

Referências Bibliográficas

- [1] KISTLER, S. F. **The fluid mechanics of curtain coating and related viscous free surfaceflows with contact lines.** Phd, Univesrity of Minnesota, Minnesota, November 1983.
- [2] AGUILA, M. E. D. **Escoamento de Emulsões Óleo em Água através de Micro-Capilraes.** Msc, PUC-Rio, Rio de Janeiro, Brasil, 2008.
- [3] RUSCHAK, K. J. **Coating flows.** Annu. Rev. Fluids Mech., 17:65–89, 1985.
- [4] KLISTER, S. F; SCHWEIZER, P. M. **Liquid Film Coating.** Springer, Londres, 1º edition, Janeiro 1997.
- [5] KISTLER, S. F; SCRIVEN, L. E. **The teapot effect: sheet-forming flows with deflection, wetting and hysteresis.** J. Fluids Mechanics, 263:19–62, 1994.
- [6] SQUIRE, H. **Investigation of instability of a moving liquid film.** British Journal Applied Physics, 4(1):167–169, 1953.
- [7] BROWN, D. R. **A study of behaviour of thin sheet of moving liquid.** J. Fluids Mechanics, 10(2):297–305, 1961.
- [8] PRITCHARD, W. G. **Instability and chaotic behaviour in free surface flow.** J. Fluids Mechanics, 165:1–60, 1986.
- [9] LIMAT, L; JENFFER, P; DAGENS, B; TOURON, E; FERMIGIER, M ; WESTFREIRD, J. E. **Gravitaional instabilities of thin liquid layer: dynnammics of pattern selection.** Physica D, 61:166–182, 1992.
- [10] HU, X; JACOBI, A. M. **The intertube falling film: Part 1-flow characteristics, mode transitions, and hysteresis.** J. Heat Transfer, 118:616–625, 1996.
- [11] ROCHE, J; N. LE GRAND, P. BRUNET, L. L ; LIMAT, L. **Perturbations on a liquid curtain near break-up: Wakes and free edges.** Physics of Fluids, 18:082101, 2006.
- [12] FINNICUM, D. S; WEINSTEIN, S. J ; RUSCHAK, K. J. **The effect of applied pressure on the shape of a two-dimensional liquid curtain falling under the influence of gravity.** J. Fluids Mechanics, 255:647–665, 1993.

- [13] LUCA, L. D. **Experimental investigation of the global instability of plane sheet flows.** *J. Fluids Mechanics*, 399:355–376, 1999.
- [14] LIN, S. P; LIAN, Z. W ; CREIGHTON, B. J. **Absolute and convective instability of a liquid sheet.** *J. Fluids Mechanics*, 220:673–689, 1990.
- [15] LUCA, L. D; COSTA, M. **Instability of spatially developing liquid sheet.** *J. Fluids Mechanics*, 331:127–144, 1997.
- [16] TENG, C. H; LIN, S. P ; CHENG, J. N. **Absolute and convective instability of a viscous liquid curtain in a viscous gas.** *J. Fluids Mechanics*, 332:105–120, 1997.
- [17] MIYAMOTO, K; SCRIVEN, L. E. **Breakdown of the air film entrained by liquid coated on web.** *AIChE Annual Meeting*, 1982.
- [18] MUËS, W; HENS, J ; BOIY, L. **Observation of a dynamic wetting process using laser-doppler velocimetry.** *AlchE J.*, 35:1521–1526, 1989.
- [19] MIYAMOTO, K. **On the mechanism of air entrained.** *Industrial coating research*, 1, 1991.
- [20] BLAKE, T. D; CLARKE, A ; RUSCHAK, K. J. **Hydrodynamic assist of dynamic wetting.** *AlchE J.*, 40(2), 1994.
- [21] BLAKE, T. D; BRACKE, M ; SHIKHMURZAEV, Y. D. **Experimental evidence of nonlocal hydrodynamic influence on the dynamic contact angle.** *Physics of Fluids*, 11:1995–2007, 1999.
- [22] BLAKE, T. D; DOBSON, R. A ; RUSCHAK, K. J. **Wetting at high capillary number.** *J. Colloid Interface Sci.*, 279:198–205, 2004.
- [23] YAMAMURA, M; SUEMATSU, S; TOSHIHISA, K ; ADACHI, K. **Experimental investigation of air entrainment in a vertical liquid jet flowing down onto a rotating roll.** *Chem. Eng. Sci.*, 55:931–942, 1999.
- [24] CLARKE, A. **Coating on a rough surface.** *AlchE Journal*, 48:2149–2156, 2002.
- [25] MARTSON, J. O; SIMMONS, M. J. H; DECENT, S. P ; KIRK, S. P. **Influence of the flow field in curtain coating onto a prewet substrate.** *Physics of Fluids*, 18:112102, 2006.

- [26] MARTSON, J. O; DECENT, S. P ; SIMMONS, M. J. H. **Hysteresis and non-uniqueness in the speed of onset of instability in curtain coating.** J. Fluids Mechanics, 569:349–363, 2006.
- [27] BENKREIRA, H. **The effect of substrate roughness on air entrainment in dip coating.** Chem. Eng. Sci., 59:2745–2751, 2004.
- [28] WEINSTEIN, S. J; RUSCHAK, K. J. **Coating flows.** Annu. Rev. Fluids Mech., 36:29–53, 2004.
- [29] LUKYANOV, A. V; SHIKHMURZAEV, Y. D. **Curtain coating in microfluids and phenomenon of nonlocality in dynamic wetting.** Phys. Lett. A, 358:426–430, 2006.
- [30] HUH, C; SCRIVEN, L. E. **Hydrodynamic model of steady movement of a solid / liquid / fluid contact line.** J. Colloid Interface Sci., 35:85–101, 1971.
- [31] DE SANTOS, J. **Two-phase Cocurrent Downflow through Constricted.** Phd, Univesrity of Minnesota, Minnesota, USA, 1991.
- [32] BENJAMIN, D. F. **Roll Coating Flows and Multiple Roll Systems.** Phd, Univesrity of Minnesota, Minnesota, USA, 1994.
- [33] HOOD, P. **Frontal solution program for unsymmetric matrices.** International Journal for numerical method in engineering, 10, 1976.
- [34] ROMERO, O. J. **Limite de Vazão Mínima do Processo de Revestimento por Extrusão de Soluções Poliméricas.** Phd, PUC-Rio, Rio de Janeiro, Brasil, 2003.
- [35] ZEVALLOS, G. **Estabilidade do Escoamento Viscoelástico em Processo de Revestimento por Rotação Direta.** Phd, PUC-Rio, Rio de Janeiro, Brasil, 2003.
- [36] YAMAMURA, M. **Assisted dynamic wetting in liquid coating.** Colloids and Surfaces A: Physicochemical and Engineering Aspects, 311:55–60, December 2007.
- [37] P. DONTULA, C. W. M; SCRIVEN, L. E. **Model elastic liquid with water soluble polymer.** AlchE Journal, 44:1247–1255, 1998.
- [38] Z. ERGUNGOR, J. M. SMOLINSKI, C. W. M; GULARI, E. **Effect of polymer-surfactant interactions on elongational viscosity and atomization os peo solutions.** Journal of Non-Newtonian Fluid Mechanics, 138:1–6, 2006.

- [39] MACOSKO, C. W. **Rheology: Principles, Measurements and Applications**. Wiley/VCH, New York, 1994.
- [40] G. SUNDERHAUF, H. R; DURST, F. **The retraction of the edge of a planar liquid sheet**. *Physics of Fluids*, 14(1):198–208, October 2001.