

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

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 peer reviewed publications and patents	Journal articles	Books, book 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

