

# Yogendra Panta

## Education:

Ph.D. Mechanical Engineering	University of Nevada Las Vegas (UNLV)	2008
M.S. Mechanical Engineering	Youngstown State University (YSU)	2004
B.E. Mechanical Engineering	Tribhuvan University	2000
B.Sc. Physical Science	Tribhuvan University	1995

## Academic Experience:

WVU Tech	Assistant Professor- Mechanical Engineering	2013-Current
YSU	Assistant Professor- Mechanical Engineering	2008-2013
UNLV	Nevada NSF EPSCoR Graduate Research Fellow	2006-2008
UNLV	Graduate Teaching Assistant	2005-2006
YSU	Graduate Assistant - Mechanical Engineering	2002-2004
Pokhara University	Lecturer- Mechanical Engineering- Part Time	2001-2002
Purvanchal University	Lecturer - Mechanical Engineering- Full Time	2000-2001

## Publications in Book, Patent Application, Refereed Journals, Proceedings, or Extended Abstract

*United States Patent Application Publication:* Kudav, G.V. and **Panta, Y.M.**, Solar Panel Wind Deflector, Pub. No. US 2013/0000219 A1; Jan. 3, 2013.

*Book:* **Panta, Y.M.**, (2009), Action of Magnetohydrodynamics on the Detection of Mercury, VDM Verlag Publishing House Ltd., Germany (ISBN 978-3-639-18425-9, 90 pages).

### *Peer Reviewed Journal Articles*

**Panta, Y.M.**, Farmer, D.E., Johnson, P., Cheney, M.A., S. Qian, (2010), "Preparation of Alpha Sources Using Magneto-Hydrodynamic Electrodeposition for Radionuclide Metrology," *Journal of Colloid and Interface Science* 342: 128-134.

**Panta, Y.M.**, Liu, J., Cheney, M.A., Joo, S.W. and S. Qian, (2009), "Ultrasensitive Detection of Mercury (II) Ions Using Electrochemical Surface Plasmon Resonance (SPR) With Magnetohydrodynamic (MHD) Convection," *Journal of Colloid and Interface Science* 333: 485-490

**Panta, Y.M.**, Qian, S., Cizdziel, J.V., Cross, C.L., (2008), "Mercury Content of Whole Cigarettes, Cigars and Chewing Tobacco Packets Using Pyrolysis Atomic Absorption Spectrometry With Gold Amalgamation," *Journal of Analytical and Applied Pyrolysis* 83: 7-11

**Panta, Y.M.**, Qian, S., Cheney, M.A., (2008), “Stripping Analysis of Mercury(II) Ionic Solutions Under Magneto-hydrodynamic (MHD) Convection,” Journal of Colloid and Interface Science 317: 175-182

*Referred Conference Proceedings- Full Paper*

**Panta, Y.M.**, Adhikari, P., Reppert, B., (2012), Analysis of Fluid Properties in High pressure Water Valves, American Society of Mechanical Engineers (ASME) IMECE, Houston, TX, Nov. 9-15.

Kudav, G.V. and **Panta, Y.M.**, (2012), Design and Testing of Wind Deflectors for Roof-Mounted Solar Panels, Advances in Fluid Mechanics (AFM), AFM 2012: 9<sup>th</sup> International Conference on Advances in Fluid Mechanics, Split, Croatia, June 26 – 28.

**Panta, Y.M.**, Kim, H.W., Adhikari, P., Aryal, S., (2012), Integration of Hands-on Computational Fluid Dynamics (CFD) in Undergraduate Curriculum, American Society of Engineering Education (ASEE)- San Antonio, TX, June 10-13.

**Panta, Y.M.**, Butcher, M, (2012), Development of an Integrative Biomechanics Course for STEM Majors, American Society of Engineering Education (ASEE)- San Antonio, TX, June 10-13.

Kim, H.W., **Panta, Y.M.**, (2012), Fostering Students' Capability of Designing Experiments Through Theme-specific Laboratory Design Projects, American Society of Engineering Education (ASEE)- San Antonio, TX, June 10-13.

Kim, H.W., **Panta, Y.M.**, (2011), “On the work by electricity in the first and second laws of thermodynamics,” ASEE Annual Conference, Vancouver, Canada, June 26 - 29.

*Referred Conference Proceedings- Extended Abstracts or Short Papers*

**Panta, Y.M.**, Adhikari, P., Aryal, S., (2012), Development of Electro-Osmotic Micromixer for Uniform and Rapid Mixing, American Society of Mechanical Engineers (ASME) Summer Bioengineering Conference (SBC)- Fajardo, Puerto Rico, June 20-23.

**Panta, Y.M.**, Aryal, S., Adhikari, P., (2012), “Analysis of Electro-Kinetic Fluid Flow in T-Shaped DNA Chips,” ASME-SBC Conference - Fajardo, Puerto Rico, June 20-23.

**Panta, Y.M.**, Adhikari, P., (2011), “Design of Efficient Electro-Osmotic Mixer,” ASME SBC Conference, Farmington, PA, June 22 - 25.

*Professional Presentations at various professional conferences: Over two-dozen presentations since 2008.*

**Honors and awards:**

President’s Gold Medal- Nepal Vidhyabhushan, President of the Republic of Nepal, 2012

Research Professorship (RP)- YSU, 2012, 2010, 2009

Distinguished Professor in Scholarship, YSU, 2012

Sigma Xi Young Investigator Award, YSU Sigma-Xi Chapter, 2011

### **Professional development activities:**

- Currently planning to develop an elective course on Applied Computational Fluid Dynamics (CFD) at WVU Tech.
- Research Interests: Thermo-Fluid Sciences including General Fluid Dynamics, Computational Fluid Dynamics (CFD), Energy Resources, Biofluids, and Microfluidics.
- Previously attended Three-Day Effective Teaching Training Workshop organized by National Effective Teaching Institute-American Society of Engineering Education (NETI-ASEE), June 2012.

### **Professional Registration:**

- Engineer Intern, The Nevada Board of Engineers – Nevada Since 2007

### **Professional Memberships:**

- Sigma Xi, The Scientific Research Society
- ASME, American Society of Mechanical Engineers
- ASEE, The American society for Engineering Education
- APS, American Physical Society

### **Service activities:**

#### *Leonard Nelson College of Engineering Service:*

- Currently serving as a representative of three faculty members ( other two members are Dr. Davari and Dr. Dickman) from College of Engineering to serve on a team that will meet with the Tech Retention "committee" to discuss faculty professional development needs.
- Currently accepted to serve as faculty advisor to West Virginia Delta Theta, the Tau Beta Pi Engineers student chapter. Attend occasional team meetings.

#### *Professional Service:*

- American Society of Mechanical Engineers (ASME), American Physical Society (APS), American Society for Engineering Education ( ASEE) conferences,
- Reviewer for ASME Journal of Fluid Engineering, Journal of Franklin Institute,
- International Editorial Member for Int. Journal of Computational Methods and Experimental Measurements, WIT Press.

#### *Previous Graduate Students:*

- P.C. Adhikari, (2013), “Computational Analysis of Mixing in Microchannels,” Graduated May 2013, YSU.
- S. Aryal, (2012), “Analysis of Electrokinetic Flow in Microfluidic Chips,” YSU.

- M. Yatsco, (2011), “Numerical Analysis and Wind Tunnel Validation of Wind Deflectors for Rooftop Solar Panel Racks, YSU.
- W. Lin, (2011), “Numerical Analysis of Magnetohydrodynamic Pump,” YSU.