

CURRICULUM VITAE

Name	DJUKIĆ ALEKSANDAR
Date of Birth:	27/03/1965
Country of Citizenship/Residence	Serbia
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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 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
Serbian	Mother tongue		
English	1	1	1

Membership of professional bodies:

- Serbian Chamber of Engineers (Professional Engineer, designer personal license No 314 A226 04)
- Executive Secretary of the Serbian Water Pollution Control Society (www.sdzv.org.rs)

Other skills:

- Desktop publishing, Spreadsheets, CAD, Internet, 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: 27 years

Country specific experience:

Country	Date from - Date to
Serbia and Montenegro	since 1991
Bosnia and Herzegovina	2008-1013
Middle East	2014-2017

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	Assistant Professor	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. Preparation of designs and studies for water supply, sewerage and water treatment projects.
November 2013 – April 2017	Belgrade	Institute for the Development of Water Resources "Jaroslav Cerni"	Senior Research Engineer	Preparation of designs and studies for water supply, sewerage, water treatment and water management projects. Research projects in the fields of hydraulic and environmental engineering.
Dec 2000 – Apr 2004	Belgrade	United Nations Office for Project Services (UNOPS)	Civil Engineering Consultant	Part-time job. Management of UNEP/UNOPS Clean up Projects in Serbia.
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.
Jan1991- June 1993	Belgrade	Institute for the Development of Water Resources "Jaroslav Cerni"	Junior Research Engineer	Assisting in research projects in the fields of hydraulic and environmental engineering. 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
May - November 2017	Pancevo, Serbia	HIP Petrohemija Pancevo (Serbia) / Services provided by the Institute J.Cerni and Faculty of Civil Engineering Belgrade	Civil Engineering and Water Management Expert	<u>Study of Preparatory Works for Construction of Polypropylene Plant at HIP Petrohemija Pancevo</u> New polypropylene plant is planned to be built at the location of existing Chlor Alkali, PVC and VCM plants in HIP Petrohemija factory in Pancevo, Serbia. The site is polluted with various pollutants, and the scope of work include: - Collection and analysis of existing documentation and data. - Analysis of institutional and legal framework, international conventions and best practices in the field of pollution mapping, waste management and remediation of polluted petrochemical industrial sites. - Identification of detailed research programs and conducting field and laboratory investigations to identify type, magnitude and spatial distribution of various pollutants in water, soil, existing equipment and structures. - Analyzes of measured results, pollution mapping, fate and distribution of pollutants, defining the scope remediation activities for polluted water, soil, equipment and structures, waste management, health and safety aspects, estimation of the costs of various remediation activities (<i>Assignment budget: 160,000 Euro</i>)
September – October 2017	Trstenik	JKP Komstan, Trstenik	Team Leader, part: water supply	<u>Technical review of detailed design of reconstruction and upgrade of water supply system in Trstenik</u> Tasks include review of hydraulic calculations, bill of quantities of detailed design for reconstruction and upgrade of water supply in Trstenik, Serbia
June – September 2017	Serbia	SIDA - Swedish International Development Cooperation Agency / Services provided by Eptisa Servicios de Ingenerie S.L.	Senior National Expert	<u>Consultancy services for the project “ Priority Environmental Infrastructure for Development in the Republic of Serbia – PEID.</u> Position of Senior National Expert for review of designs and tender documents for new main wastewater collector (5.1 km, diameter 1.0 – 1.2 m) for the city of Leskovac (Serbia). Services include review of designs, verification of Tender documents (FIDIC Yellow book), amending/drafting specifications and testing procedures.
May 2014-May 2017	Aleksinac, Serbia	SETEC GmbH, under KfW Development Bank / Services provided by the Institute J.Cerni	Team Leader	<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> 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 with detailed financial, social and economic analyses. Preparation of designs included development of detailed specifications, bill of quantities and drawings. Preparation of Tender Documents (FIDIC Red Book) for reconstruction and upgrade of DWTP (<i>Assignment budget: 110,000 Euro</i>)
since January 2014	Oman	Omani Government / Diwan of Royal Court, Directorate General of One Million Date Palm Tree Project, Oman / Services provided by the Institute J.Cerni (Serbia) and AMEC (Oman)	Expert	<u>Consultancy Services for the Design and Supervision of Date Palm Plantation at Sharqiyah Sands Aquifer - Oman</u> 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. Design preparation included detailed specifications, bill of quantities and drawings. Capacity of the system is 110,000 palms, hydraulic capacity 400 l/s (45 km of main pipelines DN700/600/500, three water tanks, three pumping stations,) Preparation of the tender documents (in accordance to “Standard Documents for Building and Civil Engineering Works”), assistance to the Client in tender evaluation and supervision of the works. (<i>Assignment budget: 950,000 Euro</i>)
January – July 2015	Belgrade (Serbia)	SETEC GmbH, under KfW Development Bank / Services provided by the Institute J.Cerni	Team Leader	<u>Technical Review of Detailed design of Drinking Water Treatment Plant Salinac – Smederevo – 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> Technical review of design documents for DWTP Salinac (capacity 200 l/s) and reporting to the Client, as per requirements of Serbian Regulations regarding planning and construction.

