Dr. Jinasena Wathogala Hewage

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Department of Chemistry
University of Ruhuna
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1) Bio Data

i) Date of Birth: 02nd October 1965.
ii) Age: 43 years.
iii) Sex: Male
iv) Marital Status: Married.

2) Educational Qualifications:

Ph.D. Degree in Theoretical Physical Chemistry (2002), University of Maine, USA

Thesis Title:

Simulations of Structure, Dynamics and Electron Diffraction Patterns of Heterogeneous Clusters $Ar_m(N_2)_n$.

Graduation Date: 30th August 2002.

Academic Transcript (Ph. D)

Course	Course Title	Grade
CHY 575	INTERMED PHYSICAL CHEM I	A^-
CHY 560	PHYSICAL METH INORGANIC CHEM	B^+
CHY 573	COMPUTER SIMULATION METHODS	A
PHY 463	STATISTICAL MECHANICS	B^-
CHY 673	STATISTICAL THERMODYNAMICS	B
CHY 572	MOLEC SPECTROSCOPY/DYNAMICS	B

B Sc. Special Degree (1994), University of Ruhuna, Matara

Obtained the B.Sc. special degree in Chemistry with 2nd class upper division (Honours) in 1994

General Science Degree
First Year Examination-1990

Subject	Grade
Chemistry	B
Physics	C
Mathematics	B

General Science Degree
Second Year Examination-1991

Subject	Grade
Chemistry	A
Physics	A
Mathematics	B

Special Science Degree (Part One) Examination-1993 Dec

Principle subject:	Chemistry I	B
	Chemistry II	A
	Chemistry III	C
	Chemistry IV	B (Practical)
Subsidiary subject:	Physics	A

Special Science Degree (Part Two) Examination-1994 Jan

Principle subject:	Chemistry I	A
	Chemistry II	B
	Chemistry III	C
	Chemistry IV	B (Practical)
General Course Assessment:		B

3) Current Research Activities

1) Investigation of structures, dynamics and energetic of mixed transition metal clusters.
2) Density Functional Calculations of $Ag_nNi_{(13-n)}$ clusters for $n \leq 13$ using Tight Binding method
3) Preparation and characterization of semiconducting oxide thin films.
4) Investigation of adsorption properties of semiconductor oxides for gas sensing.

4) Postgraduate Students

1) Ms. W. L. L. Rupika: M. Phil degree
"Investigation of structures, dynamics and energies of mixed transition metal clusters" (Thesis in preparation)

5) Programming Language Experiences

Compiled Languages: FORTRAN, BASIC and PASCAL
Scripting Languages: PERL

6) Courses of Teaching

Current year: CHE 3432 -Molecular Structure and Properties (30 Lecture hours)
CHE 4412 -Advanced Analytical Chemistry (30 Lecture hours).
CHE 4493 -Computational Chemistry (60 Lecture hours)
Passed years: CHE 3482 -Chemical Equilibrium and Changes I
CHE 4432 -Chemical Equilibrium and Changes II

7) Journal Publications:

1) " Energy trends of $Ag_nNi_{(13-n)}$ clusters for $n \leq 13$; A comparison of MD results with DFT results",
   Jinasena W. Hewage, Francois G. Amar, and Wijesing Liyanage Rupika (Manuscript in preparation).

2) "Structures, dynamics and energies of mixed transition metal clusters; $Ag_nNi_{(13-n)}$ for $n \leq 13$"
   Wijesing Liyanage Rupik, **Jinasena W. Hewage**, and Francois G. Amar (Manuscript in preparation)

3) "A novel method for preparation of semiconducting cuprous oxide thin film",
   J. W. Hewage , D. G. Swarnalatha, *J. nsf*. (Manuscript submitted)
4) "Computer Simulation Study of Structure and Stability of CO_2-N_2 Dimers" ,
   W L Rupika, **J. W. Hewage,** SLAAS Proceedings of the 64th Annual Session, 2008.

5) "Investigation of structure, dynamics and energetic of mixed transition metal clusters; $Ag_nNi_{(13-n)}$ for $n \leq 13$"
   Jinasena W. Hewage, Francois G. Amar, and Wijesing Liyanage Rupika, Ruhuna Jounal of Science.**2**, 30 (2007)

6) "The structure of mixed nitrogen-argon clusters: A comparison of simulation results with experimental diffraction patterns."
   Jinasena W. Hewage, Francois G. Amar, Marie-Francoise de Feraudy, and Gerard Torchet, Eur. Phys. J. D **24**, 249 (2003)

7) "Structural Motifs and Stability of Small Argon-Nitrogen Clusters."
   Jinasena W. Hewage, and Francois G. Amar, J. Chem. Phys. **119**, 9021 (2003)

8) "A Search for Novel Hypoglycaemic Compounds from Plants."
   Ruvin Kumara NKVM, **Jinasena W. Hewage**, Ranjith N. Pathirana, C. Pathirana,Galle Medical Association, Annual Sessions 1994.

