# MARGARET J. STOKES



Ideal Job:

Become A member of Aurora Bicycle, Pedestrian & Transit Advisory Board

## Teaching Experience

Indian Prairie School District 204

- 2010 present: Metea Valley High School, Aurora, Illinois Teacher: Honors and AP Chemistry
- 2004 2010: Waubonsie Valley High School, Aurora, Illinois
   Teacher: Honors Chemistry, Chemistry, Introduction to Physics and Chemistry, Earth Science

### Additional School Involvement/Student Enrichment:

Mentor and encourage students to work at summer internships. My students have been placed and completed research projects at:

- Fermi Laboratory Quarknet and Target programs
- University of Chicago Pritzker School of Medicine: Young Scientists Training Program
- Argonne National Laboratory: Pre-College Research Participation Program
- Loyola University Chicago Research and Engineering Apprenticeship Program (REAP)
- National Institute of Health, Illinois Institute of Technology: Boeing Scholars program
- American Cancer Society: Illinois Division Summer High School Research Program
- Lederman Scholars Program at North Central College
- Illinois State University Center for Mathematics, Science, and Technology: summer research program University Of Minnesota College of Science and Engineering: summer program for girls
- Walgreen's Chicago College of Pharmacy Explorers Program
- Summer Undergraduate Research Fellowship: Cincinnati Children's Hospital
- Chicago Field Museum: DNA Residency Program
- Dr. Rubin's Mini Medical School, Edwards Hospital
- Argonne National Laboratory Science Careers in Search of Women and Molex Corporation Girls in Engineering Day
- Individual student with a variety of professors at several Illinois universities

#### Annual STEM College and Career day:

 Create one day annual event to connect underclass students to STEM careers. Purpose is to expose students to panel discussions consisting of university admission officers, industry speakers/career opportunities, and STEM department chairs. Congressman Bill Foster was keynote speaker at last years conference.

STEM Coordinator - Metea Valley High School: oversee programs and budget for all extracurricular STEM-related activities:

- Robotics club, iSTEM (student research club), Future Medical Professionals, Worldwide Youth and Engineering club, Eco Club, etc.

Science Olympiad - (Head Coach/State qualifier past 3 years)

Girls Who Code: emerging club, organizing community members (e.g. Fermi National Laboratory, College of DuPage, Chicago JAVA users group) to support/teach girls computer programming.

 Special Recognition: Only high school sponsored by the American Nuclear Society to bring students to Argonne National Laboratory to celebrate National Nuclear Chemistry Week.

Launched Metea Valley STEM Booster club: community members and parents to support extracurricular STEM clubs and annual MVHS STEM day.

# **Industry Experience:**

1999 -2004 Full time at home parent of: Kathleen Chinetti (IMSA class of 2013, Caltech class of 2017); Peter Chinetti (Illinois Institute of Technology class of 2015)

- 1997 1999 Nalco Chemical Company, Naperville
   Sales, Chicago/Midwest Market: break into industrial lubricants market in heavy industrial manufactures (e.g. Caterpillar and Navistar)
- 1988 1997 DA Stuart, Willowbrook and Warrenville, Illinois Product Manager: Profit and Loss responsibility of metalworking fluids. Worked with sales and research laboratory to determine which project would be priorities for market launch. Technical problem solver for customers such as General Motors, Chrysler, Ford, Mack Truck, General Electric, MacDonald Douglas.
- 1985 1988 FarBest, Los Angeles, California
   Sales, West Coast: Market was heavy industry and machine shops for industrial lubricants, drawing and ironing compounds, forging compounds, cleaners, oils used in the manufacturing of steel, concrete release products used by concrete pipe manufacturers. (FarBest was acquired by DA Stuart of Willowbrook, Illinois)
- June 1985 November 1985 Orange County Chemical, Santa Ana, California
   Sales: Opened up market near new warehouse in Fontana, California. Inland Empire area.
- June 1984 June 1985 Strem Chemicals, Newburyport, Massachusetts Manufacturer of organometallic compounds.
- Rowley Biochemical, Incorporated Rowley, Massachusetts Manufacturer Solutions for Histology

### Education

- Illinois State University, Normal, Illinois Masters of Science in Chemistry Education, 2011
- Northern Illinois University, DeKalb, Illinois Teaching Certificate, 2004
- Regis College, Weston, Massachusetts Bachelors of Arts, Chemistry, 1984

Ongoing education and coursework to enhance skills including a series at Aurora University that created the curriculum framework for The John C. Dunham STEM Partnership School on the Aurora University campus

### **Internships**:

- 1983 1984 Massachusetts Department of Public Health, Boston, Massachusetts
   Studied blood clotting factor VIII that had been irradiated with a Cobalt-66 source. Project was trying to determine if irradiating blood would kill the virus that was killing people who had received blood transfusions. Later virus would be names Human immunodeficiency virus infection and acquired immune deficiency syndrome (HIV/AIDS)
- Summer 1982 Oak Ridge National Laboratory Department of Energy, Oak Ridge, Tennessee Studied nuclear radiation
- January 1981 University of Utah Salt Lake City, Utah
- School of Medicine

Observed open heart surgery on dogs, part of a FDA drug test to be used during heart transfers in humans.

 College of Nursing – tested electrical resistance across the abdomen of para and quadrapedigics to determine if bladder was full, this was done to reduce need to catheter person if no urine is present.