

Nonlinear Career Path: A New Normal And A Fun One

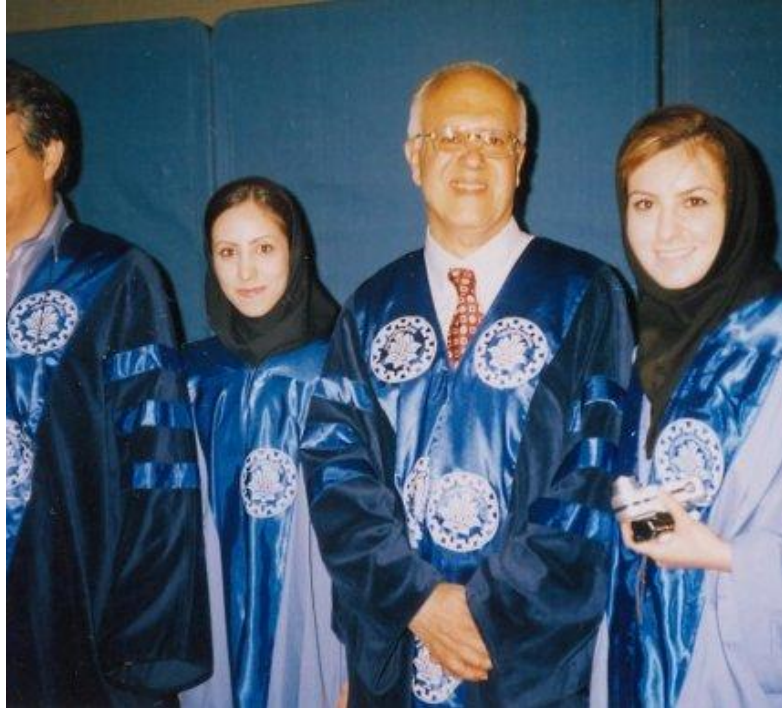
Atefeh Taheri, Ph.D.
Feb 2023

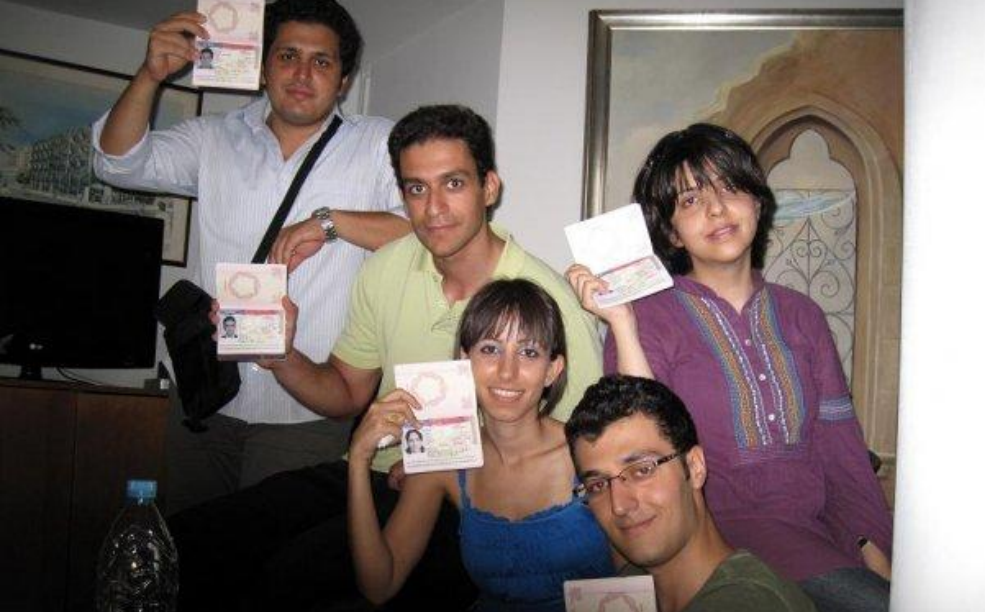




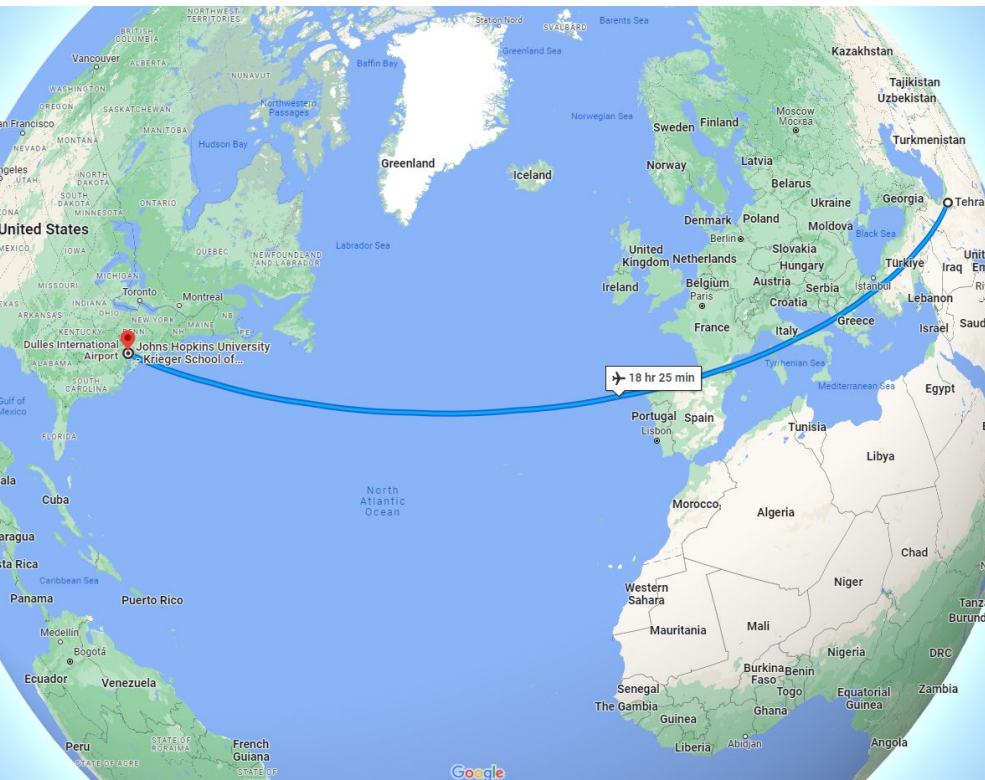
Undergraduate and Master work in Iran

- Bachelor of Science, Pure Chemistry
- Master of Science in Analytical Chemistry
- Thesis: “Modification of Glassy Carbon Electrode Using Nafion Doped Carbon Nanoparticles: Application in Voltammetric Determination of Adenine and Guanine”





