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Blanka Wladislaw and the Consolidation of Organic Chemistry in Brazil A Trajectory of Training Innovation, and Scientific Commitment

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Abstract

This article presents an overview of the academic and professional trajectory of chemist Blanka Wladislaw, based on an interview given to the CPDOC of the Getulio Vargas Foundation in 1977. Focusing on scientific training, the challenges of research in Brazil, and the development of Organic Chemistry as an autonomous field, the text highlights her pioneering contribution to national science, especially through the introduction of organic electrochemistry and the training of new researchers.

1. Introduction

The history of Brazilian science is marked by unique trajectories that, in addition to reflecting specific social and institutional contexts, highlight the active role of its protagonists in building the scientific field. In this scenario, the work of Blanka Wladislaw (1917–2010) represents one of the most relevant contributions to the consolidation of Organic Chemistry in Brazil, both in higher education and scientific research.

2. Education and Integration into the University Environment

A Polish immigrant, Blanka arrived in Brazil at the age of 14, bringing with her a solid European humanistic education that valued reading, observation, and critical thinking. Her admission to the Faculty of Philosophy, Sciences and Letters of the University of São Paulo (USP) in 1939 marked the beginning of an academic journey closely connected to European professors such as Heinrich Rheinboldt and Heinrich Hauptmann, both fundamental in structuring Chemistry education in the country.

During her undergraduate studies, Blanka stood out for her interest in laboratory activities and her affinity for Organic Chemistry. With Hauptmann's support, she began her doctoral studies a few years after graduation, completing them in record time. Her research on sulfur compounds was published in international journals, inaugurating a new line of investigation at the university.

3. Postgraduate Studies and Innovation in Organic Electrochemistry

In the 1950s, with a scholarship from the British Council, Blanka conducted postdoctoral research at Imperial College in London, where she came into contact with new methodologies in the field of Organic Electrochemistry. Upon returning to Brazil, she

introduced these techniques to the Chemistry Department at USP, which represented a significant advancement for research in the area. Her tenure thesis, defended in 1958, addressed the application of electrolytic methods to the synthesis of α -lipoic acid, and was also published abroad.

Following these contributions, Blanka structured a research group that became renowned for its scientific productivity and for training new academic and industrial professionals. Among her mentees are names such as Hans Viertler, Roberto Rittner, and Paulo Olivato, who later also took on academic roles at USP.

4. Commitment to Scientific Training and Institutional Challenges

Throughout the interview, Blanka emphasized the importance of the inseparability of teaching and research, arguing that a university professor must also be a researcher. This perspective, which was not yet predominant in Brazilian universities at the time, was consolidated in the practices of her department and influenced the organization of postgraduate programs at USP and other institutions.

Blanka also warned of the risks of academic talent being lost to industry due to salary disparities. Although she viewed the strengthening of ties between the university and the productive sector positively, she believed it was essential to ensure adequate conditions for young researchers to remain in academia.

5. Final Considerations

Blanka Wladislaw's trajectory is emblematic of scientific development in Brazil in the 20th century, revealing the challenges faced by women scientists, immigrants, and pioneers in still-developing fields. Her contribution goes beyond Organic

Chemistry, extending into the realm of scientific policy and the training of qualified human resources.

By combining academic excellence, methodological innovation,

and institutional commitment, Blanka Wladislaw stands as a central figure in the history of Brazilian science. Her legacy remains alive in the research institutes she helped build and in the generations of scientists she trained

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