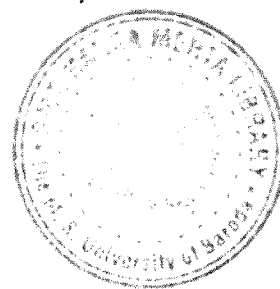


## REFERENCES

## REFERENCES



1. Scheibel E. B., Petroleum Refiner, Vol. 40 May, 1961, P.189.
2. Deshpande R. W. and Puranik S. A., "Prediction of quaternary mutual solubility data and tie line data for Benzene-Hexane-DmsO and Water", A paper presented in the 32<sup>nd</sup> Annual Session of Inst. of Chem. Engineers, Bombay, Preprints IV-A-401, Dec. 1979.
3. Degaleesan T. E. and Laddha G. S.; Indian Journal of Technology, vol 3, 1965, P.273.
4. Gruse W. A. and Stevens D.R. "The Chemical Technology of Petroleum" McGraw Hill, 1942.
5. Bloch H.S. and Wackher, R. C. Petroleum Refiner, 34, No. 2, p-145-9, Feb. 1955.
6. Deshpande R. W. and Puranik S. A., "Extraction of pure aromatics in a packed column using Dimethyl formamide as Solvent", A paper presented in the 2<sup>nd</sup> Iranian Congress of Chem. Engg. Arya-Mehr University, Tehran(Iran), 14-17 May 1975
7. Brankar A.V. Hunter T.G. and Nash A.W.; JI. Phys. Chem., Vol. 44, 1940, P.683.
8. Al-Dujali A. H., Hatim M. E. , and Al- Haidri A. A. , J. Chem. Eng. Data, 51, 2006, P-352.
9. Somekh G.S. Petroleum refiner, Vol. 42 July, 1963, P.161.
10. Somekh G.S. Petroleum Refiner, Vol. 42 Aug.1963, P.123 and Sept. 1963.
11. Johnson G.C. and A.W. Francis ; Ind. Eng. Chem. Vo. 46, Aug. 1954, P.1662.
12. Nilawar A.S. and Puranik S. A; "Liquid-Liquid extraction of aromatics using solvent. DMSO and Dmf", A paper presented in the 36<sup>th</sup> Annual Session of Indian Inst. of Chemical Engineers, Poona, Dec. 1984, A-80-91.
13. Moulton R. W. and Chang Y.C. ; Ind. Engg. Chem; 1953, P.235.
14. Pandya H.P.and Puranik S.A; "Liquid-Liquid Extraction of Caprolactum", JI. of Inst. of Engineers(India), Chem. Engg. Division, Vol. 76, Sept. 1995, p 1 to 5.
15. Nechaeva M. A. Et. Al., Neftekhimiya, Vol. 9 No. 5, 1969, P.784

16. Baites P.J and Winword A., Trans. Instn. Chem. Engrs. , Vol. 50, 1972, P.24
17. Leibson I. et al; Chem. Ind. Geniechem, Vol. 99, No. 7, 1968, P.926,
18. Cinelli E. et. al; Hydrocarbons processing, Vol. 51, April 1972, P.141.
19. Hutton D. G. ; Hydrocarbon Processing, Vol. 43, Aug. 1964, P.138
20. Cousserance H; Hydrocarbon Processing, Vol. 43, 1964, P.149,
21. Diyorov I. N. et al; Khimiya Tekhnol. Topl. Mael, No. 7 July, 1969, P.21
22. Diyarov et al ; Khimiya Tekhnol. Topl. Masel, No.3, March,1970, P.12.
23. Skinner D.A.; Ind. Engg. Chem. Vol.47, Feb., 1955 P.222.
24. Meeler E. and Hochfield G., Proceedings of the 7th world Petroleum congress, Elsevier publishing Co; Vol.4 1967, P.13.
25. Choffle B. et al; Hydrocarbon Processing, Vol.45 May, 1966, P.188.
26. Chemical Abstract, Vol.71, 1969 11698421a.
27. Chemical Abstract, Vol.75, 1971, 144355 r.
28. Sherbina E. I. et. al; Tendhnol Khimiya, topl. Massel, No. 10, Oct, 1970, P, 17
29. Ledyashova G.E. and Bairbuskaya; Khimiya Tendhnol, Topl Masel, Vol. 13, No. 4, 1968, P.21.
30. Ledyashova G.E and Dorogochinskii A. Z.; Khimiya Tekhnol Topl Masel, No. 3, March,1966,P.23.
31. Updike et at; Trans. Am. Instn. Chem. Eng. Vol. 41, 1945, P.717.
32. Ghosh S. K. and Gulati.I. B.; Petroleum and Hydrocarbons, Vol.6 No. 4 Jan; 1972 P.208.
33. Francis A. W., "Critical Solution temperature" Am. Chem. Soc; Washington D.C. 1961. P.2
34. Awwad. A. M. , Al-Dujaili A. H. and Essa M. H. , J. Chem. EnggData, Vol. 50, 2005, P-788.
35. Pandya H.P.and Puranik S A; "Liquid-Liquid extraction of Caprolactum".

