Ehsan Rezabeigi

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		EDUCATION
2010 - 2015	Ph.D.; Mechanical Engineering, Concordia University	
	Thesis title: Development of Highly Porous Polylactic Acid-based M	Ionoliths Containing
	Sol-gel-derived 45S5 Bioglass®; Evaluated as outstanding.	_
	Supervisors: Dr. Robin Drew and Dr. Paula Wood-Adams	
2005 - 2008	M.Sc.; Materials Science and Engineering, University of Tehran	
2001 - 2005	B.Sc.; Materials Science and Engineering, University of Tehran	
		AWARDS
June 2014	Centre de recherche sur les systèmes polymères (CREPEC)	(2nd poster prize)
May 2014	Concordia Accelerator Award – School of graduate studies	(1 1 /
2013 & 2014	Conference and Exposition Award – School of graduate studies	
Apr. 2013	PhD Seminar Award	(1st prize)
Feb. 2013	American Society of Materials (ASM) – Montreal chapter	(1st poster prize)
Apr. 2013	American Society of Materials (ASM) – Montreal chapter	(2nd poster prize)
2010 - 2012	Tuition Fee Remission – Concordia University	/
	RESEA	RCH INTERESTS

- **<u>Biomaterials</u>** (biodegradable, bioactive and bioinert)
- Materials science (development, characterization and processing of materials)
- Polymer-based composite materials (biocomposites and nanocomposites)
- Porous (lightweight) structures (polymers and composites)
- **Joining of materials** (surface and interface of materials)

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2015	Interviewed by Concordia University for the Montreal Gazette about my PhD research.
2015	Interviewed and featured in Concordia's Graduate Programs Viewbook 2016 – 2017 .
2014	Featured in a short movie about my PhD work, to promote Concordia University.
2014	Interviewed and featured in Concordia Engineering News for my PhD work.
2013	Runner up in three minute thesis competition , Faculty of Engineering – Concordia University.
2013	Scientific reporter for "2013 Annual Meeting of the Canadian Academy of Engineering (CAE):
	The Future of Manufacturing in Canada", Montreal, Quebec.

PROFESSIONAL EXPERIENCE AND SERVICE

2015	<u>Postdoctoral Fellow</u> – Mechanical and Industrial Engineering – Concordia University
(Current)	(Fabrication of PLA membranes for microfiltration); and:
2015	<u>Collaboration</u> with the Department of Civil Engineering – Concordia University
	(Synthesis of SiO ₂ nanoparticles via sol-gel)
• 2015	<u>Collaboration</u> with Universidad Michoacana de San Nicolás de Hidalgo – Mexico
	(In vitro evaluation of PLA/45S5 Bioglass® monoliths)
2015	<u>Collaboration</u> with École Polytechnique de Montréal (Acoustic properties of PLA foams)
2010-2015	Research Assistant and PhD student – Mechanical and Industrial Engineering – Concordia University

2015&2014	Workshop Instructor, "Posters and Presentations" – Concordia University
2015	Guest Lecturer, "PhD seminar course" (28 third-year PhD student)
2014	Guest Lecturer, MECH 221 "Materials Science" – 3 lectures (120 undergraduate students)
2014	Teaching Assistant and Marker, MECH 221 "Materials Science"
2013-2015	<u>Lab Instructor</u> and <u>Marker</u> , MECH 421 "Mechanical shaping of metals and plastics"
2014-2015	<u>Committee member</u> for preparing Graduate supervision guidelines 2015 – Concordia University
2013-2015	<u>Supervisor/ Invigilator</u> for 42 final exams – Examination office – Concordia University
	Supervision of undergraduate and graduate research projects:
2015	• Nora Lúa –masters student– (In vitro evaluation of PLA/45S5 Bioglass® scaffolds)
2014	• Johnny A. P. Seminario –undergraduate– (Crystallization in PLA/Bioglass® nanocomposites)
2009	R&D, Research Engineer – Niroo Research Institute (NRI) – Tehran, Iran

