





Career challenges, problems, and consequences in the Middle east





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I am Alshaimaa Saad, working at Faculty of Science – Cairo University as an assistant professor.



#### Our Goal:

Establishing the first school in Egypt and Middle East, which will provide a clear connection between the solar eruptions and the geoeffective phenomena on the Earth.



Educating the students at schools on the wonders of science, especially astronomy and get to talk to the public and do some outreach work to present the importance and the joy of science.

Women in Astronomy 

IAUGA Busan 2022

# Outline



- Women in higher education
- Women in academic positions

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- Challenges
- **Empowering women**





# Women in higher education



Country	^	Most Recent Year	Most Recent Value
Algeria		2020	44
Bahrain		2020	42
Djibouti		2007	17
Egypt, Arab Rep.		2018	48
Iran, Islamic Rep.		2020	34
Iraq		2005	35

Jordan	2020	28
Kuwait	2004	27
Lebanon	2014	48
Libya	2002	13
Malta	2019	36
Morocco	2020	28
Oman	2016	35
Qatar	2020	34
Saudi Arabia	2020	42
Syrian Arab Republic	2015	37
Tunisia	2012	47



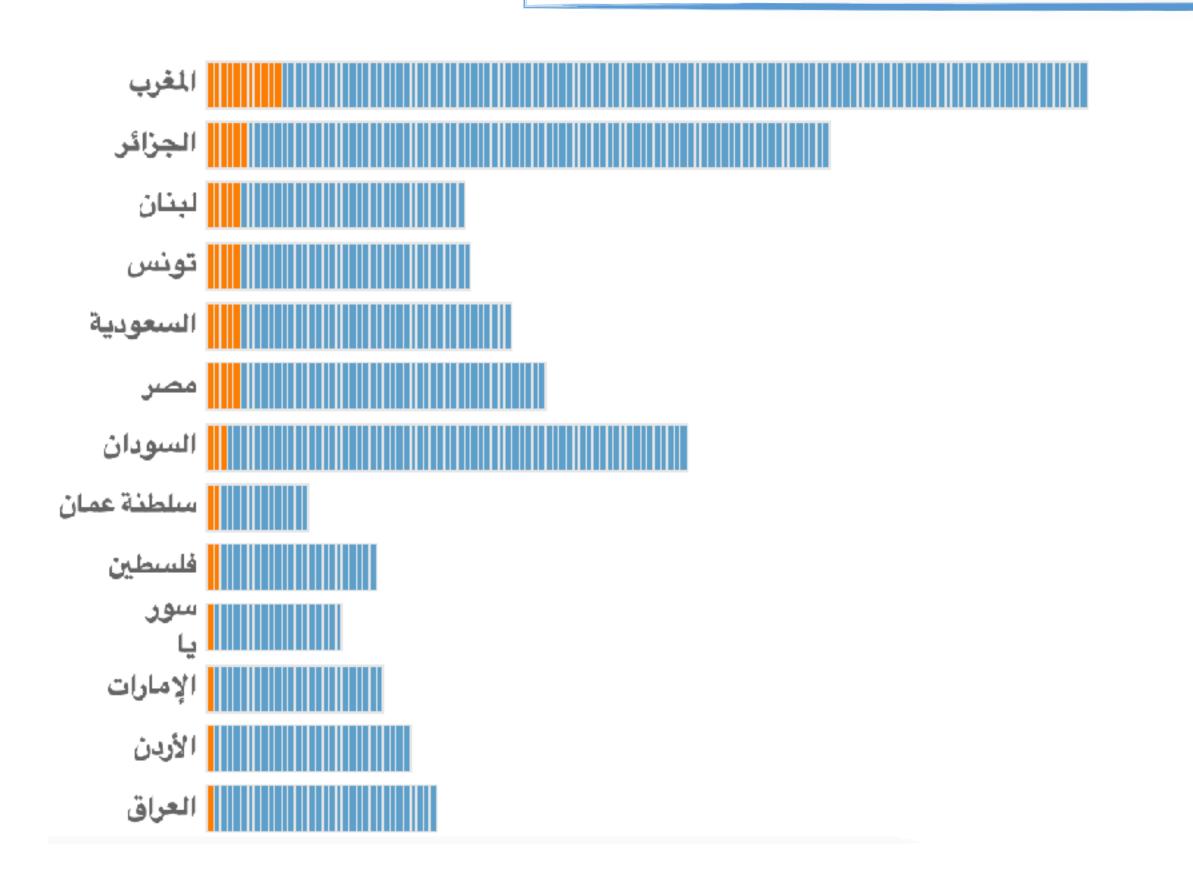
- Women are enrolled in relatively large numbers in fields such as the arts, humanities, education, and nursing, and are underrepresented in scientific fields.
- In Egypt, for example, women represent about 72 percent of total enrollment in the fields of arts, humanities, and education, while they constitute less than 30 percent of total enrollment in STEM. (Bubtana, A.R. 2018)