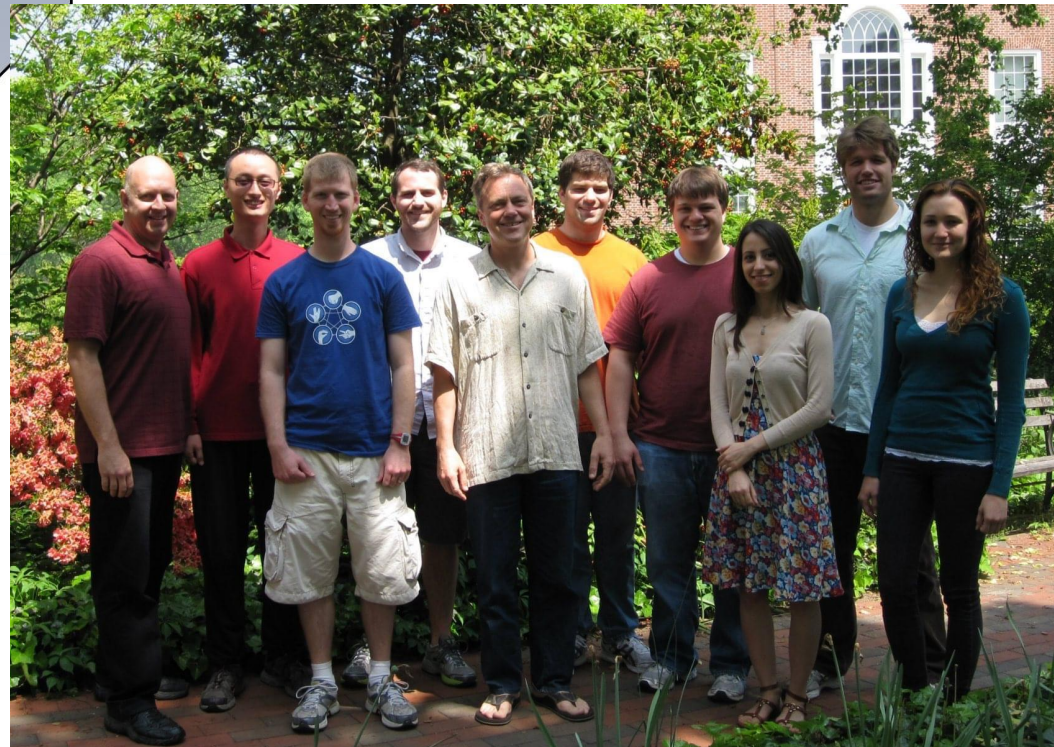
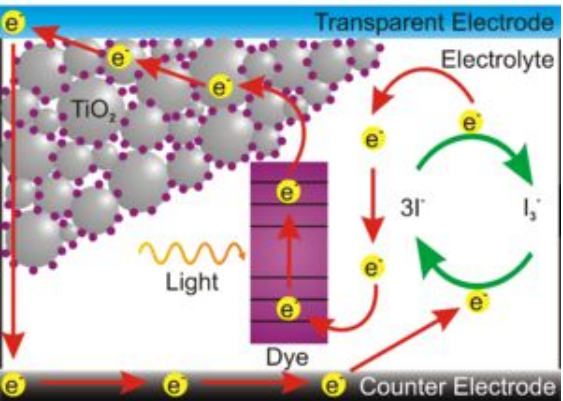
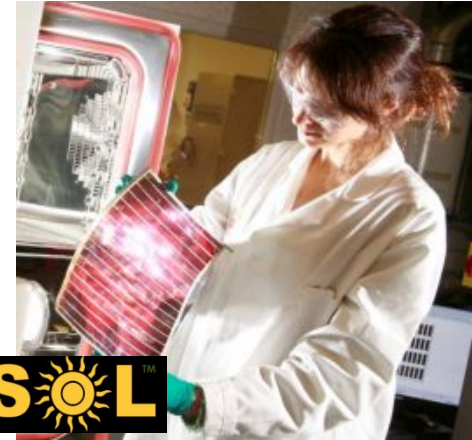
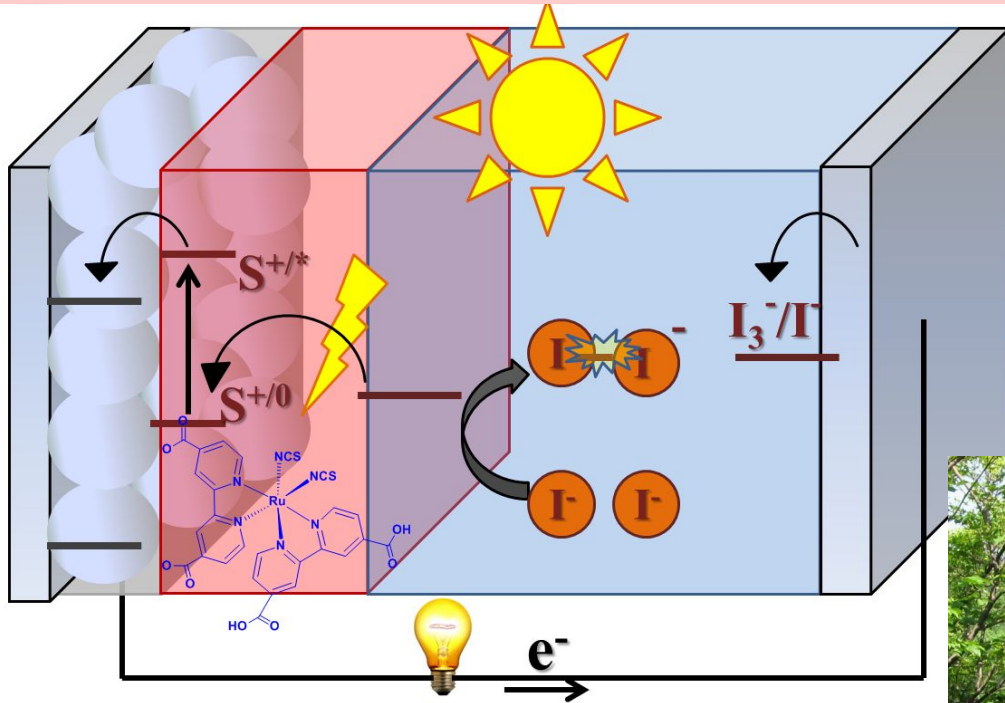
Moving Across the Globe How to survive as an international student ...



- Pick a nice advisor. Do some research on personalities of various faculty members.
- Cultural shock is normal. Give yourself some grace.
- Work on improving your English as much as you can.
- Work on improving your writing.
- They don't need to speak your language to be your friend.
- Go home for holidays if you can.
- Use school resources.
- Build up credit score. Save some money if you can.

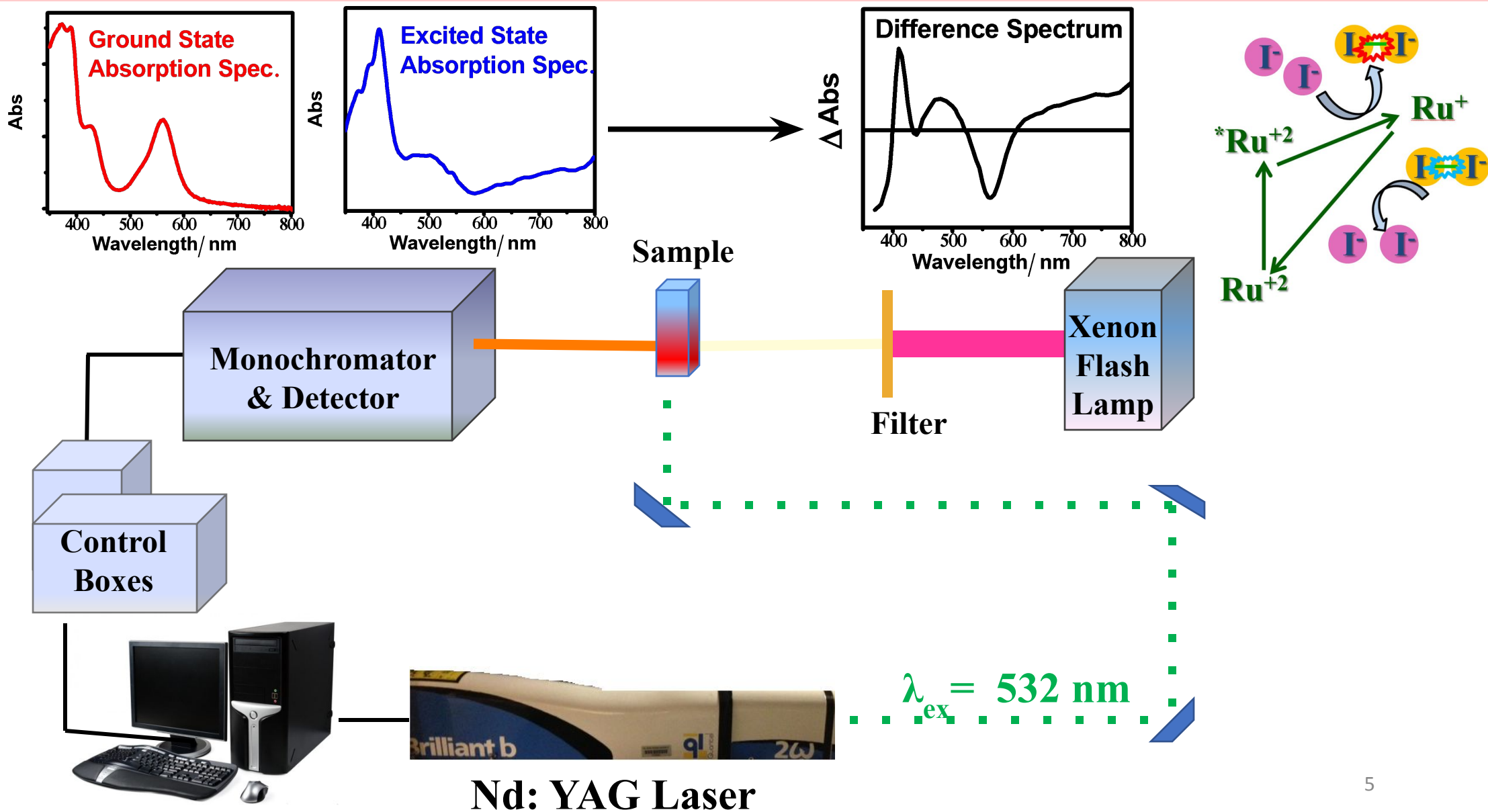


Dye Sensitized Solar Cell





Looking at fast forming and fast-dying Products: Transient Absorption Spectroscopy



