

CURRENT POSITION:

**Professor of Architecture
(Building Science and Technology)**

Faculty of Environmental Design
The University of Calgary
2500 University Drive NW
Calgary, Alberta T2N 1N4
Telephone: 403-220-6608

E-mail: lee@ucalgary.ca

QUALIFICATIONS:

- 2008 Qualified by Calgary Health Region as an *Indoor Air Quality Consultant* to assess hazardous materials in grow-ops and conduct fungal air testing.
- 1999 **AIHA** Full member, American Industrial Hygiene Association, #145172.
- 1998 **Qualified** To supervise and examine **Ph.D.** candidates.
- 1997 **AAEM** Honourary member, American Academy of Environmental Medicine.
- 1985 **Certificate** Certified Fallout Shielding Analyst #4310-85.
Emergency Preparedness, Public Works Canada.
- 1981 **MRAIC** Member, Royal Architecture Institute of Canada.
- 1980 **MAAA** Registered architect, province of Alberta, #851.

EDUCATION:

- 1975 **M.Arch.** The Ohio State University, Columbus, Ohio
- 1973 **B.Arch.** Case Western Reserve University, Cleveland, Ohio
- 1970 **Dipl.Arch.** Ryerson University, Toronto, Ontario
- Continuing Education courses, workshops and seminars in air contaminants, mould, remediation, engineering, occupational health, industrial hygiene, medicine, biometeriology, etc. from the American Academy of Environmental Medicine, American Environmental Health Foundation, CMHC, ASHRAE, IFMA, AIHA, Cdn Institute of Public Health Inspectors, etc.*

TEACHING:

- 1991-present Professor of Architecture (tenured)
- 1990-2008 Adjunct Professor and sessional instructor, The University of Manitoba
- 2007-present Examiner, Royal Architectural Institute of Canada, Syllabus Program
- 2004 Visiting Professor, Chongqing University, China
- 2003-2004 Program Director, Environmental Design, University of Calgary
- 2003-present Faculty, American Environmental Health Foundation, Dallas, Texas
- 2001 Lyle Scholar and Visiting Professor, California State Polytechnic University, Pomona, California (Winter and Spring quarters).
- 1998 Qualified by Graduate Studies to supervise and examine dissertations for **Ph.D.** candidates including those in Engineering, Environmental Science, Management, Environmental Design and Resources and the Environment.
- 1997 Visiting Professor, Chinese University of Hong Kong (winter term)
- 1996 Acting Associate Dean, Faculty of Environmental Design
- 1980-2004 Examiner, Royal Architectural Institute of Canada, Syllabus Program,
TE-1: *Materials Properties & Applications*; TE-5: *Bldg Envelope & Assemblies*.
TE-9: *Building Systems (since 2007)*.
- 1983-1990 Sessional instructor, Arctic (Aurora) College, Ft. Smith, NT.
- 1981 Dohto University, Hokkaido, Japan (Visiting scholar)
- 1978-1984 Plumbing instructor, Piping Industry Training School, Local 496
- 1977-1991 Assistant and Associate Professor of Architecture (tenured)
- 1975-76 Ryerson Polytechnical Institute, Toronto (Sessional Instructor)
- 1975-76 Mohawk College, Hamilton (Sessional Instructor)

PROFESSIONAL PRACTICE:

Present Associate- R&D, PFK Development Inc. and Titanwall Inc., Calgary.
Present Lee & de Ridder Architects, Vancouver & Calgary.
 1980-present Principal, Tang G. Lee Architect, Calgary
 2001 Consultant - HOK Architects, Toronto
 1999-2001 Joint ventures with William Roderick Crocker Architect
 1980-2001 Association with EWS Consultants Ltd., (Engineering)
 1992-1994 President, AIRE Research Inc., Calgary, Alberta
 1975-1977 John Hix Architect and Planner, Toronto, Ontario
 1973-1974 Fee and Flinn Architects, Cleveland, Ohio
 1972-1973 James A. Ness, Landscape Architect, Cleveland, Ohio

CURRENT POSITIONS:

