

# CURRICULUM VITAE

## Robert Douglas Hooton

December 2013



- Job position** Professor at the Department of Civil Engineering, University of Toronto, and NSERC/CAC Industrial Research Chair in Concrete Durability & Sustainability
- University Degrees** Graduated from the University of Toronto where he earned bachelor and master degrees in civil engineering. Hooton received his PhD from McMaster University in Ontario.
- Professional Assignments** Member of several technical committees, RILEM since 2000; American Concrete Institute (ACI), since 1977-; American Ceramics Society, Cements Division, Board of Trustees: 1996-1999, Fellow 1998, Division Chair 1993-1994, Secretary 1988; ASTM Fellow of Committee C01 1982, and member of Committee C09 since 1983; Professional Engineer in the Province of Ontario (PEO) since 1980; Canadian Standard Association (CSA) 1986; Ontario Chapter ACI (served as Director 1984-1987, President 1988); Transportation Research Board Committees since 1989; Member of Canadian Society of Civil Engineering since 2005.
- Teaching Activities** Organizer and teacher of a number of courses for BsC, MsC and PhD levels on topics such as: Concrete Technology, Instrumentation Techniques in Concrete Technology and Chemistry of Cement and Concrete. Dr. Hooton has participated as mentor and advisor in different PhD, MASc Theses and MEng Projects. Some of this works are: "Strength and Durability Properties of Self-Consolidating Concrete", 2005; "Assessment of a Rapid Test for Sulfate Resistance", 2010; Assessing Surface and Bulk Resistivity Tests for Qualifying the Chloride Penetration Resistance of Concrete", 2010; "Effect of Product Form of Silica Fume on its Ability to Control Alkali-Aggregate Reaction", 2000; "Utilization of Cement Kiln Dust", 2009; Mitigation of ASR with Slag-Silica Fume Ternary Systems, 2002.
- Professional Publications** Author or co-author of many technical articles (200), technical reports (36), also he has made many contributions to books as a chapter Author (7) and editor (3). Among his works are: "Design and Control of Concrete Mixtures", 8th Canadian Edition, Cement Association of Canada, 411 pp., June 2011. "A Critical Review on Test Methods for Evaluating the Resistance of Concrete Against Sulfate Attack", Chapter 4 in Performance of Cement-based Materials in Aggressive Aqueous Environments, RILEM, Springer, Dec. 2012; "The Reactivity and Hydration Products of Blast-Furnace Slag", Chapter in Supplementary Cementing Materials, editor, V.M. Malhotra, CANMET 1987, pp. 247-288; "Carbonate Additions to Cement", ASTM STP 1064, 1990; "Observations of chloride ingress and calcium oxychloride formation in laboratory concrete and mortar at 5°C", Cement and Concrete Research, Vol. 45, 2013, pp. 79-90; "Prescriptive versus Performance approaches for durability design-The end of innocence", Materials and Corrosion, Vol. 63, No. 12, 2012, pp. 1097-1101; "Present and future durability challenges for reinforced concrete structures," Materials and Corrosion, 2012, Vol. 63 No. 12, pp. 1047-1051; "Sulfate Resistance of Portland-Limestone Cements in Combination with Supplementary Cementitious Materials", Materials and Structures, 13 pp. published on-line Oct. 2. 2012; "Thaumasite Sulfate Attack in Portland and Portland-Limestone Cement Mortars Exposed to Sulfate Solution," Construction and Building Materials, Vol. 40, 2013, pp. 162-173; "Optimization of Aggregate Gradation Combinations to Improve Concrete Sustainability and Durability," Proceedings, 3rd International Structural Specialty Conference, CSCE, Edmonton, June 6-9, 2012, Paper STR-1059, 9 pp.; "Performance Standards and Specifications for Concrete for Promotion of Sustainable Construction", proceedings, CONSEC'07, France, June 4-6, 2007, Vol. 1, pp. 815-830.

## CURRICULUM VITAE

### Ole Mejlhede Jensen

27. November 2013



#### Personal

Birth Date: October 13, 1966

Job position: Full professor and head of Section of Construction Materials, Techn Univ DK  
Honorary professor in Southeast University and Jiangsu Academy of Building Science, CN  
Previous visiting professor in Tokyo Inst Techn, JP, and Israel Inst of Techn, IL