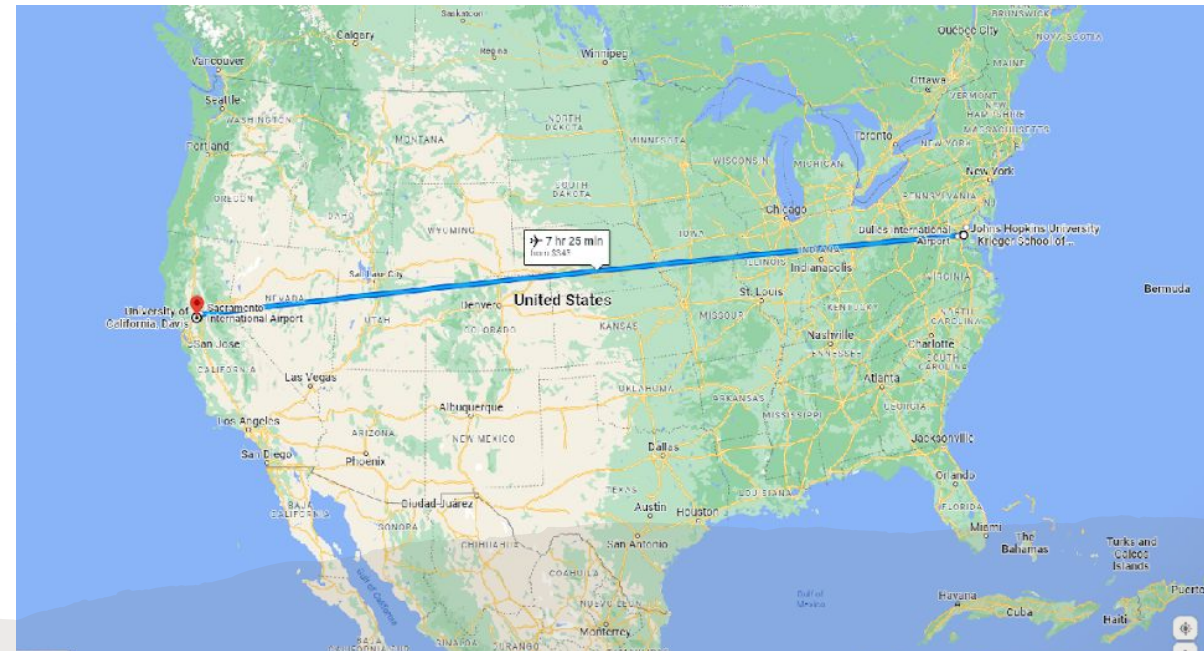
How To Survive Graduate School

- Work hard
- Have fun
- Get full night of sleep
- Write down ideas and experiments consistently
- Practice presentation and public speaking
- Do not argue with your advisor/boss.
- Befriend your current group-mates
- Network and make connections
- Get involved in local ACS chapters
- Don't make enemies or cut off good friends
- Do not date anyone in your lab/department
- Use school gym and therapists



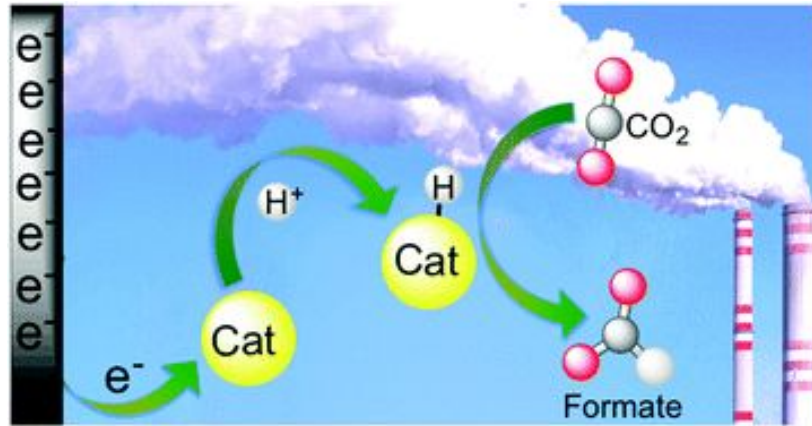
To Postdoc or Not-To-Postdoc

- Have you made up your mind about Academia versus Industry?
- If you're an international student, can you get your green card immediately or find a job to do it for you?
- Do you have a job lined up or have good resume for a good industry job right out of school?

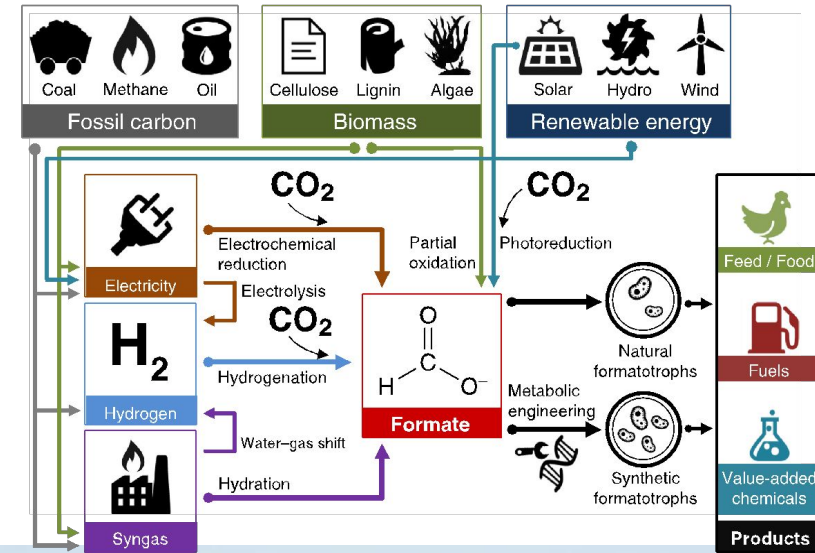
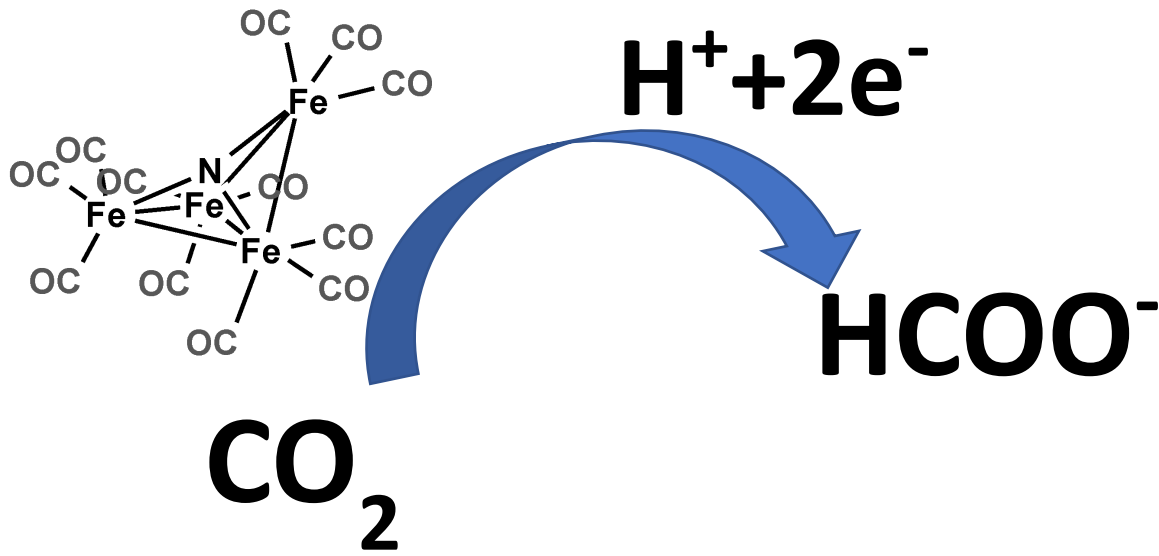




Electrocatalytic Reductions: CO₂ conversion to Formate



-1



Taheri A, Carr C., Berben L. A., ACS Cat, **2018**, 8, 5787-5793.

