## **EDITORIAL**

## THE SYSTEMIC APPROACH IN TEACHING AND LEARNING (SATL): 25<sup>TH</sup> ANNIVERSARY

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The Systemic Approach in Teaching and Learning (SATL) is based on constructivist principles and involves the creation of closed cluster concept maps called systemic diagrams. The SATL technique encourages deep learning, as opposed to rote learning.

During the last twenty years, the SATL technique has been applied and evaluated in many different knowledge domains at all levels of education (preuniversity, university, adult education), but the major teaching applications have been reported on chemistry topics in secondary and tertiary education. In chemistry, the researchers have conducted a series of successful SATL-oriented experiments, at pre-university, and university levels of education. They have created SATL units in General, Analytical, Aliphatic, Aromatic, Green, and Heterocyclic.

The systemic Approach to Teaching and Learning Chemistry (SATLC) is a teaching strategy founded and developed during the last 25 years. It aims to transform surface learning into deep meaningful learning. This goal can be achieved through the development of systemic thinking using system-oriented learning tasks. These tasks used closed schemes, referred to as systemic diagrams, in which concepts are directly linked to create a closed interconnected conceptual structure. Systemic (Systems) thinking (ST) skills were developed and evaluated in organic chemistry classes with the application of [SATLC] and more precisely by using systemic assessment questions [SAQs]. ST is one of the important learning outcomes of SATLC & a building stone in the preparation of future systemic creative thinkers. Also, ST is one of the crucial demands for Systemic Decision-Making [SDM].

This issue of AJCE published peer-reviewed articles form prominent researchers in the field of SATL in different countries. [African Journal of Chemical Education—AJCE 13(4), December 2023]

SJIF IMPACT FACTOR EVALUATION [SJIF 2012 = 3.963] SJIF IMPACT FACTOR EVALUATION [SJIF 2013 = 4.567] INDEXED AND ABSTRACTED BY CAS