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A Career Planning Tool For Chemical Scientists





ChemIDP is an Individual Development Plan designed specifically for graduate students and postdoctoral scholars in the chemical sciences. Through immersive, self-paced activities, users explore potential careers, determine specific skills needed for success, and develop plans to achieve professional goals. ChemIDP tracks user progress and input, providing tips and strategies to complete goals and guide career exploration.

https://chemidp.acs.org

5

Career Consultant Directory



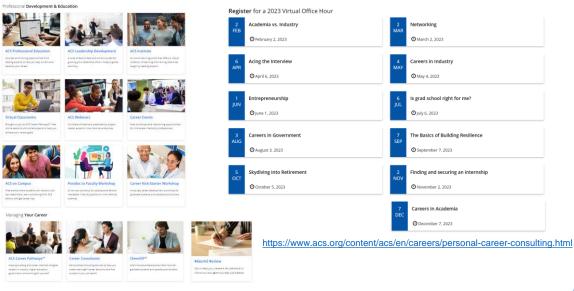


- ACS Member-exclusive program that allows you to arrange a one-on-one appointment with a certified ACS Career Consultant.
- Consultants provide personalized career advice to ACS Members.
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ACS Career Resources





https://www.acs.org/content/acs/en/careers/developing-growing-in-your-career.html

7

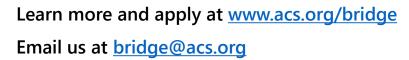
ACS Bridge Program

Are you thinking of Grad School?

If you are a student from a group underrepresented in the chemical sciences, we want to empower you to get your graduate degree!

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ACS Scholar Adunoluwa Obisesan

BS, Massachusetts Institute of Technology, June 2021 (Chemical-biological Engineering, Computer Science & Molecular Biology)

"The ACS Scholars Program provided me with monetary support as well as a valuable network of peers and mentors who have transformed my life and will help me in my future endeavors. The program enabled me to achieve more than I could have ever dreamed. Thank you so much!"

GIVE TO THE



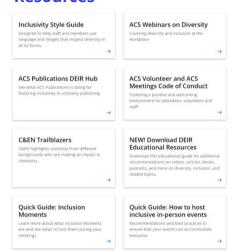
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9

ACS OFFICE OF DEIR

Advancing ACS' Core Value of Diversity, Equity, Inclusion and Respect

Resources





Diversity, Equity, Inclusion, and Respect

Equity**

fairness in access to information and resources for all. We believe is is only possible in an ronment built on respect and dignity. Equity requires the identification and elimination of ill participation of some groups.

ethnicity, gender, disability, sexual orientation, gender identity, collectively and as individuals. ACS inderstand, and draw on a vi of perspectives.

Inclusion**

and participation of all people. Every person's voice adds value, in the face of power differences. In

https://www.acs.org/content/acs/en/about/diversity.html



gcande.org



11





https://www.youtube.com/c/ACSReactions/videos



Looking for a new science podcast to listen to?



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Sam Jones, PhD Science Writer & Exec Producer



Deboki Chakravarti, PhD Science Writer & Co-Host

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13





















VOICES AND STORIES FROM THE WORLD OF CHEMISTRY





cen. acs. org/sections/stereo-chemistry-podcast. html



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15



IUPAC Global Women's Breakfast 2023



Breaking Barriers in Science

14 February 2023

Do bring along your friends from all disciplines. All genders are welcome!





iupac.org/gwb

#GWB2023







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Thurs., Feb. 9, 2023 | 2:00-3:00pm ET

More Tips for Publishing in ACS Journals

Co-produced with ACS on Campus and ACS Publications



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1/

ACS
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THIS ACS WEBINAR®
WILL BEGIN SHORTLY...

Say hello in the questions window!

18





"Design of processes and products that minimize, or ideally eliminate, the use and generation of substances hazardous to human health and the environment."

- Improve knowledge on toxicology and ecotox
- Changing general public's perspective
- Economically profitable



Anastas, P. T.; Warner, J. C. Green Chemistry: Theory and Practice. Oxford University Press: 1998. TechNavio. Global Green Chemicals Market 2019-2023, 2019.