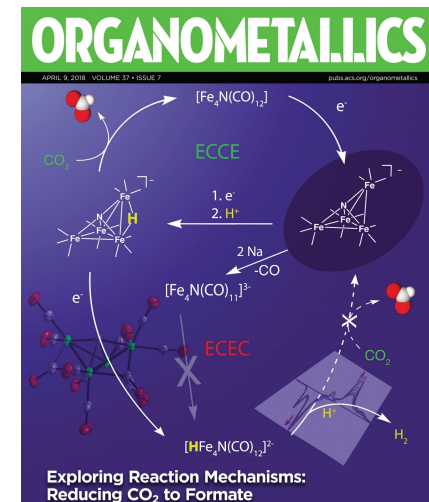
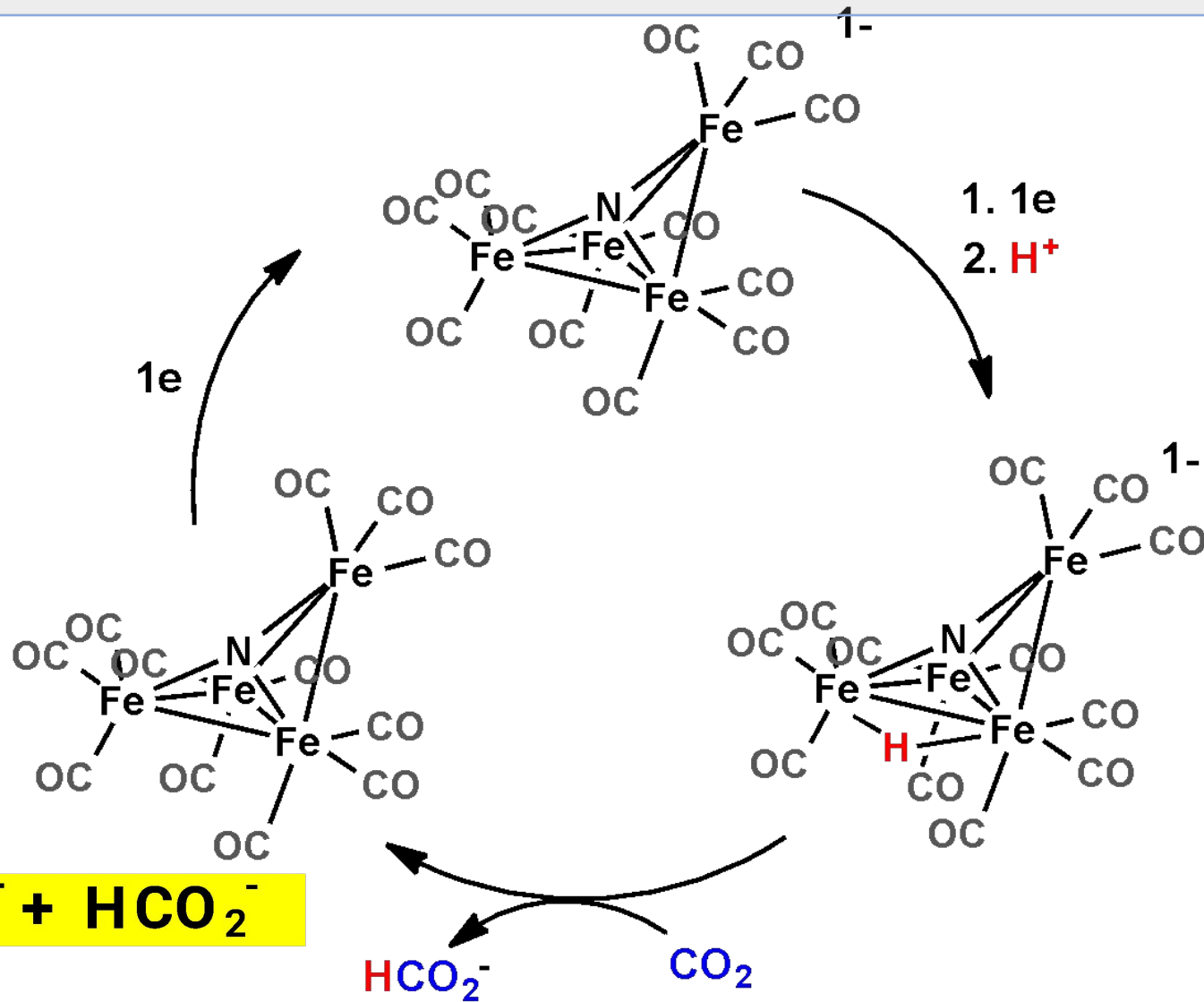
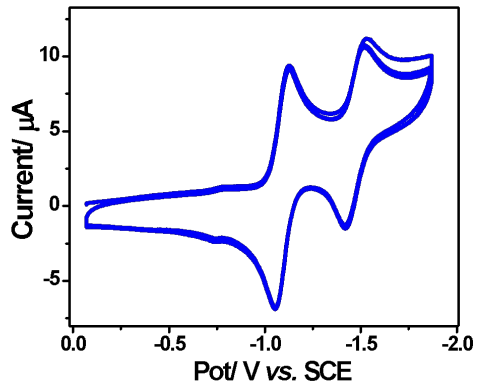
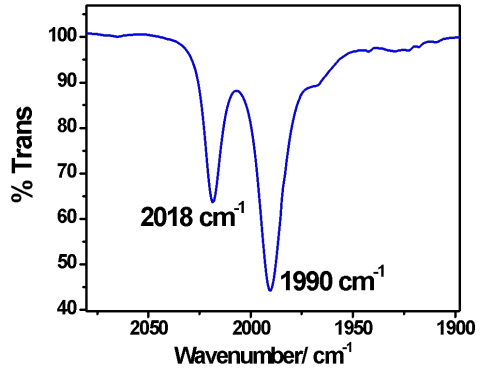
Taheri A., Berben L. A., Chem Comm, **2016**, 52, 1768-1777.

Taheri A, Loewen N. D., Cluff D. B., Berben L. A., Organometallics, **2018**, 37, 1087-1091.

Taheri A., Thompson E. J., Fettinger J. C., Berben L. A., ACS Cat, **2015**, 5, 7140-7151.



Catalytic Cycle



Academia?

Industry?



My experience with Industry

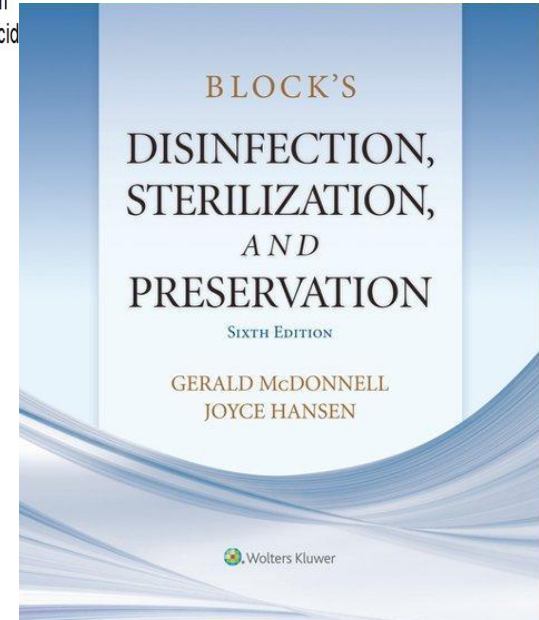
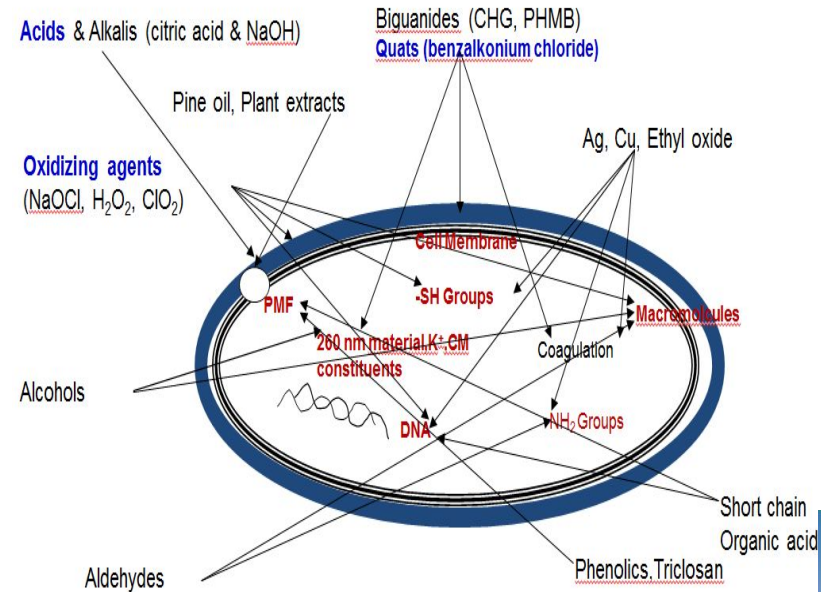
- Industry job experience can differ depending on the job and company.
- Moving from academia to industry is usually a one-way street.
- As a Ph.D. grad, you will probably be hired as a research scientist, but you can leave research after a few years.
- Nice working hours in the industry are usually only for individual contributors. The higher you go, the crazier it can get.
- Start-ups and big corporations have VERY different environments.
- Many big corporations provide relocation opportunities.
- Your Ph.D. and Postdoc advisor have little influence on hiring and future promotions.

