

## **Empowering Women in Science Laboratory Technology (SLT): Breaking and Fostering Inclusivity**

### **Abstract**

This paper explores the role, importance of women in the practice of Science Laboratory Technology and challenges they face in the field. Despite progress in various scientific disciplines (Biology, Biochemistry, Chemistry, Geology/Mining, Microbiology/Biotechnology, Physics/Electronics, Physics with Production, Physiology/Pharmacology Technology) and gender representation in Science, Technology, Engineering and Mathematics (STEM) fields, gender disparities persist and women remain underrepresented in certain fields, including SLT. The paper aims to shed light on the experiences of women in Science Laboratory Technology (SLT), identify barriers to their practice as Laboratory Scientists/Technologists and propose strategies to promote inclusivity and gender equality in this crucial field.

### **Overview**

The practice of SLT is versatile and cuts across many prime sectors such as education, agriculture, industries, medicine, engineering, national security and ICT. It is through the mandate of the Institute that Science Laboratories are efficiently and effectively managed in Secondary Schools, Colleges of Education, Polytechnics, Universities, Research Institutes and Industries so as to ensure international best practices.

This sets the stage by providing an overview of the significance of Science Laboratory Technology and the historical context of gender representation in science-related fields. It also establishes the need for increased diversity and inclusivity for the role of women in SLT. It delves into the historical context, highlighting the contributions of women to SLT from inception. It explores the challenges faced by pioneering women in the field and the gradual evolution toward greater gender inclusivity.

## **Empowering women in SLT to break barriers to growth and foster inclusivity**

Empowering women in Science Laboratory Technology to break barriers to growth and foster inclusivity involves encouraging them to improve themselves academically/professionally to be able to reach the peak of their career. Responsibilities are not handed down at the platter, rather is open those who merit it. Women are advised to seek knowledge through further studies, trainings, personal development and above all dedication to their duties. These will help women to break any barriers to growth in their profession and place them at an advantaged position.

Fostering inclusivity includes providing policies that supports women in the area of SLT. Women because of their nature and position in the family most often are marginalized due to some certain duties they perform to their families. Again, they are excluded in attaining some key positions due to ethnic, religious or cultural practices that makes it very difficult to make impact in their profession. Such practices need to be abolished and replaced with policies that would be favourable to women.

However, there are success stories of women who have excelled in Science Laboratory Technology. These women have improved their educational background by earning Masters of Science and Doctorate Degrees. They have attained the heights of being Directors in their Fields, Coordinators; Team Leaders; Association Executives and even becoming Fellows which is the peak of the Profession. This demonstrates that women can break these barriers and attain enviable positions in SLT Profession. The success stories of these women will inspire others to know that if other can achieve such Professional height then they can also do it.

## **Challenges**

Examining the present scenario in the Profession, it discusses the challenges that women encounter in pursuing careers in SLT. These challenges may include biases and family work life balance, workplace cultures that may not be encouraging to the success of women.

## **Recommendations**

These include mentorship programs, awareness campaigns, educational initiatives and policy changes that support gender diversity in SLT Profession. This indicates an envisioning future where women in SLT thrive and contribute significantly to advancements in Science and Technology. It emphasizes the importance of collective efforts to create a more inclusive environment for women pursuing careers in Science Laboratory Technology.

## **Conclusion**

In conclusion, there is need to create awareness on the emerging role of Women in SLT for a call to action, encouraging academic institutions, industry stakeholders, and policymakers to take proactive steps to address gender disparities in Science Education with emphasis on SLT. This may involve implementing and supporting policies that promote diversity, equality, and inclusivity. This calls for collective efforts to create a more inclusive and equitable environment for Women within Science, Technology, Engineering and Mathematics (STEM) fields and Science Laboratory Technology (SLT) Profession.

**Happy International Day Celebration of Women and Girls in Science!!!!**