Life Member Arctic Institute of North America (1990-present)
Board Member Environmental Health Research Foundation, USA. (founding member 2003)
Advisory Board Healthy House Institute, <http://www.healthyhouseinstitute.com/>
Advisory Board Nova Scotia Allergy and Environmental Health Association
Board of Director Caylan Boyse Foundation for Spinal Cord Injury
Advisory Board Stardale Women's Group Inc., Calgary
Director and owner Greenview Aqua-farm Ltd. (aquaculture), 1994-2006
Editorial Board Journal of Performance of Constructed Facilities, American Society of Civil Engineers (ASCE), forensic engineering. ISSN: 0887-3828
Editorial Board J. of Architecture, Civil and Environmental Engineering. ISBN: 1674-4764,
Program Advisory Council Architectural Science program, Ryerson University, Toronto
Technical steering committee Renewable Energy and Climate Change Program. SAIC Canada
Vice-chair Acoustic Ecology Research Group, The University of Calgary
Member Standing Committee on Part 5 Environmental Separation, Canadian Codes Centre, National Research Council of Canada (2009-2014)
Member Sustainable Buildings - Technical Committee - Canadian Standards Association
Member Health and End-User Advisory Committee, Health Canada and National Research Council of Canada
Member Healthy Indoors Partnership: Best Practices Committee, Health Canada and National Research Council of Canada. www.healthyindoors.com
Member Construction, Renovation and Waste Reduction Committee, Environmental Science Division, Alberta Environmental Protection
Member Alberta Building Envelope Council (Founding member, 1984)
Member Society of Building Science Educators
Member Asthma Awareness Society, Alberta
Member Indoor Air Quality Committee, University of Calgary
Member Alberta Green Building Council, Climate Change Central
Member Canadian Society for Environmental Medicine, Ottawa,

NOTABLE PAST POSITIONS:

Member (9 years) Canadian Commission on Construction Materials Centre, CCMC, NRCC.
Chair Canadian Construction Research Board - Calgary Institute, Institute for Research in Construction, National Research Council
Conference Chair Alberta Building Envelope Council, *Building failure series of seminars*, March 29, June 14, and September 27, 1985
Conference Chair *Health in the built environment*. Alberta Society for Environmental Housing and Health, The University of Calgary, March 13-14, 1993
Conference Chair *First Canadian Symposium on Architectural Research*, 1990
Conference Chair Solar Energy Society of Canada Inc., (*SESCI'84*), Annual national conference, August 2-6, 1984
Associate Committee Division of Energy, National Research Council, Canada
Director and Treasurer Society, Environment & Energy Development Studies Fdn. (1988-1997)
Accreditation Committee Architectural Technology Programme, 1990, Northern Alberta Institute of Technology, Edmonton.
Advisory Committee *Architectural Technologies*, Southern Alberta Institute of Technology
Advisory Committee *Construction Administration and Inspection Technology*, SAIT
Advisory Committee *Architectural Technology*, N.A.I.T., Edmonton (1990-present)
Program Advisory Group *Architectural Technology*, Southern Alberta Institute of Technology

<i>Advisor</i>	Human Ecology Theme House, University of Alberta, Edmonton.
<i>Board of Directors</i>	Alberta Building Envelope Council, (founding member, 1984)
<i>Board of Directors</i>	Dynamic Mining Exploration Ltd.
<i>Board of Directors</i>	Alberta Association of Designers and Architectural Technologists
<i>Board of Directors</i>	Calgary Eco-Centre Society
<i>Vice-President</i>	Solar Energy Society of Canada Inc. (SESCI) - National
<i>Founding Chair</i>	Solar Energy Society of Canada Inc. - Calgary chapter, 1979
<i>TUCFA representative</i>	University Health, Safety and Security Committee, University of Calgary
<i>Jury Chair</i>	<i>Building Science Competition</i> . National Bldg. Envelope Council
<i>Design Jury member</i>	<i>Final architectural design</i> , RAIC Syllabus Programme
<i>Design Jury member</i>	<i>Architectural Design Awards</i> for HUDAC Parade of Homes
<i>Council Member</i>	Alberta Association of Architects
<i>Co-editor</i>	SOL, official publication of SESCO
<i>Member</i>	World Winter Cities Committee, City of Calgary

HONOURS ON TEACHING EXCELLENCE.

- Nominated for the Teaching Excellence Award
- Nominated for the Graduate Teaching Excellence Award
- Nominated by the Faculty of Environmental Design for the President's Circle Teaching excellence Award, 2001.
- Nominated for teaching excellence by the students at the University of Manitoba.

