

# CURRICULUM VITAE

<b>Family Name</b>	<b>ĐUKIĆ</b>
<b>Name</b>	<b>ALEKSANDAR</b>
<b>Date and Place of Birth:</b>	27/03/1965, Belgrade (Serbia)
<b>Nationality</b>	Serbian
<b>Civil Status</b>	Married
<b>Email</b>	<a href="mailto:djukic@grf.bg.ac.rs">djukic@grf.bg.ac.rs</a> , <a href="mailto:aleksandar.djukic@yahoo.com">aleksandar.djukic@yahoo.com</a>

## Education:

Institution	Degree(s) or Diploma(s) obtained:
Faculty of Civil Engineering, Dept. of Hydraulic Engineering, University of Belgrade, Serbia [1985-1990]	<i>BSc in Civil Engineering, Hydraulic Engineering (5-years under-graduate studies)</i>
Faculty of Civil Engineering, Dept. of Hydraulic Engineering, University of Belgrade, Serbia [1990-1992]	<i>MSc in Civil Engineering, Hydraulic Engineering (2 years post-graduate studies).</i>
University of Belgrade, Serbia [2016]	<i>PhD in Technical Sciences - Civil Engineering</i>

**Language skills:** Indicate competence on a scale of 1 to 5 (1 - excellent; 5 - basic)

Language	Reading	Speaking	Writing
<b>Serbian</b>	Native speaker		
<b>English</b>	1	1	1

**Certificates:** Professional Engineer, designer license No 314 A226 04 (Serbian Chamber of Engineers)

## Duties:

Date from – Date to	Duty / Position
Oct 2018 – Sep 2024	<b>Vice-Dean for Financial Affairs</b> , Faculty of Civil Engineering University of Belgrade
Since 2022	Member of <b>University of Belgrade Financial Affairs Committee</b>
Since 1996	<b>Executive Secretary</b> of the Serbian Water Pollution Control Society (non-governmental, non-profit national association of water professionals)
Since 2019	<b>Manager</b> of IRTCUD LLC (Belgrade), Category 2 Center under the auspices of UNESCO
Since 2020	<b>Professional Civil Engineer Certification Committee</b> member, Serbian Chamber of Engineers
Since 2022	Member of the <b>Permanent Scientific Board</b> of Electric Power Industry of Serbia

## Other skills:

- Desktop publishing, Spreadsheets, CAD, Vector Graphics, Numerical programming.
- Computer applications in Hydraulic and Environmental Engineering - Modelling of water supply distribution networks, Modelling of sewerage, Modelling of wastewater treatment processes, Water quality modelling, Pressure transients

**Professional Experience:** 32 years

## Employment Record

Date from - Date to	Location	Company	Position	Description
Since May 2017	Belgrade	Faculty of Civil Engineering University of Belgrade, Dept. of Hydraulic and Environmental Engineering	Vice Dean for financial Affairs (since 2018) Associate Professor (since 2022) Assistant Professor (2017-2022)	Lectures and tutorials for subjects "Municipal Hydraulic Engineering 1" (Water Supply and Drinking Water Treatment), "Municipal Hydraulic Engineering 2" (Sewer Systems), "Municipal Hydraulic Engineering 3" (Wastewater Treatment)" and "Hydraulic infrastructure". Research in hydraulic and environmental engineering. Designs and consultancy for water supply, sewerage, water pollution control.
November 2013 – April 2017	Belgrade	"Jaroslav Cerni" Water Institute, Belgrade	Manager of the Department for Water Supply	Preparation of designs and studies for water supply, sewerage, water treatment and water management projects. Consultancy and research projects in the fields of hydraulic and environmental engineering.
July 1993 - November 2013	Belgrade	Faculty of Civil Engineering University of Belgrade	University Teaching Assistant	Tutorials for subjects related to Water supply and drinking water treatment, Sewer systems, Wastewater Treatment and Hydraulic infrastructure. Preparation of designs and studies for water supply, sewerage and water treatment projects.
Jan 1991 - June 1993	Belgrade	"Jaroslav Cerni" Water Institute, Belgrade	Junior Research Engineer	Preparation of designs and investigations studies for water supply, sewerage, water treatment and water management projects.

