

## CURRICULUM VITAE

**Work address**

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1. **Surname:** Ignjatović
2. **Name:** Ivan
3. **Date of birth:** July 27<sup>th</sup> 1979
4. **Nationality:** Serbian
5. **Civil status:** married, 3 children
6. **Education:**

<i>Institution :</i>	Faculty of Civil Engineering, University of Belgrade
<i>Date:</i>	March, 2004
<i>Degree(s) or diploma(s):</i>	B.Civ.Engineering

<i>Institution :</i>	Faculty of Civil Engineering, University of Belgrade
<i>Date:</i>	October, 2009
<i>Degree(s) or diploma(s):</i>	M.Sc. (Civ.Engineering)

<i>Institution :</i>	Faculty of Civil Engineering, University of Belgrade
<i>Date:</i>	October, 2013
<i>Degree(s) or diploma(s):</i>	Ph.D. (Civ.Engineering)

7. **Language skills:** (Mark 1 to 5 for competence, where 5 is the highest)

<i>Language</i>	<i>Reading</i>	<i>Speaking</i>	<i>Writing</i>
English	5	5	4
Russian	4	3	2

8. **Membership of professional and scientific associations**

- The International Federation for Structural Concrete-**fib** – member, faculty representative
- International Union of Laboratories and Experts in Construction Materials, Systems and Structures - **RILEM** – member
- **RILEM Technical Committee:** TC CCC - Carbonation of concrete with supplementary cementitious materials - member
- Association of Structural Engineers of Serbia, **ASES**, president of Supervisor Committee
- Society for Materials and Structures Testing of Serbia, **SMSTS**, member
- Serbian Green Building Council – Faculty representative
- Serbian Demolition Association – Faculty representative
- National auditor committee, member
- Professional exams – field of concrete structures, examiner
- Reviewer in scientific journals: Construction and Building Materials, Engineering Structures, Materials and Structures, Advances in Mechanical Engineering, Journal of Advanced Concrete Technology

**9. Research related skills:**

- Supervisor and co-supervisor of 1 PhD thesis (in progress) and large number of MSc dissertations (6 in progress).
- Participant in a number of international and national scientific projects
- Author and co-author of more than 30 publications including journal articles, book chapters and conference papers.
- Reviewer for the following scientific journals: Construction and Building Materials, Engineering Structures, Materials and Structures, Journal of Hazardous Materials, Advances in Mechanical Engineering, Journal of Advanced Concrete Technology, European Journal of Environmental and Civil Engineering, Science of the Total Environment.
- Guest editor for Special Issue "Long-Term Behavior of Cementitious Materials and Reinforced Concrete Structures", Materials — Open Access Journal

**10. Other job related skills:**

- Fully computer literate; knowledge in software for structural modelling (SAP, ETABS, SAFE, ACad, Tower)
- Licence 310 – Responsible designer of civil structures
- Internal auditor for laboratories according to the standard ISO 17025:2005
- Experience in structural design, review and peer-review of different kind of reinforced concrete structures
- Strong academic knowledge and deep insight into the world-wide technical regulations as well as the knowledge of the recently developed materials and construction solutions.

**11. Present position:**

Teaching and research associate professor at the Chair for materials and structures, Faculty of Civil Engineering, University of Belgrade

Vice dean for science, Faculty of Civil Engineering, University of Belgrade

**12. Years within the company:**

14

**13. Key qualifications:**

Ivan Ignjatović has more than 14 years of experience of scientific and research activities in the field of concrete material and reinforced concrete structures. He obtained his Ph.D. with the thesis: *Ultimate limit strength of reinforced recycled aggregate concrete beams*. During his phd research he carried out a lot of experimental work on the properties of the recycled aggregate concrete and flexural and shear behavior of the structural elements – beams made with such a concrete. Dr Ignjatović is the author or co-author of several reviewed papers published in journals, scientific and professional periodicals, international and domestic congresses and symposia. These papers present results of investigation of possibilities for utilization of recycled aggregate concrete in structural elements, as well as durability and service life design of reinforced concrete structures. His research includes also utilization of supplementary cementitious materials (fly ash, slag) in structural concrete covered by investigation of high volume fly ash concrete and alkali activated fly ash concrete. A part of his research field is dedicated to the seismic analysis of reinforced concrete and masonry structures.

