

# The Life and Legacy of Kathleen Lonsdale

*Makayla Frisse*

## Introduction

Dame Kathleen Yardley Lonsdale (1903-1971), born in Newbridge, Ireland, is most well known for her work as a chemist. She is credited with proving the structure of the benzene ring as well as helping prove the existence of molecular orbitals. Beyond this, she built an international legacy as an activist for prison reform and world peace.



## Impact

Lonsdale made major contributions to both her scientific field and the political landscape of her time. She also made history by becoming the first woman to hold many roles, including a Fellow of the Royal Society in London, a tenured professor at the University College London, president of the International Union of Crystallography, and president of the British Association for the Advancement of Science, no doubt inspiring many young female scientists in her wake.

## References:

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## Acknowledgements

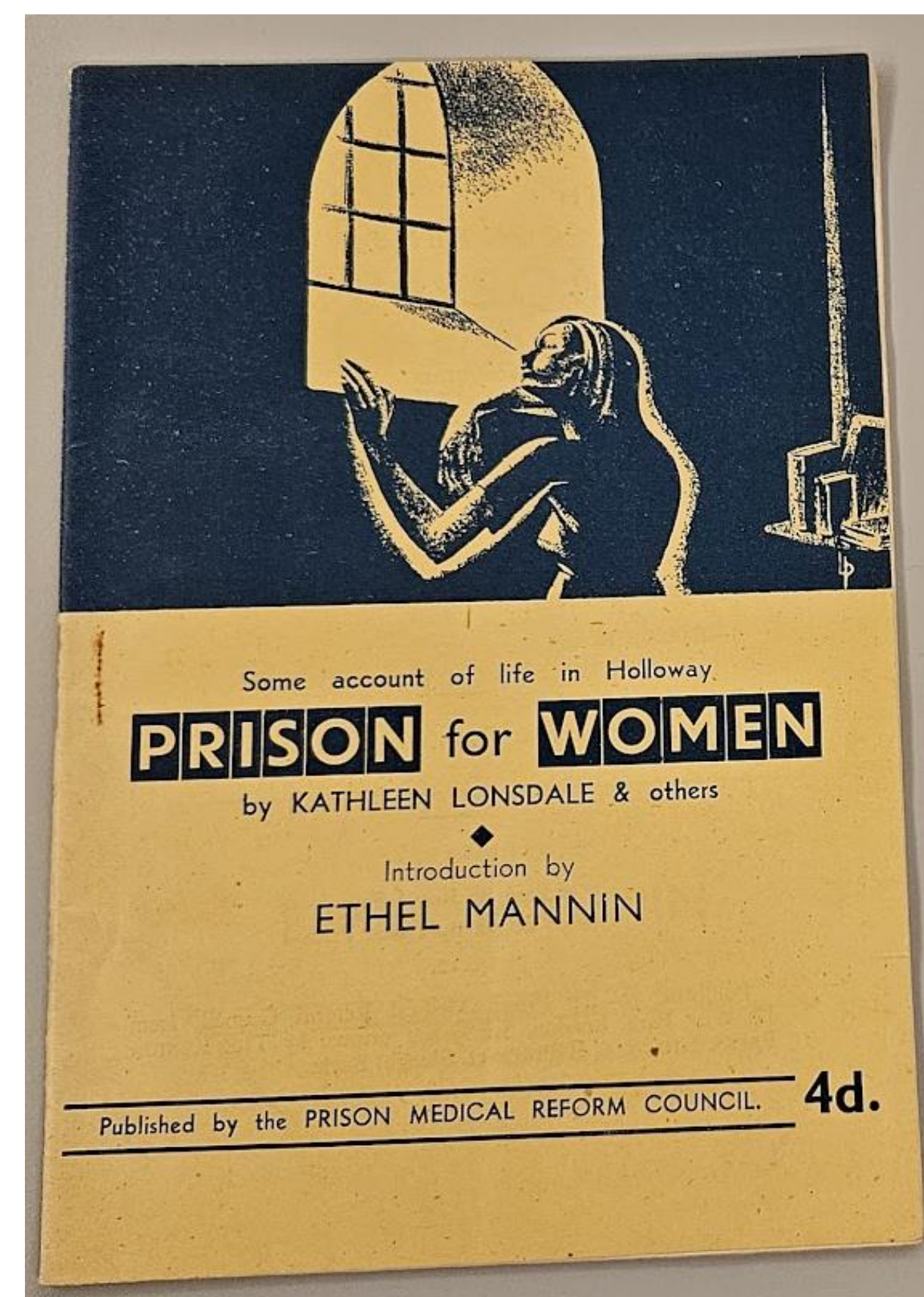
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## Key points

Lonsdale's experimental methods were novel during her time. When she discovered the planar structure of the benzene ring, it was the first time that the atomic positions had been found without any prior assumptions about the molecule. Outside of her research, Lonsdale published works on prison reform and conflict, largely influenced by her living through the second World War.

"A scientist should take interest in national and international affairs ... in making sure that facts are properly known and trying to ensure that science is used for good and not for evil purposes."

-Kathleen Lonsdale



The cover of a booklet chiefly authored by Kathleen Lonsdale, containing her account of the time she spent in Holloway Prison for Women as a result of refusing to participate in the civil defense service during World War II.