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Education

Kyoto University

- B.S. Chemical Engineering 1991
- M.S. Chemical Engineering 1993
- PhD. Chemical Engineering 1998

Advisor: F. Ogino

Dissertation: "Transport Phenomena in Hot Dry Rock Geothermal Reservoir"

Professional experience

- Kyushu Institute of Technology, Department of Applied Chemistry
Assistant Professor (4/1996 – 6/2003)
Associate Professor (7/2003 – 3/2013)
Professor (4/2013-)
- University of Minnesota Department of Chemical Engineering and Materials Science, Visiting Scholar (5/1999 – 8/1999, 5/2000 – 7/2000)
- Kyushu University Department of Chemical Engineering, Part-time Assistant Professor (7/2006)

Social services

- Officer, International Society of Coating Science and Technology
- Scientific Committee, European Coating Symposium
- Officer, Coating Research Association Japan
- International Advisory Committee, Asian Coating Workshop
- Conference Chair, 3rd Asian Coating Workshop
- Officer, Division of Materials and Interfaces, The Society of Chemical Engineers Japan

- Editor-in-Chief, Journal of Chemical Engineering of Japan, 2019-
- Member, The Society of Chemical Engineers Japan
- Member, Japan Society of Polymer Processing
- Member, The Society of Polymer Science Japan

Honors and Awards

- Best Poster Award, 10th APPChE(Asian Pacific Confederation of Chemical Engineering) Oct. 2004
- Best Reviewer Award, Journal of Chemical Engineering of Japan, Aug. 2013
- ISCST John A. Tallmadge Award Sep. 2022

Publications Journal Articles

1. N. Kumano, Y. Yamaguchi, Y. Akimoto, A. Ohshima, H. Nakamura, M. Yamamura, , Migration of binder and conductive agent during drying process of Li-ion battery cathodes, Journal of Power Sources 591 (2024) 233883
2. Masato Yamamura, Sigmoidal temporal increase in shear viscosity of titania–toluene–ethanol colloidal suspensions, Colloids and Surfaces A: Physicochemical and Engineering Aspects 675, 132047 (2023)
3. Masato Yamamura, Reaction-driven solvent transport in UV-curable phase-separating coatings, Journal of Coatings Technology and Research, 20, 15–26 (2023)
4. Masato Yamamura, Drying paths of phase-separating solution coatings exposed to humidity, Journal of Coatings Technology and Research, **19**, 15–23 (2022)
5. Masato Yamamura, Adsorption-mediated nonlinearity of critical cracking thickness in drying nanoparticle-polymer suspensions, AIChE Journal 67(5) e17229 (2021)
6. Masato Yamamura, Ribbing Instability of Newtonian Fluid Coated on a Topographic Surface, Journal of Coatings Technology and Research, 17(6), 1447-1453 (2020)
7. Hirokazu Yoshihara, Masato Yamamura, Concentration profiles in phase-separating photo-curing coatings, Journal of Coatings Technology and Research, 16(6) (2019) 1629-1636
8. Hirokazu Yoshihara, Masato Yamamura, Formation mechanism of asymmetric porous polymer films by photo-induced phase separation in the

- presence of solvent, *Journal of Applied Polymer Science*, 136 (2019) 47867
9. Tomonori Tashima, Masato Yamamura, Two-step migration of particles in evaporating bimodal suspension films at high Peclet numbers, *Journal of Coatings Technology and Research*, 14 (2017) 1-6
 10. Hidenobu Miura, Ayumi Tsuruoka, Masato Yamamura, A critical condition for overfill-to-starve transition of doctor-bladed liquids in gravure coatings, *Journal of Chemical Engineering of Japan*, 50(4) (2017), 262-267
 11. Eunhye Jang, Hiroaki Koga, Yoshihide Mawatari, Hiroyuki Kage, Masato Yamamura, Composition-dependent stress oscillations in a dilute suspension under shear, *Journal of Chemical Engineering of Japan*, 49(1) (2016), 6-9
 12. Hidenobu Miura, Masato Yamamura, Direct thickness measurement of doctor-bladed liquid film on gravure roll surface, *Journal of Coatings Technology and Research*, 12(5) (2015), 827-833
 13. Yoshihide Mawatari, Yasumasa Hamada, Masato Yamamura, Hiroyuki Kage, Flow Pattern Transition of Fine Cohesive Powders in a Gas-Solid Fluidized Bed under Mechanical Vibrating Conditions, *Procedia Engineering*, 102 (2015) 945~951
 14. Yamamura M., Koga H., Mawatari Y., Kage Y., Stress oscillations in co-solvent nanoparticle-polymer suspensions subjected to constant shear rate, *Journal of Chemical Engineering of Japan* 46(7), 430–444 (2013)
 15. Sanghyuk Lim, Kyung Hyun Ahn, Masato Yamamura, Latex Migration in Battery Slurries during Drying, *Langmuir* (2013) 29, 8233-8244
 16. Masato Yamamura., Hiroki Matsumoto, Yoshihide Mawatari, Hiroyuki Kage, Drying-induced reduction in electrical resistivity of carbon black-polyamideimide nanocomposite films, *Chemical Engineering and Processing* 70 (2013) 17- 20
 17. Yamamura M., Eikai S., Mawatari Y., Kage Y., Drying-induced hierarchical dimple patterns on partially-miscible polymeric films under ordered convections, *Drying Technology*, 31, 1212-1218 (2013)
 18. Yamamura M., Yanagisawa M., Mawatari Y., Kage H., Wetting-induced entrapment of a droplet in a UV-curable volatile liquid coating, *Journal of Chemical Engineering of Japan*, 46(5), 367–370 (2013)
 19. Yamamura, M., Yamakawa T., Nasu T., Orihashi K., Mawatari Y., Kage H., Effects of polymer end groups on the drying rates of phase separating coatings, *Chemical Engineering and Processing: Process Intensification*, 68,

