

Curriculum Vitae

CHAMARI WALLIWALAGEDARA

El Centro College
Dallas TX 75202
Chamari.w@dcccd.edu

EDUCATION

- **Post-doctoral Study in Cancer Research** **2013-2014**
 - Advanced Imaging Research Center, UT Southwestern Medical Center, Dallas, TX
- **Ph.D. in Clinical-Bioanalytical Chemistry** **2007-2012**
 - Department of Chemistry, Cleveland State University, Cleveland, OH
- **Bachelor of Science (B.Sc.) in Chemistry with Honors** **2001-2004**
 - Department of Chemistry, University of Colombo, Sri Lanka

AWARDS AND HONORS

- Best Graduate Oral Presentation Honor Award - American Chemical Society Meeting In Miniature, Cleveland, OH
- Second Best Graduate Oral Presentation Award - Cleveland State Interdisciplinary Research Conference, Cleveland State University, Cleveland, OH
- Second Best Graduate Poster Presentation Award - Cleveland State Interdisciplinary Research Conference, Cleveland State University, Cleveland, OH
- Doctoral Dissertation Research Expense Award by University Council, Cleveland State University, Cleveland, OH
- Second best graduate oral presentation Award - Society of Environmental Toxicology and Chemistry- Ohio Valley Chapter Annual meeting, Cleveland, OH

ACADEMIC SERVICE & MEMBERSHIPS

- Member of the American Chemical Society 2008-2012
- Graduate Student Interdisciplinary Research Club, CSU 2008-2012
- Invited Judge at the Northeastern Ohio Science & Engineering Fair (NEOSEF) at Cleveland State University, Cleveland, 2010

TEACHING EXPERIENCE

- **Adjunct Faculty -Chemistry** **2016-present**
STEM Division, El Centro College, Dallas County Community College District
Teaching General Chemistry (In Class) to the undergraduates and conducting General Chemistry laboratory course – responsible for everything within the course work.
- **Teaching Assistant** **2008-2012**
 - **Department of Chemistry, Cleveland State University, Cleveland, Ohio**
Conducting college chemistry, general chemistry and biochemistry laboratory sections, Grading Reports, preparing quizzes and final laboratory examinations, conducting tutorial sections to Chemistry major and minor students
- **Teaching Assistant** **2005-2006**
 - **Open University of Sri Lanka, Colombo, Sri Lanka**
Conducting Biochemistry, Physical & analytical chemistry laboratory sections,

Grading Reports, preparing quizzes and final laboratory examinations, conducting tutorial sections to chemistry students

- **Teaching Assistant** **2004-2005**
 - **Department of Chemistry, University of Colombo, Sri Lanka**
Conducting organic, physical, analytical and inorganic chemistry laboratory sections, Grading Reports, preparing quizzes and final laboratory examinations, conducting tutorial sections to chemistry students

RESEARCH EXPERIENCE

- **University of Texas Southwestern Medical Center at Dallas, Dallas, TX, USA** **Jan 2013 - Oct 2014**
"Validation of a Phosphatidylserine binding peptoid as an anti cancer drug through unbiased selection"

Nowadays more than 90% of all the new anti-cancer drugs reaching the market are not approved and not accepted. This is mainly due to the fact that their targets are conventional "protein" biomarkers which are having highly heterogeneous expression levels varied from patient to patient. Also they are very expensive and causing adverse side effects. We have discovered an anti cancer drug lead which is a peptoid and it targets a non protein bio-marker which is universally expressed in almost all of the tumor microenvironment. Peptoids are emerging as a novel class of biologically accepting compounds having favorable characteristics and features. The current stage of this project is to validate this compound through unbiased selection and get approved via clinical trials.

- **Cleveland State University, Cleveland, OH, USA** **2007- 2012**
"Proteomic approaches to elucidate molecular mechanisms of metal accumulation in plants with focus on Arsenic"

Environmental pollution due to heavy metals is a global problem and its prevention and cleanup have become a critical concern. Phytoremediation is a novel technology that uses certain plants and their associated microbes to clean up contaminated soil and water. In order to make phytoremediation an energy efficient, aesthetically pleasing method of remediating sites, it's highly important to understand the biochemical mechanisms specially the involvement of proteins responsible for toxic heavy metal hyperaccumulation. This was addressed by using most of the bioanalytical and proteomics tools as well as instrumentation such as mass spectrometry, UV/VIS and ICP.