35. Pandya H.P. and Puranik S A; "Liquid-Liquid extraction of Caprolactum".  
A paper presented in the Chemical Engineering World Congress-III, Tokyo, Sept. 1986, Proceeding of World Congress III, Tokyo, 1986-Vol. II, 6e-257, p 794-797.
36. Deshpande R. W. and Puranik S A; "Extraction of pure aromatics in a packed, column using Dimethyl formamide as a Solvent", A paper presented at 34<sup>th</sup> Annual Session of Indian Inst. of Chem. Engineers, 1981; preprints of papers Vol. I, P.102, No. 20, Madras.
37. Ripe and co-workers; Chemical Abstract Vol. 51, 1957, 8415 B.
38. Tare J.P. and Puranik S. A; "Studies in the extraction of Furfural from its aqueous solution in a packed tower", Indian Chemical Engg.(Trans) 1975, Vol 217, XVIII No. 2, P-37-46.
39. Vasilev R. Kashev K. and God Relova T., Khim Vissh. Teknol Inst. Sofia. Vol.37,22(2), 1977 P:115.
40. Deshpande R. W; "Studies in Solvent Extraction: Extraction of Pure Aromatics" M. Tech. Thesis, L. I. T. Nagpur University, 1974.
41. Surana N. M. "Liquid liquid Equilibrium Studies in Ternary and Quaternary Systems. " M. Tech. Thesis, M.S. University of Baroda, 1981.
42. Prakt.E.J Leibnitz; Chem.Vol.4 (30, 1956, P.311
43. Dhabe S.L. and Puranik S. A; "Liquid-Liquid extraction of aromatics in a spray column operated in the region of dense packing of drops"; A paper presented at Third Pacific Chemical Engg. Congress, Pache, 83, Proceedings of the Congress- Vol. I, I-254, May 8-11, 1983, Seoul, Korea
44. Bansod N. D.; Studies in solvent extraction, Extraction of Aromatics using Dimethyl formamide – M. Tech. Thesis, L. I. T ; Nagpur university, 1976
45. Chem. Abstract, 1982, 117, 130718-f

47. Khanna M.K.and Rawat B.S., Ind. .Engg.Chem. Res. 37 (2), 1992,P-67-72 (Eng.).
48. Fuchs Klaus peta, KopP.Eberhand; Deutsch, Klaus, Langer, uwe; Leschke ultrich; puschmann, peter. Hammelbeck; Heinz: Doms, Hans Georg: Schaefer Germ.D.d.02Jan1992/Application343551,2.Aug.19916pP.
49. Gamil M. Radwan . Al-Muhtaseb Shaheen A. and Fahim Mohamed A.J.Chem. Engg. Data.,Vo. 129,Issues1-2,15March1997,Pages175-186
50. Gamil M. Radwan, Shaheen A. Al-Muhtaseb and Mohamed A. Fahim Chemical and Petroleum Engineering Department, U.A.E. University, Al-Ain, United ArabEmirates 30 August 1996. ;
51. Wytze Meindersma G., Podt Anita (J.G.) and de Haan André B.; Fuel Processing Technology, Volume 87, Issue 1, December 2005, Pages 59-70
52. Kumar K., Dao E. and Mohanty K.K; Journal of Colloid and Interface Science, Volume 289, Issue 1, 1 September 2005, Pages 206-217.
53. Mohammad F.S., Doulabi, M. Mohsen-Nia and Modarress H.; The Journal of Chemical Thermodynamics, Issue-7, July 2005,
54. Nilawar A.S. and Puranik S.A; "Liquid-Liquid extraction of aromatics", A paper presented in the Fourth National Convention of Chemical Engineers, Roorkee, 3-4<sup>th</sup> Oct. 1988, Proceedings of Seminar, P-X-82-91.
55. Dong Min Chung, Mun Hwan Choi, Jae Jun Song, Sung Chul Yoon; Inn-Kyu KangandNamEungHuh International Journal of Biological Macromolecules, Volume29,Issues4-5,10December2001,Pages243-250
56. Gamil M. Radwan, Shaheen A. Al-Muhtaseb and MohamedA.Fahim; Fluid Phase Equilibrium, Volume 129, Issues 1-2, 15 March 1997, Pages175-186
57. Skinner D.A and Coworkers ; Ind. Engg. Chem. Vol. 47 Feb. 1995 P.222
58. Labinitz E.J. Prakt, Leibnitz. ; Chem. Vol. 4(3) 1956, P.311 Chem. Abstract, Vol. 51, 1957. 11024e

