Ana Magdalena Q. Vande Linde, Ph.D.

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EDUCATION

Post-Doctoral Fellow, 1988 – 1989

Stroke Research Center, Department of Neurology, Henry Ford Hospital, Detroit, MI

Ph.D. Analytical Chemistry, Wayne State University, Detroit, MI, 1988

Dissertation: Determination of Self Exchange Electron Rate Constants and Activation Parameters for Macrocyclic Polyaminothiaether and Polythiaether Complexes of Cu(II)(I) Using NMR Spectroscopy.

Adviser: Dr. David Rorabacher

- M.S. Chemistry, De La Salle University, Manila, Philippines, 1983
- M.S. Teaching Physical Science, De La Salle University, Manila, Philippines, 1980
- B.S. Chemistry, University of San Agustin, Iloilo City, Philippines, 1977

EXPERIENCE

University of Wisconsin-Stout, Department of Chemistry (1993-2015); Department of Chemistry and Physics, Menomonie, WI

Professor of Chemistry, 2004 – present Associate Professor, 1998 – 2004 Assistant Professor, 1993 – 1998

Courses Taught

- Chemistry in Our World (CHEM 110)
- Introductory Chemistry (CHEM 115)
- College Chemistry I (CHEM 135)
- College Chemistry II (CHEM 136)

Laboratory Manuals Assembled and Edited

- o College Chemistry I Laboratory Manual
- College Chemistry II Laboratory Manual
- Quantitative Analysis Laboratory Manual
- o Environmental Chemistry Laboratory Manual

Graduate Students' Theses

- o Determination of Cadmium Uptake by Parsley, Bandana Upadhyaya, 2011
- Data Analysis of the Correlation Between Processing Variables and Concentrations of Isoflavones in Soymilk, Xiuyu Li, 2005
- The Effect of Various Acidic Solutions on the Concentrations of Genistein in Tempeh, Lori Garlock, 2000

Noteworthy Service Activities

- o Department Chair, Department of Chemistry and Physics, 2017 2023
- Member, Secondary Teacher Preparation Committee. This committee submitted to the provost, a draft of the curriculum revisions needed to offer a B.S. Secondary Education program, with concentrations in science, social studies and English, Summer 2023
- Member, Joint Committee on Instructional Workload. This committee wrote the newly approved instructional workload policy, which is implemented fall 2023, spring 2022 – spring 2023

- Quantitative Analysis (CHEM 331)
- Environmental Chemistry (CHEM 353)
- Environmental Regulations (CHEM 452)
- Adv. Chemistry Experience (CHEM 489)

- o Member, Stellic (degree audit and tool) Implementation Team, fall 2022 present
- o Chemistry Minor Adviser, 1997 present
- o Environmental Health Minor Adviser, 2020 present
- Academic Adviser, Applied Science and Environmental Science Programs, Ongoing
- o Environmental Science Program Advisory Board, 2013 present
- Chair, Department of Chemistry Full Professor Promotion Committee, Fall 2018
- Chair, Department of Chemistry Assistant Professor Search Committee, 2016 2017
- Vice-Chair, Faculty Senate, August 2013 May 2017
- o Chair, Faculty Senate Election Committee, August 2013 May 2017
- Member, Faculty Senate Executive Committee, August 2013 May 2017
- o Coordinator, Chemistry Tutor Center, 1997 2016, 2022 present
- Schedule Coordinator, Department of Chemistry (and Physics), 2008 2017
- Faculty Senate Representative, Search Committee, Provost and Vice Chancellor for Academic and Student Affairs, AY 2014 – 2015
- Faculty Senate Representative, PPC, August 2013 May 2017
- Faculty Senate Representative, Search Committee, Dean of the College of Science, Technology, Engineering and Math, AY 2013 – 2014
- o Chair, Finance Committee, August 2014 May 2015
- Chair, College of STEM Promotion Committee, Fall 2012
- Co-chair, 38th Annual UW-System Chemistry Faculties Meeting, October 21-22, 2011, UW-Stout
- Department of Chemistry Representative, Applied Science Program committee, 1996-2017

