

## Curriculum Vitae



<b>Personal information</b>	
Name	Srbslav Genić
Address	Mitropolita Mraovića 9, 11000 Belgrade, Serbia
Nationality	Serbian
Date of birth	14.02.1963.

<b>Work experience</b>				
Dates (from – to)	1989 – 2003	2003 – 2006	2006 – 2011	From 2011
Occupation or position held	Assistant	Assistant Professor	Associated Professor	Full Professor
Main activities and responsibilities	<p>Heat transfer operations and heat exchangers in process industry, energetics, environmental protection and HVAC systems – modeling, industrial measurements, geothermal and waste water systems – plate and shell-and-tube heat exchangers, cooling towers, etc.</p> <p>Mass-Transfer operations and apparatuses – modeling of sorption processes (absorption, stripping) and distillation, trayed and packaged columns for gas/vapor – liquid operations (efficiency and fluidodynamics)</p> <p>Practical engineering work, technical documentation (design, control calculations, studies), industrial and laboratory testing (reports, certificates), software packages for heat and mass transfer apparatuses, cost engineering</p> <p>Court expertise</p>			
Name and address of employer	Faculty of Mechanical Engineering of the University of Belgrade Kraljice Marije 16, 11000 Belgrade, Serbia			
Type of business or sector	Education – Research – Engineering			
Telephone	+381 11 3302360 +381 62 295310			
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E-mail	sgenic@mas.bg.ac.rs			
Additional Duties at the Employer	<p>Head of the Laboratory for Process Engineering since 2003</p> <p>Head of the Laboratory for Fire Protection Engineering since 2005</p> <p>Member of the Board for Fire Safety since 2012</p> <p>Member of the Board for Safety and Health at Work since 2015</p> <p>Deputy Head of Accredited Laboratory for Process engineering, Energy efficiency and Environmental protection and a certified examiner for 4 methods since 2009</p> <p>Secretary of Department of Process Engineering 1998 – 1999 and 2010 - 2011</p> <p>Member of the Board of Faculty 2006 – 2009</p> <p>Member of the curriculum development committee 2005</p>			

<b>Education</b>			
Education (from – to)	1982 – 1989	1989 – 1994	2003
Title of qualification awarded	MSc in Mechanical Engineering	Magister in Mechanical Engineering	PhD in Mechanical Engineering
Level in national classification	VII-1	VII-2	VIII
Principal subjects or occupational skills covered	Mechanical Engineering - Process engineering		
Name of organization providing education	Faculty of Mechanical Engineering of the University of Belgrade, Kraljice Marije 16, 11000 Belgrade, Serbia		

<b>Training and specializations</b>			
From – To	2005	2005	2005
Title of qualification awarded	AQUIT Certified expert – VB.Net	Stress Analysis Of Pipelines using CAESAR II	Course of Fire Protection Systems for Professional Engineer
Name of organization providing training	Steinbeis University Berlin	Faculty of Mechanical Engineering from Belgrade and COADE	Ministry of Interior of Serbia Sector for Emergency Management
From – To	2005	2009	2012
Title of qualification awarded	Basic training of university teachers	Accidents And Consequences Modeling	Pipe Stress And Flexibility Analysis Using Caesar II Software
Name of organization providing training	Faculty of Philosophy – University of Belgrade	ESPRIT Project, Steinbeis University Berlin	NUMIKON Zagreb

<b>Personal skills and competences</b>			
Mother tongue	Serbian		
Other languages	Reading skills	Writing skills	Verbal skills
English	excellent	excellent	excellent
Russian	excellent	basic	basic
Languages of former Yugoslavia	excellent	excellent	excellent
Professional Engineer Licenses	Serbian Chamber of Engineers	License 330 - Design of Process and HVAC systems	2003
		License 332 – Design in Hydro Engineering	2013
		License 381 – Energy Efficiency of Buildings	2013
		License 430 – Plant Construction	2013
	Ministry of Interior	License A – Fire Protection Systems	2016
Ministry of Justice	Court Expert Witness	2011	
Membership in professional organizations	Serbian Chamber of Engineers – since 2003 Association of Mechanical and Electrical Engineers and Technicians of Serbia (SMEITS) - since 1989		
Activities in professional organizations	Member of the Board of SMEITS – since 2009 President of the Society of Process Engineers of SMEITS, 2010 – 2012 Chief editor of the journal "Process Technology", published by SMEITS, 2009 – 2011 President and member of the Organizing and Scientific Committee of the conference "Processing" organized by SMEITS, 2006 – 2016 Member of Regional Board of Engineers in Serbian Chamber of Engineers, 2012 - 2016		
Computer skills and competences	Skillful use of Microsoft Office tools (Word, Excel, PowerPoint, etc.) Professional software development in Visual Basic Graphic design applications (ACAD)		
Driving license	Yes		
Attachment	List of References		

