The representation of women in STEM (Science, Technology, Engineering and Mathematics) matters. Diversity in the workforce contributes to creativity, productivity, innovation, and success. The STEM fields in general and Earth Sciences in particular have long been plagued by the under-representation of women. Men tend to dominate in the field, and the numbers of women simply aren’t growing the way one would hope. Although women in most countries earn just over 40% of the bachelor’s degrees in the field, they accounted on average for just 20% of faculty in 2015, with considerable differences between countries. The troubling disparity has been attributed to a number of factors; including deeply embedded culture based psychological barriers and failures by elementary and high schools to spark girls’ interests in math and science. In colleges, the reasons for high attrition rates of women from STEM majors often cite insufficient support, and a lack of female role models. At the department, college, or institutional level emerging research suggest that a “chilly climate” environment where gender stereotypes, bias and inequality prevail. Lack of mentoring and supportive policies (particularly for work–life balance) also contribute to the “leaky pipeline” a metaphor for the greater likelihood for women to leave STEM fields at every point, from recruitment to attrition after graduation; because of a significant amount of barriers. Institutional changes in policy and structure including increasing awareness and training to reducing bias, along with strategies like implementing mentoring programs and fostering social accountability, are some of the possible solutions. While some progress has been made and we are on the right track there is still a distance to the mark line and mountains to climb along the way.

Keywords: Women in Science, Leaky pipeline, Role Models