



## Electrophoretic Harmony the Art and Science of Capillary Separation

Eduardo Ancestral\*

*Department of Analytic Biochemistry, Kiribati University, Kiribati*

### Abstract

The quest for achieving optimal capillary separation in electrophoresis represents a harmonious blend of art and science, where intricate techniques converge to unveil the diverse landscape of biomolecules. This abstract delves into the symbiotic relationship between the artistic finesse required in method development and the scientific precision essential for capillary electrophoresis (CE). Through the narrow confines of a capillary, charged species embark on a journey guided by electric fields, revealing their unique signatures in a symphony of migration. The abstract explores the artistic nuances involved in optimizing conditions such as buffer composition, voltage gradients, and temperature, acknowledging the role of intuition and experience. Simultaneously, it delves into the scientific principles governing CE, including the inherent electrophoretic mobility of analytes and the impact of electro osmotic flow. The review highlights the interdisciplinary nature of CE, where chemistry, physics, and engineering converge to create a masterpiece of analytical separation.

---

\*Corresponding author: Eduardo Ancestral, Department of Analytic Biochemistry, Kiribati University, Kiribati, E-mail: aeduardo@gmail.com

Received: 11-Nov-2023, Manuscript No: jabt-23-121810, Editor assigned: 13-