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Sustainable Chemistry

"Resources, including energy, should be used at a rate at which they can be replaced naturally, and the generation of wastes cannot be faster than the rate of their remediation."

- Planetary boundaries
- Systems thinking
- Circularity



"We do not inherit the earth from our ancestors; we borrow it from our children" Moses Henry Cass

Horváth, I. T. Chem. Rev. 2018, 118, 2, 369-371

21

21

Green Chemistry and the UN SDGs

Green Chemistry: Interconnection between social, economic, and environmental aspects

Intrinsic systemic and inclusive approach of **Green Chemistry** essential for the achievement of the United Nations' Sustainable Development Goals (UN SDGs).



Anastas, P.; Nolasco, M.; Kerton, F.; Kirchhoff, M.; Licence, P.; Pradeep, T.; Subramaniam, B.; Moores, ACS Sustainable Chem. Eng. 2021, 9 (24), 8015–8017.

Anastas, P. T.; Zimmerman, J. B. Curr. Opin. Green Sustain. Chem. 2018, 13, 150–153,

©Juliana Vidal







Audience Survey Question ANSWER THE QUESTION ON THE INTERACTIVE SCREEN IN ONE MOMENT

The United Nations has defined how many Sustainable Development Goals?

- 5
- 10
- 15
- 17
- 21

23

Gender Equality for a Sustainable Future



UN SDG #5: Potential to compromise the fulfilment of all other 17 UN SDGs if not achieved

Contributions of women in social, economic, and environmental systems crucial for achieving a sustainable future: Women as **Important Agents of Change**

Brosché, S. Women, Chemicals and the SDGs. Strategic Approach to International Chemicals Management (SAICM) and International Pollutants Elimination Network (IPEN), 2020. Medupin, C. Sustainability 2020, 12 (17), 7116. @Juliana Vidal

^{*} If your answer differs greatly from the choices above tell us in the chat!

The Current Situation

After 30 years, role of women as agents of systemic change still needs to be recognized, acknowledged, strengthened, and drastically amplified.



Report of the United Nations Conference on Environment and Development - Vol. I: Resolutions Adopted by the Conference; United Nations (UN): Rio de Janeiro, Brazil, 25 1992. Warth, L.; Koparanova, M. Empowering Women for Sustainable Development; United Nations Economic Commission for Europe (UNECE): 2012.

25

Women vs Green Chemistry



©Juliana Vidal



Sustainability Central to ACS Core



The ACS GCI/Office of Sustainability aims to:

- (i) *catalyze* and enable the equitable implementation of Green and Sustainable Chemistry and Engineering throughout the global chemical enterprise and the Society
- (ii) **empower** chemists to identify and develop chemistries consistent with sustainable development, circularity and preservation of human and ecosystem health.

American Chemical Society 28

Green Chemistry Institute



Empowering people to reimagine chemistry and engineering for a sustainable future.

Vision

A sustainable future facilitated by the transforming power of chemistry and engineering.

Mission

To catalyze the implementation of innovative approaches to chemistry and engineering that enable sustainable development across the globe.

Strategic Areas

Science Advance research, scholarship and innovation in green and sustainable chemistry and engineering

Enable the implementation of green chemistry and engineering across the education sector

Industry

Accelerate the industrial adoption of green and sustainable chemistry and engineering

Facilitate equity in the adoption of green chemistry, engineering, and sustainability practices worldwide

American Chemical Society

https://www.acs.org/greenchemistry

2

29

ACS Campaign for a Sustainable Future





SUMMITS: MOBILIZE CHEMISTS TO CONTRIBUTE TO SDG'S



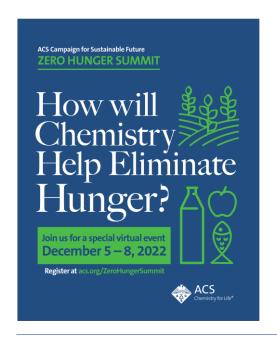
GREEN AND SUSTAINABLE CHEMISTRY PLATFORM