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December 2014 – September 2015	Belgrade (Serbia)	Regional Development Agency East Srem / Services provided by the Institute J.Cerni	Team member	<u>Prefeasibility study and Master plan of regional water supply system East Srem</u> Regional WSS East Srem is foreseen to provide drinking water for 5 municipalities of the Srem Region in the Autonomous Province Vojvodina (Serbia). The system comprises of drinking water source in the river Sava alluvium, drinking water treatment plant, main pipelines with pumping stations and water tanks. Capacity of the system is approx. 1,000 litres per second. <i>(Assignment budget: 36,000 Euro)</i>
Since March – December 2014	Belgrade (Serbia)	PUC Novi Sad Waterworks and Sewerage / Services provided by the Institute J.Cerni	Team Leader	<u>Detailed design of wastewater treatment and water recirculation system at the drinking water treatment plant Strand (Novi Sad)</u> DWTP Strand (1,500 l/s capacity) is the main drinking water plant for the city of Novi Sad (Serbia). Design preparation includes filed investigations of water quality, collection and analyses of data on the existing structures and equipment, establishment of optimal capacity of treatment and recirculation facilities, pipeline sizing, economic and technical evaluation of water recirculation feasibility. Drawings, technical specifications and BoQ were developed as well.
December 2013 - October 2014	Serbia	European Union Delegation to Serbia; / Services provided by consortium IBF-Niras-STEM Vcr	Senior Key Expert	<u>Technical expertise to support development, contracting, implementation and monitoring of environmental infrastructures / Framework Contract Commission 2011 - Lot 1–contract n° 2013-331125 /</u> 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, conducting filed missions, reporting. <i>(Assignment budget: 25,000 Euro)</i>
April - December 2013	Serbia	Municipality of Obrenovac / Services provided by the Faculty of Civil Engineering, University of Belgrade	Team Member	<u>Consultancy Services for Implementation of Design Preparation and Construction of WWTP Obrenovac</u> Tasks include collection and analysis of data, 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. <i>(Assignment budget: 32,000 Euro)</i>
May 2009 – June 2013	Serbia and Bosnia & Herzegovina	ERS, Banja Luka, Bosnia and Herzegovina, project financed by the World Bank / Services provided by: Wattenfall Poweconsult GmbH	Expert Designer and Supervisor	<u>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).</u> 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"> ▪ Review of existing documentation; ▪ Preparation of professional and technical reports about all phases of each project; ▪ Preparation of tender documents (World Bank bidding documents) for reconstruction, upgrade and construction of new sewers and wastewater treatment facilities. ▪ Assistance to the Client in the tendering process; ▪ Monitoring of the works execution; ▪ Other consulting assistance required by the PIU and the ERS - Elektroprivreda R.Srpske. <i>(Assignment budget: 450,000 Euro)</i>
February 2009 – March 2012	Serbia	Municipalities in Serbia, / Services provided by: MP Velika Morava d.o.o., Beograd	Chief Designer (part: Civil - Hydraulic Engineering)	<u>Detailed Designs of Municipal WWTPs</u> for the following cities: <ul style="list-style-type: none"> - Detailed design of WWTP Koceljeva (capacity 7000 p.e.), - Detailed design of WWTP Raca (capacity 6000 p.e) and - Detailed design of WWTP Despotovac (capacity 12000 p.e.) Preparation of designs included collection and analyses of data, 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. <i>(Assignment budget: 85,000 Euro)</i>

