

A home for women's voices

Creating a gender-inclusive environment is of the utmost importance in scientific research. Zakya Kafafi and Mónica Lira-Cantú talk about how their initiative, Women in Renewable Energy, promotes a stronger presence of female scientists at conferences and in the workplace.

Zakya Kafafi and Mónica Lira-Cantú

Two years ago, we launched a new conference event, Women in Renewable Energy (WiRE), to showcase key trends and the latest research findings in renewable energy developed and led by female scientists from around the world. The need for such an event came from our experience.

When Zakya started her research in the renewable energy field in the United States 25 years ago, she often found herself being the only woman in the room at conferences and meetings. There were hardly any women pursuing research in the field at that time. Ten years later, Mónica found herself in a very similar situation when she started her research in Europe, despite a substantial rise in women who were active in the energy field.

In response, Mónica worked proactively to ensure 50% female representation in the activities she organized. When participating in one of those events in 2018, Zakya was struck by the level of attendance and active participation by young women scientists. Yet, beyond initiatives like ours, we felt there was still a general lack of their visibility at meetings. We then decided to aim higher and organize an international conference that was entirely women-led — WiRE.

Drawing on our experience, we offer some reflections on providing an effective forum for women's voices, and pathways towards achieving gender balance in energy research.

The first WiRE event was held in 2019 in San Diego, California, USA at the yearly meeting of the International Society for Optics and Photonics. Technical presentations were delivered only by women on research they were leading. These were followed by a roundtable discussion where participants shared their leadership and career experiences, the challenges and obstacles they faced, and how they handled them. In light of the success of this event, we decided to make WiRE a yearly conference and organize it at a different location and sponsoring institution each time, to spread the message of inclusivity and reach as many women as possible. Although we held the



Zakya Kafafi.



Mónica Lira-Cantú.

second meeting virtually due to the COVID-19 pandemic, WiRE 2022 is planned to be an on-site satellite event at the European Materials Research Society Spring Meeting in Strasbourg, France (www.european-mrs.com/meetings/2022-spring/wire).

Many women in science, technology, engineering and mathematics experience gender inequalities and other gender-based issues. To this end, we built a roundtable event into WiRE that provided a platform to gain advice on gender issues and equality, and to discuss them without judgement. We addressed and debated gender imbalance, unconscious biases and underlying inhibitors. We encouraged participants at WiRE events — both men and women — to act as agents for change to improve the culture at their home institutions by endorsing an inclusive working culture.

To overcome gender biases and institutional barriers, shaping a strong network between women and raising the visibility of female role models is crucial. Networking is key to advancing and promoting women's careers as well as guiding their career progression to leadership positions. At WiRE, we foster stronger connections by creating women's

networking groups. For junior researchers, this is an opportunity to interact with world-class female leaders and find role models. Through networking groups, we share experiences and shortcomings, but also promote actions.

Women's representation has already proved and will continue to create a more productive environment. Complex challenges such as the climate crisis will benefit from the perspectives of under-represented groups who can come up with new or overlooked ways to address scientific and technological problems. We urge institutions to make tangible changes to the work place in response to the feedback they receive for more representation and recognition of women's contributions. We call for more equitable representation in conference organizing committees, award and technical programme committees, editorial boards and peer-review and recruitment panels.

We hope that by moving WiRE from one continent to another, from one country to another, and from one host organization to another, we are able to reach more women and institutions, and make our

call to action more prominent. Although this initiative is still in its infancy, we feel it provides an important avenue for raising consciousness in scientific societies of the role that women are currently playing and will play in the field of renewable energy. WiRE provides greater networking and community-building opportunities that help create leadership pathways. We hope

the initiative will foster progress in gender equity in energy science. □

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Competing interests

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