### 13. Professional Experience (Selection of Relevant Projects):

Date from – Date to	Location	Client / Implemented by	Position	Description
Since 2018	Serbia, The Netherlands	EU Commission / Implemented by an international consortium led by the IHE Delft, the Netherlands	Key Expert	<b><u>HORIZON 2020 project - Regenerating ECOSystems with Nature-based solutions for hydro-meteorological risk rEduCTion (“RECONNECT”)</u></b> , Project number: 776866, Call Identifier: H2020-SC5-08-2017 International research project aiming to develop and introduce methodologies of co-creation, co-design in flood defense projects by implementing Nature Based Solutions principles and methods.
June – November 2022	Belgrade	Veolia /  Services provided by WSP - Golder	Expert for water related issues	<b><u>Environmental, Health and Safety Forensic Due Diligence Assessment of Beo Cista Energija d.o.o. and Suez Vinca Operator d.o.o.</u></b> Subject of Due diligence is Vinca municipal solid waste landfill, the main landfill for the city of Belgrade, which recently entered PPP agreement with renowned international companies for solid waste management. The Vinca Landfill, the biggest in the Balkans region, covers 42 ha and is in operation for decades. Recent and planned upgrades include a new energy to waste facility, 7.5 million m <sup>3</sup> capacity landfill, Leachate treatment plant : R/O + evapo-concentration (90,000 m <sup>3</sup> /y) and Biogas engines 3MW. Expert's tasks include: <ul style="list-style-type: none"> <li>- Determination of the technical and environmental obligations, and review of the environmental and technical permits related to the facilities and operations.</li> <li>- Full assessment of the environmental and technical compliance.</li> <li>- Assessment of the technical and environmental conditions, real estates and investments in progress, and the identification of possible pollution and environmental damages.</li> <li>- Review of the plans and the permitting processes, identification of risks and irregularities.</li> <li>- Identification of environmental and technical risks and irregularities regarding the plants and their activities, with particular attention to irregularities and fraud involving a criminal risk (forensic screening).</li> </ul>
October 2019 – December 2020	Belgrade, Serbia	Ministry of Construction, Transport and Infrastructure Services provided by IAUS	Leading expert	<b><u>Spatial plan of R. of Serbia till year 2035 (draft)</u></b> Analyses of existing data and strategic planning of water sector (water supply, sanitation, hydropower, irrigation and drainage, etc.), water pollution control and water resources management in Serbia in period 2021-2035.
Since March 2018	Belgrade, Serbia	Rio Sava Explorations (Rio Tinto subsidiary) / Services provided by Faculty of Civil Engineering, Belgrade	Team Leader	<b><u>Rio Tinto, Project Jadar - Independent consultant for water-related issues</u></b> Consultancy services aiming to assist the Client's project team on water-related issues taking into account the multiple views and sectors – notably the engineering and geology perspective, as well as environmental, social and community perspective, and, importantly the legal perspective taking into account both the legal frameworks of the EU and the Republic of Serbia. Consultancy cover wide range of issues, including hydrology, flood protection, water treatment, water management, water pollution control, waste and wastewater management.
2018-2019	Belgrade, The Netherlands	EU Commission / Implemented by an international consortium led by the University of Sheffield, UK	Key Expert	<b><u>HORIZON 2020 project - Grant Agreement number: 778136 — Wat-Qual — H2020-MSCA-RISE-2017</u></b> International research project aiming to develop innovative technologies for management of drinking water supply distribution systems, focusing on maintaining drinking water quality through innovative planning, monitoring, maintenance and flushing operations.
January - December 2018	Serbia	Ministry of Construction, Transport and Infrastructure /  Services provided by IAUS, Belgrade	Water Sector Expert	<b><u>Sustainable and Integrated Urban Development Strategy of the Republic of Serbia Until 2030</u></b> The Sustainable and Integrated Urban Development Strategy of Serbia is a strategic document that has been developed for the first time in the planning practice in the Republic of Serbia for a time horizon until 2030. This document creates preconditions for the implementation of the New Urban Agenda, which was adopted 2016 at the UN Habitat III Conference in Ecuador in Quito. Water issues covered included: water supply, sanitation, pollution prevention, flood protection and urban water management.
May 2014-May 2017	Serbia	SETEC GmbH, under KfW Development Bank / Services provided by the Institute J.Cerni	Team Leader	<b><u>Feasibility Study, Designs and Tender Documents of the Drinking Water Treatment Plant Bresje - Aleksinac (capacity 300 l/s) – KfW of Phase II of Programme II Water and Sewerage Programme in Medium-Sized Municipalities in Serbia (No. 2008 66 301 / 2009 70 046)</u></b> Collection and analyses of data on water quality, existing facilities operation and efficiency, and other data needed for elaboration and selection of optimal water treatment technology. Preparation of a Feasibility Study, Preliminary and detailed designs with detailed financial, social and economic analyses. Services included development of detailed specifications, BoQ and Tender Documents (FIDIC Red Book) for reconstruction and upgrade of the DWTP