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May – Sept 2010	Serbia and Montenegro	EBRD / Services provided by Dekonta, Serbia	Team Member (Water and Wastewater)	Environmental and Social Due Diligence of JKZP Danilovgrad, Montenegro 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. <i>(Assignment budget: 20,000 Euro)</i>
Dec 2006 - May 2011	Serbia	City of Belgrade / Services provided Faculty of Civil Engineering, University of Belgrade	Team Leader	Technical assistance to the Belgrade Land Development Agency in preparation of the Pre-feasibility Study and Master Plan of the Belgrade Sewerage Tasks included: <ul style="list-style-type: none"> ▪ preparation of ToR and tender documents, assistance in the tendering process, ▪ project management, monitoring and guidance of the plan preparation, ▪ detailed review of the Pre-feasibility Study and the Master Plan, Reporting. 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. <i>(Assignment budget: 140,000 Euro)</i>
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	Increase of Efficiency and Reduction of Water Losses of the Water Supply System Pozarevac, 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 programme 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"> ▪ Preparation of ToR and tender documents, Assistance in tendering process and contracting, ▪ Monitoring of project execution, Approval of reports prepared by the Contractor ▪ Assistance to the Municipality and the Contractor in project execution, Reporting. <i>(Assignment budget: 40,000 Euro)</i>
October 2007 – August 2008	Serbia	Municipality of Obrenovac (Serbia), / Services provided by the Faculty of Civil Engineering, University of Belgrade	Chief Designer	General Design of sewer network for municipality of Obrenovac The City of Obrenovac is located 30 km from Belgrade. design preparation included collection and analyses of data on the sewer network, hydraulic and pollution loads and other data needed for establishment of optimal capacity of the sewer system. Expansion of the sewer network was also elaborated. <i>(Assignment budget: 26,000 Euro)</i>
July 2007 – July 2008	Serbia	Municipality of Obrenovac (Serbia), / Services provided by the Faculty of Civil Engineering, University of Belgrade	Designer	Pre-feasibility study and General Design for WWTP for the Municipality of Obrenovac Design preparation included collection and analyses of data on hydraulic and pollution loads and other data needed for establishment of optimal capacity of the plant and required treatment efficiency. The capacity of the WWTP is 55,000 p.e. and treatment efficiency is in line with the requirements of local and EU regulations. A total of three alternatives were developed in the design and analysed both technically and financially. <i>(Assignment budget: 30,000 Euro)</i>
January 2006 – June 2007	Serbia	City of Belgrade / Services provided by the Faculty of Civil Engineering, University of Belgrade	Reviewer	Review of Feasibility Studies and Preliminary Designs for Three Wastewater Treatment Plants for the City of Belgrade Review of Feasibility Studies and Preliminary Designs for Three Wastewater Treatment Plants for the City of Belgrade (plants: Veliko Selo 1.5 mil. p.e., Krnjaca 120 000 p.e., Ostruznica 40 000 p.e.), prepared by a consortium of international and local consultants. Provision of technical assistance to the Employer in guidance and technical coordination of design preparation and administrative procedures. <i>(Assignment budget: 80,000 Euro)</i>