Industry	Academia
★ Responsibilities focused on developing company goals	★ Responsibilities such as finding grants, mentoring students, publishing research
★ Structured and set work hours	★ Flexible work and hours and schedule
★ Work is driven by business goals	★ More intellectual freedom in what you choose to research
★ More direct impact	★ Lower average salary
★ Higher average salary	★ Continuous pressure to publish work
★ Deadline driven pressure	★ Long-term goals
★ Fast-paced	
★ Short-term goals	



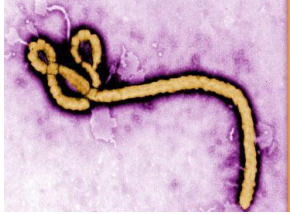
HEALTHCARE®

Product Development Experience: Formulation Scientist



Product Development Experience: Properties of the Ideal Healthcare Disinfectant

Broad spectrum antimicrobial activity



Fast acting



Keeps surfaces wet for full contact time



Easy to Kill

Enveloped & Large Viruses:
Herpes, Measles, HIV virus, COVID

Vegetative Bacteria:
Staphylococcus sp, E.coli, P.

Fungi:
Trichophyton sp., Aspergillus sp.

Non-enveloped & Small Viruses:
Polio virus

Mycobacteria:
TB

Bacterial Spores:
Bacillus spp., C. difficile

Non-toxic



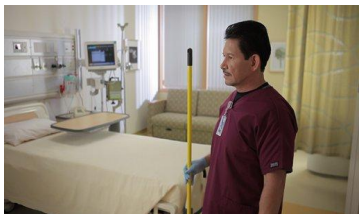
Surface compatible



Easy-to-use



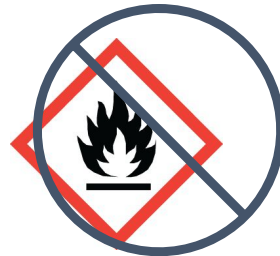
Acceptable odor



Economical



Solubility, Stability, Cleaner, nonflammable





SMART TALK

The Public Speaker's Guide to Success in Every Situation

LISA B. MARSHALL

"Teaches you to unleash the enchanting person inside you. It will help you end clumsy conversations, pitiful persuasion, and impotent influence."
 -Guy Kawasaki, bestselling author and Apple evangelist

LEAN IN

WOMEN, WORK, AND THE WILL TO LEAD

SHERYL SANDBERG

THE INTERNATIONAL BESTSELLER

MANAGING UP

HOW TO MOVE UP, WIN AT WORK, AND SUCCEED WITH ANY TYPE OF BOSS

MARY ABBAJAY

WILEY

REVISED AND UPDATED

NICE GIRLS DON'T GET THE CORNER OFFICE

THE NEW YORK TIMES, WALL STREET JOURNAL, AND BUSINESSWEEK BESTSELLER

Unconscious Mistakes Women Make That Sabotage Their Careers

Lois P. Frankel, PhD

UNABRIDGED • READ BY THE AUTHOR • INCLUDES A PDF

the **Loudest Duck**

Moving Beyond Diversity While Embracing Differences TO Achieve Success at Work

Laura Liswood
 Senior Advisor, Goldman Sachs



The jungle gym model benefits everyone, but especially women who might be starting careers, switching careers, getting blocked by external barriers, or reentering the workforce after taking time off. The ability to forge a unique path with occasional dips, detours, and even dead ends presents a better chance for fulfillment.

Setting the Record Straight on Switching

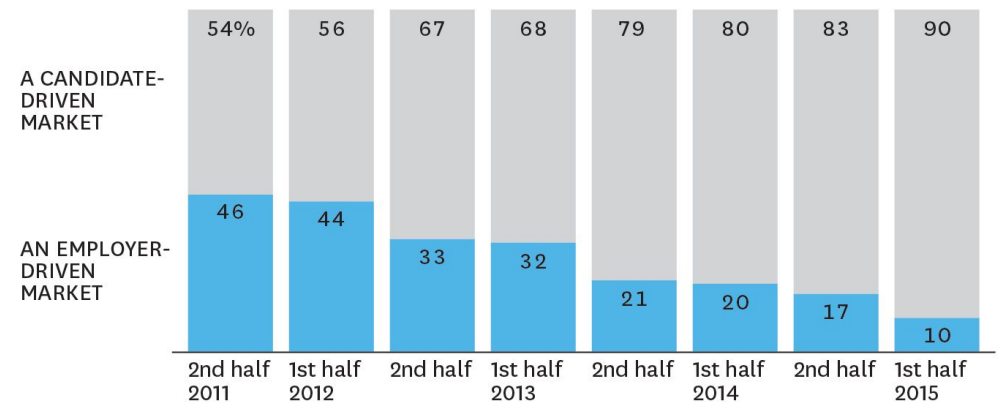
Jobs:

Some old fashion advice

1. “Never tell your boss that you’re looking for another position.”
2. “Stay at a job for at least a year or two — moving around too much looks bad on a resume.”
3. “Don’t quit your job before allowing your current employer to make a counter offer.”
4. “Never make a lateral move — a new job is your only chance of making a big leap in title and compensation.”
5. “You should always be looking for your next job.”

Power Has Shifted from Employers to Job Candidates, According to Recruiters

Q: If you had to choose one, how would you describe today’s labor market?



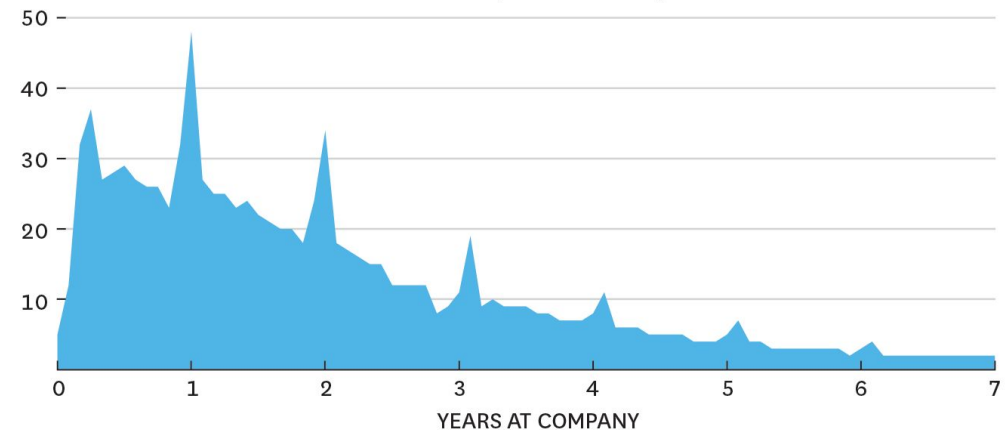
SOURCE MRINETWORK “RECRUITER SENTIMENT STUDY,” 1ST HALF OF 2015

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A Good Time to Quit?

People are most likely to leave a job around their one-year work anniversary.