#### University

BSc (eng), Engn Acad DK, 1989, MSc (eng), Techn Univ DK, 1991

#### Degrees

PhD (eng), Techn Univ DK, 1993, DSc (eng), Aalborg Univ, 2005

#### Professional Assignments

Member of The Danish Academy of Technical Sciences; Fellow of RILEM; Chairman of RILEM TAC: Technical Activities Committee 2006-2010; Chairman of RILEM EAC: Educational Activities Committee 2006-; "Expert member" of RILEM TAC: Technical Activities Committee 2003-2006; Secretary to RILEM TC 196-ICC: Technical committee on internal curing of concrete; Chairman of the Danish Mortar Assessment Body (DMØK), 1999-2005; Chairman of the Mortar committee certification body, Dancert, affiliated to the Danish Technological Institute, 2005; Executive member, Curing Meter Inc.; Court appointed technical expert, Western High Court, 2001-2003; Member of the Advisory Board of the Danish Technical Research Council, 2001-2005; Chairman and member of evaluation committees for several full professorships, lectureships and PhD-projects inside and outside Denmark; Officially appointed external examiner for BSc and MSc in Civil Engineering, The Danish Ministry of Education, 2001-; Member of nomination committee for RILEM vice president 2006; Chairman of nomination committee for Robert L'Hermite medal 2006 and 2009; Chairman of the American Society for Testing and Materials (ASTM) task group "Standard Test Method for Autogenous Strain of Cement Paste and Mortar" 2005-2009; Associate editor of Materials and Structures 2005-2010 (ed. handling of 360 submissions); Organizational involvement in more than 30 international conferences; Referee for more than 20 international journals and academies.

#### Teaching Activities

Tutor, speaker and organizer of a number of courses at BSc and MSc level within construction materials, cement and concrete technology and material physics since 1991. Tutor, speaker and organizer of more than 10 international doctoral (PhD) courses on advanced cement-based materials around the world since 1999. Supervisor for numerous BSc, MSc and PhD students since 1992 (Aalborg University and Technical University of Denmark)

Establishment of an Educational Activities Committee within RILEM

Implementation of a new DTU 5-ECTS course on "The Science of Construction materials" including class-room demonstrations

#### Professional Publications

Author of approx. 140 scientific publications, including international refereed journal papers, patents, conference proceedings, standards, books, anthologies, etc.

# CURRICULUM VITAE

## Konstantin Kovler

December 2013



- Job position** Associate Professor at the Faculty of Civil and Environmental Engineering, Technion- Israel Institute of Technology
- University Degrees** D. Sc. in Structural Engineering, State University of Civil Engineering (former Civil Engineering Institute), Moscow, 1986.  
M. Sc. (summa cum laude) in Industrial and Civil Construction, State University of Civil Engineering, Moscow, 1978.
- Professional Assignments** National Building Research Institute (NBRI), Faculty of Civil and Environmental Engineering, Technion, Haifa: Head of the Building Materials and Technology Department since 2005, Principal Researcher since 1996, Researcher 1991 – 1996; Senior Research Fellow, State Open University, Moscow, 1989 – 1990; Senior Research Fellow, Laboratory of Physical Chemical and Physical Mechanical Research, USSR Research Institute of Building Materials and Structures, Moscow, 1987 – 1989; Department of Structures Testing, Faculty of Civil Engineering, State University of Civil Engineering, Moscow: Junior Research Fellow 1982 – 1986, Senior Research Engineer 1981 – 1982, Research Engineer 1980 – 1981, Research Engineer-Department of Soil Mechanics and Foundations, Faculty of Hydrotechnical Construction 1978 – 1980. Member of different associations such as RILEM, ACI and the Association of Civil and Infrastructure Engineers in Israel.
- Teaching Activities** Mentor and advisor of several PhD, M.Sc and D.Sc student projects, in subjects as: Modeling of internal curing of high strength concrete; Optimization of pre-saturated lightweight aggregate to counteract autogenous shrinkage of high strength concrete, Influence of wet lightweight aggregate on autogenous curing of high strength concrete, Testing of radon exhalation rate from building materials. Dr. Kovler has organized several courses, in subjects as: Building Materials, Building Materials and Processes, Construction/Technology with/of Metallic - Materials, Plastic and Composite Materials, Composite Materials in Construction, Advanced Chapters in Cementitious Systems.
- Professional Publications** Author of 6 books, 220 technical publications and 18 book chapters and developer of 5 patents. Relevant publication:
- Cracking sensitivity of normal and high strength concretes,
  - Radiological constraints of using building materials and industrial by-products in construction,
  - Effect of SAP on the Mechanical Properties of Concrete
  - Types of Damage in Concrete Structures, Failure, Distress and Repair of Concrete Structures
  - Effect of Internal Curing on Autogenous Deformation

# CURRICULUM VITAE

## Tang Luping



**Personal** Job Position: Professor of Department of Civil and Environmental Engineering Chalmers University of Technology.