Date from – Date to	Location	Client / Implemented by	Position	Description
January 2014- March 2018	Oman	Omani Government / Diwan of Royal Court, Directorate General of One Million Date Palm Tree Project, Oman / Services provided by the Institute J.Cerni and AMEC, Oman	Civ. Eng. Expert	<b>Consultancy Services for the Design and Supervision of Date Palm Plantation at Sharqiyah Sands Aquifer - Oman</b> Services include assessment and testing of water wells in two well fields, groundwater aquifer assessment and modelling, development of water supply schemes for a new plantation, designing of water supply and irrigation system, hydraulic engineering design, including pipelines, regulation blocks, water tanks, pumping stations. Preparation of the tender documents according to Public Authority on Electricity and Water Standard Bidding Documents, assistance to the Client in tender evaluation and supervision of the works.
December 2013 - October 2014	Serbia	European Union Delegation to Serbia; (valentina.di-sebastiano@eeas.europa.eu) / Services provided by consortium IBF-Niras-STEM Vcr	Senior Key Expert	<b>Technical expertise to support development, contracting, implementation and monitoring of environmental infrastructures / Framework Contract Commission 2011 - Lot 1–contract n° 2013-331125 /</b> Position of senior key expert in water supply and wastewater management. Scope of services include assistance to the EUD in assessment of current status of activities in water related projects funded by the EU in Serbia, examination of the existing documentation and status of the project execution, monitoring of the project progress, giving opinion on claims and other issues that may arise during execution of the projects, filed missions, reporting.
April - December 2013	Serbia	Municipality of Obrenovac / Services provided by the Faculty of Civil Engineering, University of Belgrade	Team Member	<b>Consultancy Services for Implementation of Design Preparation and Construction of WWTP Obrenovac</b> Tasks include collection and analysis of data, wastewater collection system assessment, wastewater flow and pollution loads measurements and estimates, definition of scope of works and services, development of project implementation plan, drafting ToRs for investigation works and design studies preparation, consulting services to local authorities regarding project preparation and implementation, communication with stakeholders.
May 2009 – June 2013	Bosnia & Herzegovina	ERS, Banja Luka, Bosnia and Herzegovina, financed by the World Bank / Services provided Wattenfall Poweconsult GmbH	Expert Designer and Supervisor	<b>Technical Assistance to the PIU in Design, Procurement Activities and Supervision of the IDA Financed Components of the ECSEE APL3-BiH Project for TPPs (World Bank).</b> Expert responsible for projects 2U (Rehabilitation of the wastewater treatment system in TPP Ugljevik, Bosnia & Herzegovina) and 5G (Replacing the wastewater treatment system TPP Gacko, Bosnia & Herzegovina). Tasks included: <ul style="list-style-type: none"> <li>▪ Review of existing documentation;</li> <li>▪ Preparation of professional and technical reports about all phases of each project;</li> <li>▪ Preparation of tender documents (World Bank bidding documents) for reconstruction, upgrade and construction of new sewers and wastewater treatment facilities.</li> <li>▪ Assistance to the Client in the tendering process;</li> <li>▪ Monitoring of the works execution;</li> <li>▪ Other consulting assistance required by the PIU and the ERS - Elektroprivreda R.Srpske.</li> </ul>
February 2009 – March 2012	Serbia	Municipalities in Serbia, / MP Velika Morava d.o.o., Beograd	Chief Designer (part: Civil - Hydraulic Engineering)	<b>Detailed Designs of Municipal WWTPs</b> for the following cities: <ul style="list-style-type: none"> <li>- Detailed design of WWTP Koceljeva (capacity 7000 p.e.),</li> <li>- Detailed design of WWTP Raca (capacity 6000 p.e) and</li> <li>- Detailed design of WWTP Despotovac (capacity 12000 p.e.)</li> </ul> Preparation of designs included collection and analyses of data, wastewater collection systems, hydraulic and pollution loads and other data needed for establishment of optimal capacity of the plant and the required treatment efficiency in line with the EU and local standards. Detailed designs were developed, including detailed specifications, hydraulic calculations, drawings, BoQs.
May – Sept 2010	Montenegro	EBRD / Services provided by Dekonta, Serbia	Team Member (Water and Wastewater)	<b>Environmental and Social Due Diligence of JKZP Danilovgrad, Montenegro</b> The Environmental and Social Due Diligence (ESDD) was performed for the EBRD who was considering the provision of a long term loan to JKZP Danilovgrad for financing wastewater system upgrades (new sewer network and a WWTP) and water supply system upgrades. The assignment included Environmental, H&S and Social Audit of the current activities, Environmental Analysis of proposed projects, Environmental and Social action plan, Stakeholders Engagement Plan, etc. Identified issues and proposed mitigation measures with the associated costs were presented in the Environmental and Social Action Plan.

