

СПИСЪК
на публикациите на д-р М. Хенненберг с учени от
Института по механика

1. Hennenberg M., Slavtchev S., G. Valchev (2013), On Faraday instability in magnetic liquids: Ence-Erdelyi approach applied to the Hill equation describing oscillations of a ferrofluid free surface, *J. Theor. Appl. Mech.*, **43**, No.4, pp. 49-68 (ISSN: 0861-6663).
2. Vanhaelen Q., Hennenberg M., Slavtchev S., Weysow B. (2010), Contribution to the dynamics of a deformable interface between two incompressible electromagnetically controllable liquids, *Physica A, Statistical Mechanics and its Applications*, vol. 389, No. 21, pp. 5061-5076 (DOI: 10.1016/j.physa.2010.06.052).
3. Valchev G., Slavtchev S., Hennenberg M., Weysow B. (2010), Instability of a thermoconvective ferrofluid flow in a horizontal channel, In: Proc. 7th Int. Conference on Heat Transfer, Fluid Mechanics and Thermodynamics, HEFAT2020, 19-21 July 2010, Antalya, Turkey, pp. 617-621 (ISBN: 978-1-86854-818-7).
4. Hennenberg M., Slavtchev S., Valchev G. (2010), On the Hill equation describing oscillations of a ferrofluid free surface in a vertical magnetic field, *Microgravity Science and Technology*, vol. 22, No. 3, pp. 455-460 (DOI: 10.1007/s12217-010-9221-x).
5. Hennenberg M., Slavtchev S., Weysow B. (2010), Oscillatory magnetic field action on a ferrofluid layer, *J. Theor. Appl. Mech.*, vol. 40, No.1, pp. 33-50 (ISSN: 0861-6663).
6. Hennenberg M., Slavtchev S., Weysow B. (2009), Modelling of an oscillatory magnetic field action on a ferrofluid layer, *Microgravity Science and Technology*, vol. 21, Suppl. issue, pp. S45-S50 (ISSN 0938-0108 (Print) 1875-0494 (Online)).
7. Hennenberg M., Slavtchev S., Weysow B. (2009), Thermal Marangoni instability and the magnetic pressure for a thin ferrofluid layer, *Interdisciplinary Transport Phenomena: Annals New York Acad. Sciences*, No. 1161, pp. 361-376.
8. Slavtchev S., Valchev G., Hennenberg M., Weysow B. (2009), Stability of a thermoconvective ferrofluid flow in a horizontal channel with respect to two-dimensional waves, 11th Nat. Congress Theor. Appl. Mech., 2-5 Sept 2009, Borovets, Bulgaria (on CD).
9. Hennenberg M., Slavtchev S., Weysow B. (2009), Oscillatory magnetic field action on a ferrofluid layer, *J. Theor. Appl. Mech.* (submitted).
10. Slavtchev S., Hennenberg M., Valchev G., Weysow B. (2008), Stability of ferrofluid flows in a horizontal channel subjected to a longitudinal temperature gradient and an oblique magnetic field, *Microgravity Science and Technology*, vol. 20, issue 3-4, pp. 199-203 (ISSN 0938-0108 (Print) 1875-0494 (Online)).
11. Hennenberg M., Slavtchev S., Weysow B. (2008), Parametric instability of a thin ferrofluid layer excited by an oscillating magnetic field in the presence of the

Marangoni effect, In: Proc. 12th Workshop on Transport Phenomena in Two-Phase Flow, 13-18 Sept. 2008, Sunny Beach Resort, Bulgaria (Ed. by Ch. Boyadjiev and J. Hristov), DTM, Sofia, pp. 1-12.

12. Hennenberg M., Slavtchev S., Weysow B., Scheid B. (2007), Coupling between stationary Marangoni and Cowley-Rosensweig instabilities in a deformable ferrofluid layer, *FDMP: Fluid Dynamics and Materials Processing*, vol. 3, No. 4, pp. 295-302.
13. Hennenberg M., Slavtchev S., Weysow B. (2007), Thermal Marangoni instability and the magnetic pressure for a thin ferrofluid layer, Preliminary Proc. of 2007 Interdisciplinary Transport Phenomena V, Bansko, Bulgaria, October 14-19, 2007, ITP-07-58, pp. 12-39 – 12-51 (Ed. by S.S. Sandhal).
14. Slavtchev S., Hennenberg M. (2007), Marangoni instability due to mass transfer in two-liquid systems, In: Proc. 4th Intern. Berlin Workshop - IBW 4 on Transport Phenomena with Moving Boundaries, 27-28 September 2007, Berlin, Germany, *Fortschritt-Berichte VDI*, Reihe 3, Nr. 883, Dusseldorf, VDI-Verlag, pp. 30-50.
15. Hennenberg M., Weysow B., Slavtchev S., Desai Th., Scheid B. (2006), Steady flows of laterally heated ferrofluid layer: Influence of inclined strong magnetic field and gravity level, *Physics of Fluids*, vol. 18, issue 9, Sept. 2006, Art. No. 093602.
16. Hennenberg M., Weysow B., Slavtchev S., Alexandrov V., Scheid B. (2006), Gravity level influence on a laterally heated ferrofluid submitted to an oblique strong magnetic field, *Z. Phys. Chem.*, vol. 220, pp. 199 – 208.
17. Hennenberg M., Slavtchev S., Weysow B., Scheid B. (2006), Stationary coupling of the Marangoni and the Cowley-Rosensweig instability in a thin ferrofluid layer, In: Int. Topical Team Workshop on Two-phase Systems for Ground and Space Applications, 19-21 September 2006, Brussels, Belgium, Book of Abstracts (Eds. O. Kabov, E. Gatapova, J.-C. Legros), pp. 22-23.
18. Hennenberg M., Slavtchev S., Weysow B., Scheid B. (2006), Stationary thermocapillary instability in a thin ferrofluid layer submitted to a weak magnetic field, In: Proc. 11th Workshop on Transport Phenomena in Two-Phase Flow, 1-5 Sept. 2006, Sunny Beach, Bulgaria (Ed. by J. Hristov), pp. 143 – 156 (ISBN-13: 978-954-9380-05-7).
19. Hennenberg M., Weysow B., Slavtchev S., Alexandrov V. (2005), Linear Marangoni and Rayleigh-Taylor instabilities of a ferrofluid thick layer, in a vertical magnetic field, *J. Non-equilibrium Thermodynamics*, vol. 30, pp. 189 – 204.
20. Hennenberg M., Weysow B., Slavtchev S., Alexandrov V., Desai Th. (2005), Rayleigh-Marangoni-Benard instability of a ferrofluid layer in a vertical magnetic field, *J. Magnetism and Magnetic Materials*, vol. 289, pp. 268-271.