59. Fuchs Klaus peta. KooP.Eberhand; Deutsch Klaus Langeruwe. Leschke ultrich; puschmann, peter. Hammelbeck, Heinz: Doms, Hans Georg: Schaefer Germ. D.d 02 Jan 1992 Application 343551, 2 Aug. 1991 (6 pp).
60. Mukhopadhyay M. and Malleswara Rao Y.S.N.,. " Solvency – Selectivity Behavior of (TEG-NMP) Mixed Slovent for Aromatics Extraction", Proceedings of 42 nd Annual Convention of I.I. Ch. E. Dec. 1989.
61. Ahmed S. A., Tanwar, R. S. , Gupta R. K. and Khanna A. ; Fluid Phase Equilibrium, Vol.214,issue-2, Feb-2004, P-199.
62. Maizar Rahman Paul Mikitenko and Lionel ; Jl. of Oil and Gas Technology, Development Center "KENIGAS",Jakarta Selatan, Indonesia Institute Francais du Petrole, Issue-3 January 1984.
63. Maizar Rahman; Paul Mikitenko and Lionel ;Asselineau Chemical Engineering Science, Volume 39, Issue 11, 1984, P.1543-1558
64. Mukhopadhyay M. and Prabhakara Rao. ;"L-L-E Data for Six Component Aromatics Extraction System" proceedings of the 38th Annual convention of IIchE. Dec. 1985.
65. Fluid Phase Equilibrium, Volume 32, Issue 1, 2 October 1986, P.17-25
66. Mehrotra R., Garg M.O. and Cohpra S. J., Rawat B.S. and Khanna M. K. Mukhopadhyay M. and Malleshwara Rao B. D.: Trans. Indian Chemical Engineer, Vo. 29, No. 4 52, Oct. 1987.
67. Dhabe S. L.," Studies in solvent extraction, Extraction of Aromatics using Dimethly sulfoxide" M. Tech. Thesis, L.I.T, Nagpur university, 1976.
68. Khanna M.K., Rawal B.S., Ind. Engg. Chem, Res. Ind. 1992, 37 (2), 67-72 (Eng.)
69. Al-SahhaTaher A. and Kapetanovic.Emina.;Fluid Phase Equilibrium ,Volume 118, Issue 2, 30 April 1996, P.271-285.
70. Al-Sahaf Taher A. and Kapetanovic Emina ;Fluid –Phase Equilibria,Volume121,Issue-1, 15 January 1999, P-371-381.

71. Mehrotra R., Garg M. O. and Chopra S. J. Rawat B. S and Khanna M. K. Engineers India Limited, NewDelhi, Private Communication, 2003.
72. Bansod N. D. and Puranik .S A; "L-L extraction of aromatics-Mathematical Modelling" A paper presented in the Chemical Engg. World Congress-III. Tokyo . 1986:Vol.II. 7a-108, P-29-23.
73. Khanna Ashok, Singh Manish K. Bajpai Saurabh and Sanpui Debjit ; Fluid – Phase Equilibria, Volume 214, Issue-2, 1 February, 2004, P-210.
74. The Journal of Chemical Thermodynamics, Volume 35, Issue 1, January 2003 Pages 67-76
75. Khanna Ashok, Singh Manish K., Bajpai Saurabh and Debjit Sanpui, Fluid Phase Equilibrium, Volume 215, issue 2, 1 February 2004, P.211-220
76. Ahmed S. A. and Tanmwar R. S., Gupta R. K. and Khanna A; Fluid phase Equilibrium, Volume 220, Issue 2. 30 th June 2004, P.189-198
77. Kolah Aspi, "Studies in L-L equilibria", M.Tech. Thesis . M.S. University of Baroda. 1991
78. Mohsen-Nia M and Modarress H., JI. of Thermodynamics, Vol.37, Issue-2, Feb-2005.
79. Doulabi F. and Bagheri H; JI. of Thermodynamics, Vol.37, Issue-3, March, 2005.
80. Trevor M. Letcher and, Prashant Reddy; The Journal of Chemical Thermodynamics, Volume 37, Issue 5, May 2005, Pages 415-421
81. Doulabi Mohammad F. S., Mohsen M. Nia and Modarress H ; The Journal of Chemical Thermodynamics , Volume 37, Issue 7, July 2005, P-421.
82. Gade V. N.. and Puranik S.A., "Liquid-Liquid Extraction" An overview, JI. of Inst. of Engineers (India), Chemical Engineering Division, Jan-March 1990, Feb 90, Vol. 70, p 71-78.