- **University of Colombo, Colombo, Sri Lanka** **2001-2004**
"Synthesis and characterization of supra-molecular structures [2] Rotaxane and [2] Catenenes"

BOOK PUBLICATIONS

"A Bioanalytical Study on Heavy metal Hyperaccumulation In Plants". LAP LAMBERT Academic Publishing (July 20, 2013) , ISBN-10: 3659407526, ISBN-13: 978-3659407529

SCHOLARLY PUBLICATIONS

- "Comparison of sample preparation methods for the resolution of metal-regulated proteins in *Helianthus annuus* by 2-Dimensional gel electrophoresis" Open Journal of proteomics, (2010), 3,20-25
- "Differential expression of proteins induced by lead in dwarf sunflower *Helianthus annuus*" Phytochemistry, (2010), 71, 1460-65
- "Differential Proteome analysis of *Chlamydomonas reinhardtii* response to arsenic exposure" American Journal of Plant Science, (2012), 3, 764-772
- **Dissertation of PhD:** Proteomic Approaches to Elucidate Molecular Mechanisms of Metal Accumulation in Plants with Focus on Arsenic

MEETINGS AND PRESENTATIONS

- **Chamari Waliwalagedara**, Harry van Keulen, Belinda Willard, Robert Wei, "Differential proteome analysis of *Chlamydomonas reinhardtii* response to arsenic exposure". *28th Annual meeting of the Ohio Valley Chapter of the Society of Environmental Toxicology and Chemistry (SETAC)*, Cleveland, OH, September 2011.
- **Chamari Waliwalagedara**, Jerome D. McGinty, Katie L. Lemmeyer, Harry van Keulen, Belinda Willard, Robert Wei, "The uptake of arsenic and differential expression of arsenic regulated proteins in Chinese brake fern *Pteris vittata*". *College of Science Research day*, Cleveland State University, OH, April 2011.
- **Chamari Waliwalagedara** Harry van Keulen, Teresa J. Cutright and Robert Wei, "Differential Expression of proteins in response to arsenic stress in *Chlamydomonas reinhardtii*", *240th American Chemical Society National Meeting and Exposition*, Boston, MA, August 2010.
- **Chamari Waliwalagedara** Harry van Keulen, Teresa J. Cutright and Robert Wei, "Differential Expression of proteins in response to arsenic stress in *Chlamydomonas reinhardtii*", *American Chemical Society Meetings In Miniature*, Cleveland, OH, March 2010.
- **Chamari Waliwalagedara**, Harry van Keulen, Belinda Willard, Robert Wei, "Differential expression of proteins in response to arsenic stress in *Chlamydomonas reinhardtii*", Cleveland State Interdisciplinary Research Conference, Cleveland State University, OH, October 2010.
- **Chamari Waliwalagedara** Harry van Keulen, Teresa J. Cutright and Robert Wei, "Induction and binding of heavy metal ions to Metallothionein II in *Helianthus annuus*" *30th Annual Meeting of Society of Environmental Toxicology and Chemistry (SETAC) North America*, New Orleans, LA, November 2009.
- **Chamari Waliwalagedara** Harry van Keulen, Teresa J. Cutright and Robert Wei, "Induction of Metallothionein II to heavy metal ions in *Helianthus annuus*" *American Chemical Society Meetings In Miniature*, Cleveland, OH, March 2009.
- **Chamari Waliwalagedara**, Harry van Keulen, Teresa J. Cutright and Robert Wei, "Identification of heavy metal-regulated proteins in *Helianthus annuus* using two dimensional gel electrophoresis." *10th Annual Plant Molecular Biology and Biotechnology Research Symposium*, Columbus, OH, April 2008.
- **Chamari Waliwalagedara** Harry van Keulen, Teresa J. Cutright and Robert Wei,, "Comparison of sample preparation methods for the resolution of heavy metal regulated proteins by 2-Dimensional gel electrophoresis in *Helianthus annuus*" *College of Science Research Day, Cleveland State university*, Cleveland, OH, May 2008.