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# Liquid-Liquid Extraction: A Bibliography Update (1992-1993)

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BIBLIOGRAPHY

# Liquid–Liquid Extraction: A Bibliography Update (1992–1993)

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This article provides a bibliographic listing of journal papers published during 1992–1993 concerned with liquid–liquid extraction. It is an update to the literature as provided in a previous bibliographic paper (1) detailing publications in 1991 concerned with equilibrium-staged separations. An update of this original paper (for 1992–1993) has recently been published (2). The references are taken from the 40 most important chemical engineering journals.

Many papers are still published each year concerned with the use of liquid–liquid extraction for the separation of "traditional" chemicals. However, over the last decade the emphasis in the published papers has been toward applications of extraction in mineral processing, e.g., for the removal/separation of heavy metals in particular, and in the area of biotechnology. Liquid–liquid extraction has been described as the "Cinderella" of the separation technologies, and it is certainly less widely used and documented than distillation. However, for particular separations and where energy savings are required, extraction will remain an important and developing area of research and publication.

A companion bibliography detailing supercritical extraction from 1980–1993 was published separately (3) due to the current interest in this relatively new technology. A full bibliographic listing of papers published from 1967 to 1991 covering all separation processes is available (4–6).

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