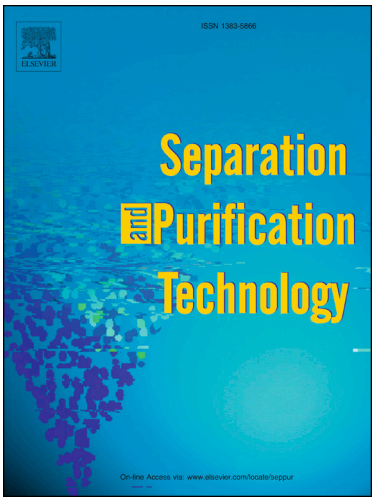

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Solvent extraction of zinc from synthetic Zn-Cd-Mn chloride solution using D2EHPA: Optimization and thermodynamic studies

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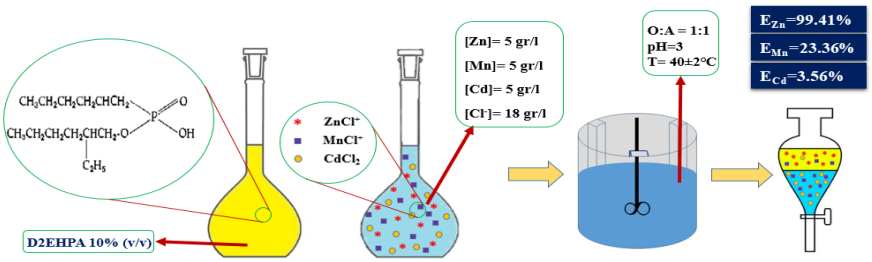
Research highlights

- Solvent extraction of zinc from synthetic Zn-Cd-Mn chloride solution was investigated.
- Effective parameters were pH, concentrations of D2EHPA and ions, temperature and contact time.
- Concentrations of D2EHPA and ions were the most effective parameters on separation of Zn from Mn and Cd.
- The predominant Zn species extracted by D2EHPA was $ZnCl^{+}$ which is different from sulfate solution.
- Thermodynamic parameters of zinc extraction from chloride solution were calculated.

Graphical abstract



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