## Prof. dr Srbislav Genić PE - List Of References

### Published Papers

#### Heat transfer operations and equipment

- 1 Radanov. B. B., Genić B. S., Jacimovic M. B., Heat Transfer Coefficient for Condensation of Steam on Freely Formed Falling Liquid Jets, *AIChE Journal*, vol. 62, no. 7, pp. 2579-2584, 2016.
- 2 Kolendic I. P., Genić B. S., Jacimovic M. B., Cupric Lj. N., Jakimov M. S., Radanov B. B., Modeling of the Working Cycle of the Pressure-Powered Pump, *Thermal Science*, vol. 19 no. 3, pp. 1051-1058, 2015.
- 3 Jacimovic B. N., Genić B. S., Jacimovic M., B., Novel method for validation of experimental data for direct contact condensers with zero vapor outflow, *Applied thermal engineering*, vol. 91, pp. 1134-1140, 2015.
- 4 Jaćimović B., Genić S., Budimir N. J., Jarić M. S., Techno-economic optimization of plant for raw ethanol production based on experimental data, *International Journal of Heat and Mass Transfer*, vol. 79, pp 639-646, 2014.
- 5 Genić S., Jaćimović B., Jarić M., Budimir N., Analysis of fouling factor in district heating heat exchangers with parallel helical tube coils, *International Journal of Heat and Mass Transfer*, vol. 56, no. 1, pp. 9-15, 2013.
- 6 Genić S., Jaćimović B., Jarić, M., Budimir, N., Dobrnjac M., Research on the shell-side thermal performances of heat exchangers with helical tube coils, *International Journal of Heat and Mass Transfer*, vol. 55, no. 15-16, pp. 4295-4300, 2012.
- 7 Genić S., Jaćimović B., Mandić D., Petrović D., Experimental determination of fouling factor on plate heat exchangers in district heating system, *Energy and Buildings*, vol. 50, pp. 204–211, 2012.
- 8 Genić S., Jaćimović B., Vladić Lj., Heat transfer rate of direct-contact condensation on baffle trays, *International Journal of Heat and Mass Transfer*, vol. 51, no. 25-26, pp. 5772-5776, 2008.
- 9 Genić S., Jaćimović B., Janjić B., Experimental research of highly viscous fluid cooling in cross-flow to a tube bundle, *International Journal of Heat and Mass Transfer*, vol. 50, no. 7-8, pp. 1288-1294, 2007.
- 10 Genić S., Direct-contact condensation heat transfer on downcomerless trays for steam–water system, *International Journal of Heat and Mass Transfer*, vol. 49, no. 7-8, pp. 1225-1230, 2006.
- 11 Milanović P., Jaćimović B., Genić S., Experimental measurement of fouling resistance in the heat exchanger of a geothermal heating system, *Geothermic*, vol.35, no. 1, pp. 79-86, 2006.
- 12 Jaćimović B., Genić S., Latinović B., Research on the air pressure drop in plate finned tube heat exchangers, *International Journal of Refrigeration*, vol. 29, no. 7, pp. 1138-1143, 2006.
- 13 Genić S., Jaćimović B., Latinović B., Research on air pressure drop in helically-finned tube heat exchangers, *Applied Thermal Engineering*, vol.26, no. 5-6, pp. 478-485, 2006.

#### Mass transfer operations and equipment

- 14 Jaćimović B., Genić S., Jaćimović N., Reboiler separation efficiencies for binary systems, *Industrial Engineering Chemistry Research*, vol. 51, no.16, pp. 5793–5804, 2012.
- 15 Jaćimović B., Genić S., Normalized efficiency for stagewise operations, *Industrial Engineering Chemistry Research*, vol. 50, no. 12, pp. 7437-7444, 2011.
- 16 Jaćimović B., Genić S., Tray efficiency versus stripping factor, *Industrial Engineering Chemistry Research*, vol. 50, no. 12, pp. 7445-7451, 2011.
- 17 Đorđević D. R., Jaćimović B. M., Genić S., Arandelović I. D., Kolendić P. I., Rajić R. S., A Simple Method for Simulation of Stationary and Non-stationary Operation of Trayed Distillation Column, *Revista De Chimie*, vol. 62, no. 3, pp. 328-334, 2011.
- 18 Jaćimović B., Genić S., Đorđević D., Budimir N., Jarić M., Estimation of the number of trays for natural gas triethylene glycol dehydration column, *Chemical Engineering Research and Design*, vol. 89, no. 6, pp. 561-572, 2011.
- 19 Jaćimović B., Genić S., Tray-to-tray method for estimation of the number of trays in gas-liquid columns in case of intensive entrainment, *Chemical Engineering Research & Design*, vol. 86, no. 5A, pp. 427-434, 2008.
- 20 Jaćimović B., Genić S., Number of trays in gas-liquid columns in case of intensive entrainment: Broadening of the Kremser equation, *Chemical Engineering Research & Design*, vol. 85, no. A12, pp. 1662 -1669, 2007.
- 21 Jaćimović B., Genić S., Froth porosity and clear liquid height in trayed columns, *Chemical Engineering and Technology*, vol. 23, no. 2, pp. 171-176, 2000.
- 22 Jaćimović B., Genić S., Use a new approach to find Murphree tray efficiency, *Chemical Engineering Progress*, vol. 92, no. 8, pp. 46-51, 1996.