55–59 (2013)

20. Yamamura M., Yoshihara H., Mawatari Y. Kage, H., Enhanced Solvent Drying of Liquid Film Coatings by Fluorine-base Polymeric Surfactant Addition, *Journal of Chemical Engineering of Japan*, 45(6), 441–443 (2012)
21. Yamamura M., Wajima S., Mawatari Y. Kage, H., Non-uniform thinning of polymeric coatings under Marangoni stress, *Journal of Chemical Engineering of Japan*, 43(1), 40–45 (2010)
22. Yamamura M. Ono H., Uchinomiya, T., Mawatari Y., Kage H., Suppressed cracking in drying nanoparticle-polymer coatings at high Peclet numbers, *Journal of Chemical Engineering of Japan* 43 (2), 209–213 (2010)
23. Yamamura M., Matsunaga S., Mawatari Y., Kage H., Drying behavior of thin liquid films in a condenser dryer with a solvent-trapping screen, *Chemical Engineering and Processing*, 48, 1427–1431 (2009)
24. Yamamura M. Ono H., Uchinomiya, T., Mawatari Y., Kage H., Multiple crack nucleation in drying nanoparticle-polymer coatings, *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 342 (2009) 65–69
25. Yamamura M. Ohara K., Mawatari Y., Kage H., Measuring the drying rate of liquid film coatings using heat-flux method, *Drying Technology*, 27, 817–820 (2009)
26. Yamamura M. Uchinomiya, T., Mawatari Y., Kage H., Drying-induced Surface Roughening of Polymeric Coating under Periodic Air Blowing, *AIChE Journal*, 55(7), 1648–1658 (2009)
27. Yamamura M., Orihashi K., Mawatari Y., Kage, H., Light-tunable solvent drying in photo-responsive solution coatings, *Drying Technology*, 26, 97–100 (2008)
28. Yamamura M., Uchinomiya, T., Mawatari, Y., Kage, H., Asymmetric surface roughness formation on moving non-isothermal liquid coatings, *International Polymer Processing*, 22(1), 22–26, 2007
29. Yamamura M., Ishimoto, S., Mawatari, Y., Kage, H., Transitions between condenser and airflow dryings of thin film coatings, *Drying Technology*, 25(6), 993–997, 2007
30. Yamamura M., Assisted dynamic wetting in liquid coatings: a review, *Colloids and Surfaces A: Physicochem. Eng. Aspects* 311 (2007) 55–60
31. Yamamura M., Inoue, T., Mawatari, Y., Kage, H., Drying-rate limit in condenser drying of thin film coatings, *Journal of Chemical Engineering of Japan*, 39(8), 814–817, 2006

32. Yamamura M., Matsunaga, A., Mawatari, Y., Adachi, K., Kage, H., Particle-assisted dynamic wetting in a suspension liquid jet impinged onto a moving solid at different flow rates, *Chemical Engineering Science*, 61(16), 5421-5426, 2006
33. Kajiwarara, T., Yamamura, M., Asahina, T., Relationship between Neck-in phenomena and rheological properties in film casting, *Journal of the Society of Rheology Japan*, 34(2), 97-103, 2006
34. Yamamura, M., Miura, H., Kage, H., Postponed air entrainment in dilute suspension coatings, *AIChE Journal*, 51(8), 2171-2177, 2005
35. Tao Zhou, Masato Yamamura and Hiroyuki Kage, Bubble Movement Pattern and Rise Velocity in Two-dimensional Horizontal and Vertical Vibro-fluidized Beds, *Canadian Journal of Chemical Engineering*, 82(2), 236-243, 2004
36. Yamamura, M., Nakamura, S., Kajiwarara, T., Adachi, K., Kage, H., Flow-induced stripe pattern formation in phase-separating fluids, *Polymer*, 44, 4699-4704, 2003
37. Yamamura, M., Kajiwarara, T., Kage, H., Multicomponent diffusion in phase-separating polymer blends with different frictional interactions: a mean-friction model, *Chemical Engineering Science*, 58, 3891-3899, 2003
38. Yamamura, M., K. Nagai, T. Kajiwarara and K. Adachi, Stripe pattern breakup in evaporation liquid layer on a plane with horizontal temperature gradient, *Chemical Engineering and Processing*, 42, 395-402, 2003
39. Yamamura, M., T. Nishio, T. Kajiwarara and K. Adachi, Evaporation-induced pattern formation in polymer films via secondary phase separation, *Chemical Engineering Science*, 57, 2901-2905, 2002
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41. Yamamura, M., K. Horiuchi, T. Kajiwarara and K. Adachi, Decrease in solvent evaporation rate due to phase separation in polymer films, *AIChE Journal*, 48, 2711-2714, 2002
42. Yamamura, M. and Ogino F., Mass transfer from hot dry rock to water flowing through a circular fracture, *Geothermics*, Vol.31(3), 283-302, 2002
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49. Ogino, F., M. Yamamura and T. Yoshida, Heat transfer from hot dry rock to water flowing through a fracture surrounded by secondary crack network, *Geothermal Science and Technology*, 6, 139-162, 1999
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