

#### International Network of Women Engineers & Scientists

AFTI Conference June 15, 2019 Tunis, Tunisia

"What the United Nations Women is doing to challenge countries and track the 17 Sustainable Development Goals"

Gail Mattson, PE, CHMM, PMP INWES President, 2018-2020



#### INWES 2018-2020 Objectives

- 1. Become a more influential voice on STEM issues for the benefits of women and society
- 2. Increase the presence of women in mainstream STEM decision-making bodies
- 3. Promote exchange of information and best practices for outreach and professional development
- 4. Provide opportunities for networking world wide
- 5. Support a range of global and regional projects
- 6. Expand the opportunities for education and careers in STEM for girls and women.



UN Millennial Declaration MDGs for 2020, then SDGs for 2030







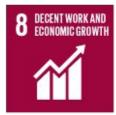


































#### What are most organizations and countries doing towards Goal 5?



- Removal of gender segregated work
- Governments have resolved to empower women as effective ways to promote sustainable development
- UN Framework Convention on Climate Change in 2012 included gender equality





































- Governments are to ensure equal access for women to full and productive employment and decent work
- Girls in STEM is a new focus for education systems worldwide

INWES is collaborating through UN Women and ECOSOC



#### INWES is big on collaborations that share resources and expand outreach for all of our programs

- Partner with universities on providing scholarships, role models, and expanding academic opportunities
  - Partner with corporations for conducting career development and diversity & inclusion training
  - Host joint outreach events with other women and STEM organizations to reach more girls and their parents, such as math contests and robotics competitions





#### How INWES and Women in STEM contribute to Goal 1 – No Poverty?

- Women in higher paying jobs in STEM improve the financially situation for their family and their community.
- Women with education and resources can more effectively advocate for basic needs and propose specific programs to address poverty in different communities.







































#### How INWES and Women in STEM contribute to Goal 2 - Zero Hunger?

- Women with degrees in agriculture and plant sciences can improve the quality and quantity of food for their families and communities.
- Women can better innovate for simple solutions to address basic needs such the development of solar ovens and more effective farming methods with regards to irrigation and food production.









































How INWES and Women in STEM contribute to Goal 3 - Good Health & Well-being

• Women with degrees in Medicine and Health Services can improve the health of their communities and well-being through nutrition programs and educate their communities on unsafe work practices, vaccinations, dangers of illegal drugs, smoking, etc.







































How INWES and Women in STEM contribute to Goal 4 – Quality Education?

- Women with college degrees can set good examples and serve as mentors to encourage others to pursue higher education.
- Women with STEM degrees can also educate the next generations in STEM fields, serve as role models, and ensure high quality education in their communities.









































How INWES and Women in STEM contribute to Goal 5 – Gender Equality

- Women in STEM can be advocates for other girls and women to pursue professional careers.
- Be advocates for equal employment opportunities and equal pay at all levels
- Hold employers accountable for Diversity and Inclusion Programs







































How INWES and Women in STEM contribute to Goal 6 – Clean Water & Sanitation?

- Women in the Environmental Sciences and Engineering can advocate for and design, construct new and upgraded potable water and waste water treatment plants and systems.
- Innovate ways to provide better clean water and sanitation systems in rural communities.









































How INWES and Women in STEM contribute to Goal 7 – Affordable and Clean Energy?

• Women in multiple STEM areas can advocate for and help design and build new facilities to generate more affordable and clean energy such as solar, wind, wave action, modular nuclear, and hydro electric, etc.







































How INWES and Women in STEM contribute to Goal 8 – Decent Work and Economic Growth?

Women in STEM can be effective advocates for opening up new opportunities for decent working conditions for women and children, encouraging women entrepreneurs and establishing viable businesses in their communities.









































How INWES and Women in STEM contribute to Goal 9 –Industry, Innovation and Infrastructure?

- Women in all areas of STEM can be involved in expanding existing and introducing/starting up industries in their communities.
- Women in STEM research can be instrumental in discovering new energy sources, innovation of new materials and technologies and designs for more effective and 'green' infrastructures.









































How INWES and Women in STEM contribute to Goal 10 – Reduced Inequalities

• Women in STEM careers and management in STEM industries can advocate for equal opportunities for advancement, mentoring, promotions, and management training, and a seat in the board room or in decision making bodies in government at all levels.









































How INWES and Women in STEM contribute to Goal 11 – Sustainable Cities and Communities?

• Women in multiple STEM areas can contribute to the design, education of decision makers and the various community groups, construction, and operations of more sustainable cities and eco-friendly communities in the future.







































How INWES and Women in STEM contribute to Goal 12 - Responsible Consumption & Reduction?

• Women in STEM can fill essential roles in determining how to best reduce waste in all aspects of infrastructure design, construction and operations of facilities as well as educating businesses, industry and communities how to reduce waste eliminate pollution and expand recycling.







































#### How INWES and Women in STEM contribute to Goal 13 – Climate Change?

• Women in STEM should be leaders in advocating multiple ways to address climate change from designing more energy efficient systems to reducing the generation of pollutants affecting air quality, water quality and contributing to climate change.









































How INWES and Women in STEM contribute to Goal 14 – Life Below Water?

Women in Environmental Sciences and Biology should be playing key roles addressing the negative short-term and long-term impacts of current agricultural methods, pollution from consumers and industry are having on the environment, our ever decreasing fresh water bodies and precious areas in our oceans.







































How INWES and Women in STEM contribute to Goal 15 – Life on Land?

Women in Environmental
Sciences and Biology should be
playing key roles addressing the
negative short-term and long-term
impacts of current agricultural
methods, pollution from
consumers and industry are
having on the environment and
the precious areas of wilderness.







































How INWES and Women in STEM contribute to Goal 16 – Peace, Justice and Strong Institutions?

Women in STEM can educate decision makers and/or run for political office in order for government entities from local to national levels understand how lack of education, shortage of energy sources and pollution of our environment impact political stability, our institutions and peace efforts worldwide.









































How INWES and Women in STEM contribute to Goal 17 – Partnerships for the Goals?

- Women in STEM organizations should be looking for multiple opportunities to partner with other organizations, institutions, not-for-profits and corporations striving to attain any of the SDGs.
- Should be highlighting how coordinated efforts can help achieve multiple goals.







































#### INWES Plans for the Future

#### 2018 - 2020

- ✓ Host Regional Conferences in 2019 and ICWES18 in 2020
- ✓ Establish new regional network in Latin America
- Strengthen regional networks thru network meetings & projects
- ✓ Support the establishment of new STEM organizations
- ✓ Support activities for young women in STEM including on-line mentoring on our website and participation in regional events
- Expand INWES activities through collaborations with UNESCO, UN Women, WFEO and other STEM organizations
- ✓ Collaborate with other organizations, corporations and foundations to make progress on all of the SDGs for 2030



### INWES Plans for the Future What can you do?

- Come up with other ideas of how INWES can strive to achieve some of the SDGs
- ✓ Think of opportunities for collaborations with other organizations and prepare whitepapers or proposals and/or provide contacts so we can pursue
- ✔ Provide specific examples of how Women in STEM have already contributed towards meeting one or more of the SDGs.
- ✓ Help INWES identify and establish collaborations with other organizations that are associated with the UN Women
- ✓ Collaborate with other organizations, corporations and foundations to make progress on all of the SDGs for 2030