Lidija Zdravkovic

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Academic appointments

2014 – present	Head of the Geotechnics Section, Imperial College London
2013 – present	Professor of Computational Geomechanics, Imperial College London
2007 – 2013	Reader in Computational Geomechanics, Imperial College London
2003 – 2007	Senior Lecturer, Imperial College London
1999 – 2003	Lecturer, Imperial College London
1996 – 1999	Research Associate, Imperial College London
1988 – 1992	Research and Teaching Assistant, University of Belgrade, Serbia

Education

1992 – 1996 **Doctor of Philosophy (PhD) and Diploma of Imperial College (DIC)**

Doctoral research in Geotechnical Engineering, Imperial College London
Thesis title: *The stress-strain-strength anisotropy of a granular medium under general stress conditions*

1988 – 1992 **MSc Geotechnical Engineering, University of Belgrade**

Mark: 10/10 (Distinction)
Thesis title: *Some aspects of solving nonlinear interaction problems between structural frames and soil*

1983 – 1988 **Degree in Civil Engineering (5 years), University of Belgrade**

Civil Engineering with specialisation in Structures
Overall mark: 8.89/10
Diploma project: *Design of incrementally launched concrete bridges over multiple spans*
Mark: 10/10

Work experience and responsibilities

1999 – present **Academic at Imperial College London**

- Module coordinator for:
  - Year 4 *Advanced Soil Mechanics* (MEng degree in Civil Engineering)
  - *Analysis and Constitutive Modelling* (MSc degree in Soil Mechanics)
  - *Strength and Deformation* (MSc degree in Soil Mechanics)
- Supervisor of MEng Final Year projects, MSc dissertations, PhD and post-doctoral research projects
- Personal Tutor of undergraduate and post-graduate students
- Development of experimental techniques for characterising saturated and unsaturated geomaterials under mechanical and thermal perturbations
- Development of the finite element software ICFEP for geotechnical applications
- Development of constitutive models for geomaterials
- Over the years Member of the Departmental Research Committee and Computing Committee, Departmental Disability Officer and Examination Officer
- Head of Geotechnics Section since 2014, with responsibilities for Section's finances, academic and technical support employments and promotions, development and maintenance of research facilities
- Consulting for industry

1996 – 1999 **Research Associate at Imperial College London**

Employed on EPSRC grant GR/K57459/01 *Modelling the effects of soil brittleness and anisotropy in new offshore foundation problems*; responsible for:

- Advanced Hollow Cylinder Apparatus (HCA) experiments into soil anisotropy and brittleness
- Development of advanced constitutive models for simulation of soils anisotropy and numerical analysis of offshore suction bucket foundations

1988 – 1992 **Research and Teaching Assistant, University of Belgrade**

Academic staff member at the Faculty of Civil Engineering, responsible for:

- Delivery of laboratory classes and academic tutorials
- Own MSc studies and research dissertation
- Consulting for industry

Academic profile

Recent projects

BEACON – Bentonite mechanical evolution (2017-2021)

- EURATOM work programme for implementation of first-of-their-kind geological facilities for long-term disposal of high-level nuclear waste
- €3.8M; 25 EU academic and industry partners, led by pan-European national nuclear waste management organisations
- Specific roles: design assessment of bentonite buffers through numerical modelling and laboratory testing of hydro-mechanical homogenisation of compacted bentonite

CACTUS – Climate adaptation control technologies for urban spaces (2018-2022)

- £2.2M EPSRC funded (EP/R005834/1); 6 UK university partners
- Specific roles: development of numerical models of composite barrier systems capable of limiting the impact of climate change on geotechnical infrastructure

ALPHA – Numerical analysis of laterally loaded piles in chalk (2019-2020)

- £100k EPSRC Supergen ORE Hub flexible funding
- Specific roles: characterisation of chalk behaviour from laboratory and field testing, calibration of constitutive models, predictive numerical analyses of laterally-loaded monopiles installed in chalk

PISA & PISA2 (Pile-Soil Analysis) projects (2013-2018)

- £3.8M Joint Industry Project, led by Ørsted and Carbon Trust on the development of new design methods for laterally-loaded offshore wind-turbine monopiles
- Academic partnership with Oxford University and University College Dublin; industry partners including 9 additional offshore developers
- Specific roles: field testing of monopiles in a stiff clay and dense marine sand; characterisation of clay and sand behaviour from laboratory and field testing; calibration of advanced constitutive models; predictive numerical analyses of laterally-loaded monopiles installed in stiff clays and dense marine sands

Honours and awards

- Imperial College President's Award and Medal for Excellence in Education – category Research Supervision (2019)
- BGA Fleming Award to PISA project for excellence in geotechnical design and construction (2017)
- Canadian Geotechnical Journal Editor's choice award 2017, for paper https://doi.org/10.1139/cgj-2016-0319
- Imperial College President's Award and Medal for Outstanding Research Team – awarded to ICFEP research team (2015)
- BGA Medal 2012 for paper https://doi.org/10.1680/geot.11.P.057
- BGA Medal 2010 for paper https://doi.org/10.1680/grim.2010.163.4.217
- BGA Medal 2008 for paper https://doi.org/10.1139/T08-087
- ICE Telford Gold Medal 2002 for paper https://doi.org/10.1680/geot.2002.52.6.447

Memberships

- British Geotechnical Association (BGA) and Institution of Civil Engineers (since 2000)
- UK representative and core member of ISSMGE TC103 for Numerical Analysis (since 2010) (Technical Committee of the Int. Soc. for Soil Mechanics & Geotechnical. Eng.)
- UK corresponding member of ISSMGE TC221 for Tailings & Mine Wastes (since 2019)
- Elected member of the BGA Executive Committee (2010-2013)