CURRENT OR RECENT COURSES TAUGHT.

EVDA 511	Building Science and Technology I
EVDA 561	Professional Practice 1
ENCI 595.05	Introduction to Masonry Design
EVDS 609	Environmental Design Practice.
EVDA 611	Building Science and Technology II
EVDS 621	Health in the Built Environment
EVDS 623	Sustainability in the Built Environment.
EVDA 663	Professional Practice 2
EVDS 762.01	Sustainable Building Design
No. 34217	Philosophy and Practice of Sustainable Development.

PAST COURSES TAUGHT

EVDS 610	Introduction to Architecture and the Building Industry
EVDS 625	Materials, Properties and Applications
EVDS 627	Project Management
EVDS 619	Structures
EVDS 625	Management and Cost Control in the Building Industry
EVDS 627	Architectural Acoustics
EVDS 629	Architectural Engineering Analysis I (HVAC)
EVDS 639	Architectural Engineering Analysis II (Acoustics & Lighting)
EVDS 683.24	Practice Management
EVDS 683.44	Heating, Ventilating and Air-conditioning, Acoustics and Lighting
EVDS 691.07	Architectural and Environmental Acoustics (Block course)
EVDS 691.19	Solar Energy: Advanced Topics: Technology (Block course)
EVDS 701/702	Advanced Environmental Design Practice (Core course)
EVDS 717	Architectural Professional Practice.
EVDS 755	Site and Building Development and Construction
EVDS 793.01	Workshop safety

COURSES TAUGHT AT OTHER INSTITUTIONS

Year	Institution	Topic
2007-present	Royal Architectural Institute of Canada	TE-1 Materials: TE-5 Bldg. Envelope TE-9: Bldg Sys
1998-2008	University of Manitoba	Environmental Controls 5 (HVAC acoustics lighting)
2004	Chongqing University, China	Sustainable buildings for the future
2001	Universitat Internacional de Catalunya	Solar Energy, Ecology 3
2001	California State Polytechnic University	Sustainability: Green Architecture
1980-2001	Royal Architectural Institute of Canada	TE-1: Materials, Properties & Applications
1980-2001	Royal Architectural Institute of Canada	TE-5: Building Envelope & Assemblies

1997	Chinese University of Hong Kong	Environmental Controls II
1990-1995	University of Manitoba	Building Science & Technology I & II
1980-1990	Arctic College, Fort Smith, N.W.T.	Energy Physics and Efficiency
1979-1986	Piping Industry Training School, Local 496	Solar Heating Systems
1983-1985	Lethbridge Community College	Solar Greenhouses
1981	Dohto University, Hokkaido, Japan	Solar Energy
1975-76	Ryerson Polytechnical Institute, Toronto	Building Science and Technology
1975-76	Mohawk College, Hamilton	Methods and Materials, History of Architecture

2.4 GRADUATE DEGREE SUPERVISION (INCLUDING OTHER INSTITUTIONS AND DEPARTMENTS)

# OF STUDENTS	DEGREE	DEPARTMENT	UNIVERSITY
19	Ph.D.	<ul style="list-style-type: none"> Architecture, Engineering, Management, Environmental Design, and Interdisciplinary Graduate Programme. 	University of Calgary
~130	M.Arch.	<ul style="list-style-type: none"> Architecture 	University of Calgary
~90	M.E.Des.	<ul style="list-style-type: none"> Planning, Environmental Sciences,, Urban Design, Industrial Design. 	University of Calgary
16	M.Sc.	<ul style="list-style-type: none"> Department of Civil Engineering Sustainable Energy Development Department of Biological Sciences Department of Mechanical and Manufacturing Engineering Resources and the Environment 	University of Calgary
3	M.Eng.	<ul style="list-style-type: none"> Environmental Engineering Mechanical and Manufacturing Engineering 	University of Calgary
2	M.Arch.	<ul style="list-style-type: none"> Faculty of Architecture 	University of Manitoba
1	M.Sc.	<ul style="list-style-type: none"> Faculty of Environment, Earth and Resources (Geography) 	University of Manitoba
1	M.Des.	<ul style="list-style-type: none"> Industrial Design Programme 	University of Alberta
1	M.GiS	<ul style="list-style-type: none"> Department of Geography 	University of Calgary
1	M.Div.	<ul style="list-style-type: none"> Divinity 	Briercrest Biblical Seminary

2.4.1 Ph.D. Supervision, Supervisory Committee and Examiner (19)

PhD Supervisor – 4

PhD Co-supervisor - 1

PhD Supervisory Committee – 8

PhD Candidacy and final thesis examiner – 5

PhD Thesis Advisor - 1

Ms. Rozhen Mohammed-Amin, **Ph.D.** (Computational Media Design)

“Design and product as tools for cross culture identity.”