21. Slavtchev S., Hennenberg M. (2004), Marangoni convection due to mass transfer in two layer systems, In: Proc. 2nd Intern. Berlin Workshop-IBW2 on Transport Phenomena with Moving Boundaries, 9-10 October 2003, Berlin, Germany, *Fortschritt-Berichte VDI*, Reihe 3, Nr. 817, Dusseldorf, VDI-Verlag, pp. 188-201.
22. Hennenberg M., Slavtchev S., Weysow B., Alexandrov V. (2004), Laminar flow in a horizontal ferrofluid layer submitted to lateral heating and an oblique magnetic field, In: Proc. 9th Workshop on Transport Phenomena in Two-Phase Flow, 27 August -1 Sept. 2004, Borovets, Bulgaria, (Ed. by Ch. Boyadjiev and J. Hristov), pp. 43 – 50.
23. Hennenberg M., Slavtchev S., Weysow B. (2003), Thermocapillary flow in a horizontal ferrofluid layer submitted to a longitudinal temperature gradient and an oblique large magnetic field, In: Proc. 8th Workshop on Transport Phenomena in Two-Phase Flow, Sunny Beach'2003, 13-18 Sept. 2003, Bourgas – Sunny Beach, Bulgaria (Ed. by Ch. Boyadjiev and J. Hristov), pp. 11-18.
24. Slavtchev S., Hennenberg M. (2002), Oscillatory Marangoni instability at mass transfer through an interface between two liquids, In: Proc. 7th Workshop on Transport Phenomena in Two-Phase Flow, 7-12 September 2002, Varna, Bulgaria, (Ed. by Ch. Boyadjiev and J. Hristov), pp. 135 – 142.
25. Hennenberg M., Weysow B., Slavtchev S., Legros J.-C. (2001), Coupling between Marangoni and Rosensweig instabilities, Part I: The transfer wave, *European Phys. J., Applied Physics*, vol. 16, pp. 217-229.
26. Slavtchev S., Hennenberg M., Mendes-Tatsis M.A., Legros J.-C. (2001), Interfacial rheology and Marangoni instability, *Bulg. Chem. Communications*, vol. 33, No. 3/4, pp. 297-319. (Also, Proc. 9th Int. Summer School of Chem. Engineering, 18-24 Sept. 2001, Sozopol, Bulgaria, Ts. Sapundzhiev (Ed.), pp.102-123.)
27. Hennenberg M., Slavtchev S., Weysow B., Legros J.-C. (2000), On the Earnshaw and the Van den Tempel-Lucassen compositional viscoelastic theories, *J. Colloid Interface Sci.*, vol. 230, pp. 216-218.
28. Slavtchev S., Hennenberg M., Legros J.-C. (1999), On mass transfer through an interface bordering two immiscible liquids, In: Proc. Joint Meeting 4th Workshop on Transport Phenomena in Two-Phase Flow and EFCE Working Party on Multiphase Fluid Flow, Apollonia'99, 11-16 Sept. 1999, Sozopol, Bulgaria, (Ed. By Ch. Boyadjiev), pp. 207-212.
29. Slavtchev S., Hennenberg M., Legros J.-C., Lebon G. (1998), Stationary solutal Marangoni instability in a two-layer system, *J. Colloid Interface Sci.*, vol. 203, pp. 354-368.
30. Slavtchev S., Hennenberg M., Legros J.-C. (1997), Non-oscillatory solutal Marangoni instability in a system of two liquid layers of finite width, In: Proc. Joint Xth

European and VIth Russian Symposium on Physical Sciences in Microgravity, 15-21 June 1997, St. Petersburg, Russia, vol.1, pp. 118-121.

31. Slavtchev S., Hennenberg M., Kozhoukharova Zh., Legros J.-C. (1996), Solutal Marangoni instability in two layer systems in the presence of adsorption-desorption process at the interface, In: Fluids in Space, Proc. Second European Symp., 22-26 April 1996, Naples, Italy, pp. 371-375.