Date from – Date to	Location	Client / Implemented by	Position	Description
Dec 2006 - May 2011	Serbia	City of Belgrade / Services provided Faculty of Civil Engineering, University of Belgrade	Team Leader	<b>Technical assistance to the Belgrade Land Development Agency in preparation of the Pre-feasibility Study and Master Plan of the Belgrade Sewerage</b> Tasks included: <ul style="list-style-type: none"> <li>preparation of ToR and tender documents, assistance in the tendering process,</li> <li>project management, monitoring and guidance of the plan preparation,</li> <li>detailed review of the Pre-feasibility Study and the Master Plan, Reporting.</li> </ul> The Plan was prepared by a consortium of local and international consultants selected through an international tender. The final version of the Prefeasibility Study and Master plan consist of a total of 26 folders with over 2000 pages of text and over 250 drawings (layouts, profiles, sections, details) containing a detailed overview of the present state, design criteria, target service levels, technical solutions for expansion and development of sewer system and wastewater treatment in the Belgrade Metropolitan area.
June 2008- December 2011	Serbia	Municipality of Pozarevac (Serbia), under Municipality Infrastructure Programme financed by the EU / Services provided by the Faculty of Civil Engineering, University of Belgrade	Team Member	<b>Increase of Efficiency and Reduction of Water Losses of the Water Supply System Pozarevac,</b> Project aims at increasing efficiency of operation of the Water Supply System Pozarevac (central Serbia, 60,000 inhabitants) and reduction of water losses. Project is a part of the water supply rehabilitation program jointly financed by the Municipality of Pozarevac and EU / EAR (thorough EU funded Project: Municipal support Programme for North-Eastern Serbia). Activities include: <ul style="list-style-type: none"> <li>Preparation of ToR and tender documents, Assistance in tendering process (RFP) and contracting,</li> <li>Monitoring of project execution, Approval of reports prepared by the Contractor</li> <li>Assistance to the Municipality and the Contractor in project execution, Reporting.</li> </ul>
December 2004 – June 2006,	Serbia	Norwegian government, NIVA / Services provided by the Faculty of Civil Engineering, University of Belgrade	Designer	<b>Pre-feasibility study and General Design for central WWTP for municipalities Vrbas and Kula</b> The Project was funded by the Norwegian government through NIVA. The plant was designed to treat domestic and industrial wastewater from both cities. The total capacity of the WWTP is 125,000 p.e. and treatment efficiency is in line with EU regulations. A total of 4 alternatives were developed and analysed both technically and financially, including analyses of the impacts on the environment. Conventional wastewater treatment plant with anaerobic sludge treatment was selected as an optimal one. Set of tender documents (FIDIC EPC Turnkey) for WWTP was prepared.
1998/9 (measurements and modelling), 2003-2004 (design), Belgrade	Serbia	City of Belgrade / Faculty of Civil Engineering, University of Belgrade	Designer (part: sewer network)	<b>Design and EIA for the rehabilitation of a combined sewer network in the Kumodraz watershed (part of city of Belgrade sewerage)</b> The Kumodraz urban catchment covers approximately an 8 square kilometers of urban and suburban area of the city of Belgrade. Project activities included collection and analyses of data, field survey, wastewater flow and quality measurements, mathematical modelling of rainfall-runoff, retention ponds and sewer network design. Several alternative solutions were developed which included reconstruction and upgrade of the sewer systems, establishment of retention ponds and rainwater harvesting opportunities. An EIA (Environmental Impact Assessment) was also prepared.
March – June 2005	Serbia	European Agency for Reconstruction (EAR, European Commission, Belgrade)	Team leader	<b>Preparation of Project Description for the Project of Remediation of Wastewater Canal in Pančevo</b> (European Agency for Reconstruction, Contract No 04SER01/16/018) Preparation of the Terms of Reference (Project description) for preparation of designs and tender documents for remediation of wastewater canal in Pančevo which was polluted by industrial activities. Remediation options included dredging, disposal and possible treatment options.
September 2004 – June 2005	Serbia	European Commission / Consortium URS, Jaakko Poyry Infra & Dekonta	Expert for water supply and wastewater	<b>Environmental Assessment of 25 industrial facilities in Serbia (EU funded project - EAR)</b> Assessment of the state of the environment and environmental protection systems in the selected 25 enterprises which were in the process of preparation for privatisation, including: Petrohemija (Pancevo), Trayal (Krusevac), Magnohrom (Kraljevo), Sintetički kaučuk (Elemir), Milan Blagojevic (Lucani), etc. Services included assessment of legal, physical, technical and financial aspects of water and wastewater systems, assessment of compliance with Serbian and EU environmental regulations, establishing measures to be undertaken, with implementation plans and cost estimates.

