

## DEPARTMENT OF MINING & MATERIALS ENGINEERING

### ANNEX TO DEPARTMENTAL ANNUAL REPORT OF 2017

#### RESEARCH PUBLICATIONS – Articles in refereed journals

##### MATERIALS ENGINEERING

###### BEVAN, K.H.

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Md. S. Hossain, B. Muralidharan, and K. H. Bevan, "A General Theoretical Framework for Characterizing Solvated Electronic Structure via Voltammetry: Applied to Carbon Nanotubes", J. Phys. Chem. C, 121,18288 (2017).

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K. H. Bevan, "Electron transfer from the perspective of electron transmission: Biased non-adiabatic intermolecular reactions in the single-particle picture", J. Chem. Phys. 146, 134106 (2017).

###### BROCHU, M.

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B. Ellyson, N. Chekir, M. Brochu and M. Brochu, Characterization of Bending Vibration Fatigue of WBD Fabricated Ti-6Al-4V, International Journal of Fatigue, 101, 1 (2017) 36.

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M. Javidani, J. Arreguin-Zavala, J. Danovitch, Y. Tian and M. Brochu, Additive manufacturing of AlSi10Mg alloy using direct energy deposition: microstructure and hardness characterization, Journal of Thermal Spray Technology, 26, 4 (2017) 587-597.

R. Chou, A. Ghosh, S.C. Chou, M. Paliwal and M. Brochu\*, Microstructure and Mechanical Properties of Al10SiMg Fabricated by Pulsed Laser Powder Bed Fusion, Materials Science and Engineering A, 689, (2017) 53–62.

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A. Muniz, M. Paliwal, I-H Jung and M. Brochu, Fractional Crystallization Model of Multicomponent Aluminum Alloys: A Case Study of Aircraft Recycling, *Metallurgical and Materials Transactions B*, 48, 2 (2017) 1024-1034.

I. Rozenblit, S. Murugupillai, M.A. McArthur, M. Brochu, S. Omanovic, A Mn/Co-oxide electrode for potential use in high energy density hybrid supercapacitors, *Materials Chemistry and Physics*, 193 (2017) 73–81.

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- Y. Zhang, N. Brodusch, S. Descartes, J.M. Shockley, R. Gauvin, R.R. Chromik, "The effect of submicron second-phase particles on the rate of grain refinement in copper-oxygen alloy during cold spray," *Journal of Thermal Spray Technology* 26, 1509-16 (2017).
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## **DEMOPOULOS, G.P.**

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### **GAUVIN, R.**

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## **JUNG, I-H.**

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### **NAZHAT, S.**

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