**University Degrees** B. Sc. in Building Materials, Chongqing Institute of Architecture & Engineering, China, 1982.  
Lic. in Building Materials, Chalmers University of Technology, Gothenburg, Sweden, 1993  
Ph.D. in Building Materials, Chalmers University of Technology, Gothenburg, Sweden, 1996  
Diploma of Higher Education, IT University in Gothenburg, Sweden, 2010

**Professional Assignments** Professor, Research leader of Group of Building Materials, Department of Civil and Environmental Engineering, Chalmers University of Technology 2008-; Associate Professor and Research Leader, Department of Civil and Environmental Engineering, Chalmers University of Technology (50% of full time), Research Scientist, Department of Building Technology and Mechanics, SP Technical Research Institute of Sweden (50% full of time) 2004-2008; Department of Building Technology, SP Swedish National Testing and Research Institute 1995-2004; Doctoral Student, Institute of Building Materials, Chalmers University of Technology 1990-1995. Member of different committees, RILEM TC 235-CTC, RILEM TC 230-PSC, RILEM TC 213-MAI.

**Teaching Activities** Tutor and speaker of a number of courses about the chloride transport in concrete,

**Professional Publications** The Rapid Chloride Migration (RCM) Test: adopted as a standard in many countries, (e.g. GB/T 50082-2009); Book Resistance of Concrete to Chloride Ingress – Testing and Modelling, Taylor & Francis Group, 2011; and more than 100 popular research articles about cementitious materials and concrete durability, among his works are: A Study of Consequences of Freezing of Concrete Structures for Storage of Nuclear Waste due to Permafrost, 2013; Electrochemical migration technique to accelerate ageing of cementitious materials, EPJ Web of Conferences, 2013; Recommendation of RILEM TC 178-TMC: Testing and modelling chloride penetration in concrete, Materials and Structures, 2013; Chloride profiles along the concrete–steel interface, International Journal of Structural Engineering, 2013; The introduction of Key Performance Indicators (KPI) for predicting the state of health C Green, S Nanukuttan, International Congress on Durability of Concrete, 2012; Critical Conditions for Depassivation of Steel in Concrete: Interface Chloride Profiles and Steel Surface Condition, Nordic Concrete Research, 2012; Chloride analysis in concrete by LA-ICP-MS, Advances in Construction Materials through Science, 2011; Chloride diffusivity of self-compacting concrete, First Int. RILEM Symp. on Self-Compacting, 1999; Laboratory test methods, Performance Criteria for Concrete Durability, 1995; Slab test: Freeze/thaw resistance of concrete—Internal deterioration L Tang, PE Petersson - Materials and structures, 2004.

# CURRICULUM VITAE

## Karen Louise Scrivener

December 2013



- Job position** Professor (ordinaire) and Director of Laboratory of Construction Materials at Ecole Polytechnique Federale de Lausanne, Switzerland.
- University Degrees** PhD in Materials Science, Imperial College London, U.K., 1984  
Master on Materials Science, University Pennsylvania, U.S.A., 1980  
MA in Natural Sciences (3 year specialisation) – Metallurgy and Materials Science, Clare College, Cambridge University, U.K., 1979.
- Professional Assignments** Full Professor and Director of the Construction Materials Laboratory (LMC) at Ecole Polytechnique Fédérale de Lausanne, since 2001 ; Editor-in Chief Cement and Concrete Research, since 2005; Senior Scientist & Head of the Calcium Aluminates Department at Lafarge company, France, 1995-2001; Lecturer of Department of Materials and head of the research group on cement and concrete at Imperial College London, U.K., 1991 – 1995; Warren Research Fellow of the Royal Society at Imperial College London, U.K., and independent research on characterization and quantification of cement microstructures by electron beam techniques, 1986 – 1991; Post-doctoral Research Assistant at Imperial College London, U.K., 1983 – 1986. Member of different organisations such as RILEM and ACI.
- Teaching Activities** Construction Materials for 1<sup>st</sup> year Civil Engineers (currently 220 students), Construction Materials and Materials Science for 3<sup>rd</sup> year students, Advanced Material Science for 4<sup>th</sup> Year students (15-40), Crystallography and Materials Science for 2<sup>nd</sup> year students and organizer and professor of more than 20 doctoral courses.
- Professional Publications** Author of many relevant publications on kinetics, hydration and microstructure of portland cement based systems and supplementary cementitious materials. Her fields of expertise are quantitative microstructural characterisation, microstructural modeling, and micro-mechanics of wood. Her most important works include:
- Studying nucleation and growth kinetics of alite hydration
  - Backscattered electron imaging of cementitious microstructures: understanding and quantification
  - The interfacial transition zone (ITZ) between cement paste and aggregate in
  - Influence of limestone on the hydration of Portland cements
  - A thermodynamic and experimental study of the conditions of thaumasite formation
  - Relation of expansion due to alkali silica reaction to the degree of reaction measured by SEM image analysis

# CURRICULUM VITAE

**Jason Weiss**

December 2013



**Job position** Professor of Civil Engineering and Director of the Pankow Materials Laboratory of Purdue University.

**University Degrees** PhD Civil Engineering Northwestern University Evanston, IL, USA, 1997-1999.  
MSc Civil Engineering Northwestern University Evanston, IL, USA, 1995-1997.  
B.A.E. Architectural Engineering Penn State University, University Park, PA, USA 1990-1995.