83. Dunstan et al. 'Science of Petroleum, Oxford University Press, New Yourk, 1938.
84. Fenske E. R. and Broughton D B., Industrial Engineering Chemistry, vol 47, 1955, P-714.
85. Bennett R E, Duddley J. F. and Shepard M. W; Industrial Engineering Chemistry, vol 43, 1951, P -1488.
86. Nelson W. I; Petroleum Refinery Engineering ; McGraw Hill, 1958.
87. Deshpande R. W. and Puranik S.A. "Extraction of aromatics with Dimethyl sulphoxide as a Solvent", a paper presented in the 2<sup>nd</sup> Iranian Congress of Chem. Engg. Arya-Mehr University, Tehran(Iran), 14-17 , May, 1975.
88. Othmer D. R. , Chemical Engineering Progress, vol 54, no 48, 1958, p 407.
89. Low A. J., Chemical Engineering, vol 75, no 64, 1968, P- 4018.
90. Maksymilian Pajak and Robert Kotiatek, Ind. Chem. Processing 1991, 12(4), 587 – 99(P.01)
91. Communications, Ind. Eng. Chem Res., 1909, 28, 1096 – 1101
92. Bahmanyar H., Chang- Kakoti D.K. i, Garro L., Liang T.B. and Slater.M.J.  
Int. Apar. Chem, 1991, 30 (40, 3-6 (Pol 1),
93. Maksymilian Pajak, (Inst. Int. Chem. Urtadzen Gepln. Politech, Wroclawska, Wroclaw, Pol.), Int. Apar. Chem., 1991, 30(4), 3-6(pol1),.
94. Rohlfing Ebendard, Hattmann. hugo . Maksymilian Pajak, (Inst. Int. Chem. Urtadzen Gepln. Politech, Wroclawska, Wroclaw, Pol.) Int. Apar. Chem. 1991, 30(4), 3-6(pol1),.
95. Kumar A. and Hartland S., Chem Eng. Res. Dev., 1994, 72(AI), 89-104 (Eng.).
96. Watson J. S. and McNeese L.E.; American Institute of Chemical Engineers' Journal, vol 21, no 6, 1975, P. 1081.

97. Thornton and Rahman ,Trans. Inst. , Chem. Engrs. Vol.61, Part A, January 1990 P.74-83
98. Appel F.S. and Elgin J.C., Industrial Engineering Chemistry, vol 29, 1937, P. 451.
99. Gayler R and Pratt. H. R. C. , Transactions of the Institution of Chemical Engineers, vol 29, 1951, P. 11
100. Gayler R. and Pratt H. R. C., Transactons of the Institution of Chemical Engineers, vol 31, 1953, P. 57.
101. Sitaramayya T. and Laddha G .S' Chemical Engineering Science, vol 13, 1968, P. 236.
102. Johnson A. I. and Laverng E. Canadian Journal of Chemical Engineers, vol 39, 1961, P. 37.
103. Burdett I. D., Webb D. R. and Davies G. A., Chemical Engineering Science, Vol 36, no 12, 1981, P. 1915.
104. Chandra Shekharan P.and Laddha G. S. , "Proceedings of the First Australian Conference on Hydraulic and Fluid Mechanics". Pergamon Press, 1963, P.243.
105. Gayler R. and Pratt H. R. C. Transactions of the Institution of Chemical Engineers, vol 35, 1957, P. 273.
106. Degaleesan T. E. and Laddha G. S., Indian Journal of Technology, vol 3, 1965, P.273.
107. Blanding F. H. and Elgin J. C. Transactions of American Institute of Chemical Engineers, vol 38, 1942, P. 305.
108. Breckenfeld R. R. and Wilke G. R. , Chemical Engineering Progress, vol 46, 1950, P. 187.
109. Row S. B., Koffolt J. H. and Withrow J. R. ,Transactions of American Institute of Chemical Engineers, vol 37, 1941, P.559.

