Advancing the Role of Women in Production Engineering

(by Prof. Ajay Malshe)

Diversity and inclusion in all forms, including gender, color, discipline, race, and culture, are essential for the wholesome and equitable creation of a talent pool and workforce. In this sense, elevating the role of women in production science and engineering is a critical matter which requires urgent attention. CIRP, in upholding universally accepted norms of inclusivity, also has a responsibility to lead the way for the next generation of production engineering scholars and leaders, through the equitable participation of women in this field. Currently, only 53 out of a total of 685 CIRP members (including corporate members) and research affiliates are women, with Prof. Hoda ElMaraghy (from Canada) being the first elected female Fellow member.



Photo: Assembly of colleagues over an invited lunch during the 2022 CIRP GA meeting to discuss the advancement of the role of women in production engineering.

With this backdrop, and the aim to increase the diversity of CIRP as an academy, the first meeting of interested female and male CIRP colleagues took place during the 2022 CIRP General Assembly. The meeting was organized by Prof. Malshe (USA) for his interest in elevating the representation and role of women in production engineering, and based on his discussions with women Fellows of CIRP, including Prof. Jian Cao (USA), Prof. Stefania Bruschi (Italy), Prof. Marion Merklein (Germany), and Prof. Brigid Mullany (USA). The meeting was attended and supported by several CIRP colleagues, including Prof. Hans Hansen (President of CIRP, 2021-22).

The discussions were collegial, inclusive, and productive, in which every participant had the opportunity to openly share their experiences. The topics discussed included:

- (1) Challenges (such as unconscious bias) and also the opportunities which women experience in building a career in production engineering.
- (2) Proactive guidance and support female colleagues have received from other women, and men, active in this field.
- (3) The importance of continuing this initiative within CIRP, with the support and participation of the leadership and members of the CIRP community.
- (4) Intentional recruitment of more women into the field of production science and engineering, to help strengthen the future workforce in this field.

The meeting concluded with the intention of reconvening at the 2023 Winter Meeting and the 2023 General Assembly, in order to continue building awareness and momentum on this important initiative within CIRP.

Anecdotal references for further reading can be found from:

- [1] More women in manufacturing jobs in every age group https://www.census.gov/library/stories/2022/10/more-women-in-manufacturing-jobs.html
- [2] Promoting gender balance in the manufacturing sector EIT Manufacturing https://www.eitmanufacturing.eu/news-events/news/promoting-gender-balance-in-the-manufacturing-sector/
- [3] The future of women in Asia's workforce https://www.mckinsey.com/featured-insights/asia-pacific/the-future-of-women-in-asias-workforce
- [4] Women in the workforce: An unmet potential in Asia and Pacific https://www.adb.org/sites/default/files/publication/158480/women-workforce-unmet-potential.pdf
- [5] Manufacturing leaders call for more women to join their ranks (Australia) https://www.afr.com/companies/manufacturing/manufacturing-leaders-call-for-more-women-to-join-their-ranks-20220717-p5b26u