Date from – Date to	Location	Client / Implemented by	Position	Description
December 2000 - April 2004	Serbia and Montenegro	United Nations office for Project Services / United Nations Environment Programme	Civil Engineering Consultant - Supervisor	<p><b>Clean up of Environmental Hotspots in FR Yugoslavia (UNEP/UNOPS)</b></p> <p>Total budget of the project was 12,500,000 USD. Tasks included coordination of the following projects:</p> <ul style="list-style-type: none"> <li>- Project PA6 'Rehabilitation of WWTP in Petrochemical Factory Pancevo, Serbia'</li> <li>- Project PA12 'Rehabilitation of the Sewer Network and Wastewater Pre-treatment Facilities in Pancevo Oil Refinery, Serbia' (assistance in implementation)</li> <li>- Project PA13.1 'Wastewater Canal Rehabilitation'</li> </ul> <p>The scope of services included:</p> <ul style="list-style-type: none"> <li>- Assessment of present conditions and available data,</li> <li>- Preparation of a procurement strategy, preparation of ToRs for field and desk studies,</li> <li>- Drafting of Tender documents for services and works (based on UNDP/UNOPS standard Tender Documents),</li> <li>- Participation in tendering process, evaluation of tenders, contracting</li> <li>- Supervision of rehabilitation works/design preparation,</li> <li>- Contract management, reporting to the UN and to local stakeholders.</li> </ul>
January 1993 – June 1996	Serbia	Ministry of Agriculture, Forestry and Water Management / Institute "Jaroslav Cerni", Belgrade	Team member (parts: water supply, water pollution control, integral water management)	<p><b>Republic of Serbia Water Resources Master Plan</b></p> <p>The Master Plan is a strategic document for the water resources management in the Republic of Serbia. Comprehensive hydrologic and water quality analyses of the present and planned state were performed for all watercourses, lakes and groundwater sources in Serbia. Regional water supply systems are planned and optimal systems were defined. Multi-criteria optimisation was applied to resolve conflicts between economic, environmental and social impacts of planned and proposed systems. National strategy for water pollution control, as well as implementation schedule was outlined.</p>

#### 14. Other relevant information:

- Publications:
  - Scientific and Technical papers: International conferences and Journals - 20 papers, National conferences and journals - 50 papers
  - Aleksandar Đukić, Miloš Stanić, Jasna Plavšić, Jovan Despotović (2022) Road Drainage (in Serbian: Odvodnjavanje puteva). Faculty of Civil Engineering University of Belgrade and IRTCUD, ISBN 978-86-7518-222-1 (202 pages)
  - D.Ljubisavljevic, A.Djukic, B.Babic: "Wastewater Treatment" (in Serbian), Faculty of Civil Engineering University of Belgrade, Belgrade, 2004, ISBN 86-7518-039-X (260 pages).
  - D.Ljubisavljevic, B.Babic, A.Djukic, B.Jovanovic: "Urban Water Engineering Handbook" (in Serbian), Faculty of Civil Engineering University of Belgrade, Belgrade, 2011, ISBN 86-7330-119-X (315 pages).
- Training courses:
  - Training of Professional Engineer Candidates – Regulations and Standards regarding Planning, Construction and Water Resources Management in the Republic of Serbia (three times a year, Serbian Chamber of Engineers, 2010-2015, 2020-present),
  - "Operation and maintenance of water supply and sewerage" (Association for Water Technology and Sanitary Engineering, Belgrade, 2007-2009)