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December 2004 – June 2006,	Serbia	Norwegian government, NIVA / Services provided by the Faculty of Civil Engineering, University of Belgrade	Designer	<u>Pre-feasibility study and General Design for central WWTP for municipalities Vrbas and Kula</u> 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. (Assignment budget: 60,000 Euro)
1998/9 (measurements and modelling), 2003-2004 (design), Belgrade	Serbia	City of Belgrade, Land Development Agency / Services provided by: Faculty of Civil Engineering, University of Belgrade	Designer (part: sewer network)	<u>Design and EIA for the rehabilitation of a combined sewer network in the Kumodraz watershed (part of city of Belgrade sewerage)</u> The Kumodraz urban catchment covers approximately an 8 square kilometre 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. (Assignment budget: 200,000 Euro)
March – June 2005	Serbia	European Agency for Reconstruction	Team leader	<u>Preparation of Project Description for the Project of Remediation of Wastewater Canal in Pančevo</u> (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. (Assignment budget: 12,000 Euro)
October 2004 – May 2005	Serbia	The Regional Environmental Center for Central and Eastern Europe (REC), Szentadre, Hungary	Local Expert for Water Sector	<u>Priority Environmental Investment Programme for South Eastern Europe (PEIP)</u> Identification of the municipalities in Serbia which do not comply with the EU directives requirements in the water sector. Preparation of an overview of the environmental situation in selected pilot hot spots in the water sector and on the financial situation linked to project development. Work with the pilot hot spot authorities on gathering information needed for project formulation. Formulation of the WWTP project concept for the City of Sabac (capacity 120,000 p.e.) for interested financing institutions. (Assignment budget: 20,000 Euro)
September 2004 – June 2005	Serbia	European Commission / Services provided by: Consortium URS, Jaakko Poyry Infra & Dekonta, Serbia	Expert for water supply and wastewater	<u>Environmental Assessment of 25 industrial facilities in Serbia (EU funded project - EAR)</u> 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), Sinteticki 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. (Assignment budget: 250,000 Euro)
April – July 2004	Montenegro	Municipality of Mojkovac, project financed by the EU / Services provided by Faculty of Civil Engineering, University of Montenegro, Podgorica	Chief Designer (part: Civil - Hydraulic Engineering)	<u>Preliminary design of WWTP for the Mojkovac settlement (River Tara Watershed, Montenegro)</u> Design foresaw WWTP Mojkovac (7500 P.E.) for treatment of municipal and industrial wastewaters which shall remove pollutants and nutrients up to the requirements of EU Directives. Design included data analyses, projection of hydraulic and pollution loads, elaboration and selection of a treatment process alternative, elaboration of technical features of the plant, specifications, phasing of plant construction, investment and annual costs cost estimate, including, unit costs of treatment per m ³ of treated water. (Assignment budget: 30,000 Euro)

Date from – Date to	Location	Client / Implemented by	Position	Description
December 2000 - April 2004	Serbia	United Nations office for Project Services / United Nations Environment Programme	Civil Engineering Consultant	<p>Clean up of Environmental Hotspots in FR Yugoslavia (UNEP/UNOPS)</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"> - Project PA6 'Rehabilitation of WWTP in Petrochemical Factory Pancevo, Serbia' - Project PA12 'Rehabilitation of the Sewer Network and Wastewater Pre-treatment Facilities in Pancevo Oil Refinery, Serbia' (assistance in implementation) - Project PA13.1 'Wastewater Canal Rehabilitation' <p>The scope of services included:</p> <ul style="list-style-type: none"> - Assessment of present conditions and available data, - Preparation of a procurement strategy, - Preparation of ToRs for field and desk studies, - Drafting of Tender documents for services and works (based on UNDP/UNOPS standard Tender Documents), - Participation in tendering process, evaluation of tenders, contracting - Supervision of rehabilitation works/design preparation, - Contract management, reporting to the UN and to local stakeholders.
January 1993 – June 1996	Serbia	Ministry of Agriculture, Forestry and Water Management / Services provided by: Institute "Jaroslav Cerni", Belgrade	Team member (parts: water supply, water pollution control, integral water management)	<p>Republic of Serbia Water Resources Master Plan</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. Multicriteria 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:
 - D.Ljubisavljevic, A.Djukic, B.Babic: "Wastewater Treatment" (textbook in Serbian), Faculty of Civil Engineering University of Belgrade, Belgrade 2004 (260 pages).
 - D.Ljubisavljevic, B.Babic, A.Djukic, B.Jovanovic: "Urban Water Engineering Handbook" (in Serbian), Faculty of Civil Engineering University of Belgrade, Belgrade, 2010 (315 pages).
 - Scientific and Technical papers: International conferences and Journals - 14 papers, National conferences and journals - 50 papers
- 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),
 - "Operation and maintenance of water supply and sewerage" (Association for Water Technology and Sanitary Engineering, Belgrade, 2007-2009)