NUMBER OF EMPLOYEES WHO CHANGED JOBS (IN THOUSANDS)



SOURCE ENTELO, BASED ON A RANDOM SAMPLE OF 1 MILLION EMPLOYEES IN ITS DATABASE

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Fundamental Scientist at Oronite

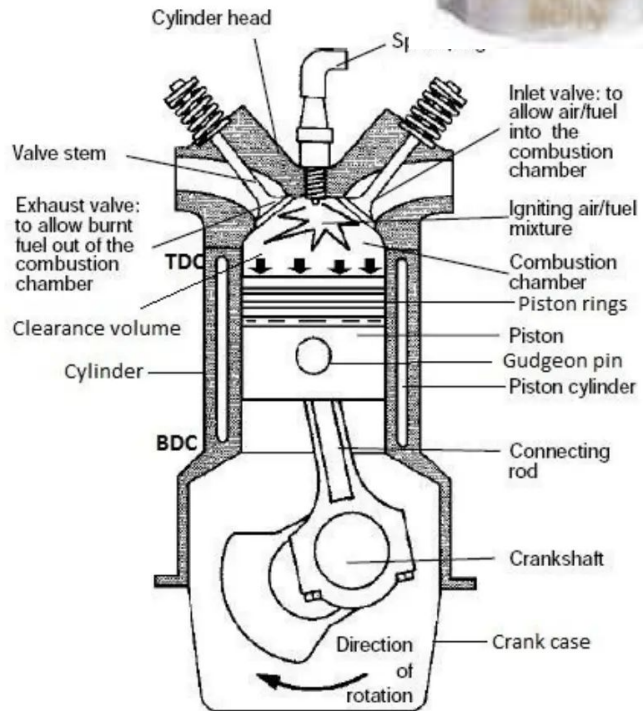


Base Oils
(~70-99%)

- Mineral oils
- Synthetic hydrocarbons
- Plant-based oils
- Other synthetic fluids

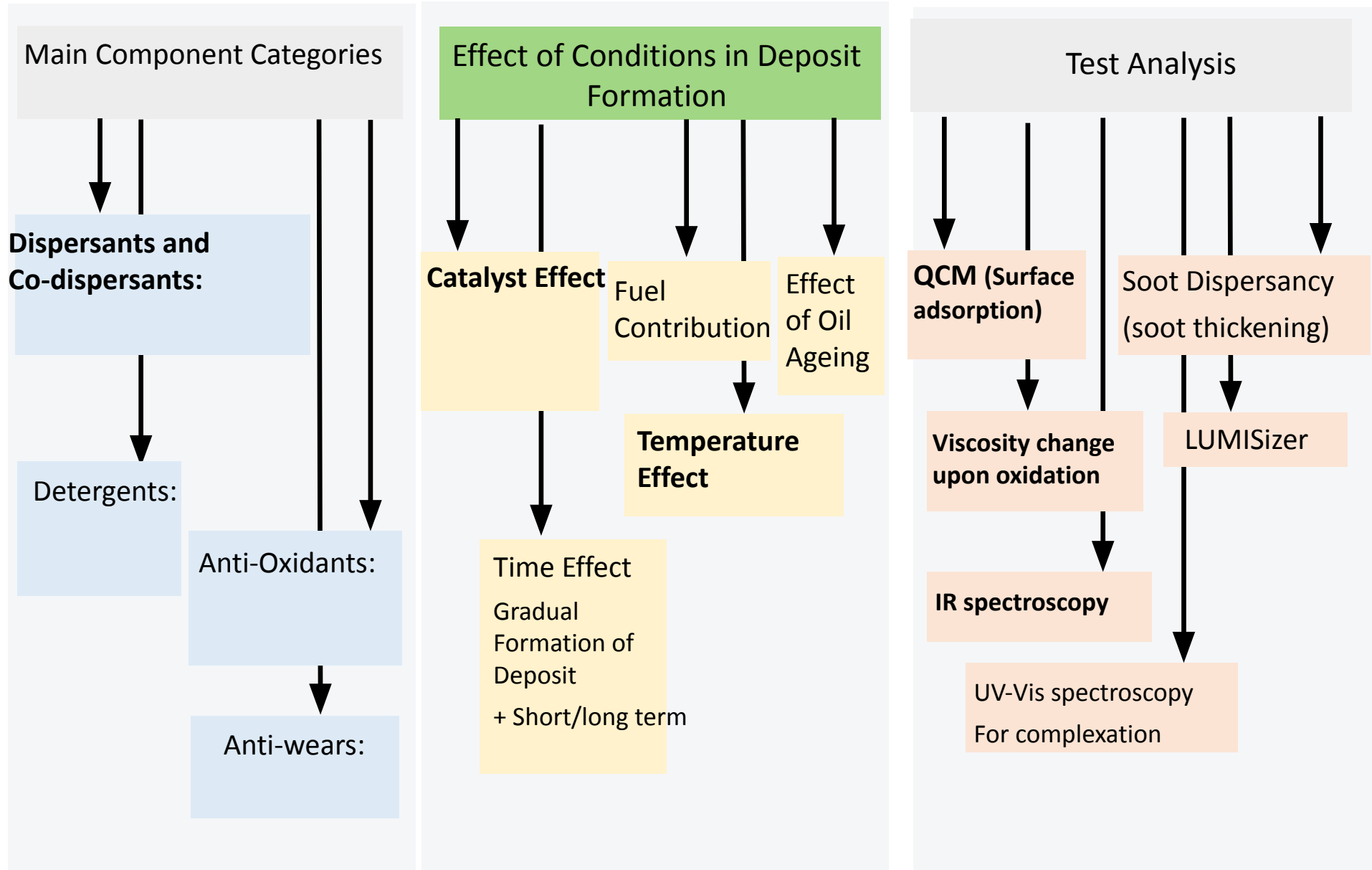
Additives
(~1-30%)

- Antioxidant
- Antifoam
- Dispersant
- Viscosity modifier
- Pour point depressant
- Antiwear
- Corrosion inhibitor
- Friction modifier
- Metal deactivator





Fundamental Scientist at Oronite





Digital & Process Efficiency Team in DT&S

Deliver digital technologies, data analytics, and competitive insights to drive high business efficiency, fast decision making, and optimized portfolio lifecycle management for the Lubricants P&T organization.

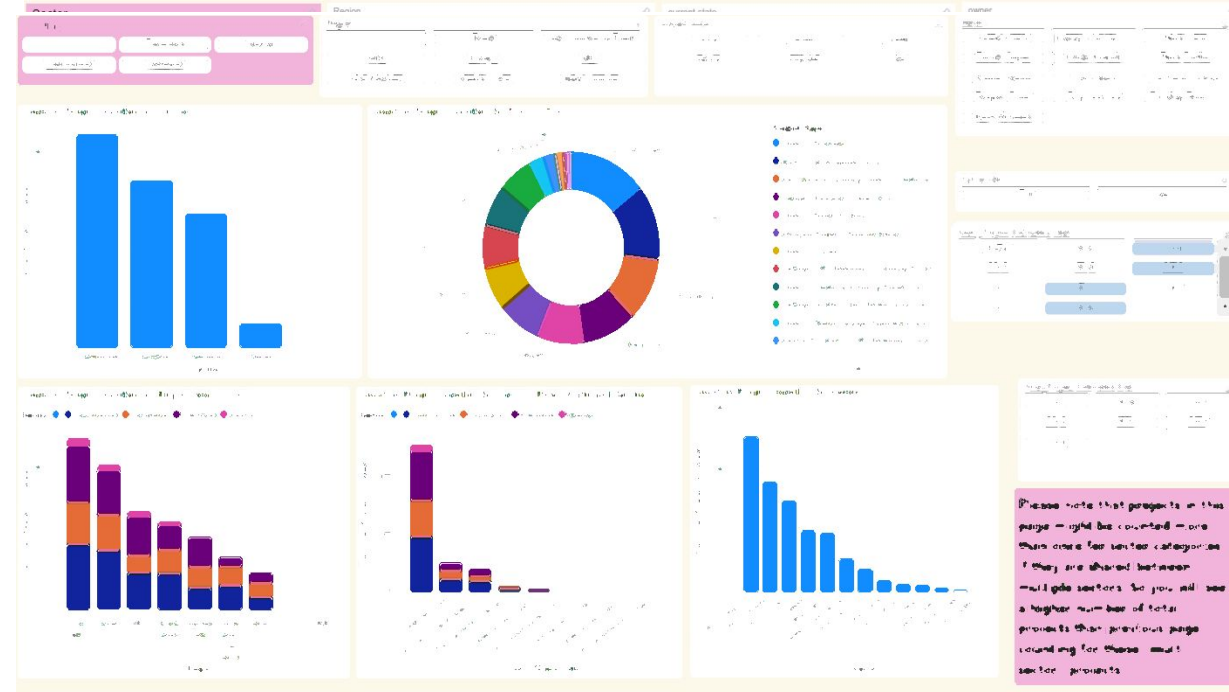
Product & Raw Material Cost Dashboard



This Dashboard contains highly confidential information concerning product formulation and costing. Company policy requires you to safeguard this information. This information should be shared only with other Chevron employees who have a legitimate "need to know". Do not share this information with anyone outside the company. Please note the cost is for current month and past 12 months. This dashboard does not give any information about the future cost. Use at your own risk.