#### Design of process and HVAC systems

- 23 Genić S., Jaćimović B., Genić V., Economic optimization of pipe diameter for complete turbulence, *Energy and Buildings*, vol. 45, pp. 335–338, 2012.
- 24 Budimir N., Jarić M., Jaćimović B., Genić S., Jaćimović N., Rectified Ethanol Production Cost Analysis, *Thermal Science*, vol. 15, no. 2, pp. 281-292, 2011.

- 25 Milanović P., Jaćimović B., Genić S., The influence of heat exchanger performances on the design of indirect geothermal heating system, *Energy and Buildings*, vol. 36, no. 1, pp. 9-14, 2004.
- 26 Jaćimović B., Živković B., Genić S., Zekonja P., Supply water temperature regulation problems in district heating network with both direct and indirect connection, *Energy and Buildings*, vol. 28, pp. 317-322, 1998.

### **Textbooks and monograph**

- 1 Jaćimović B., Genić S., Heat transfer operations and equipment (In Serbian), Faculty of Mechanical Engineering, Belgrade, 2016.
- 2 Genić S., Jaćimović B., Mitić S., Kolendić P., Economic analysis for process engineering (in Serbian), SMEITS, Belgrade, 2014.
- 3 Genić S., Jaćimović B., Jarić M., Budimir N., Properties of process fluids (in Serbian), SMEITS, Belgrade, 2014.
- 4 Jaćimović B., Genić S., Mass transfer operations and equipment – Part 2: Mass-transfer operations (in Serbian), Faculty of Mechanical Engineering, Belgrade, 2010.
- 5 Jaćimović B., Genić S., Mass transfer operations and equipment – Part 1: Mass transfer (in Serbian), Faculty of Mechanical Engineering, Belgrade, 2007.
- 6 Nagi, M., Laza, J., Lelea, D., Jaćimović B., Genić S., Culegerea de probleme de utilaje termice (Worked examples of heat exchangers – in Romanian), LITO Universitatea Politehnica din Timisoara, Timisoara, 1999.

### **Projects (Final and Basic Design)**

- Magisterial pipeline Obrenovac – Novi Beograd (Thermal capacity 600 MW, length 30 km, 4 pump substations, 2 heat exchange substations)
- Reconstruction of Municipal heat plant Zeleznik (Belgrade) – capacity 18 MW
- Reconstruction of steam condensate pipeline in factory Ethylen in HIP Petrohemija Pancevo
- Adaptation of ventilation system and waste air heat recovery on the machine PM4 in The Paper Factory Belgrade – Capacity (air flow rate) 120000 m<sup>3</sup>/h
- Thermal oil boiler room in AD Plastik Smederevo – Capacity 1 MW
- Pipeline for hydraulic transport of ash slurry for Thermal Power Plant Kostolac A (more than 7 km long)
- Potable and refined alcohol distilleries – Capacity 20-120 m<sup>3</sup>/day (6 Projects)
- Facility for waste water purification for alcohol distillery, fish canning factory and amunition factory
- Pipeline transport of bitumen in factory Grmeč (more than 3 km of double jacketed pipeline)
- Biodiesel production plant – capacity 450 kg/h – trans-esterification with supercritical methanol
- CO<sub>2</sub> production and purification plant – Capacity 5000 kg/h
- Coal gas purification plant with monoethanol-amine solution – Capacity 50000 m<sup>3</sup>/h
- Production and transport of cold water for dairy (3 Projects)
- Compressor and vacuum station and transport of medical gases for hospitals (2 Projects)
- Fire protection systems - sprinkler, foam, steam (6 Projects)
- Adaptation of installations for transport and loading of acetic-acid and methanol

