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Authors: Navideh Anarjan, Abolghasem Jouyban

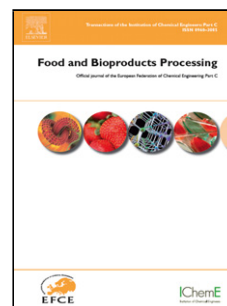
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## Preparation of lycopene nanodispersions from tomato processing waste: Effects of organic phase composition

Navideh Anarjan<sup>1\*</sup>, Abolghasem Jouyban<sup>2,3</sup>

<sup>1</sup> *Department of Chemical Engineering, Tabriz Branch, Islamic Azad University, Tabriz, Iran*

<sup>2</sup> *Pharmaceutical Analysis Research Center and Faculty of Pharmacy, Tabriz University of Medical Sciences, Tabriz, Iran*

<sup>3</sup> *Kimia Idea Pardaz Azarbayjan (KIPA) Science Based Company, Tabriz University of Medical Sciences, Tabriz 51664, Iran.*

\*Corresponding Author:

Navideh Anarjan, PhD, Assistant Professor

anarjan@iaut.ac.ir

+989144027140

### Highlights

- Lycopene was simultaneously extracted from waste and size reduced into nano-ranges
- The ultrasound assisted nano-precipitation technique was used
- Simplex centroid mixture design was applied to optimize the organic phase composition
- The optimum lycopene nanoparticles were physically stable during 4-week storage
- The lycopene content of optimum product was decreased by a first order kinetic model

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