**SHORT CV – PUSHPALATHA MURTHY**

## PUSHPALATHA MURTHY Tel: 906-487-3007

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1. **PROFESSIONAL PREPARATION:**

Miranda House, Delhi University Delhi, India Chemistry B.Sc. (Hons) 1972

Indian Institute of Technology Kanpur, India Chemistry M.Sc. 1974

Brown University Providence, RI Chemistry Ph.D. 1979

1. **PROFESSIONAL APPOINTMENTS:**

July 16 – now: Associate Provost and Dean of the Graduate School, Michigan Tech. University, Houghton, MI

Aug 15 - July: Associate Dean, Graduate School, Michigan Tech. University

Oct 12 - July 15: Program Director, Division of Graduate Education, NSF, Arlington, VA

Sept 99 - present: Professor, Department of Chemistry, Michigan Tech U. Houghton, MI

Sept 05 - May 06: Sabbatical leave at CSIRO Canberra, and CAMBIA, Canberra, Australia

Aug 01- Aug 04: Chair, Department of Chemistry, Michigan Tech. Univ.

Aug 00 - Aug 01: Interim Chair, Department of Chemistry, Michigan Tech. Univ.

Sept 91‑ Aug 99: Associate Professor, Department of Chemistry, Michigan Tech. Univ.

Mar 93 - May 93: Visiting Assoc. Prof (on sabbatical leave), Biotechnology Dept., Cornell University, Ithaca, NY

Sept 92 - Dec 92: Visiting Assoc. Prof (on sabbatical leave), Michigan State

University, East Lansing, MI

Sept 86 - Aug 91: Assistant Professor, Department of Chemistry, Michigan Tech. Univ.

Sept 85 - Aug 86: Visiting Asst. Professor, Department of Chemistry and Chemical Engineering, Michigan Tech. Univ.

Aug 82 - Jan 85: Research Chemist, Stauffer Chemical Company, Dobbs Ferry, NY

Jun 80 - Aug 82: Post-doctoral fellow, Mental Health Research Institute, Univ. of

Michigan, Ann Arbor, MI with Prof. B. W. Agranoff

Jul 79 - May 80: Post-doctoral fellow, Chemistry Department Univ. of Mich., Ann Arbor, MI, with Prof. M. Koreeda

## Selected Publications:

## 1. Mimi Yang, Sasha Teymorian, Philip Olivares, *Pushpalatha P.N.Murthy* (2015) Extracellular expression of alkaline phytase in Pichia pastoris: the GAP promoter is more efficient than the AOX1 promoter. *Biotechnology Reports* 6, 112-118.

**2***. P.P.N.Murthy*, M. Thompson, K. Hungwe **(2014)** The Development of a Semester-long, Inquiry-Based Laboratory Course in Upper-Level Biochemistry and Molecular Biology. ***J. Chemical Education*** **91**, 1909-1917.

**3**. J.A. Dorsch, A. Cook, K.A. Young, J.M. Anderson, A.T. Bauman, C.J. Volkmann, *P.P.N. Murthy* and V. Raboy **(2003)** Seed phosphorous and inositol phosphate phenotype of barley low phytic acid genotypes. ***Phytochemistry* 62,** 691-704

**4.** *P.P.N. Murthy* **(2007)** Identification of inositol phosphates by NMR spectroscopy: unraveling structural diversity. In Proceedings of the Bouyoucos conference on Biogeochemical interaction of inositol phosphates in the environment, B.L. Turner, A.E. Richardson, and E.J. Mullaney (Editors), CB international, Cambridge, MA, pp 7-22.

**5.** V. Raboy, P. Gerbasi, K.A. Young, S. Stoneberg, S.G. Pickett, A.T. Bauman, *P.P.N.Murthy*, and W.F. Sheridan **(2000)** Origin and seed phenotype of maize *low phytic acid 1-1* and *low phytic acid* *2-1.* ***Plant Physiol.* 124,** 355-368.

**Other significant products**

**1.** L.G. Barrientos and *P.P.N. Murthy* **(1996)** Conformational analysis of *myo*-inositol phosphates. ***Carbohydrate Res****.* **296,** 39-54

**2.** M. Yang, S. Johnson, *P.P.N. Murthy* (**2012**) Enhancement of alkaline phytase production in *Pichia pastoris*: influence of gene dosage, sequence optimization and expression temperature. ***Protein Express. Purif.*** **84**, 247-254.

**3.** S.C. Johnson, M.Yang, *P.P.N. Murthy* (**2010**) Heterologous expression and functional characterization of a plant alkaline phytase in *Pichia pastoris*. ***Protein Express. Purif.* 74**, 196-203.

**4**. Ping Yang, Bernard Spiess, *Pushpalatha P.N. Murthy*, Richard E. Brown **(2007)** Influence of metal cations on the intramolecular hydrogen-bonding network in phosphorylated compounds. ***J. Phys. Chem.*** **111**, 3602-3612.

**5**. Cuihua Xue, Singaravelu Velayudhan, Steve Johnson, Rahul Saha, Adrian Smith, Wilbur Brewer, *Pushpalatha Murthy*, Susan T. Bagley, and Haiying Liu **(2009)** Highly water –soluble, fluorescent, conjugated fluorine-based glycopolymers with poly(ethylene glycol)-tethereed spacers for sensitive detection of *Escherichia coli*. ***Chem. Eur. J.*** **15**, 2289-2295.

1. **SYNERGISTIC ACTIVITIES**

1) Member of Advisory Committee of COACh (<http://coach.uoregon.edu/>), an organization dedicated to the career advancement of women scientists. Facilitated COACh workshops nationally and internationally

2) Director of Women in Science and Engineering at Michigan Tech (2007-1012) Mission is to increase women faculty at Michigan Tech through recruitment, advancement and career success. Developed a maternity leave policy for Michigan Tech.

3) NSF (2013-2015) In charge of outreach activities to increase participation of underrepresented groups in the Graduate Research Fellowship Program. Visited a number of Historically Black Colleges and Universities (HBCU) to implement a new strategy for promoting GRFP to NBCU students.

4) NSF (2012-2015) In charge of implementing changes to the GRFP review format from on-site face-to-face panels to virtual panels.