Faculty of Graduate Studies, The University of Calgary.

Anticipated defence: 2014 (Supervisor)

Ms. Maha AbuHafeetha, **Ph.D.** (Environmental Design)

“Effect of Indoor Air Quality on Students’ Performance in Selected Elementary Schools in Calgary.”

Faculty of Graduate Studies, The University of Calgary.

Anticipated defence: 2013 (Supervisor)

Mr. Mark Iantkow, **Ph.D.** (Interdisciplinary Graduate Programme)

“Inclusive Access Education of Environmental Designers: An Interdisciplinary Approach.”

Faculty of Graduate Studies, The University of Calgary.

Anticipated defence: 2012 (Supervisory Committee)

Mr. David Ince, **Ph.D.** (Interdisciplinary Graduate Programme)

“Application of Decision Analysis Principles to Support Greater Use of Solar Energy Technologies for Electricity Production in the Caribbean.” Faculty of Graduate Studies, The University of Calgary.

Anticipated defence: 2011 (Supervisory Committee)

Mr. Mostafa Sabbagh, **Ph.D.** (Environmental Design)
“Assessment of High Performance Schools in Cold Climates.” Faculty of Graduate Studies, The University of Calgary.

Candidacy examination: June 19 2009 (Supervisory Committee)

Mr. Ahmed M. Qenawy, **Ph.D.** (Mechanical and Manufacturing Engineering),
“Innovative Hybrid Heating and Cooling Adsorption Solar System.” Faculty of Graduate Studies, The University of Calgary.

Anticipated defence: April 29 2008 (Supervisory Committee)

Ms. Alaa Kaadil, **Ph.D.** (Environmental Design), Faculty of Graduate Studies, The University of Calgary.

Candidacy Oral examination: 2007-12-05 (Examiner).

Ms. Patricia M. Glanville, **Ph.D.** (Resources and the Environment), “The Environmental Implications of CO₂ from Building Construction and Operation and Regenerative Effects of Environmental Sinks.” Faculty of Graduate Studies, The University of Calgary.

Anticipated defence (Withdrawn): 2008 (Co-supervisor)

Mr. Mohamed Kassab, **Ph.D.** (Environmental Design) “Simulation of daylighting and other building energy systems.” Faculty of Graduate Studies, The University of Calgary.

Defended: November 23 2007 (Supervisor).

Mr. Sami Fahmy, **Ph.D.** (Civil Engineering, Project Management) “Design-build. Uncertainty Management Model. Exploring Public Owner’s Opportunities and Risks.” Faculty of Graduate Studies, Univ. of Calgary.

Defended: December 24 2004 (Supervisory Committee)

Mr. Juan L. Espinoza, **Ph.D.** (Faculty of Management) “Green Energy: An innovative way for sustainability in Latin America.” Faculty of Graduate Studies, The University of Calgary.

Defended: November 2004 (Supervisor)

Mr. Carlos De Marquis, **Ph.D.** (Civil Engineering, Project Management) “Business relationship and conceptual framework in private construction projects in China.” Faculty of Graduate Studies, The University of Calgary.

Defended: September 2, 2004 (Supervisory Committee)

Ms. Cagla Dogan, **Ph.D.** (Faculty of Environmental Design) “Sustainable product design with an emphasis on integrated scales of production.” Faculty of Graduate Studies, The University of Calgary.

Candidacy Oral Examination, December 8 2003 (Examiner)

Mr. David Jan Cowan, **Ph.D.** (Faculty of Environmental Design - Architecture) Working title: “Energy and Sustainable Design.” Faculty of Graduate Studies, The University of Calgary.