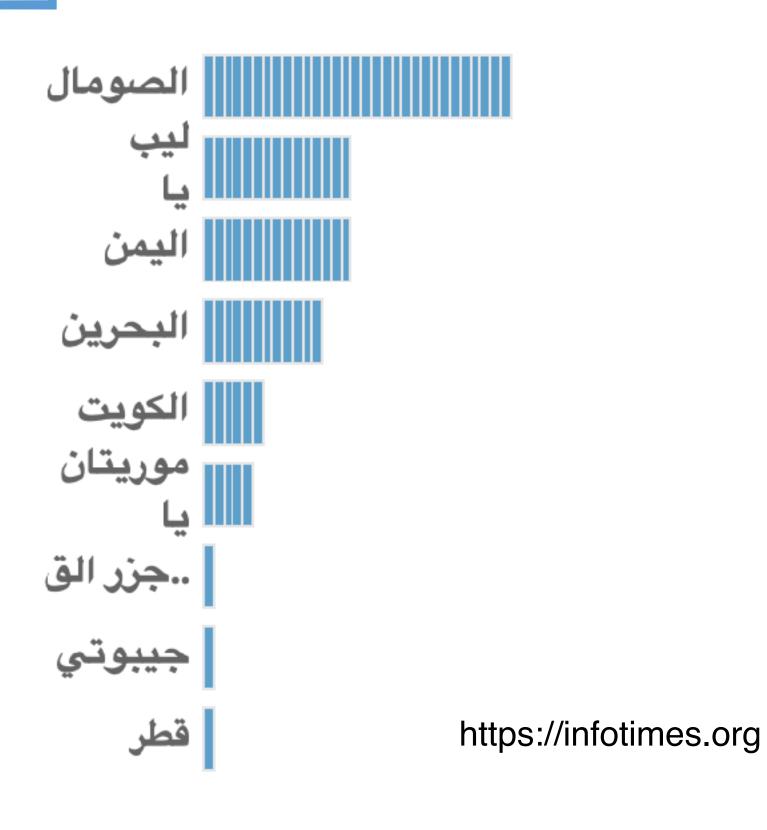


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# Women in academic positions?



