

GRAEME R. GOODALL

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SUMMARY OF QUALIFICATIONS

- Experienced researcher with 12 months exposure to industry
- Areas of expertise include:
 - Profound knowledge of metallurgy relating to the generation, analysis and quantification of microstructures in various alloy systems resulting from advanced joining, welding, forming and coating
 - Sophisticated knowledge of materials engineering with a highly developed understanding of extractive metallurgy principles and processes
 - Communication of scientific principles, results and their significance to any audience group
- Advanced capabilities in designing and executing efficient thermo-mechanical simulation and microstructural analysis using Gleeble, BAHR and NETZSCH instruments
- Experience working abroad (Chile, Australia) and in secondary languages (Spanish, French)
- Knowledge of industrial and governmental procedures and structure
- Strong presentation skills - delivered presentations to senior management and industry experts
- Internationally published in peer-reviewed journals with presentations at international conferences
- Experience delivering relevant technology transfer to industry partners and sponsors

EDUCATION

Doctor of Philosophy- Materials Engineering, McGill University, Montreal QC. September 2007 – December 2010

- Thesis: Welding High Strength Modern Line Pipe Steel. Successfully defended Dec 20th, 2010
- Investigated the effect of welding parameters and optimized the resulting microstructure of the steel for use in high productivity mechanized welds
- Collaborated with external partners to design and implement testing strategies for challenging and sensitive materials
- NSERC PGSD Fellow (\$63K, 2007 –2010), Vadasz Engineering Doctoral Fellowship (\$75K, 2007-2010), FQRNT (\$60K, awarded and declined by applicant for NSERC compliance)
- Conducted all research activities at the Canadian National Materials Testing Laboratory

Master's of Materials Engineering, McGill University, Montreal QC. September 2005 – May 2007

- Thesis: Recovery of Nickel from Reject Laterite (via extractive pyrometallurgy)
- Industrial Partner: Xstrata Nickel (Formerly Falconbridge Dominicana)
- Horace G. Young Scholarship (2006), NRCAN Intern Scholarship (2005), Department of Materials Graduate Entrance Scholarship (2005), Wisdom Scholarship (2005)
- Developed a novel carbothermic reduction technique to recover nickel from discarded ore
- Delivered regular progress reports on an industry determined schedule

Bachelor of Metallurgical Engineering, Co-op, McGill University, Montreal QC. September 2000 – May 2005

- McGill, Gordon W. Smith Scholarship (2004, 2003), TMS Student Award
- Member of the Engineering Undergraduate Society
- Co-op postings in Antofagasta, Chile; Sorel, Quebec and Brisbane, Australia.

PROFESSIONAL EXPERIENCE

Technologist – Part Time, NRCAN Canmet MTL, Ottawa, ON. Sept 2008- Sept 2010

- Designed thermo-mechanical processing experiments for metallurgical samples using a Gleeble 3800, BAHR Dilatometer and a NETZSCH DSC to quantify weld-generated microstructures through simulation.
- Analyzed the constituent phases of resulting microstructures through optical and electron microscopy.

Course Lecturer, McGill University, Montreal, QC.

May – Aug 2007

- Lectured the third year extractive metallurgy course for the Materials Engineering Department.
- Prepared and delivered nine hours of lecture per week, designed and executed tutorials, set and graded exams.

Research Assistant, Co-op, Pyrosearch – University of Queensland, Brisbane, Australia May – Dec 2004

- Created and conducted experiments to determine the invariant points and univariant lines in a calcium ferrite slag system
- Invented novel substrate configurations and prepared experimental materials to explore previously unknown regions of the phase system
- Presented results in a comprehensive oral and written report

Co-op Student, QIT, Rio-Tinto Iron and Titanium Research Centre, Sorel, QC. Jan – May 2003

- Investigated the pyrohydrolysis of multi-component chloride leach liquor and composed a report summarizing recent research at QIT to support streamlined processing in the reactor

Teaching Assistant, McGill University, Montreal, QC.

Sept 2002 – May 2007

- Undergraduate experience: graded work and presented tutorials for the Engineering Communication Skills course for two semesters
- Graduate experience:
 - Presented the remaining 1/3 of the senior level course Modeling and Control in Mineral processing
 - Three hours of lecture per week, conducting tutorials and supervising laboratory experiments while maintaining a full course-load
 - Responsible for supervising laboratory exercises, executing tutorials and grading work in the following courses:
 - Phase Transformations in Solids, Engineering Communication Skills, Process and Materials Design, Sustainable Materials Processing

Junior Metallurgical Engineer, Co-op, Altonorte, Noranda Inc, Antofagasta, Chile. May – Aug 2002

- Collected and analyzed reactor matte and dusts from a newly commissioned Noranda reactor vessel to help optimize processing parameters for improved recovery

ADDITIONAL PROFESSIONAL ACTIVITIES

- Student Chair for the 50th Anniversary METSOC Conference of Metallurgists to be held in Montreal, QC, October 2011

COMPUTER SKILLS

- Microsoft Office, OriginPro, Maple, QuickSim, AxioVision, Proteus, EndNote, Sketch Up
- Basic programming

LANGUAGES

- Fluent English and French
- Spanish: Comfortable reading and conversing at an intermediate level

INTERESTS AND ACTIVITIES

- Music: Member of the Harmonic Generation a capella group since 2008
- Sports: Ultimate Frisbee, Snowboarding, Cycling
- International cooking and cuisine

LIST OF PUBLICATIONS & REFERENCES

- Available upon request