Candidacy Oral Examination, August 8, 2002 (Examiner)

Ms. Christine Schuh, **Ph.D.** (Faculty of Environmental Design, Environmental Sciences), “Performance Indicators for Environmental Quality.” Faculty of Graduate Studies, The University of Calgary.

Defended: June 15, 2000. (Supervisory Committee)

Mr. Keith Pedwell, **Ph.D.** (Civil Engineering, Project Management) “Project capital cost risks and contracting strategy.” Faculty of Graduate Studies, The University of Calgary.

1996-04-18 (Withdrawn from programme) (Supervisory committee)

Mr. Changqing Wang, **Ph.D.** (Department of Civil Engineering), “Temperature Effects in Hardening Concrete.” Faculty of Graduate Studies, The University of Calgary.

Defended: October 1 1994 (Examiner)

Mr. Patrice Ameny, **Ph.D.** (Department of Civil Engineering) “Modelling the Deformation of Masonry.” Faculty of Graduate Studies, The University of Calgary.

Defended: November 1982. (Examiner)

Ms. C. Elizabeth Wilson, **Ph.D.** (Department of Anthropology) “The Environmental Niche of Aboriginal Infants: Possible Implications for Sudden Infant Deaths.” (Advisor) The University of Manitoba. (Advisor)

2.4.2 Master’s Degree Supervision (Other institutions and departments) (27).

Ms. Maha AbuHafeetha, **M.Sc.** “Investigation of the Impact of Commissioning Stages on Indoor Air Quality in New Buildings in Calgary.” Dept. of Civil Engineering, Graduate Studies, University of Calgary.

Anticipated defence – September 2009 (Co-supervisor)

Mr. Bankole Akinlabi Arowobusoye, **M.Eng.** (Environmental Engineering) “**Optimization of Volatile Fatty Acids Production in Bench Scale Studies for Enhanced Biological Nutrient Removal.**” Department of Civil Engineering, Faculty of Graduate Studies, The University of Calgary.
2009-06-22 (Examiner)

Mr. Eduard Cubi Montanya, **M.Sc.** “**Performance of Underfloor Air Distribution Systems. Temperature Stratification and Ventilation Effectiveness in the Child Development Centre.**” Dept. of Mechanical and Manufacturing Engineering and Energy and Environmental Systems Interdisciplinary Graduate Specialisation, Graduate Studies, University of Calgary.
Defended –March 30 2009, (Examiner)

Mr. Kurt G. Dorward, **M.Sc.** “**Methods for Sustainable Prairie Agriculture.**”
Faculty of Environment, Earth and Resources, The University of Manitoba, Winnipeg.
Defended – March 26 2009 (Supervisory committee)

Ms. Qiulan Zhu, **M.Sc.** “**Outdoor Tests of Modified Solar Air Collectors and Modelling of Stratified Storage Tanks.**” Dept. of Mechanical & Manufacturing Engineering, Graduate Studies, University of Calgary.
2008-5-23 (Examiner)

Mr. Lucas Da Silva, **M.Sc.** “**A Review of LEED Credits in Canadian Building Projects to Optimize Benefits and Lower Costs.**” Dept. of Civil Engineering, Faculty of Graduate Studies, University of Calgary.
2007-12-20 (Examiner)

Mr. Apoorva Sharma, **M.Eng.** (Environmental Engineering)
Department of Civil Engineering, Faculty of Graduate Studies, The University of Calgary.
2007-09-10 (Internal/External examiner)

Ms. María Antonieta Sánchez, **M.Sc.** (Sustainable Energy Development)
“**A Study of energy efficiency in buildings: Design of an efficient house for Metropolitan District of Quito.**” OLADE Sustainable Energy Project, Faculty of Graduate Studies, The University of Calgary.
2006-04-01 (Supervisor)

Mr. John Cong Lu, **M.Eng.** “**Energy Conversion and Environmental Engineering.**” Department of Mechanical and Manufacturing Engineering, Faculty of Graduate Studies, The University of Calgary.
2004-04-22 (Examiner)

Mr. Ganyo Nutakor, **M.Sc.** “**Assessing Final Cost of Construction at Bid Time.**” Department of Civil Engineering, Faculty of Graduate Studies, The University of Calgary.
2004-01-16 (Examiner)