This is a work in progress dashboard, which needs your feedback for improvement. Please message Atefeh Taheri with question, concern, and feedback!

Project Analytics



Category	# items	Financial Impact (\$/Yr)
Project Management	7	\$249,600
Claims, Product Properties	6	\$112,608
Lab Service Requests	17	1,013,672
Total	30	\$1,375,880
In progress	24	\$970,080



Maintenance and Reliability Team Lead at AFL

Our team provides standards that increase predictability and dependable performance in our facilities equipment. Reliable performance ensures the delivery of products or services, on spec, on time, every time. Within our BU, reliability and inspection means having the ability to deliver production and performance results set forth in the business plan along with incident free operations.

Americas Fuels & Lubricants ISC Network

Legend

- Chevron Proprietary Terminal
- Joint Operation Terminal (Non-Operated)
- Joint Venture Terminal
- Joint Operation Terminal (Chevron-Operated)
- ★ Chevron Refinery & Truck/Rail Loading
- ▲ Third-Party Refinery & Loading Rack
- ▲ Third-Party Refinery
- Third-Party Exchange Terminal
- Third-Party Backup Exchange Terminal
- Third-Party Terminalling Agreement
- ◆ Chevron Proprietary Airport
- ◆ Joint Operation Airport (Chevron-Operated)
- ◆ Joint Operation Airport (Non-Operated)
- ◆ Third-Party Airport

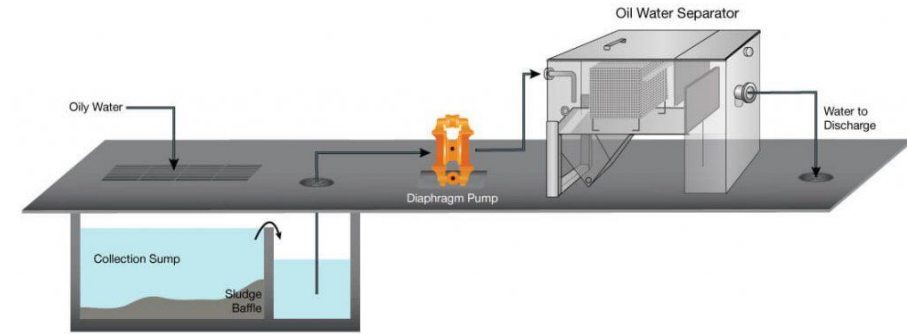
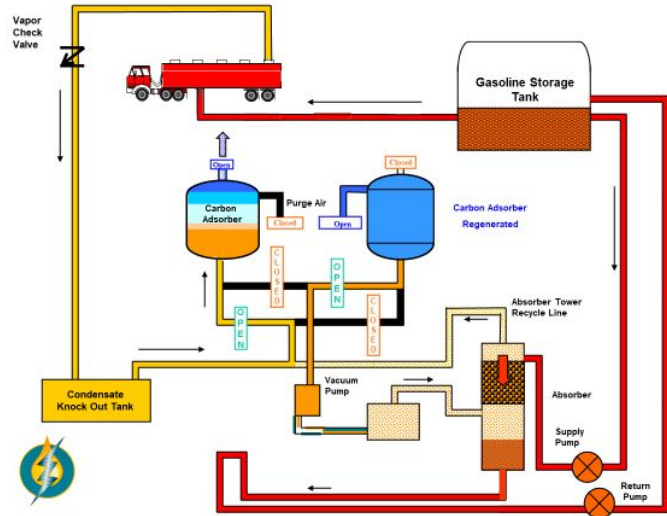
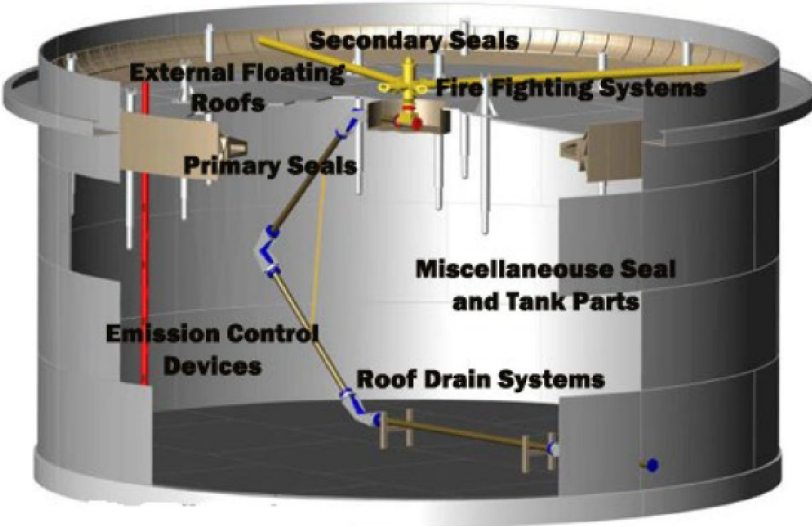
Areas

- Northwest
- East
- Southwest
- Colombia/Central America

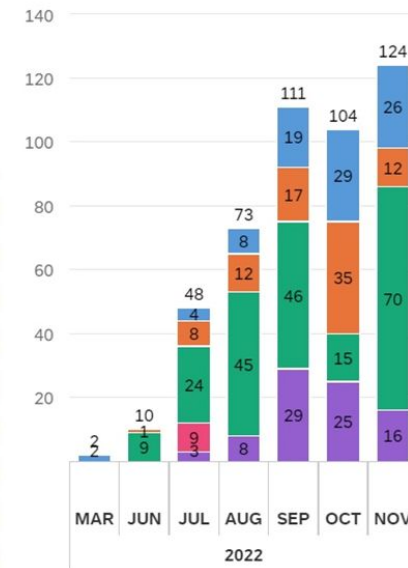




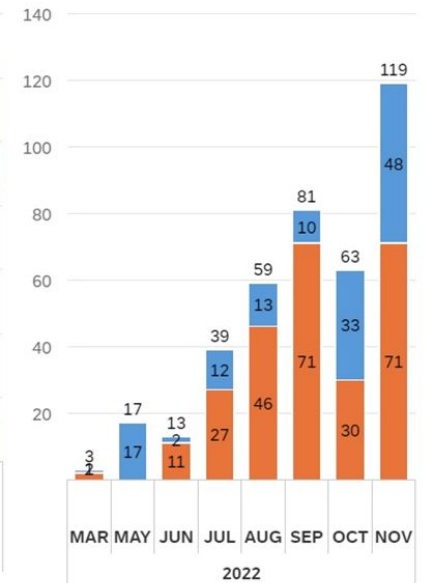
Maintenance and Reliability Team Lead at AFL



Confirmed Work Orders
By User by Month



Completed Work Orders
Corrective/Preventive by Month





Diversity & Inclusion Efforts: Practice Leadership & Serve the Community



feature
Northern California AWIS chapters

Teamwork Makes the Dream Work: How Collaborative Efforts between Groups with Shared Missions Can Accelerate Success

By Danielle J. Tan, PhD, President of AWIS East Bay
AWIS member since 2014

The first Northern California Chapter of AWIS was founded in Palo Alto, and more chapters followed in East Bay, San Francisco, and Sacramento Valley to accommodate the needs of members in growing science and technology regions. The primary goal of the chapters has always been to provide high quality programs to support women and girls in science.

With multiple AWIS chapters in a relatively small, but dense

AWIS

Association for Women in Science

East Bay Palo Alto Sacramento Valley San Francisco

geographical area, the Northern California chapters formed a joint committee known as AWIS-NCC almost 30 years ago. The purpose of the committee was to coordinate professional development workshops, recognize women who have assisted other women in establishing careers in science, and plan all-chapter social events.