**Professional Assignments** Guest Researcher, National Institute of Standards and Technology 2011-2012; Courtesy Appt., School of Material Science and Engineering, Purdue University 2010; Director of the Pankow Materials Laboratories, Purdue University since 2009; Professor, School of Civil Engineering, Purdue University since 2007; Associate Head, School of Civil Engineering, Purdue University 2007-2009; Assistant of the Head for Research, School of Civil Engineering, Purdue University 2005-2007; Associate Professor, School of Civil Engineering, Purdue University 2004-2007; Visiting Professor, Technical University of Denmark 2004 (May-Oct); VBL Visiting Professor, Oita University Dept. of Architectural Engineering 2004 (Jan-Feb); Assistant Professor, School of Civil Engineering, Purdue University 1999-2004; Member of the American Concrete Institute (ACI 123, 318A), the American Society of Civil Engineers, RILEM, Transportation Research Board, and American Society for Testing and Materials.

**Teaching Activities** Organized The Committee of the Annual Faculty Enhancement Workshop for Teaching the Material Science, Engineering, and Field Aspects of Concrete at Purdue University, also he have several teaching recognition such as: Roy G and Myrna E Wansik Teaching Award - 2001, 2005, 2006; A. A. Potter Best Teacher Award for the College Engineering (2010); Elected Fellow of the Purdue Teaching Academy-2012. Also Dr. Weiss has worked as advisor for numerous doctoral students (15+), masters students (30+), undergraduate students (40+) and post-doctoral researchers, visiting professors, and visiting scholars (20+).

**Professional Publications** Author/speaker of many important articles/presentations. Some of the titles of his works describe his areas of interest:

- Shrinkage Cracking of Restrained Concrete Slabs
- Prediction of Shrinkage Stress and Displacement Fields in a Concrete Slab Restrained by an Elastic Sub grade
- Measurement of Volume Change in Cementitious Materials at Early Ages, Review of Testing Protocols and Interpretation of Results
- Interactions Between Shrinkage Reducing Admixtures and Cement Pastes Pore Solution
- Recent Trends to Reduce Shrinkage Cracking In Concrete Pavements
- Shrinkage and Creep of Concrete
- Neutron Tomography Investigation of Superabsorbent Polymers in Cement Paste



# CURRICULUM VITAE

## Alejandro Durán Herrera

December 2013



**Job position** Full time Professor and Head of the Concrete Technology Department at the Facultad de Ingeniería Civil (FIC) of the Universidad Autónoma de Nuevo León (UANL) in Monterrey, Mexico

**University Degrees** Postdoctoral studies at the Université de Sherbrooke, Québec, Canada, 2005-2007. PhD on Materials Engineering, MSc on Environmental Engineering and BSc in Civil Engineering, UANL, 2003, 1998 and 1992 respectively.

**Professional Assignments** Professor of Concrete Technology at undergraduate level and advanced Concrete Technology, Hydraulic Binders and Research Methodology at graduate level in the MSc Program on Construction Materials and in the PhD Program on Construction Materials and Structural Engineering at UANL, since 2007; Fellow and Board Member of the American Concrete Institute (ACI) and of the following committees: Educational Activities, Certification Programs, International Activities and of the International Certification Sub-Committee; Treasurer and Member of the ACI Northeast Mexico Chapter; National Researcher Level 1 granted by the National Research System (SNI) of the National Council for Science and Technology (CONACYT); Member of the Consolidated Academic Group on Concrete Technology of the School of Civil Engineering, UANL; Coordinator of the Doctoral program in Engineering of Construction materials and structures, UANL, 2007-2011; Member of different associations as RILEM, ACI and ASTM; Member of different editorial committees and reviewer of journals as "Construction and Building Materials" of Elsevier and Concreto y Cemento, Investigación y Desarrollo" of the Instituto Mexicano del Cemento y del Concreto (IMCYC).

**Teaching Activities** Tutor of PhD and MSc students; Advisor of Bachelor students for the ACI student competitions; Organizer of different seminars, courses, conferences on cement and concrete technology, as well as on materials for concrete production.

**Professional Publications** Author and coauthor of several scientific papers on subjects as high volume fly ash, internal curing, and self-consolidating concretes.