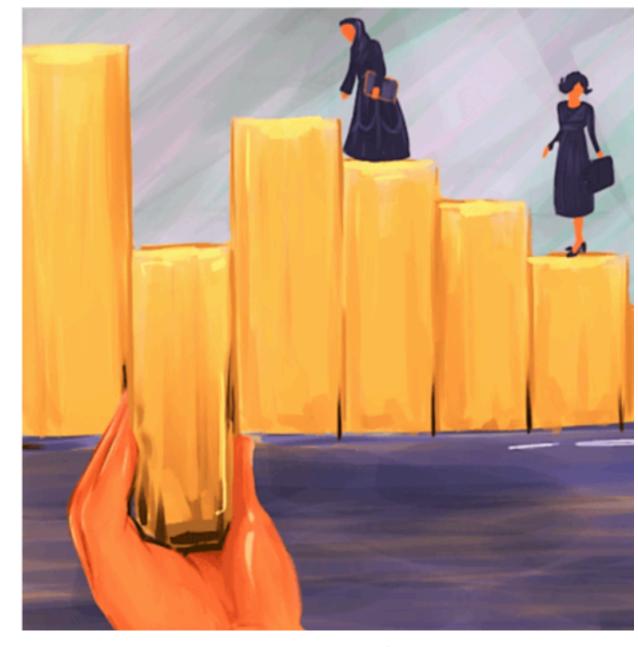


The extent of women's participation in the leadership of academic institutions in the Middle East and North Africa 2018



This data includes 702 universities in 22 Arab countries.

- Despite an increase in the number of women with higher degrees in the middle east, their access to senior leadership positions in academic institutions is still difficult.
- No woman holds any presidential position in all higher educational institutions in 9 Arab countries: Bahrain, Comoros, Djibouti, Kuwait, Libya, Mauritania, Qatar, Somalia, and Yemen. (WHED 2018)
- The number of women decreases as they moved up in career progression because of their main role and great duties towards their families.
- 32 percent of female university leaders had to change their career paths to take care of their families. (WHED 2018)

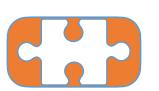


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Academic positions 

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#### Challenges



Two young women from very different backgrounds and stages in their education asked Dr. Mai if a successful academic career in

computer science was possible for 'someone like them'.

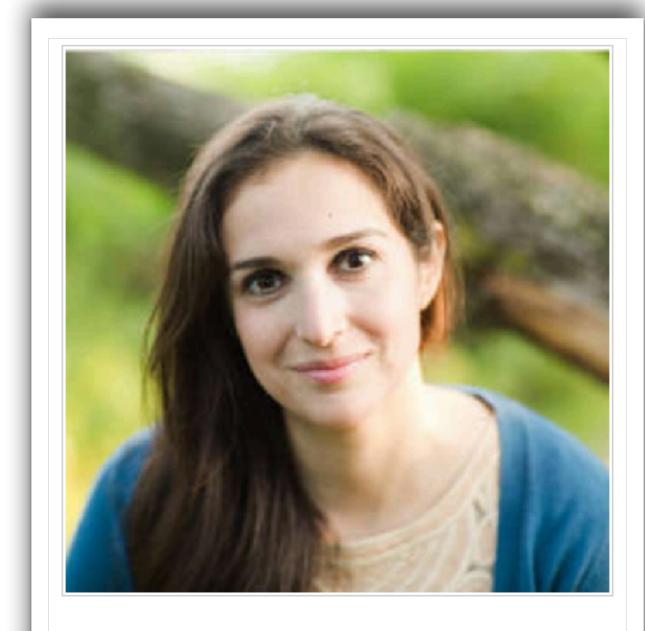
"One of my main worries after graduating isn't necessarily securing a job but is being accepted in the workplace," said Marlee Kopetsky, a biomedical engineering student with a focus in psychology at

Stevens Institute of Technology.



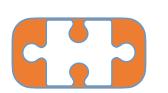
Marlee Kopetsky is a junior at Stevens Institute of Technology, majoring in biomedical engineering with a focus on psychology.

Photo: Dana Kopetsky



Mai Elshehaly is a lecturer in computer science at the University of Bradford, UK.

### Challenges





Men are better than women in STEM fields. Women are not interested in careers in science. Successful women behave in masculine ways.

