

CISE UNLUER

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Nationality: Cypriot (EU)

EDUCATION

University of Cambridge **Cambridge, UK**
PhD in Structural and Environmental Engineering
Graduation: July 2012

Imperial College London **London, UK**
MSc and DIC (Diploma of the Imperial College) in Concrete Structures and Business Management
Graduation: September 2007

Vanderbilt University **Nashville, TN, USA**
BEng in Civil Engineering with a minor in Mathematics
Graduation: May 2006

ACADEMIC EXPERIENCE

Massachusetts Institute of Technology – Research Associate; August 2012 – Present **Boston, MA, USA**
▪ Post-doctoral researcher

National University of Singapore – Visiting Researcher; March – April 2011 **Singapore**

University of Cambridge – Student Supervisor; October 2009 – July 2012 **Cambridge, UK**
▪ Supervised two 4th year engineering students during their final year research projects
▪ Supervised 25 engineering students taking Organizational Behaviour course

University of Cambridge – Graduate Student/Researcher; April 2009 – July 2012 **Cambridge, UK**
▪ Research on reactive magnesium oxide cements. Main research objectives include investigating properties and applications of MgO cements, optimizing CO₂ sequestration and mechanical performance

Imperial College London – Graduate Student/Researcher; May 2007 – September 2007 **London, UK**
▪ MSc dissertation on “an Experimental Evaluation of Recycled Aggregate Concrete from Waste Silt”
▪ Main goal was to produce and evaluate the mechanical properties of silt aggregate, its implementation in concrete mixes; and recommend further developments to its strength and stability for further use

MEMBERSHIPS, HONOURS & AWARDS

IWHM Bernard Butler Trust– Grant by the Institution of Works & Highways Management, May 2011

Lord Frederick Cavendish Studentship– Awarded by Lucy Cavendish College, July 2010

Dow Sustainability Innovation Challenge – Overall winner at the University of Cambridge, March 2010

Cambridge Philosophical Society – Member since March 2010

Institution of Civil Engineers – Graduate Member (training plan for the CEng MICE position), October 2007

Fundamentals of Engineering (FE) Exam – Passed and obtained Engineer in Training (EIT) title, May 2006

CASP (Fulbright) Scholar – Cyprus America Scholarship Program by Fulbright Commission, August 2002

Vanderbilt Engineering Academic Achievement Scholar – Merit based in engineering, August 2002

Vanderbilt University Dean’s List – Merit based list, 2002 – 2006

Chi Epsilon, Alpha Lambda Delta Honour Society, Athenians Junior Honorary, National Scholars Honour Society, The National Dean’s List – Academic Honorary Societies, 2002

Near East Scholar – Ranked 1st out of 550 candidates nationwide in high-school entrance exam, 1996

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WORK EXPERIENCE

Reach Cambridge – Instructor; July 2011 & 2012 **Cambridge, UK**

- Prepared and taught a weekly engineering course for students aged 16-18 from around the world

Cambridge Judge Business School – Market Researcher; October 2009 – January 2010 **Cambridge, UK**

- Performed technology assessment and market research on an innovative flexible display technology within the signage industry

KIBRIS Newspaper – Weekly columnist; June 2009 – Present **Nicosia, Cyprus**

- Writing a weekly column about climate change, sustainability, and renewable energy related issues in the most widely read newspaper in North Cyprus

Ramboll Group – Structural Engineer; October 2007 – March 2009 **London, UK**

- Worked on the design of various projects involving reinforced concrete and steel construction including York Road (multi-storey reinforced concrete frame, office refurbishment), Liverpool Football Club stadium (steel roof design), Black Sea Hotel & Residences (reinforced concrete frame, to be built in a seismic region), University of Bedfordshire (reinforced concrete frame)
- Responsible for organizing technical highlights and regular site visits for training purposes
- Team leader for the MERIT 2009 competition, representing the Cambridge office of the company

The Near East College Science Department – Part-time Lecturer; Summer 2006 **Nicosia, Cyprus**

- Taught SAT I courses to high-school students, preparing them for the Math and English sections

Vanderbilt University Department of Mathematics – Grader; May 2004 – 2006 **Nashville, TN, USA**

- Graded tests and assignments for about 50 students taking Second-year Accelerated Calculus

Lennar Homes – Civil Engineering Intern; Summer 2005 **Orlando, FL, USA**

- Worked with the Purchasing Agents and Estimators to prepare payment schedules, scopes of work and initial contracts for the upcoming subcontractors; set up cost variance and operational review reports

Korman Construction Ltd. – Civil Engineering Intern; Summer 2004 **Nicosia, Cyprus**

- Assisted with several construction projects involving the AutoCAD computer systems, compiled project schedules to communicate timelines to clients, performed site visits, prepared monthly progress reports

Vanderbilt Development & Alumni Relations – Worker; October 2003 – 2004 **Nashville, TN, USA**

- Worked closely with alumni in raising funds for the school, organized reunion and other alumni events

SKILLS

Computer Programs: Bentley Redline, CSC S-frame, CSC Fastrak Simple Beam & Simple Column, TEDDS, ArcGIS, AutoCAD, Matlab, ANSYS, Cambridge Engineering Selector, J.D. Edwards, MS Office, HTML, Internet Explorer, Netscape Navigator

Languages: Turkish (native speaker), English (fluent), German (basic)