SUSTAINABLE CHEMISTRY GRANTS PROGRAM

American Chemical Society

30









American Chemical Society



Women, Publishing, Biases & Actions



Women are more likely to have an article rejected without review Biases exist at each step of publishing. They appear minor in isolation, yet their combined effect puts women at a significant disadvantage

ACTION: RSC Publishing aims to reflect their research community Recruit and train reviewers, editorial board members & associate editors to reflect the current gender balance of our research community (~36% women)



Why are publishers monitoring this and taking action?

Ensuring that the community fairly rewards and retains a more diverse range of voices will lead to better science and by extension will benefit society (e.g. UN SDG5)

Is publishing in the chemical sciences gender-biased? Royal Society of Chemistry 2019

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33

Women Leaders in Sustainable Chemistry Publishing



6 of 16 associate editors are women.

Green Chemistry

 1 of 2 associate editors and 2 of 5 editorial board members are women

RSC Sustainability (new journal)

2 of 5 associate editors are women.

"When women participate in governance, there is a greater chance policies will reflect more closely the needs of all citizens."

Co-operation and Development



©Juliana Vidal & Francesca Kerton

Special Issues Highlighting Women's Research



For Gender Equality in Science ©Juliana Vidal & Francesca Kerton

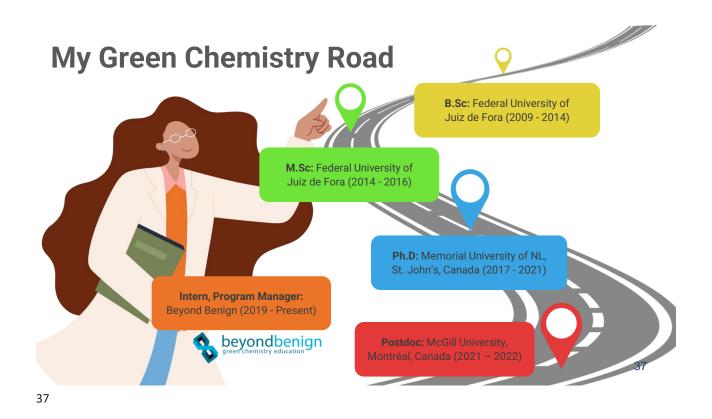
35

Hi, I'm Juliana

Program Manager, Higher Education at Beyond Benign: Green Chemistry for a Sustainable Future

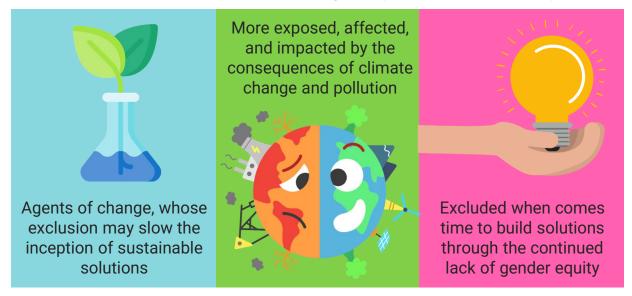


- Green Chemistry in 2013;
- BSc in valorization of silver residues;
- MSc treating formaldehyde solutions;
- Passion for science communication:
- Green Chemistry Education;
- Sustainability at the molecular level;
- Chemists with skills for our future.





Women in Green Chemistry: Agents of Change



Osman-Elasha, B. Women...In the Shadow of Climate Change. UN Chronicle. https://www.un.org/en/chronicle/article/womenin-shadow-climate-change

39

39

Inspiring Mentorship and Sponsorship

Accelerate women's careers and provide them with the correct networks.

Influential mentor, sponsor, and "cheerleader" can strongly impact women's professional trajectories and support their progression.



Breaking the Barriers - Women's Retention and Progression in the Chemical Sciences; Royal Society of Chemistry (RSC), 2018. Ibarra, H. Keeping Women from Advancing into Leadership, 2019. https://hbr.org/2019/08/a-lack-of-sponsorship-is-keeping-women-from-advancing-into-leadership.