110. Ballard J. H. and Piret F. L. , Industrial Engineering Chemicals, vol 42, 1950, P. 1088.
111. Dell F. R .and Pratt H. R. C. , Transactions of American Institute of Chemical Engineers, vol 29, 1951, P. 89.
112. Crowford J. W. and Wilke G. R. , Chemical Engineering Progress, vol 47, 1951, P.423.
113. Hotling E. H. and Lockhart F. J. , Chemical Engineering Progress, vol 50, 1954, P.94.
114. Sakiadis B .C . and Hohnson A .I., Industrial Engineering Chemistry, vol 46, no, 1954, p 1229.
115. Numunaitis R. R., Eckert J .S. , Foot E. H. and Rollison L. R., Ind. Engg.Chemistry, vol 67, no 11, 1971, P.6
116. Watson J. S. and McNeese L.E., 'Jl. American Institute of Chemical Engineers' , vol 19, 1973, P.23
117. Gayler R. and Pratt H. R. C ; Transactions of the Institution of Chemical Engineers, vol 35, 1957, p .267.
118. Laddha G. S. and Smith J .M., Chemical Engineering Progress, vol 46. 1950, P.195.
119. Smith G. C. and Beckman R. B. 'Jl. American Institute of Chemical Engineers' , vol 4, no 2, 1958, P.18
120. Krishnan V, Degaleesan T. E. and Laddha G. S., Indian chemical engineers, vol 16, no 4, 1957, P.127.
121. Handlos A E and Baron T G.; 'Jl. American Institute of Chemical Engineers' , vol 3, 1957, P.127.
122. Kroning R and Brink J C. , Applied Scientific Research, Vol A2, 1950 P.257.
123. Laddha G .S, et al. Indian journal of Technology, vol 16, no 7, 1978 P.257.

124. Gopalrao V. and Ramamurthy M.; Chemical and Petrochemical Journal, Vol 9, No 11, 1978, P.17.
125. Pratt H. R. C, et al. ,Transactions of Institution of Chemical Engineers, vol 29, 1951, p .126.
126. Gayler R. and Pratt H. R. C. , Transactions of Institution of chemical Engineers, Vol 31, 1953, P.69.
127. Puranik S.A.and Sharma M M, chemical Engineering Science, vol 25,1970, p .257.
128. Hamilton J. A. and Pratt H. R. C. 'JI. American Institute of Chemical Engineers' , vol 30, no 3, 1984.
129. Billet R. and Mackowiak J; Chemical Engineering World, vol 15, no 10, 1980, P.29.
130. Billet R. and Mackowiak J; American Institute of Chemical Engineers' Symposium Series, vol 236, No.80, 1984, P.54.
131. Laddha G.S.and Degaleesan T. E. “ Transport phenomena in liquid liquid extraction” Tata McGraw Hil1976, P.18-22.
132. Hand D. B. and Co-workers,Ind. Engg.Chem., vol. 34, 1930, P.1961
133. Campbell J.A.; Ind.Engg., Chem., Vol.36, 1944, P.1158
134. Bachman I., Ind.Eng. Chem. (Annual Edn.), No.1, 1940, P.38
135. Othmer D.F. and Tobias P.F.;Ind. Eng. Chem. ; Vol.34, 1942 P.643.
136. Prince R.G.H. and Co-workers; chem. Engg. Science vol.3, 1954, P.175.
137. Hand D.B., J. Phy. Chem. , 34, 1930, P.1961.
138. Fredenslund A.; Jones , R. L., and Prausnitz J.M. A. I. Ch. E. J. 1975 21, 1068.
139. Reid R. C Prausnitz J. M. and Poling B. E. “Properties of Gases and liquids “, McGraw Hill , 1988.