By combining our resources, we were able to take on projects that would have been challenging for individual chapters to sustain. Our collaborative effort also provided continuity through the years, as members and volunteers changed, by transferring institutional knowledge of a chapter's operating procedures and history effectively.

The AWIS-NCC committee includes an NCC representative from each of the four chapters (voting members), the



American Chemical Society > Officer Toolkit > Grants and Awards > Outreach Volunteers of the Year

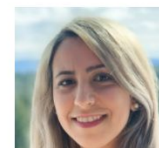
Outreach Volunteers of the Year

Congratulations to the 2021 Outreach Volunteers of the Year!

California Local Section

Atefeh Taheri

Atefeh has spearheaded collaborations between the California Local Section (CalACS) and the East Bay chapter of the Association for Women in Science (AWIS). One successful event, featuring the author Lois Franke, had over 100 attendees and was the first joint event between CalACS and AWIS. Atefeh has also planned numerous events with a focus on diversity, featuring local speakers. Atefeh has also planned a screening of "Picture a Scientist," raising over \$5,000 for STEM-focused scholarships. She has planned networking events and technical presentations. Atefeh's contributions to CalACS in 2020 were instrumental for continuing to serve members.



World's Creativity & Innovation Day Celebration:

A Conversation with Barbara Burger

(ACS California & AWIS East Bay Joint Virtual Event)

April 29 (12:00 – 1:00 PM PST)

Barbara Burger, PhD, is Chevron's Vice President of Innovation and President of Technology Ventures at Chevron.

Barbara's many civic and industry affiliations include a seat on the Board of the Oil and Gas Climate Initiative (OGCI) Climate Investment LLP and leadership positions with Houston Exponential, the Houston Symphony Society, and the Rice University Corporate Innovation Advisory Board.

Barbara holds a bachelor's degree in chemistry from the University of Rochester, a doctoral degree in chemistry from the California Institute of Technology, and an academic honor M.S. in Business from the University of California, Berkeley. Barbara remains an active alumna, serving on the University of Rochester's Board of Trustees and the university's River Campus Libraries National Council. She established the Barbara J. Burger Research Scholarship in the Sciences at the University of Rochester and founded the Barbara J. Burger Clinic which includes genetic, reflex, and communicative (oral for speech, natural, community) and economic impact.

At the California Institute of Technology, Barbara is active with Caltech Women in Chemistry, supporting the careers of graduate students in chemistry and related sciences. Barbara also serves on the Strategic Advisory Board for the Resnick Sustainability Institute at Caltech.

This Event is Free (with donation option) & Open to All! More Details and Registration [Here!](#)



Pioneers in the Oil Field: Establishing LGBTQ+ Inclusion at Chevron in the 90's

Wednesday September 9th, 2020
6:00 – 7:00 PM (PDT)

A co-sponsored online event between ACS California Section and AWIS East Bay
The event will include a presentation followed by a Q&A session.

Dr. Kirk Nass earned his PhD in Chemical Engineering from the University of Michigan in Seattle and is currently an R&D team leader at Chevron Overseas. Kirk has had a long and illustrious 31-year career at Chevron.

In 1991, Kirk was a founding board member of the Chevron LGBTQ+ and our employees association (CGLGA), now known as Chevron PRIDE, and has held multiple Board positions for the next 10 years, including Chair. During those 10 years, Chevron added several initiatives to their non-discrimination and non-retaliation policies, awarded domestic partner benefits to employees, and officially established employee diversity networks.

Kirk and his husband Michael collaborate with the help of Chevron-sponsored matching grants, established the first scholarship for LGBTQ+ students in the Department of Chemical Engineering at Rice's undergraduate alma mater, the University of Houston at UH-Denia - Clearlake.

[RSVP here!](#)
Zoom link to be shared with attendees the day of the event.

The event is FREE and open to all.

More information at: calacs.org or email taheri@ucdavis.edu or ebawis.help@gmail.com

International Women's Day Celebration

(ACS California & AWIS East Bay Joint Virtual Event)

March 8 (5:00 - 7:30 PM PST)

This Year's Theme: #ChooseToChallenge

A challenge world is an able world. Individually, we're all responsible for our own thoughts and actions - all day, every day. We can all choose to challenge and call our gender bias and inequality. We can all choose to seek out and celebrate women's achievements. Collectively, we can all help create an inclusive world. From challenge comes change, so let's all choose to challenge.

Mitra Kashanchi
VP of Manufacturing & Supply at Chevron
Chemicals

Dr. Lois P. Franke
NYT and WSJ
Bestselling Author

Sandra W. Robert, CAE
CEO of Association of Women in Science (AWIS)

Join us and hear from our distinguished speakers and enjoy the follow up networking session.
This Event is Free (with donation option) & Open to All!
More Details and Registration [Here!](#)

The Case for Diversity and Inclusion: A Conversation with Leland Jourdan

(Chief Diversity Officer, Chevron Corporation)

Thursday – June 25th, 2020 – 12:30- 1:30 PM (PDT)

A co-sponsored online event between ACS and AWIS
The event will include a presentation followed by a Q&A session.

Leland (Leo) T. Jourdan graduated from the United States Military Academy at West Point in 1978. Serving his five-year post-military military commitment, he reached the rank of Captain while serving in a logistics office and participated in the 10th Airborne Corps. He currently serves as Chief Diversity Officer, Global Diversity and Outreach Center of Expertise with Chevron. Prior assignment in Chevron includes Vice President, Commercial, Chevron India Business Unit, which included commercial and business development covering Indonesia and the Philippines, and GM Commercial and Business Development for Chevron's Asia South Business Unit which includes Bangladesh, Myanmar, China, Thailand, Cambodia and Vietnam. Leland has been in the energy industry since 1983, a career that spans the regulated and deregulated industries of energy commodities, including US domestic crude, transportation and LNG, as well as energy acquisition and downstream research. After nine years living in Thailand and Indonesia, Leland now resides in Houston, TX, with Dawn, his wife of 37 years. They have three children and two grandchildren. Leland is an avid golfer, a published author, and serves on the advisory board of RESARCH Houston's Services in Houston.

[RSVP here!](#)
Zoom or Webex link to be shared with attendees the day of the event.

The event is FREE and open to all.

More information at: calacs.org or email taheri@ucdavis.edu or danielle.tan@awis.org



ACS FALL 2021 RESILIENCE OF CHEMISTRY

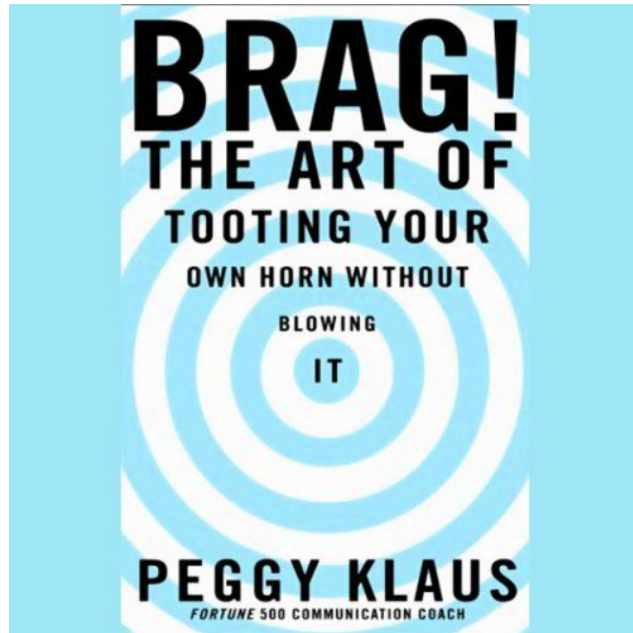
Turning my COVID nightmare into positive energy!

Starting collaboration with AWIS & achieving success

Atefeh Taheri, Ph.D.
Paper#: 3590462
taheri.atefeh@gmail.com

STEPS TO CLIMB THE LADDER FASTER

Do each job as best as you can!



- 7 Be a Team Player
- 6 Think and Act a Level Above
- 5 Become an Asset to the Company
- 4 Dream beyond the Job Description
- 3 Work Hard
- 2 Keep Networking
- 1 Make a Plan





Thank You for Your
Attention!
Questions?