Department Chair, 2017 - 2023

Noteworthy Accomplishments

- o Facilitated the acquisition of funds for the following projects/equipment:
 - Wireless sensors (pH, temperature, conductivity) \$10,276, DIN Funds, A. Vande Linderequestor, 2022 2023
 - Oscilloscopes, Generators, Meters for Physics Labs, \$24,000, Lab Mod Project Fund,
 A. Vande Linde-requestor, 2019-2020
 - Furnace and 3D Printer, \$15,938, ME Differential Tuition Fund and College Reserve,
 M. Ray-requestor, 2019-2020
 - Single Photon Counter, \$8,557, Lab Mod Project Fund, T. Zimmerman-requestor, 2019-2020
 - FTIR Spectrometer, \$21,598, Lab Mod Project, Fund, D. Kadnikov-requestor, S2018
 - Balances, Desiccators, Lab Pro Mini Interface, and Other Small Equipment, \$32,624,
 Lab Mod Project Fund, A. Vande Linde-requestor, \$2018
 - Monitor with Air Media and Moving Camera for SA 347/367, \$20,000, Lab Mod Project Fund, A. Vande Linde-requestor, spring 2018
 - Chemistry Prep Area Update, \$17,395, Lab Mod Project Fund, R. Hoeft-requestor, 2018-2019
 - Autosampler for the NMR, \$33,605, Lab Mod Project Fund, D. Kadnikov-requestor, 2018-2019
 - Analytical Balances for the Organic Chem Lab, \$11,300, Lab Mod Project Fund, D. Kadnikov-requestor, 2018-2019

- Monitors with Air Media and White Boards in the Chemistry and Physics Tutor Centers, \$12,279, Classroom Modernization Project Fund, A. Vande Linde-requestor, Spring 2017
- Periodic Tables in Chemistry and Physics Teaching Spaces, \$6,400, Classroom Modernization Project Fund, A. Vande Linde-requestor, spring 2017
- Renovation of Organic Chemistry Lab, \$5,500, Lab Mod Project Fund, D. Kadnikovrequestor, spring 2017
- Acquired \$55,842 from Access to Learning funds for Tutors and Lab Assistants, AY 18-19 to AY 23-24
- Acquired up to 1.25 FTE of Graduate Assistantship, AY 18-19 to AY 23-24. Recruited up to five graduate students, assigned their schedules and responsibilities, and monitor their performance through feedback from instructors.
- Approval of the Environmental Health Minor
- Approval of the GEOL course prefix for geology courses which were designates as PHYS courses.
- Organization of the Chemistry Tutor Center and Laboratories in SW335, SA347 and SA367
- Approval of the Open Lab Policies, Five-Year DCP Strategic Plan, Instrument Usage Fees, and Instrument Usage Policies
- Facilitated the following: updates of outdated physics and chemistry courses; correction of prerequisites of introductory physics courses; renaming the

Henry Ford Hospital Stroke Research Center, Department of Neurology, Detroit, MI

Junior Staff Investigator, 1989 - 1993

Post-Doctoral Fellow, 1988 - 1989

Madonna University, Chemistry Department, Livonia, MI

Adjunct Associate Professor, 1992 - 1993

Wayne State University, Department of Chemistry Detroit, MI

Graduate Teaching and Research Assistant, 1983 – 1988

De La Salle University, Department of Chemistry, Manila, Philippines

Assistant Professor, 1981 - 1983

College Instructor, 1980 - 1981

Colegio de San Agustin, Department of Chemistry, Bacolod City, Philippines

College Instructor, 1977 - 1978

PEER REVIEWED PUBLICATIONS

- B.E. Johnson and B. Upadhyaya (Faculty Advisors: A.M.Q. Vande Linde and K. Carlson):
 Models of Cadmium Absorption by Italian Parsley, *Proceedings of the National Conference on Undergraduate Research*, 2012, 613-619.
 http://www.ncurproceedings.org/ojs/index.php/NCUR2012/article/view/168/257
- K.M. Hurd, M. Chopp, A.M.Q. Vande Linde, Y. Li, T. Spencer: The Effects of Moderate Hyperglycemia on the Temporal Profile of Brain Tissue Intracellular pH and [Mg²⁺] After Global Cerebral Ischemia in Rats. *J Neurol Science*, 1995, 129, 90-96.
- G.H. Leggett, B.C. Dunn, A.M.Q. Vande Linde, L.A. Ochrymowycz and D.B. Rorabacher: Electron-Transfer Kinetics of Copper (II)/(I) Macrocyclic Tetrathiaether Complexes. The Influence of Ring Size Upon Gated Behavior. *Inorg Chem* 1993, 32, 5911-5918.
- J.A. Helpern, A.M.Q. Vande Linde, K.M.A. Welch, S.R. Levine, L.R. Schultz, R.J. Ordidge, J.W. Hugg, H.R. Halvorson: Acute Elevation and Recovery of Intracellular [Mg²⁺] Following Human Focal Ischemia. *Neurology* 1993, 43, 1577-1581.
- A.M.Q. Vande Linde, B.C. Westerby, L.A. Ochrymowycz, D.B. Rorabacher: Applicability of the Marcus Relationship to Copper (II)/(I) Electron Transfer. Comparison of NMR Self-Exchange

