

INDEX

- amphoteric, 11, 12
- anionic, 11, 24, 38, 39
- aqueous phase, 1, 7, 35, 37, 69
- aromatic, 10
- carrier
 - acidic, 10, 40
 - basic, 10, 38
 - neutral, 10
 - synergistic, 5, 8, 23, 34, 39, 73
- carrier-facilitated transport, 7
- carrier-solute complex, 9
- cationic, 11
- demulsification
 - biological, 85
 - chemical, 84
 - combination, 85
 - efficiency, 88, 89, 90, 92
 - factors, 88
 - heating-ultrasonic, 85, 87
 - membrane, 84
 - physical, 83
 - process, 2, 13, 18, 63, 67, 81
 - ultrasonic, 81, 83
- dielectric, 10, 11, 24
- diffusion coefficient, 10
- diluent, 10, 23
 - aliphatic, 10
 - aromatic, 10
- ELM. *See* Emulsion Liquid Membrane
- emulsifier, 5, 11, 13, 18
- emulsifying, 3, 64
- emulsifying agent, 3
- emulsion, 2
 - liquid membrane, 27, 63
 - stability, 3, 24, 53, 68, 70, 74
 - system, 18
- emulsion stability, 3
- extract, 9
- extractant, 3
- extraction
 - agent, 27
 - efficiency, 25, 37, 39, 40, 63, 66, 67
 - liquid-liquid, 8, 34, 69
 - performance, 9, 24, 36, 37, 65, 66, 68, 74
 - procedure, 35, 52

- process, 2, 5, 8, 12, 13, 18,
28, 33, 35, 43, 51, 66, 72,
75, 87
 - solvent, 8, 81
 - stability, 68
 - synergistic, 33
- formulation, 8
- ELM, 8, 14, 19, 23, 28, 65,
70, 73
 - synergistic, 34, 36, 40
- hydrophilic-lipophilic balance,
5, 12, 28
- hydrophobic, 11, 65
- ILs. *See* Ionic liquids
- ionic liquid, 5, 23
- kinetic, 8, 89
- lipophilic, 5, 11, 12, 28, 65
- liquid membrane, 1, 9, 23, 26,
52, 55, 66, 81
- bulk, 1
 - emulsion, 1, 17, 33, 49, 63,
65, 81
 - organic, 4, 5, 52, 87
 - pickering emulsion, 26
 - supported, 1
- liquid-liquid extraction, 8
- LLE. *See* liquid-liquid
extraction
- mass transfer, 3, 5, 18, 23, 27,
28, 57, 63, 66, 72, 74
 - metal-carrier complex, 10
 - nanoparticle, 5
 - nanoparticles, 25
 - nonionic, 11
 - organic phase, 3, 18, 35, 38,
43, 66
 - organic solvent/diluent, 3
 - osmotic
 - pressure, 4, 68, 71, 75
 - swelling, 4
- PELM. *See* Pickering Emulsion
Liquid Membrane
- recovery, 1
- recovery process, 3
- selectivity-enhancing diluent, 10
- separation
 - efficiency, 26, 28, 74
 - process, 17, 23, 25, 84
 - water phase, 89
- solute, 1, 7
- solute distribution, 10
- solute-carrier, 7
- solvent, 23
- solvent extraction, 8
- stripping, 9
 - agent, 5, 9, 52
 - metal, 10

- organic compound, 10
- performance, 9, 53, 57
- reaction, 3, 9, 58, 69
- synergistic, 50
- surfactant, 3, 11
 - blended, 5, 25, 27, 64, 65
- thermodynamic, 8
- volatility, 11
- wastewater, 1