

GI-MS47-04 | “IT’S JUST LIKE PLANNING A DINNER...” - WOMEN IN CRYSTALLOGRAPHIC COMPUTING

Thorn, Andrea (University of Würzburg, Würzburg, GER)

In the early days of crystallography, every structure solution involved performing many laborious and repetitive calculations. Up until the 1960s, this kind of manually performed computation as well as coding were considered predominantly women’s work [1] - and advertised as such in magazines like Cosmopolitan.

The women who played a pivotal role in early crystallography contributed almost all also to crystallographic computation [2]: Kathleen Lonsdale, Helen Dick Megaw, Dorothy Hodgkin, and Isabella Karle, just to name a few; and their work inspired later generations. However, today, the number of women developing new computational techniques seems to be declining.

This talk will search for reasons, give a historical perspective for the future of female methods developers and highlight how crystallographers of all genders can start to develop their own software, methods and algorithms.

[1] Thompson, C. (2019) "The Secret History of Women in Coding", New York Times

[2] Neumann, W., Benz, K.-W. (2018) "Kristalle verändern unsere Welt: Struktur – Eigenschaften – Anwendungen", De Gruyter, Berlin/Boston, 2018