PUBLICATIONS

Peer-reviewed articles

- E. Rezabeigi, P.M. Wood-Adams and R.A.L. Drew, "The incorporation of surface modified sol-gelderived 45S5 Bioglass[®] in highly porous polylactic acid monoliths", <u>under review</u> at Composites Part A: Applied Science and Manufacturing, 2015.
- 2. E. Rezabeigi, P.M. Wood-Adams and R.A.L. Drew, "Production of porous polylactic acid monoliths via nonsolvent induced phase separation", **Polymer**, 55, 6743 6753, 2014.
- 3. E. Rezabeigi, P.M. Wood-Adams and R.A.L. Drew, "Isothermal ternary phase diagram of the polylactic acid-dichloromethane-hexane system", **Polymer**, 55, 3100 3106, 2014.
- 4. E. Rezabeigi, P.M. Wood-Adams and R.A.L. Drew, "Synthesis of 45S5 Bioglass[®] via a straightforward organic, nitrate-free sol-gel process", **Materials Science and Engineering:** C, 40, 248 252, 2014.
- 5. E. Rezabeigi, P.M. Wood-Adams and R.A.L. Drew, "Surface Modification of Sol-Gel-Derived 45S5 Bioglass® for Incorporation in Polylactic Acid (PLA)", **Advances in Bioceramics and Porous Ceramics** VI, John Wiley & Sons, Inc., Hoboken, NJ, USA, vol. 34, no. 6, pp. 107 112, 2013.

Papers in conference proceedings *(presenter)

- 1. *E. Rezabeigi*, P.M. Proa-Flores, R.A.L. Drew and P.M. Wood-Adams, "A novel nitrate-free sol-gel process for production of 45S5 Bioglass[®]", In: Proceedings of the American Society for Composites, 1, pp. 34 42, Sep. 26 28, 2011, Montreal, QC, Canada.
- 2. <u>E. Rezabeigi</u>, A.M. Hadian and A. Hadian, "Investigation on Effective Factors in Brazing of B₄C Using Ag-based Filler Metals", In: Proceedings of the 13th European Conference on Composite Materials (ECCM-13), June 2 5, 2008, Stockholm, Sweden.

Other conference presentations

- 1. **E.** Rezabeigi, P.M. Wood-Adams and R.A.L. Drew, "Production of polylactic acid/45S5 Bioglass® scaffolds for bone regeneration purposes", 27th Canadian Materials Science Conference (CMSC), June 2 5, 2015, Halifax, Nova Scotia, Canada (**Oral presentation**).
- 2. *E. Rezabeigi*, P.M. Wood-Adams and R.A.L. Drew, "Development of Polylactic Acid Foams via Nonsolvent-induced Phase Separation", 30th International Conference of the Polymer Processing Society (PPS-30), June 8 12, 2014, Cleveland, OH, USA (**Oral presentation**).

Book translation (English to Persian)

• Clifford Matthews, "The Handbook of In-Service Inspection", 1st edition, 2004. <u>Translated</u> by F. Malek Ghaeeni, S. Gholizadeh Miankouh, M. Jafarzadegan, E. Rezabeigi et al. 2009, Tehran, Iran.

LANGUAGES

• English (Full professional proficiency)

• French (Limited working proficiency)

SPECIALIZED TRAINING/WORKSHOPS

- 2015 **Project Leadership Essentials** Gradproskills Concordia University
- 2015 **Basic Concepts of Project Management** Gradproskills Concordia University
- 2015 **Project Management Essentials** Gradproskills Concordia University
- 2013 Generating Creativity (4 sessions) Gradproskills Concordia University
- 2013 How to conduct productive meetings Gradproskills Concordia University

TECHNICAL SKILLS

- **Expert** in *Word*, *Excel*, *PowerPoint* and *PS* (Photoshop)
- Familiar with AutoCAD, Origin, CES (Cambridge Engineering Selector), SolidWorks and Matlab.