Ms. Julia Elizabeth Lovecchio, **M.GiS.** “**Site analysis for wind turbines.**” Dept. of Geography, Faculty of Graduate Studies, University of Calgary.
2003-09-15 (Examiner)

Mr. Yong Ma, **M.Sc.** Department of Civil Engineering, Faculty of Graduate Studies, University of Calgary.
2002-12-16 (Examiner)

Ms. Liwen Ren, **M.Sc.** “**Trust and engineering selection in the oil and gas industry.**” Department of Civil Engineering, Faculty of Graduate Studies, The University of Calgary.
May 27, 2002 (Examiner)

Ms. Megan Kemper Strickfaden, **M.Des.** “**Sustainable solar collector**” Industrial Design Programme, Faculty of Art and Design, Faculty of Graduate Studies, The University of Alberta.
2001-10-15 (Supervisory committee)

Mr. Kevin Porter, **M.Arch.** “**Alternative secondary school facility in Edmonton.**” Faculty of Architecture, The University of Manitoba.
2000-05-01 (External thesis advisor)

Ms.Carolynn Wilson, **M.Arch.** “**Native Women’s Healing Lodge, St. Laurent, Manitoba.**”
Faculty of Architecture, The University of Manitoba.
2000 (External thesis advisor)

Mr. Bradley Hopper, **M.Sc.** (Aquatic Ecology) “**Iron and Light Limitation of Freshwater Chrysophyte Phytoplankton.**” Department of Biological Sciences, Faculty of Graduate Studies, The University of Calgary.
Defended on 1999-11-01 (Examiner)

Ms. Cheryl Alanna Dean, **M.Eng.** Environmental Engineering Programme, Department of Civil Engineering, Faculty of Graduate Studies, The University of Calgary.
June 30, 1998 (Examiner)

Mr. Jo-Jimmy Chui, **M.Sc.** "**Early Thermal Cracking Behaviour of Young Concrete Under Restrained Conditions.**" Department of Civil Engineering, Faculty of Graduate Studies, The University of Calgary. 1997 (Examiner)

Ms. Anca Diana Galasiu, **M.Sc.** "**An Evaluation of the Potential for Improved Energy Efficiency at a Daylite High School.**" Dept of Mechanical Engineering, Graduate Studies, Univ. of Calgary.
May 3, 1996, and September 1996 (re-defence). (Examiner)

Reverend Gordon W. Marchant, **Master of Divinity Programme**, Theology, "Building for the Chief Designer: A Needs Assessment." Briercreech Biblical Seminary, Caronport, Saskatchewan, January 21, 1993 (Supervisory Committee)

Mr. Michael Nahir, **M.Sc.**, Committee on Resources and the Environment, (student withdrew from programme), The University of Calgary, October 1993. (Examiner)

Mr. Warren Eng, **M.Sc.** "**Finite Element Modelling of Masonry Diaphragm Walls Subjected to Lateral and Thermal Loading.**" Department of Civil Engineering, Faculty of Graduate Studies, The University of Calgary, July 7, 1989 (Examiner)

Mr. Aidan Patrick Byrne, **M.Sc.** "**A Comparative Study of the Performance and Economics of Active Domestic Solar Heating Options in Alberta.**" Committee on Resources and the Environment, The University of Calgary.
1984 (Supervisor)

Mr. Robert Leckie, **M.Sc.** "**Analysis and Modification of the Thermal Performance of Attached Greenhouse for Space Heating in Northern Climates.**" Committee on Resources and the Environment, The University of Calgary. 1984 (Supervisor)

Mr. Hannes G. Gugenham, **M.Sc.** "**Thermal Responses of Bridge-slabs to Climatological Effects.**" Department of Civil Engineering, Faculty of Graduate Studies, The University of Calgary.
October 16, 1981 (Examiner)

Mr. Rashad Ahmed Khalil, **M.Sc.** "**Stress-strain Behaviour of Clay and Concrete Masonry.**" Department of Civil Engineering, Faculty of Graduate Studies, The University of Calgary.
July 7, 1979 (Examiner),

Mr. Patrice Ameny, **M.Sc.** "**Elastic and Creep Properties of Lightweight Concrete Masonry.**" Department of Civil Engineering, Faculty of Graduate Studies, The University of Calgary.
January 25, 1979 (Examiner)