- Relaxation and Reduction and Oxidation Cross Reaction Kinetics for a Macrocyclic Aminotetrathiaether Copper (II)/(I) Complex in Aqueous Solution. *Inorg Chem*, 1993, 31, 251-257.
- Vande Linde A.M.Q., Chopp M., Lee S.A., Schultz L., Chen Q., Welch K.M.A.: Suppression of Post-Ischemic Brain Tissue Alkalosis by U74006F. *J Neur Sci* 1993, 114, 36-39.
- Levine S.R., Helpern J.A., Vande Linde A.M.Q., Sawaya K.L., Brown E.E., Ramadan N.M., Ordidge R.J., Deveshwar R.K., Welch K.M.A.: ³¹P NMR Investigation of Human Focal Cerebral Ischemia: Brain pH and Energy Metabolism. *Radiology* 1992, 185, 537-544.
- Halvorson H.R., Vande Linde A.M.Q., Helpern J.A., Welch K.M.A.: Assessment of Magnesium Concentrations by ³¹P NMR in vivo. *NMR in Biomed* 1992, 5, 53-58.
- Vande Linde A.M.Q., Juntunen K.L., Mols O., Ksebati M., Ochrymowycz L.A., Rorabacher D.B.: Direct Determination of the Self Exchange Electron-Transfer Rate Constant for a Copper (II)/(I) Macrocyclic Pentathiaether Complex. *Inorg Chem* 1991, 30, 5037-5042.
- Vande Linde A.M.Q., Chopp M., Chen H., Helpern J.A., Knight R., Halvorson H.R., Brown E. and Welch K.M.A.: Chronic Changes in Brain Mg²⁺ Concentration After Forebrain Ischemia in the Rat. *Metabolic Brain Disease* 1991. 6. 199-205.
- Chen H., Chopp M., Vande Linde A.M.Q., Dereski M.O., Garcia J.H., Welch K.M.A.: The Effects of Post-Ischemic Hypothermia on the Neuronal Injury and Brain Metabolism After Forebrain Ischemia in the Rat. *J Neurol Sci* 1992, 107, 191-198.
- Chopp M., Chen H., Vande Linde A.M.Q., Brown E., Welch K.M.A.: Time Course of Post Ischemic Intracellular Alkalosis Reflects the Duration of Ischemia. *J Cereb Blood Flow & Metab* 1990, 10, 860-865.
- Chopp M., Vande Linde A.M.Q., Chen H., Knight R., Helpern J.A., Welch K.M.A.: Chronic Intracellular Cerebral Alkalosis After an 8 Minute Forebrain Ischemic Insult in the Rat. Stroke 1990, 21, 463-466.
- o Ramadan N.M. Halvorson H., Vande Linde A.M.Q., Levine S.R., Helpern J.A., Welch K.M.A.: Low Brain Magnesium in Migraine. Harold Wolf Award winner. *Headache* 1989, 29, 416-419.
- Rorabacher D.B., Bernardo M.M. Vande Linde A.M.Q., Leggett G.H., Westerby B.C., Martin M.J. Ochrymowycz L.A.: Use of Macrocyclic Polythiaether Ligands in Structure-Reactivity Studies of Copper (II)/(I). Pure & Appl Chem 1988, 60, 501-508.

BOOK CHAPTER

K.M.A. Welch, S.R. Levine, G. Martin, R. Ordidge, A.M.Q. Vande Linde, J.A. Helpern: Magnetic Resonance Spectroscopy in Cerebral Ischemia. *Neurologic Clinics*. HJM Barnett, VC Hachinski (Eds.) WB Saunders Co., Philadelphia, 1992, Vol. 10, p. 1-29.

RECENT PRESENTATIONS

- Shumaker, K., Thiede, K., & Vande Linde, A.M.Q. "Changes in Chemical Oxygen Deman of Surface Waters in Dunn County." National Conference on Undergraduate Research, Eau Claire, WI, April 13 – 15, 2023
- Shumaker, K., Medin, S. & Vande Linde, A.M.Q. "Keeping them Honest: Examining the Ascorbic Acid Content of Vitamin C Tablets." National Conference on Undergraduate Research, Eau Claire, WI, April 13 – 15, 2023
- Miller, A., & Vande Linde, A.M.Q. "Glyphosate in Surface and Groundwater." UW-Stout Research Day, Menomonie, WI, May 3, 2022
- Ciak, A., Theisen, L., Kuss, L., Deaver, B., Hang, H., Xiong, M., & Vande Linde, A.M.Q. "Effect of Zinc Application on Cadmium Absorption in Kale and Snow Peas." Food and Drug Administration Regional Retail Food Safety Seminar and the National Environmental Health Association Region 4 Conference, Minneapolis, MN, Sept 19-21, 2017, and at the UW System Posters in the Rotunda, Madison, WI. April 11, 2018.
- Kuss, L., Deaver, B., Jerkovich, T. & Vande Linde, A.M.Q. "Lead and Cadmium Content of Imported and American Food Products." Food and Drug Administration Regional Retail Food Safety Seminar and the National Environmental Health Association Region 4 Conference, Minneapolis MN, Sept 19-21, 2017.
- Kraase, J., Dahlen, J., Forrest, G., Olson, A., & Vande Linde, A.M.Q. "Cadmium Detected in Legumes and Other Food Samples." Minnesota Environmental Health Association Winter

