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EDUCATION

Drexel University, Philadelphia, USA	Ph.D	Material Engineering	2005
Drexel University, Philadelphia, USA	ME	Material Engineering	2002
ISITEM, Nantes, France	BE	Material Engineering	1999

PROFESSIONAL ACTIVITIES

- Academic Director, Sydney Manufacturing Hub, The University of Sydney, 2022-Present
- Professor, School of Civil Engineering, The University of Sydney, 2022 - Present
- Deputy Director, Sydney Manufacturing Hub, The University of Sydney, 2020 -2022
- Associate Professor, School of Civil Engineering, The University of Sydney, 2017 – 2021
- Senior lecturer, School of Civil Engineering, The University of Sydney, 2012 – 2016
- Lecturer, School of Civil Engineering, The University of Sydney, 2008 – 2011
- Post-Doctoral Research Associate, Los Alamos National Laboratory, USA, 2005 - 2007

AWARD AND HONORS

- Equity Prize (Thompson) at The University of Sydney, 2021

MAIN SCIENTIFIC PUBLICATION

- E. M. Agaliotis, B. D. Ake-Concha, A. May-Pat, J. P. Morales-Arias, C. Bernal, A. Valadez-Gonzalez, P. J. Herrera-Franco, **G. Proust**, J. F. Koh-Dzul, J. G. Carrillo, E. A. Flores-Johnson (2022) Tensile Behavior of 3D Printed Polylactic Acid (PLA) Based Composites Reinforced with Natural Fiber, *Polymers*, **14** (19): 3976.
- W. H. Kan, D. Jiang, N. S. L. Chiu, M. Humbert, Y. Zhu, P. Hodgson, X. Gao, V. K. Bhatia, **G. Proust**, A. Huang (2022) Effect of *in-situ* layer-by-layer rolling on the microstructure, mechanical properties, and corrosion resistance of a directed energy deposited 316L stainless steel, *Additive Manufacturing*, **55**: 102863.
- W. H. Kan, S. Huang, A. Huang, L. Chang, Y. Nadot, J. M. Cairney, **G. Proust** (2021) Effect of T6 treatment on additively-manufactured AlSi10Mg sliding against ceramic and steel, *Wear*, **482-483**: 203961.

- K. J. Tam, M. W. Vaughan, L. Shen, M. Knezevic, I. Karaman, **G. Proust** (2021) Modelling Dynamic Recrystallisation in Magnesium Alloy AZ31, *International Journal of Plasticity*, **142**: 102995.
- Y. Huang, S. Löschke, **G. Proust** (2021) In the Mix: The Effect of Wood Composition on the 3D Printability and Mechanical Performance of Wood-Plastic Composites, *Composites Part C*, **5**: 100140.
- Y. Zhang, **G. Proust**, D. Retraint, H. Wang, Y. Gan, Y. (2021) Predicting mechanical properties of 316L stainless steel subjected to SMAT: A sequential DEM-FEM investigation, *International Journal of Mechanical Sciences*, **193**: 106173.
- K. J. Tam, M. Vaughan, L. Shen, M. Knezevic, I. Karaman, G. Proust (2020) Modelling the Temperature and Texture Effects on the Deformation Mechanisms of Magnesium Alloy AZ31, *International Journal of Mechanical Sciences*, **182**: 105727.
- W. H. Kan, S. Huang, G. Proust, V. Bhatia, L. Chang, T. Lucey, X. Tang, J. M. Cairney (2020) Improving metal-ceramic systems subjected to sliding contact by reinforcing the metallic counterpart with ceramic particles, *Wear*, **452-453**: 203311.
- W. H. Kan, Z. Man, S. Huang, K. Dolman, T. Lucey, X. Tang, L. Chang, G. Proust, J. Cairney (2020) Development of (Nb_{0.75},Ti_{0.25})C-Reinforced Cast Duplex Stainless Steel Composites, *Metallurgical and Materials Transactions A*, **51 (5)**: 2366-2376.
- W. H. Kan, Y. Zhang, X. Tang, T. Lucey, G. Proust, Y. Gan, J. Cairney (2020) Precipitation of (Ti, Zr, Nb, Ta, Hf) C high entropy carbides in a steel matrix, *Materialia*, **9**: 100540.
- Y. Nadot, C. Nadot-Martin, W. H. Kan, S. Boufadene, M. Foley, J. Cairney, G. Proust, L. Ridosz (2020) Predicting the fatigue life of an AlSi10Mg alloy manufactured via selective laser melting by using data from Computed Tomography, *Additive Manufacturing* **32 (3)**: 100899.
- Y. Zhang, G. Proust, D. Retraint, H. Wang, Y. Gan (2019) Discrete element simulation of surface mechanical attrition treatment with rough-surface sonotrode, *International Journal of Mechanical Sciences*, **161**: 105060.
- W. H. Kan, Y. Nadot, M. Foley, L. Ridosz, G. Proust, J. M Cairney (2019) Factors that affect the properties of additively-manufactured AlSi10Mg: Porosity versus microstructure, *Additive Manufacturing*, **29**: 100805.
- G. Proust (2019) Processing magnesium at room temperature, *Science*, **365 (6448)**: 30-31.
- M.W. Vaughan, W. Nasim, E. Dogan, J.S. Herrington, G. Proust, A.A. Benzerga, I. Karaman (2019) Interplay between the effects of deformation mechanisms and dynamic recrystallization on the failure of Mg-3Al-1Zn, *Acta Materialia*, **168**: 448-472.
- W. H. Kan, G. Proust, V. Bhatia, L. Chang, K. Dolman, T. Lucey, X. Tang, J. Cairney (2019) Slurry erosion, sliding wear and corrosion behavior of martensitic stainless steel composites reinforced in-situ with NbC particles, *Wear*, **420**: 149-162.

RESEARCH INTERESTS

- Additive Manufacturing
- Microscopy
- Mechanical Properties
- Crystal Plasticity