**14. Projects:**

International projects:

- 1) SPS project 985402 (IMSAFE): Improved Security through Safer Cementation of Hazardous Wastes. Research Project with University of Sheffield (UK) and Institute for multidisciplinary research (RS), Funded by The NATO Science for Peace and Security (SPS) Programme. Ass. Prof. dr Ivan Ignjatović – project co-director, (2018-2019).
- 2) 451-03-02141/2017-09/49: Seismic evaluation of existing buildings in Serbia and Austria – assessment, retrofitting and strengthening. Bilateral cooperation with Technische Universität Wien. Ministry for Education, Science and Technology, Republic of Serbia. (2018-2019)
- 3) Making concrete green – customized concrete structures optimized for long-term loadings. Initiation of International Cooperation with Ruhr University Bochum and Ss. Cyril and Mehtodius University in Skopje. German Research Foundation (DFG) (2018)
- 4) DS-2016-0051: Fiber reinforced alkali activated composites (properties and selected durability aspects). Multilateral Research Project with Brno University of Technology and Technical University Vienna. Ministry for Education, Science and Technology, Republic of Serbia. Ass. Prof. dr Ivan Ignjatović – project director, (2017-2018).
- 5) SCOPES (Scientific Cooperation between Eastern Europe and Switzerland), Joint Research Project with ETH Zürich. Project title: “Recycled aggregate and fly ash concrete: Economic and technologic study. From down cycling to urban ecology”. Ass. Prof. dr Ivan Ignjatović – project participant, (2014-2016).
- 6) 451-03-1924/2016-09/3: Energy and environmentally efficient resource use in the concrete construction industry. Bilateral cooperation with University of Lisbon - Instituto Superior Técnico (IST). Ministry for Education, Science and Technology, Republic of Serbia. (2018-2019)
- 7) “START” – Danube Region Project Fund: “Research of River-Port Sediment and its Potential use in Civil Engineering”, Ass. Prof. dr Ivan Ignjatović – Coordinator of Partner, (2015-2016).
- 8) COST Action TU 1301 (2014-2017): NORM for Building Materials. COST (European Cooperation in Science and Technology), Ass. Prof. dr Ivan Ignjatović – Management Committee Member, (2007-2011).
- 9) COST Action C 25 – Sustainability of Constructions – Integrated Approach to Life-time Structural Engineering, COST (European Cooperation in Science and Technology), Dr. Ass. Ass. Ivan Ignjatović – Working group Member, (2007-2011).

National projects:

- 1) Ministry of Education, Science and Technological Development of the Republic of Serbia, Technological development programme, Project No. TR36017, (2011-2015) Project title: “Utilization of by-products and recycled waste materials in concrete composites in the scope of sustainable construction development in Serbia: investigation and environmental assessment of possible applications”. Ass. Prof. dr Ivan Ignjatović - project participant
- 2) Ministry of Science and Technological Development of the Republic of Serbia, Technological development programme, Project No. TR16004, (2008-2010), Project title: “Utilization of recycled aggregate concrete in reinforced concrete structures”. Ass. Prof. dr Ivan Ignjatović - project participant.

**15. Professional Experience Record:**

<i>Date</i>	2004 up to date
<i>Location</i>	Belgrade, Serbia
<i>Company</i>	Faculty of Civil Engineering
<i>Current Position</i>	Teaching and research associate professor
<i>Description</i>	Teaching, research, design, reviewing and consulting in design and construction of reinforced and prestressed concrete structures

## 17. Awards and recognitions

- Charter from the Association of Structural Engineers of Serbia (ASES) for the best scientific achievement in the field of structural engineering for 2012. and 2013.
- Medallion of Society for Materials and Structures Testing of Serbia (SMSTS) for the best PhD thesis in the period 2011.-2014.
- Special Mention Award on the International Federation for Structural Concrete, fib Symposium, 2008. Amsterdam
- Award from foundation of “Prof. dr Vladimir Korolija“ as the best student of Department for structures, Faculty of Civil Engineering, University of Belgrade, in 2004.
- Fellowship from the fund „The most talented 500 students”

## 18. Publications (selected)

### Peer-reviewed Journal articles

1. Carević V., **Ignjatović I.** Influence of loading cracks on the carbonation resistance of RC elements. Construction and Building Materials. 2019; 227.  
<https://doi.org/10.1016/j.conbuildmat.2019.07.309>
2. Carević V., **Ignjatović I.**, Dragaš J. Model for practical carbonation depth prediction for high volume fly ash concrete and recycled aggregate concrete. Construction and Building Materials. 2019; 213, 194-208.  
<https://doi.org/10.1016/j.conbuildmat.2019.03.267>.
3. Tošić N., Marinković S., Pecić N., **Ignjatović I.**, Dragaš J. Long-term behaviour of reinforced beams made with natural or recycled aggregate concrete and high-volume fly ash concrete. Construction and Building Materials. 2018; 176, 344-358.  
<https://doi.org/10.1016/j.conbuildmat.2018.05.002>
4. **Ignjatović I.**, Marinković S., Tošić N. Shear behaviour of recycled aggregate concrete beams with and without shear reinforcement. Engineering Structures. 2017; 141, 386-401.  
<http://dx.doi.org/10.1016/j.engstruct.2017.03.026>
5. Marinković S., Dragaš J., **Ignjatović I.**, Tošić N. Environmental assessment of green concretes for structural use. Journal of Cleaner Production. 2017; 154, 633-649  
<http://dx.doi.org/10.1016/j.jclepro.2017.04.015>
6. **Ignjatović I.**, Sas Z., Dragaš J., Somlai J., Kovacs T. Radiological and material characterization of high volume fly ash concrete, Journal of Environmental Radioactivity. 2016; 168, 38-45.  
<http://dx.doi.org/10.1016/j.jenvrad.2016.06.021>
7. Tošić N., Marinković S., **Ignjatović I.** A database on flexural and shear strength of reinforced recycled aggregate concrete beams and comparison to Eurocode 2 predictions. Construction and Building Materials. 2016; 127, 932-944.  
<http://dx.doi.org/10.1016/j.conbuildmat.2016.10.058>
8. Nuccetelli C., Trevisi R., **Ignjatović I.**, Dragaš J. (2016): Alkali-activated concrete with Serbian