140. Prausnitz J.M, "Molecular Thermodynamics of Fluid Phase Equilibria", Prantice-Halls, 1969.
141. Renon H. and Prausnitz J.M., A. I. Ch. E. J. 1968, P.16, P.135.
142. Scot R. L. J. Chem. Physics, 1956, P.25, P.193.
143. Abrams D. and Prausnitz J. M... A. I. Ch. E. J. 1988, P.21, P.116.
144. Maurer G. and Prausnitz J. M., Fluid Phase Equilibria, 1978, P.21, P.116.
145. Nagata I. and Kawamura Y., Chem. Engg. Sci., 1979, . . .
146. Nagata I., Fluid phase equilibria ,1985 a, 18,P.105.
147. Nagata I. ,Fluid phase Equilibria ,1985b., 19, P.153.
148. Davis G A, Rusuton E and Thomas. J A. "Symposium on Interfacial Phenomena". American Institute of Chemical Engineers, National Meeting, New Orleans, 1973.
149. Jancie S.J , Zuiderweg F.J.and Sterff F;. American Institute of Chemical Engineering Symposium Series, vol 238, no 80, 1984, P.139.
150. Venkatraman G. and Laddha G.S., 'Jl. American Institute of Chemical Engineers' , vol 6, 1960, P .355.
151. Blanding F. H. and Elgin J. C ; Transactions of American Institute of Chemical Engineers, vol 38, 1942, P.305.
152. Shukla Sadhana., " Performance Spray column operated in the region of dense packing of drops.," M. E. Thesis, M. S. University of Baroda , 1987.
153. Lebson I .and Beckman R. B. Chemical Engineering Progress, vol 49, 1953, p 405.
154. Jancic S. J. and Zuiderweg F. J; American Institute of Chemical Engineer's symposium Series, vol 238, 1984, P. 16.
155. Perrin D.P., Armarogo W.L.F. and Perrin D.R., "Purification of Laboratory Chemicals", 1st Ed. Pergamon Press Ltd., 1966.
156. Perry J..H., Chemical engineers' Handbook, McGraw-Hill Book Company, New York, 1950.

156. Perry J.H., Chemical engineers' Handbook, McGraw-Hill Book Company, New York, 1950.
157. Kirk N. and Othmer D.F., Encyclopaedia of Chemical Technology, 2nd Ed., John Wiley and Sons, 51Inc.,1963.
158. Reid R. C; and Sherwood T. K; The properties of Gases and Liquids, 2nd Edn, McGraw Hill Book Co; New York, 1966.
159. Tare J.P.and Puranik S. A., "Studies in ternary phase(liquid) equilibria", Indian Chemical Engineers(Trans) 1976 No.-4, P.27.
160. Alders L."Liquid – Liquid Extraction", Elsevier Publishing Co., New York, 1st Edn., 1955.
161. Lewis J.B., Jones J. and Pratt H.R.C., Trans. Inst. Chem. Engrs. 29, (1951), P.126  
Trans. I. Chem. E. Vol.61, Part A, January 1990 P.74-83
162. Shukla Sadhana, and Puranik S. A., "Residence time distribution in a spray column operated in the region of dense packing of drops", A paper presented in Indian Chemical Engineering Congress 1989, CHEMCON-89, Trivendrum, Preprints of CHEMCON 1989 Congress, A4-10, p 123, Dec. 1989.
163. Hand D. B. and Co-workers ;Ind. Engg.chem. ; vol. 34, 1930, P.1961
164. Campbell J.A.; Ind.Engg., Chem., Vol.36, 1944, P.1158
165. Othmer D.F. and Tobias P.F;Ind. Eng. Chem. ; Vol.34, 1942 P.643.
166. Tare J. P."Studies in the Extraction of Furfural from it's aqueous solution in a packed bed". M.Tech. Thesis ., Nagpur University.,1972.
167. Dhumne S. G., "Studies in solvent extraction, Extraction of Aromatics using Dimethyl formamide", M. Tech. Thesis, L. I. T ; Nagpur university, 1976
168. Gandhi D. J. "Studies in L-L equilibrium and V-L equilibria (MA-Meoh-H<sub>2</sub>O EA-Etoh water and B.A. BuOH water systems)" M.Tech. Thesis . M.S. University of Baroda. 1988

- 170 Nilawar A.S. and Puranik S. A. "Prediction of quaternary mutual solubility data and tie-line data for Benzene- HexaneDmf-Water". A paper presented in the 31<sup>st</sup> Annual Session of Inst. Of Chemical Engineers, Cochin, A-5, 1978.
- 171 Puranik S. A. "Liquid-Liquid extraction in a packed column Generalized Correlations by Mathematical Modeling", A paper presented in "Indian Chemical Engineering Congress – CHEMCON-94", 14 –17<sup>th</sup> Dec. 94, IIT, Kharagpur.
- 172 Ladhawala Shefali., "Effluent Treatment by Liquid-Liquid Extraction", M.Tech. Thesis, Nirma. University; 2004.