering, University of Utah

Professional Registrations and Licenses:

None

Professional Affiliations:

The Minerals, Metals and Materials Society (TMS)
Sigma Xi (Current Stanford Chapter)
ASM International (formerly the American Society for Metals)

Honors and Awards:

Co-Recipient of Extractive Metallurgy Award of The Metallurgical Engineering (1976)
Burlington Northern Faculty Achievement Award (1992)

Funded Grants:

With Professor Downey for Recovery of Metal Contaminants from Industrial Wastewaters with Magnetic NanoComposites in a Novel Continuous Flow Process System. \$495,127.
With C.A. Young, W.Gleason and H.H.Huang, "REE selective Processing by leaching and Chelating SPCs," Office of Naval Research, \$300,000 (2012-2015).

Publications:

1. Fundamental procedure to evaluate and design industrial waste water treatment systems, case study discussions, SME-Mineral Processing Plant Design Tucson, AZ (2009)
2. Developing a high volume manufacturing wet clean process to remove BF₂ implant induced molybdenum contamination, "Solid state phenomena", Vol. 145-146 p 127-130 (2009)

3. Using Revised HKF to Model Elevated Temperature and Pressure Operation – Gold Autoclave, International Hydro2008, phoenix Arizona, August (2008)
4. Free Energies from the Solubility of Solids Using Speciation Calculation, International Hydro2008, Phoenix, Arizona, August (2008)
5. Free Energies from the Solubility of Solid Compounds Using Speciation Calculations with Huang, H., Young C., and Twidwell, L., Hydrometallurgy 2008: Proceedings of the Hydrometallurgy 6th International Symposium, SME (2008)
6. Electrochemistry of Enargite: Reactivity in Alkaline Solutions. 2012 EPD Congress, TMS (2012)
7. Spectroelectrochemistry of Enargite I: Reactivity in Alkaline Solutions,”, Hydroprocess 2013 (2013)
8. Electrochemistry of Enargite: Reactivity in Alkaline Solutions, SME Annual Meeting, SME. (2013)
9. Utility of Mass Balanced Eh-pH Diagrams II: Stoichiometry of Cu-As-S-H₂O system SME annual meeting Denver 2015

URP mentorships:

None

Graduate Committees:

Advised Master Students: Raj Srivastave and Arwin Gunawan (2014-2014)

Thesis Committees: Jesse Bowden (Master 2015) and Nick Gow (Ph. D. 2015)

Service:

Montana Tech

Computer, Web and Graduate Consult.

Review Submitted Papers for

International Journal of Hydrometallurgy,

Chemical Thermodynamics and

Journal of Solution Chemistry