- fly ash and its radiological impact, *Journal of Environmental Radioactivity*, 2016; 168, 30-37.  
<http://dx.doi.org/10.1016/j.jenvrad.2016.09.002>
9. Dragaš J., **Ignjatović I.**, Tošić N., Marinković S. (2016): Mechanical and time-dependent properties of high-volume fly ash concrete for structural use. *Magazine of Concrete Research*. 2016; 68(12): 632-645  
<https://doi.org/10.1680/jmacr.15.00384>
  10. **Ignjatović I.**, Marinković S., Mišković Z., Savić A. (2013): Flexural behavior of reinforced recycled aggregate concrete beams under short-term loading, *Materials and Structures* 46(6), 1045-1059.  
<https://doi.org/10.1617/s11527-012-9952-9>
  11. Marinković S., Radonjanin V., Malesev M., **Ignjatović I.** (2010): Comparative environmental assessment of natural and recycled aggregate concrete, *Waste Management* 30(11), 2255-2264.  
<http://dx.doi.org/10.1016/j.wasman.2010.04.012>
  12. Marinković S., Koković V., **Ignjatović I.**, Alendar V. (2010): Belgrade's Delta City shopping mall - design and construction, *Structural Concrete-Journal of the fib*, Vol.11(1), 2010, 3-13.

### Books chapters

1. Marinković S.B., **Ignjatović I.S.**, Radonjanin V.S, Malešev M.M. (2012): Recycled Aggregate Concrete for Structural Use-An Overview of Technologies, Properties and Applications, Chapter 7 in Fardis M.N. (ed): *Innovative Materials and Techniques in Concrete Construction*, ISBN 978-94-007-1996-5, Springer Science+Business media B.V., p. 115-130.
2. Marinković S.B., **Ignjatović I.S.**, Radonjanin V.S (2013): Life cycle assessment (LCA) of concrete with recycled aggregates (RAs), Chapter 23 in Pacheco-Torgal F. et al (eds): *Handbook of recycled concrete and demolition waste*, Woodhead Publishing Limited, p. 569-604.
3. Marinković S.B., Malešev M., **Ignjatović I.S.** (2014): Life cycle assessment (LCA) of concrete using recycled concrete or natural aggregates, *Eco-efficient construction and building materials*, Woodhead Publishing Limited, p. 239-266.

### 19. Others:

Besides teaching and research activities, he has also worked on structural engineering projects, the following being the most important ones:

1. Concept and Schematic Design of the project: “Dubai Creek Harbour development”, Dubai, UEA, 2017
2. Structural Review of Structural Design for the “Underground Garage Knez Miloš”, Serbia, 2017
3. Structural Review of Structural Design for IKEA Belgrade East, Serbia, 2016
4. Structural Review of Detailed Structural Design for “Valjara – Block A and B”, Industry complex Michelin-Tigar Tyres, Pirot, Serbia, building area is approx. 45,000 sqm. 2014-2015
5. Preliminary and Detailed Structural Design of CCEI Bank building in Bata. Total building area is approx. 7500sqm., 2011-2012
6. Structural Review of Science and Technology Park, Phase I, Novi Sad, Serbia, 2011
7. Structural Peer Review: HILTON RIYADH HOTEL & RESIDENCE, for O&A - Omrania & Associates, 2011
8. Preliminary and Detailed Structural Design design of Hotel “Center” in Novi Sad. Total building area is approx. 5,000 sqm. 2008-2009
9. Preliminary and Detailed Structural Design of the Delta City Shopping Mall, Bgrade. Total

building area is approx. 80,000 sqm. 2005-2007

10. Structural Peer Review of Post-Tensioned Slab Design at Level 6 at The Gateway Tower 2 Development in Abu Dhabi, 2007
11. Preliminary and Detailed Structural Design of “Zvezdara theater” building in Belgrade. 2004
12. Detailed structural rehabilitation and strengthening design for 10 multistory residence buildings damaged during Kraljevo earthquake, 2011