membrane [6].

As a result, EME arose in 2006 to improve analytes di usion rate and expedite extraction method, opening a new avenue for pharmaceutical analysis. EME allows for the determination of a wide spectrum of acidic and basic medicines from complicated matrices by employing organic extracting solvents immobilised in membrane pores. EME improves mass transfer by using applied voltage rather than passive di usion, boosting analyte ow and reducing extraction time. Although EME by applied voltage has various advantages and intriguing characteristics, it is also connected with obstacles and restrictions. In general, analytes with log P values less than two are not successfully extracted when a pure solvent is utilised as a support liquid membrane (SLM). Lipophilic substances in biological samples also cause membrane pores to get clogged. is limitation is due to the nature of the EME membrane, which is typically constructed of polypropylene and is incompatible with polar chemicals and aqueous solutions [7].

e development of organic solvent-free techniques and the use of green materials is one of the principles of green chemistry. Green materials are frequently used in the development of innovative microextraction techniques due to their excellent features, which include cost-e ective natural precursors and environmentally friendly synthesis procedures. As a result, green materials have received more attention in order to reduce chemical waste and achieve more safe techniques. Using biodegradable materials in membrane structures