Workplace sexual harassment (verbal or physical)

was reported by 24% of the study population. (Farah Fathima et al 2020)

**Gender Bias.** 

The majority of university presidents are selected by political leaders represented by the Minister of Higher Education, the Prime Minister, and not by election or according to career progression policy

# **Social and family pressures.**

Half of the female scientists reported that their working hours prevent them from spending quality time with their family (46%) and that their work responsibility demands more of them than their responsibility to their families (49.8). (Farah Fathima et al 2020)



Challenges • • • • • • IAUGA Busan 2022

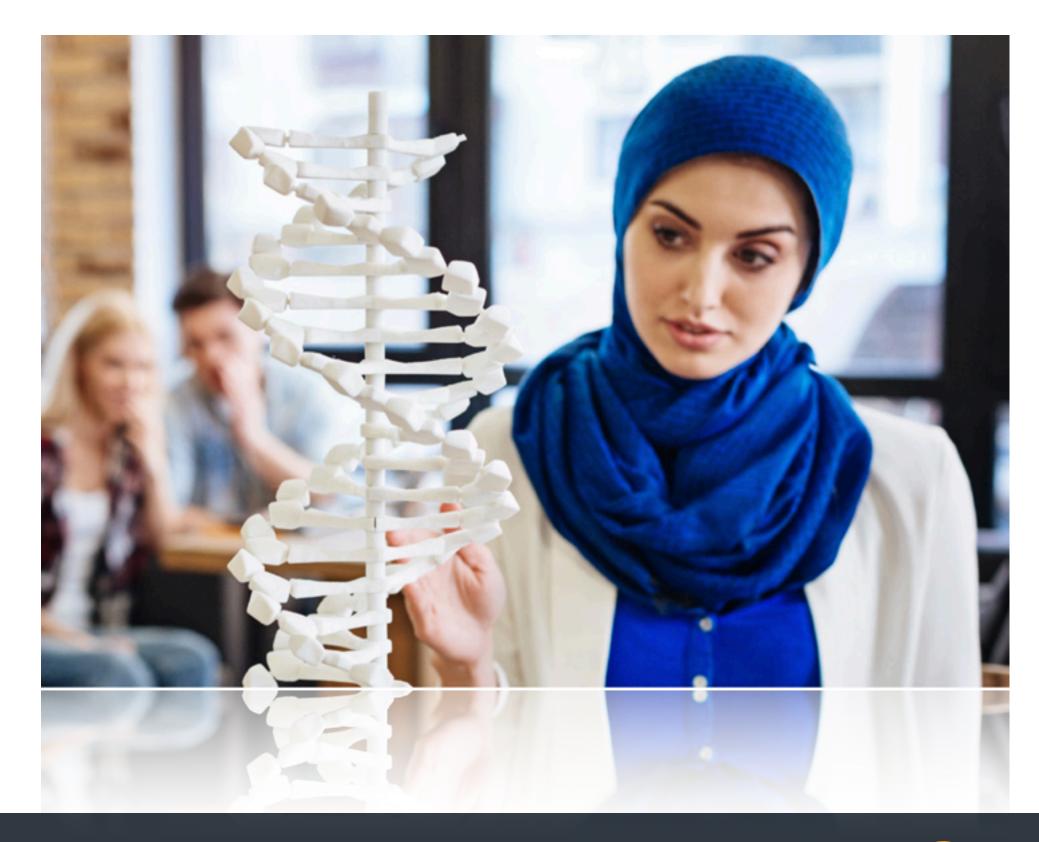
#### Empowering women?



- Flexible work timings, and woman-friendly management policies, appear to reduce work-related stress and improve work-life balance among female scientists. (Farah Fathima et al 2020)
- There is a strong push in many countries towards becoming knowledge-based economies, and (using) science and engineering as a means to do so. This is attracting women and men to the field
- The presence of women in the higher education leadership sector reflects positively on girls' education.

It would also provide <u>a safe and healthy workplace</u> for other women, whether they are academics, administrators, or students, thereby <u>boosting their productivity.</u>

Most importantly, we must deliver the message that academia in a STEM discipline is more than achievable for women of all backgrounds. We must convey the reassurance that if you are a woman in pursuit of a STEM degree and career, you will get there and we've got your back! "Mai Elshehaly"



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# Empowering women?



Funding... Scholarships only for women.



The ceremony recognized 14 Arab female scientists from the MENA region for their groundbreaking research.