6) Oral Presentations:

1) Second Annual Greater Boston Area Statistical Mechanics Meeting Saturday, October 14, 2000, Brandeis University, MA.
   "Landau free energy calculations of heterogeneous clusters using molecular dynamics."
   W. H. Jinasena, University of Maine, Maine.
2) American Chemical Society 30th Northeast Regional Meeting, June 24-27, 2001, University of New Hampshire, Durham, NH.
   "Molecular Dynamics Simulation of the Structure , Dynamics and Electron Diffraction Patterns of $(N_2)n\ Ar_m$ Clusters".
   W. H. Jinasena and F. G. Amar, University of Maine

3) Third CERMM Symposium, Concordia University, Montreal, CA, January 11, 2003.
"Structure and Thermodynamics of $Ar_m(N_2)_n$ Clusters,"
Francois G. Amar and Jinasena W. Hewage.

7) Poster Presentations:

1) 224th American Chemical Society National Meeting, August 18-2, 2002, Boston. MA.
"Simulation of Structure, Stability and Electron Dfiffraction Patterns of Mixed Nitrogen-Argon Clusters".
J. Hewage and F. G. Amar, University of Maine.

8) Professional/Special Qualifications and Experience:

1) Worked as a temporary assistant lecturer in the Department of Chemistry, University of Ruhuna in 1994-1995 and conducted Physical Chemistry Lectures and practical Chemistry classes for the first year, second year and third year undergraduate students.
2) Worked as a probationary lecturer in the Department of Chemistry, University of Ruhuna in 1995-1997 and conducted Physical Chemistry Lectures and practical Chemistry classes for the first year, second year and third year undergraduate students.
3) Worked as a general Chemistry Teaching Assistant from 1997 to 2002 in the Department of Chemistry, University of Maine, USA.
4) Working as a senior lecturer (grade II) in the Department of Chemistry, University of Ruhuna since January 2003 and conducts Physical Chemistry Lectures and Practical Classes for both B.Sc. (General) degree and B.Sc. (Special) degree students

9) Other Activities and Workshops:

1) Participated as **a resource person** for the workshop on "**Chemistry, Physics and Mathematics for G.C.E. (A/L) Teacher**" held from 10th to 14th of December 2007 at the Postgraduate Institute of Science (PGI), University of Peradeniya.
"Chemical equilibrium"
2) Introduced a new course unit for B.Sc. (Special degree students)
CHE4493: Computational Chemistry
3) Participated as **a resource person** for the workshop on "**G.C.E. (A/L) Teacher training Workshop in Chemistry**" held on 11th and 12th of November 2006 at the department of Chemistry university of Ruhuna.
"Importance of fundamental concepts included in the G.C.E (A/L) Physical Chemistry syllabus"

4) Coordinated **Practical Session in Physical** Chemistry in the workshop on "**G.C.E(A/L) Teacher training Workshop in Chemistry**" held on 11th and 12th of November 2006 at the department of Chemistry, University of Ruhuna.
5) Carried out a summer research project on "**Investigation of magnetic properties on small metal clusters**", from May 31st to July 31st, 2006, Department of Chemistry, University of Maine. USA.
6) Participated the workshop on "**Integrating Science and Mathematics Education into Teaching**", University of Maine, USA

7) Executive committee member of 4th Science Symposium-2006, Faculty of Science, University of Ruhuna

8) Worked as a visiting academic in the **Physical Chemistry for the course CHU 2124**, the Open University, Matara, Regional Center.

9) Participated the international conference on "New directions in Teaching, Learning and Education of Chemical Sciences at the Tertiary Level", held on 11th and 12th March 2006, Taj Samudra Hotel, Colombo.

10) Participated the subject Reviewer Training Workshop held on 27th January 2006, BMICH.

11) Participated the workshop on "**Course Planning Workshop of the Distance Education Partnership Program**" from 02nd to 4th September 2005, Blue Water Hotel, Wadduwa

12) Was a member of two-member committee appointed to investigate the salary anomalous in NARA by Minister of Fisheries and Aquatic Resources.

13) Participated the High Performance Computing Workshop on "Scientific Computing and Visualization", December 2-3,1999, Boston University, MA, USA

10) Special Academic/Professional Awards

(i) NSF Research Grant 2008 (RG/2008/BS/3)
(ii) NRC Research Grant 2007 approved and waiting for release of funds
(iii) University of Ruhuna Research Grant 2006/2007 (RU/SF/RP/2006/04)
(iv) University of Ruhuna Research Grant 2004/2005 (RU/SF/RP/2004/01)
(v) The best Teaching Assistant in general Chemistry in 2002, Department of Chemistry, University of Maine, USA

11) Names of references

Professor Francois G. Amar Department of Chemistry Aubert Hall University of Maine, Orono, ME 04469 USA (207)-581-1196 **amar@maine.edu**	Professor. R. N. Pathirana Head/Department of Chemistry, University of Ruhuna Matara Sri Lanka ranjithnp@chem.ruh.ac.lk	Professor Jayendran Rasaiah Department of Chemistry Aubert Hall University of Maine, Orono, ME 04469 USA (207)-581-1179 rasaiah@maine.edu

I hereby certify that above details are true and correct.

November 16, 2009 

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Date Signature