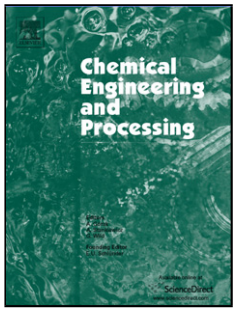

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The use of an innovative inverse numerical modeling method for the evaluation and parameter estimation of barberry anthocyanins ultrasound assisted extraction

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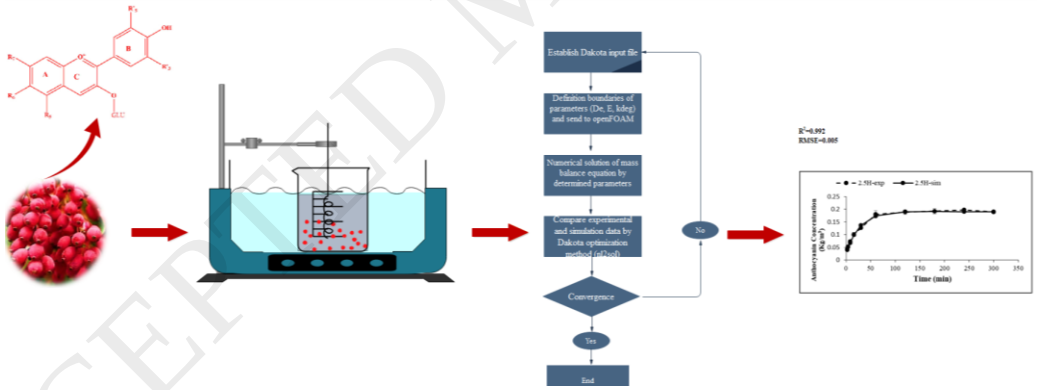
Graphical abstract



Highlights

- The inverse numerical simulation is an accurate and powerful technique to investigate transport properties of food processes.
- The inverse modelling approach are able to simultaneously estimate process coefficient including k_c, D_e, E, and k_{deg} ultrasound-assisted extraction of barberry anthocyanin compounds.