- Conference, University of Minnesota, Minneapolis, MN, January 28, 2016
- Boberg, K., Lusk, J., Vande Linde, A.M.Q., & Carlson, K.M. "The Effect of Zinc on Cadmium Uptake in Radishes." 13th Annual UW-System Symposium for Undergraduate Research and Creative Activity, UW-Milwaukee, Milwaukee, WI, April 2014
- Krecker, K., Odero, D., Levie, A., Vande Linde, A.M.Q., & Carlson, K.M. "Cadmium Uptake in Parsley from Phosphorus Containing Fertilizers." Research Day, UW-Stout, Menomonie, WI, April 2013
- K. Carlson, K., Hashmi, M., Vande Linde, A.M.Q., Little, A., Kirk, J. "Improving on Student-Community Learning." Workshop, 2nd Annual Conference, ASQ Advancing the STEM Agenda in Education, the Workplace and Society, UW-Stout, Menomonie, WI, July 2012
- J. Zaloudek, J., Stanislawski, D., Wirtanen, D., Vande Linde, A.M.Q. & Chandler, R. "Universal Design Across the Campus." Forum presented during the Celebrating Innovative Teaching in the Classroom Event, UW-Stout, Menomonie, WI, May 2012
- Johnson, B. E., Bandana, U., Vande Linde, A.M.Q., & Carlson, K. M. "Models of Cadmium Absorption by Italian Parsley." National Conference on Undergraduate Research, Ogden, UT, March 29-31, 2012, and at the 2012 UW System Posters in the Rotunda, Madison, WI, March 2012
- Upadhyaya, B., Vande Linde, A.M.Q., & Carlson, K.M. "Cadmium Uptake in the Roots and Leaves of Parsley (Petroselinum Crispum)." Research Day, UW-Stout, Menomonie, WI, April 2012
- Adhikari, K., Faust, E., & Vande Linde, A.M.Q. "Relationship of Recharge Rate and Well Water Composition." National Conference on Undergraduate Research, La Crosse, WI, April 16-18, 2009.

FUNDED RESEARCH PROJECTS

- o Establishment of a Certified Testing Laboratory, \$8,300, Stout Foundation Grant, 2004 2006.
- Enhancement of the Genistein Content of Soy Foods, \$46,606, Wisconsin Soybean Marketing Board, 1999 – 2001.
- Development of Computer Based Chemistry Experiments, \$9,766, Stout Foundation Grant, 1998 2001.
- Anticarcinogens in Fruits and Vegetables: Effects of Aging, Cooking, Processing and Storage,
 \$7,005, Faculty Research Initiative Grant, Program, University of Wisconsin-Stout, 1994-1995.
- In Vivo ³¹P NMR Study of the Influence of Brain Glucose Stores on Cerebral Ischemia, \$10,000, Henry Ford Hospital Small Project Fund, 1991–1993.
- Brain Tissue Alkalosis and Free Radical Formation, \$25,500, American Heart Association of Michigan, Grant-In-Aid Program, 1992–1993.

AWARDS, HONORS AND SCHOLARSHIPS

- o Tenure, Department of Chemistry, University of Wisconsin- Stout, 1999
- Harold G. Wolf, M.D., Annual Lecture Award, awarded by the American Association for the Study of Headache, for the research publication entitled: "Low Brain Magnesium in Migraine" by Ramadan N.M., Halvorson H.R., Vande Linde A.M.Q., Helpern J.A., Levine S.R. and Welch K.M.A., 1989
- Graduate Teaching and Research Assistantship, Department of Chemistry, Wayne State University, Detroit, MI, 1983 – 1988
- National Chemistry Honor, Phi Lambda Upsilon, National Chemistry Honor Society, Wayne State University Chapter, 1985 – 1988
- o Faculty Development Scholarship, De La Salle University, Manila, Philippines, 1981 1983
- National Science Development Board Scholarship, Philippine Government, 1978 1980
- o University Scholarship, University of San Agustin, Iloilo City, Philippines, 1974 1977

AFFILIATIONS

- Minnesota Environmental Health Association
- Council on Undergraduate Research
- Philippine Association of Chemistry Teachers
- American Chemical Society
- · Society of Magnetic Resonance in Medicine