A Change in Intergeneration Dynamics



Fee, A.; McIlfatrick, S.; Ryan, A. Int. J. Older People Nurs. 2020, 15 (3), e12318. Martin, C. E. A New Wave of Caregivers: Men, 2019. New York Times. https://www.nytimes.com/2019/09/18/opinion/male-care-giver.html

41

41

#WomenOfGreenChemistry, GCI at UoFT



 $\#WomenOfGreenChemistry. The Green Chemistry Initiative at the University of Toronto. \\ \underline{http://greenchemuoft.ca/normalistical.} \\$

Towards a Comprehensive Change

An approach including all marginalized scientists needed for a systemic change.



Addressing our environmental challenges requires promoting the advocacy and support of scientists from all backgrounds and parts of the world.

Urbina-Blanco, C. A. et al., J. Am. Chem. Soc. 2020, 142 (34), 14393-14396.

43

43

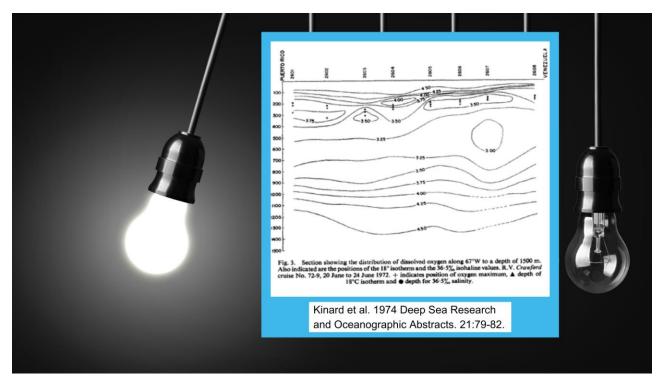














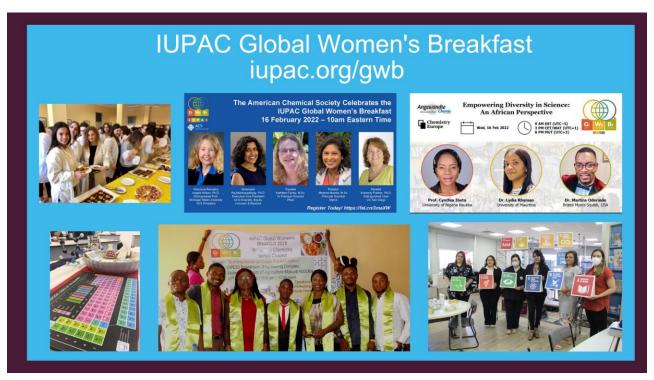




















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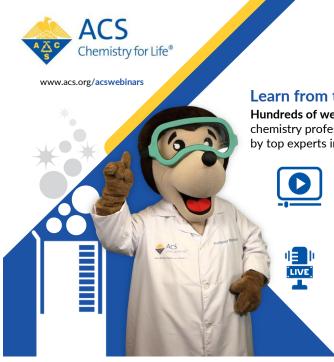
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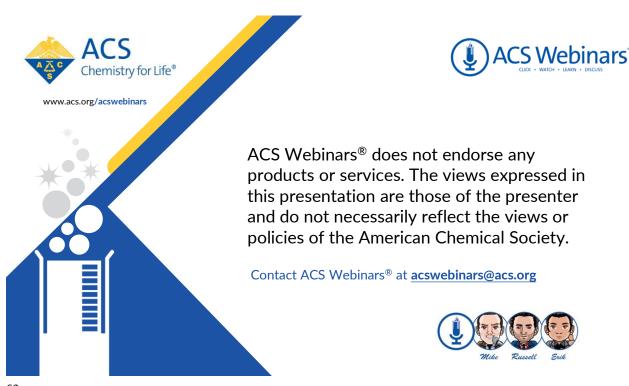
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61



01