Grégory Lécrivain

Helmholtz-Zentrum Dresden-Rossendorf
Institut für Fluiddynamik
Bautzner Landstraße 400
01328 Dresden, Deutschland
☎ *+49 351 260 3768*
FAX *+49 351 260 13768*
✉ *g.lecrivain@hzdr.de*

Research experience

2017-2018 **Parental leave**, *Reduced working hours*

2016–2017 **Helmholtz-Zentrum Dresden-Rossendorf**, *Germany*, Marie-Curie fellowship
- Experimental investigation of particle attachment to an immersed gas bubble

2014–2016 **Kyoto University**, *Japan*, Marie-Curie fellowship
- Direct numerical simulation of particle transport at fluidic interfaces

2010–2014 **Helmholtz-Zentrum Dresden-Rossendorf**, *German*, Post-doctoral position
- Experimental investigation of particle deposition and remobilisation in turbulent air flows
- Direct numerical simulation of aerosol particle transport in turbulent flows

2009–2010 **Technical University Dresden**, *Germany*, Post-doctoral position
- Industry project aimed at optimising the shapes of external components sitting on high-speed vehicles

Education

2005–2009 **Manchester Metropolitan University**, *England*, Ph.D. studies
- Using reverse engineering and computational fluid dynamics to improve the performance of complex three-dimensional bodies interacting with a fluid flow

2002–2005 **Art et Métier ParisTech**, *France*, Master's studies
- Distinctive element of the French higher education system, which recruits their students with a selective procedure

2000–2002 **Preparatory class**, *France*
- Preparation for the competitive examination to French engineering schools, known as Grandes Ecoles

2000 **Baccalauréat**, *France*

Languages

German	Fluent
English	Fluent
French	Mother tongue
Japanese	Conversant

Selected publications

- Lecrivain G., Kotani, Y., Yamamoto R., Hampel U., and Taniguchi T. (2018), A diffuse interface model to simulate the rise of a fluid droplet across a cloud of particles, ***Physical Review Fluids 3***, 094002

- Lecrivain G., Yamamoto R., Hampel U., and Taniguchi T. (2017), Direct numerical simulation of an arbitrarily shaped particle at a fluidic interface, ***Physical Review E 95***, 063107
- Lecrivain G., Yamamoto R., Hampel U., and Taniguchi T. (2016), Direct numerical simulation of a particle attachment to an immersed bubble, ***Physics of Fluids 28***, 083301
- Lecrivain G., Rayan R., Hurtado A., and Hampel, U. (2016), Using quasi-DNS to investigate the deposition of elongated aerosol particles in a wavy channel flow, ***Computers & Fluids 124***, p. 78-85
- Lecrivain G., Petrucci G., Rudolph M., Hampel U., and Yamamoto R. (2015), Attachment of solid elongated particles on a gas bubble surface, ***International Journal of Multiphase Flow 71***, p. 83-93
- Lecrivain G., Vitsas A., Boudouvis A.G., and Hampel U. (2014), Simulation of multilayer particle resuspension in an obstructed channel flow, ***Powder Technology 263***, p. 142-150.
- Lecrivain G., Barry L., and Hampel U. (2014), Three-dimensional simulation of multilayer par-ticle deposition in an obstructed channel flow, ***Powder Technology 258***, p. 134-143
- Lecrivain G., Drapeau-Martin S., Barth T., and Hampel U. (2014). Numerical simulation of multilayer deposition in an obstructed channel flow, ***Advanced Powder Technology 25***, p. 310-320
- Barth T., Lecrivain G., and Hampel U. (2013), Particle deposition study in a horizontal turbulent duct flow using optical microscopy and particle size spectrometry, ***Journal of Aerosol Science 60***, p. 47-54
- Lecrivain G. and Hampel U. (2012), Influence of the Lagrangian integral time scale estimation in the near wall region on particle deposition, ***ASME Journal of Fluids Engineering 134***, p. 1-6

Patent

- Schönherr, H.S., Steinike, D., Rüdiger, F., Lecrivain, G., Fröhlich, J., Camera outdoor housing for use in traffic engineering , ***DE201210107170***, Filing: 03.08.2012, Publication: 15.05.2014

Third-party funding

- International Marie-Curie Fellowship, European Commission, 2014-2017, “Capture of mineral particles by rising bubbles”, 340.000 €
- Graduate Academy of the Technical University of Dresden, 2018-2021, “Investigation of binary particle mixing in intricate three-dimensional apparatuses by advanced ultrafast X-ray computed tomography and high-fidelity simulations”, 48.600 €