Training Courses: ICE 5-weeks Contracts Course, Seismic Design to EC8, Building Design to EC2, Corus Sustainability Seminar, The Art & Science of Sustainable Buildings by ICE, Health, Safety & Welfare for Site and General Safety and Legislation, Making Professional Presentations, Report Writing Skills, Into Business

PUBLICATIONS

Working Journal Papers

Unluer, C., Al-Tabbaa, A. (2012), "Impact of hydrated magnesium carbonate additives on the carbonation of reactive MgO cements", to be submitted to Cement and Concrete Research

Yi, Y. L., Liska, M., **Unluer, C.,** and Al-Tabbaa, A. (2012), "Carbonating magnesia for soil stabilisation", Submitted to Geotechnique

Yi, Y. L., Liska, M., Akinyugha, A., **Unluer, C.,** and Al-Tabbaa, A. (2012), "Preliminary laboratory-scale model auger installation and testing of carbonated soil-MgO columns", Submitted to Geotechnical Testing Journal

Conference Papers

Unluer, C., Al-Tabbaa, A., "Effect of Aggregate Size Distribution on the Carbonation of Reactive Magnesia Based Porous Blocks", Proceedings of the 18th Annual International Sustainable Development Research Conference, Hull, UK, June 2012

Unluer, C., Al-Tabbaa, A., "Green Construction with Carbonating Reactive Magnesia Porous Blocks: Effect of Cement and Water Contents", Proceedings of the International Conference on Future Concrete 2011, Dubai, UAE, December 2011

Theses

Unluer, C., "Enhancing the Carbonation of Reactive Magnesia Cement-Based Porous Blocks", *PhD dissertation submitted for the Degree of Doctor of Philosophy*, University of Cambridge, 2012

Unluer, C., "Optimising the Sustainability of Reactive Magnesia Cement-Based Porous Blocks", *First Year Research Report submitted for the Degree of Doctor of Philosophy*, University of Cambridge, 2010

Unluer, C., "An Experimental Evaluation of Recycled Aggregate Concrete from Waste Silt", *Dissertation Submitted for the Degree of Master of Science*, Imperial College London, 2007

PRESENTATIONS

Effect of Aggregate Size Distribution on the Carbonation of Reactive Magnesia Based Porous Blocks, invited presentation, 18th Annual International Sustainable Development Research Conference, Hull, UK, June 2012

Green Construction with Carbonating Reactive Magnesia Porous Blocks: Effect of Cement and Water Contents, invited presentation, The International Conference on Future Concrete 2011, Dubai, UAE, December 2011

Equal and Sustainable Infrastructures, invited presentation, LERU Bright Student Conference, Lund University, Helsingborg, Sweden, August 2011

MgO Cement Porous Blocks: How Sustainable Can It Get?, invited presentation, Vanderbilt Initiative for Scholarship and Global Engagement (VISAGE) Program, London, UK, June 2011

Optimising the Sustainability of Reactive Magnesia Cement-based Porous Blocks, invited presentation, The National University of Singapore, Singapore, April 2011

Magnesia Cement Porous Blocks: Sustainability Optimization, invited presentation, Dow Sustainability Innovation Student Challenge Global Recognition Event, Boston, MA, USA, October 2010

Sustainable Magnesium Oxide Cements, poster presentation, Innovate to Survive: Engineers for a One Planet Future by ICE, London, UK, June 2010

Research on Magnesium Oxide Cements, invited presentation, Geotechnical and Geo-environmental Research Group Workshop, University of Cambridge, Cambridge, UK, June 2009

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ACADEMIC ACTIVITIES

Chi Epsilon, Civil Engineering Honour Society – Secretary; August 2004 – May 2006

- Organized panels, took minutes at all meetings, composed newsletters, and contacted all members

V-Squared Mentoring Program – Student Mentor, Treasurer, Secretary; January 2003 – May 2006

- Provided social & psychological counseling and support for incoming engineering freshmen as a mentor
- Organized freshman seminar panels, took minutes at all meetings, and composed newsletters

Turkish Student Association – President; August 2002 – May 2006

- Organized campus events, worked closely and coordinated with other student organizations for several activities, managed committee meetings, recruited speakers, composed newsletters

American Society of Civil Engineers (ASCE) – Active member; August 2003 – May 2006

- Participated in the 2005 Workshop for Student Chapter Leaders in Orlando, FL

Project Future – Web Master; August 2004 – May 2006

- Updated and maintained the web-page of this economics club, encouraging students to develop an interest in consulting, marketing and financial services

VOLUNTEERING

LiterAid – Co-founder; October 2011 - Present

- Managing the charitable organization which aims to make an impact by facilitating a link between people/organisations who want to provide books as a donation and those who need them most

EducateCYPRUS – Co-founder; April 2009 - Present

- Running the charitable educational organization with an international scope in the cause of providing students of Cyprus with the opportunity of attending first-class universities in Europe and USA

EXPRESS Newspaper – Writer; November 2010 - Present

- Writing a monthly column on climate change and sustainability related issues to increase awareness

ISTE KIBRIS Magazine – Writer; March 2010 - Present

- Addressing climate change and sustainability related issues every month, providing the readers with valuable information and suggestions regarding green living

Science, Technology, Engineering and Mathematics Network – Mentor; October 2007 – Present

- Volunteering as a Science and Engineering Ambassador under STEMNET at several schools in London, promoting my skills to young learners, inspiring and encouraging them to develop an interest in science

PERSONAL

- Born on October 7, 1985 in Cyprus – EU citizen
- Enjoy the exchange of ideas with people from different cultural backgrounds
- Hobby – travelling and photography (3 time award winning)