

New Zealand MSI Curriculum Vitae

PART 1

1a. Personal details				
Full name	<i>Title</i>	<i>First name</i>	<i>Second name(s)</i>	<i>Family name</i>
	Dr	Pierson		Rathinaraj
Present position		Research Team manager		
Organisation/Employer		Waikato Institute of Technology		
Contact Address		51, Akoranga Road		
		Hamilton. New Zealand.		
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Personal website (if applicable)	http://www.wintec.ac.nz			

1b. Academic qualifications

2015, Post-doctoral, Institute of Bio-Medical Technologies, Auckland University of Technology- New Zealand

2014, Post-doctoral, Bio-Medical Engineering, Kyngpook National University-South Korea

2010, Doctoral, Chemistry, Inje University -South Korea

2001, Master of Philosophy, Chemistry, Bharathidasan University -India

1999, Master of Science, Chemistry, Bharathidasan University -India

1997, Bachelor of Science, Chemistry, Bharathidasan University -India

1c. Professional positions held

2015- Till, Research Team Manager, Waikato Institute of Technology, Hamilton

2014- 2015 Research fellow, Bio-Medical technologies, Auckland university of Technology

2014- 2015 Research fellow, Bio-Medical engineering, Kyngpook National University

2002- 2007, Senior Lecturer, Sri Bhagwan Mahaveer Jain College

2001-2002, Lecturer, Lowry memorial College

2000-2001, Instructor, ED Thomas memorial School

1d. Present research/professional speciality

Research Focus- Gold nanoparticles/ quantum dots based biomaterials for cancer cell apoptosis.

1e. Total years research experience	14 years
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1f. Professional distinctions and memberships (including honours, prizes, scholarships, boards or governance roles, etc)

2014, Best paper award, Med Sci congress-Queenstown -New Zealand

2012-2014, BK21 research grant, Inje University- South Korea

2007-2010, BK21 plus research grant, Kyngpook National University- South Korea

2010 Best outgoing student award, Inje University- South Korea.

1g. Total number of <i>peer reviewed</i> publications and patents	Journal articles	Books, chapters, books edited	Conference proceedings	Patents
	23	-	10	-

PART 2

2a. Research publications and dissemination

Peer-reviewed journal articles

Selected Publications

1]. **Pierson R**, Srithar G: Linalool prevents oxidative stress activated protein kinases in single UVB-exposed human skin cells. *PLoS ONE*, 12: (5)5415184, **2017**.

[2]. **Pierson R**, Al-Jumaily M: Internazation – endosomal apoptosis of breast cancer cells using herecptin-immobilized gold nanoparticles. *Breast cancer: Targets and therapy*, 7: 51-58, **2015**.

[3]. **Pierson R**, IK Kang: Targeting and molecular imaging of HepG2 cells using Surface-functionalized gold nanoparticles. *Journal of Nanoparticle Research*, 17: 311, **2015**.

[4]. **Pierson R**, Al-Jumaily M: Comparative intracellular uptake of Quantum dots and Gold nanoparticles into oral squamous cancer cells and its relationship to cell survival. *International Journal of Bio-Materials and Bio-medical engineering*, 1: 1-7, 2015.

[4]. **Pierson R**, IK Kang: targeted images of KB cells using Folate – Conjugated gold nanoparticles. *Nano Scale Research Letters*, 10: 14-25, **2015**.

[5]. **Pierson R**, Han SJ: Specific intracellular uptake of Herceptin –conjugated CdSe/ZnS quantum dots into breast cancer cells. *Journal of Bio-Medical Research International*, 14:954307, **2014**.

[6]. Moon J, **Pierson R**: Enhanced Intracellular uptake of CdTe quantum dots by conjugation of oligopeptides. *Journal of Nanomaterials*, 13:291020, **2013**.

[7]. **R. Pierson**, C. Basavaraja, and Do sung Huh: Micro structure and electrical properties of Poly-N- isopropylacrylamide-Nvinyl Carbazolecopolymers. *Bulletin of Korean Chemical Society*, 30: 2057, **2009**.

[8]. C. Basavaraja, **R. Pierson** and Do Sung Huh: Studies on Properties of Polyaniline-Dodecylbenzene Sulfonic Acid Composite Films Synthesized Using Different Oxidants. *Macromolecular Research*, 17: 609, 2009.

[9]. C. Basavaraja, **R. Pierson**, T. K. Vishnuvardhan, Do Sung Huh: Characterization and electrical behavior of Pani- PNIPAA/Alumina aqueous dispersions in the presence of DBSA", *European polymer journal*, 44: 1556, **2008**.

[10]. **R. Pierson**, C. Basavaraja, and D. S. Huh: Excitation of Waves in a BZ system in Emulsion Media. *Bulletin of Korean Chemical Society*, 29: 2241, **2008**.

Peer reviewed books, book chapters, books edited

Reviewed 24 Journals for Dove Medical press on Oncology since 2014

Refereed conference proceedings

1. **R. Pierson** "Targeting and molecular imaging of HepG2 cells using Surface-functionalized gold nanoparticles *4th international conference on Bionics, Australia (2016) (poster presentation).*
2. **R. Pierson** "Targeted images of KB cells using Folate – Conjugated gold nanoparticles" *Medical Science congress, New Zealand (2015) (Oral presentation).*
3. **R. Pierson** "Electrical properties of breast cancer cells by impedance measurement of Herceptin immobilized gold nanoparticles" *Medical Science congress, New Zealand (2014) (Oral presentation).*
4. **R. Pierson** "Preparation of β -galactose immobilized gold nanoparticles and their interaction with Hep-G2 cells" *International conference on biotechnology and human welfare, SASTRA, India (2013) (Oral presentation).*
5. **R. Pierson** "Immobilization of folic acid on surface modified gold nanoparticles for cancer cell imaging" *Annual Meeting Korean Polymer Society, CECO, South Korea (2013).*
6. **R. Pierson** "Excitation of Waves in a BZ system in Emulsion Media" *Gordon research conference, Colby College, Maine – USA (2008).*
7. **R. Pierson** "Bifurcation Phase Studies of BZ Reaction Containing Oxalic Acid and Acetone as a Mixed Organic Substrate in an Open System" *Gel Sympo, Tokyo University, Tokyo -Japan (2007).*

Patents

Other forms of dissemination (reports for clients, technical reports, popular press, etc)

Assisted and completed 12 master course thesis on nanoparticle drug delivery during 2012-2017

2b. Previous research work

Research title: Intra cellular uptake of Herceptin/ folic acid immobilized gold nanoparticles into breast/ oral squamous cancer cells

Principal outcome: Journal published in 2015

Principal end-user and contact: Mariana Vandar Walt ,
Mariana.VanderWalt@wintec.ac.nz

2c. Describe the commercial, social or environmental impact of your previous research work

The treatment of cancer via antibody is considered to be a promising tool in cancer cells apoptosis. Therefore, it can react due to ligand –receptor mechanism of tumors with very low side effects

2d. Demonstration of relationships with end-users

New Zealand cancer society and Korean Bio-medical society