### **Technical control of Projects (Final and Basic Design)**

- Feasibility study and basic engineering design for the construction of a combined gas-steam power plant with cogeneration 175 MWe CCGT CHP Pancevo (Serbia)
- Utilities in pharmaceutical factories ICN Galenika Belgrade – DIW and DEMI water, steam, compressed air, nitrogen (2 projects)
- Systems for recuperation of waste heat in Železara Smederevo (4 projects)
- Pneumatic transport of PE granules in HIP Petrohemija Pancevo (2 projects)
- Industrial ventilation in garages of Belgrade Public Utility City Transport Company (5 projects)
- District heating pipelines of Belgrade Public utility (3 projects)
- Industrial furnaces for brick production plants (2 projects)
- Fire protection systems in mega markets, tunnels and garages (6 projects)

### **Technical Documentation for Process Industries, Energetics and HVAC**

- Packed stripper columns for methane removal from potable water – capacity 18-100 m<sup>3</sup>/h (3 plants)
- Packed absorber column for recuperation of HCL, CH<sub>3</sub>OH and acetic acid vapors (3 columns, 2 plants)
- Trayed columns for distillery for production of potable and rectified ethyl-alcohol (6 columns)
- Partial and total condensers for distilleries (9 units)
- Phosgene production plant (packaged column for purification of phosgene OD 700 mm, 10 shell-and-tube heat exchangers)

- Process tanks and separators - Tita Kuru Nigeria - ABB (over 20 units)
- Storage tanks - Tita Kuru Nigeria - ABB (4 tanks, OD 6000 mm, length 50-75 m)
- Air conditioning system for storage of fertilizer – Capacity 56000 m<sup>3</sup>/h
- Thermal and mechanical design of shell-and-tube heat exchangers for Process, HVAC and environment protection plants (more than 200 exchangers)
- Thermal design of gasketed plate heat exchangers for various process plants and district heating systems (more than 150 exchangers)
- 250-5000 m<sup>3</sup> diesel and fuel oil API 650 tanks with coil and suction heater (6 tanks)
- Direct contact water heater with natural gas combustion products – duty 500 MW
- Fruit juice pasteurizator – capacity 4000 kg/h
- Potable water tanks with immersed tube and electrical heaters (6 units 1-10 m<sup>3</sup>)
- Industrial vacuum cleaner – capacity 300 m<sup>3</sup>/h
- API oil separator – capacity 3 m<sup>3</sup>/h
- Steam boiler mechanical and electric level control device for pressures up to 40 bar

### **Technical, Economic and Environmental Studies**

- Techno-economic study of energy efficiency improvements of air coolers in Refinery Pancevo (over 220 exchangers)
- Techno-economic study of energy efficiency improvements of fired heaters and boilers in Refinery Pancevo (16 fired heaters and 1 boiler)
- Study of environmental impact of a combined gas-steam power plant with cogeneration 175 MWe CCGT CHP Pancevo (Serbia)
- Analysis of key subsystems and options for improvement of the performance of district heating system in Lazarevac (6.5 km pipeline)
- Techno-economic analysis of water deoxygenation processes and plants for district heating system boilers and pipelines of Belgrade Public utility (3 types of processes for 8 heat plants)
- Techno-economic study of capacity and profitability of refined alcohol production plant in Debrca (Serbia)
- Technical study of chimneys of the district heating boilers of Belgrade Public Utility (16 stacks)
- Techno-economic study of capacity and profitability of heat plants in Zrenjanin and Sremska Mitrovica (capacity 24 - 105 MW)

### **Measurements of Performances and Testing Of Equipment**

- Shell-and-tube heat exchangers for environment protection, process and hvac systems (97 exchangers)
- Plate heat exchangers water/water in substations in district heating systems (11 types)
- Finned tube heat exchangers (13 exchangers)
- Pressure drop of plastic flexible pipe and air valves for hvac systems (8 types)
- Cooling system for mineral water factory
- Coal and fuel oil boilers (3 boilers)
- Pressure powered pump for condensate and industrial fluids
- Electromagnetic and regulation valves up to DN 150 (10 types)
- PE pipes and fittings for heating and cold water distribution systems and pvc tubes for drainage according to en/ din standards (23 types)
- Hoses for ventilation systems – pressure and vacuum testing, pressure drop testing (over 30 types in range 50-350 mm)

### **Commercial Software Packages**

- Shell-and-tube heat exchangers with straight and u tubes (bare and integrally finned) – heat performances and pressure drop
- Cross-flow tubular (bare and finned) heat exchangers – heat performances and pressure drop
- HVAC tubular (coil) heat exchangers – heat performances and pressure drop
- Plate heat exchangers (heaters, coolers and condensers) – heat performances and pressure drop
- Mechanical design of pressure vessels according to AD Merkblätter

### **Court expert – 20 times**