#### **Short CV**

Name: Dušan Prodanović

**Current Employer: University of Belgrade, Faculty of Civil Engineering** 

Address: Bulevar kralja Aleksandra 73, 11000 Belgrade, Serbia

Position: Professor, Head of Hydraulic and Environmental Engineering department

Gender: Male

Nationality/-ies: Serbian

Telephone Nr. +381 11 3370206 Mobile Nr. + 381 63 8039808

Email: dprodanovic@grf.bg.ac.rs

Website: http://www.grf.bg.ac.rs/fakultet/pro/e?nid=50

# **Relevant Work Experience**

| 2015 - | Faculty of Civil Engineering, University of Belgrade, Professor, Head of Hydraulic and |  |  |  |  |  |
|--------|--|--|--|--|--|--|
| Date   | Environmental Engineering Department and Lecturing in Fluid Mechanics and in           |  |  |  |  |  |
|        | Measurements in Hydraulic  |  |  |  |  |  |
| 2013-  | Faculty of Civil Engineering, University of Belgrade, Professor, Lecturing in Fluid    |  |  |  |  |  |
| 2015   | Mechanics and in Measurements in Hydraulic   |  |  |  |  |  |
| 2001-  | Faculty of Civil Engineering, University of Belgrade, Director of Hydraulic and        |  |  |  |  |  |
| 2015   | Environmental Engineering Institute  |  |  |  |  |  |
|        |  |  |  |  |  |  |

## **Education and Training**

| 1999 | University of Belgrade, Faculty of Civil Engineering, Doctor of Tech. Sciences. Thesis: "Improvements of Hydroinformatic Methods in Analysis of Flow from Urban Catchments"         |
|------|---|
| 1991 | University of Belgrade, Faculty of Civil Engineering, Master of Tech. Sciences. Thesis: "Experimental investigation of fluid flow field behind two types of flow regulating valves" |
| 1985 | University of Belgrade, Faculty of Civil Engineering, DiplIng. in Civil Engineering   |

#### Main fields of Expertise/Interest

#### Short description of expertise and interests

Expert in theoretical and experimental fluid mechanics and software and hardware development for data acquisition and data analysis. Has worked on on-line and off-line data processing; real time control; GIS applications in UD models (PhD thesis: "Improvements of Hydroinformatic Methods in Analysis of Flow from Urban Catchments") and its application in Urban Drainage simulation models, Hydrology and Flood forecasting; development of tools for data linkage;, routines for automatic data validation and assimilation with forecasting models; surface flow pattern analysis, delineation and automatic flow path generation; transient flow analyses in fluid distribution and hydropower systems; computational hydraulics, open channel hydraulics; experimental catchments, etc. He has authored more than 60 journal publications, books and chapters in national and international book and 200 proceedings on international and national conferences, and worked in more than 80 professional projects.

### Participation in Networks/Committees

| 2015-to-  | Expert and advisor in experimental hydraulics: Risk assessment of masonry bridges under |  |  |  |  |  |  |
|-----------|---|--|--|--|--|--|--|
| date      | flood conditions: hydrodynamic effects of debris blockage and scour. EPSRC Reference:   |  |  |  |  |  |  |
|           | EP/M017354/1: Coastal & Waterway Engineering.   |  |  |  |  |  |  |
| 2003- to- | Serbian Chamber of Engineers, license no 314 5777 03                                    |  |  |  |  |  |  |
| date      |   |  |  |  |  |  |  |
| 1999-to-  | International Association of Hydro-Environment Engineering and Research (IAHR)          |  |  |  |  |  |  |
| date      |   |  |  |  |  |  |  |
| 1990-to-  | International Research and Training Centre on Urban Drainage/Waters (UNESCO)            |  |  |  |  |  |  |
| date      |   |  |  |  |  |  |  |

## Awards

| 2001 | 1 <sup>st</sup> prize, Belgrade chamber of commerce, for developments regarding data preparation in Urban Drainage models |
|------|---|
| 1991 | City of Belgrade's 1st prize for best defended master of science thesis   |

## **Relevant Projects**

| Year | List most recent project first including 1. Title; 2. Funding Authority and Programme; 3. |  |  |  |  |  |
|------|---|--|--|--|--|--|
|      | Project Role (Coordinator/Partner). 4. Budget   |  |  |  |  |  |
|      |   |  |  |  |  |  |
| 2014 | Mathematical model and GIS database for support to design project of Dabar                |  |  |  |  |  |
|      | Hydropower system. Power Utility of the Republic of Srpska, Contractor: The Jaroslav      |  |  |  |  |  |
|      | Černi Institute for the Development of Water Resources. GIS and hydraulic expert          |  |  |  |  |  |
|      | (Activities performed: GIS tools development, link with simula-tion model). Budget:       |  |  |  |  |  |

|      | 20.000 euros.   |  |  |  |  |  |
|------|---|--|--|--|--|--|
| 2012 | Monitoring and Forecast Modelling of Inflow in Reservoir System Trebisnjica. Power Utility of the Republic of Srpska – Hydropower complex on the Trebisnjica River, Contractor: The Jaroslav Černi Institute for the Development of Water Resources. Responsible designer for Monitoring system and Forecast Model (Development of monitoring network, link with existing system; development of hydraulic and hydrology model suitable for forecasts). Budget: 50.000 euros. |  |  |  |  |  |
| 2012 | Flood protection plan and Flood mapping zones, for city of Čačak (Serbia). City of Cacak. Project manager and Responsible for GIS support. Budget: 40.000 euros.  |  |  |  |  |  |
| 2007 | Monitoring system on Tisa and Danube catchment. EAR, End user: Republic Hydrometeorological Service of Serbia. Monitoring and IT expert (Team leader for selection, purchase and installation of 6 automatic hydrometeo stations). Budget: 600.000 euros.   |  |  |  |  |  |

#### **Relevant Publications**

*List most recent experience first. Please ensure a limited list of publications (<10)* 

Djukić A., B. Lekić, V. Rajaković-Ognjanović, Dj. Veljović, T. Vulić, M. Djolić, Z. Naunović, J. Despotović, D. Prodanović (2016). Further insight into the mechanism of heavy metals partitioning in stormwater runoff. Journal of Environmental Management, Vol. 168 (1 March 2016), Pages: 104-110, DOI: 10.1016/j.jenvman.2015.11.035 and DOI: 10.1016/j.jenvman.2015.11.035 (supplementary data).

Leitao J., D. Prodanović, Č. Maksimović (2016). Improving merge methods for grid-based digital elevation models. Computer and Geosciences, Vol. 88 (March 2016), Pages: 115-131, DOI: 10.1016/j.cageo.2016.01.001.Leitao J., D. Prodanović, S. Boonya-Aroonnet, Č. Maksimović (2013): Enhanced DEM-based flow path delineation methods for urban flood modelling. Journal of Hydroinformatics, Vol. 15, No. 2, pages: 568-579, DOI: 10.2166/hydro.2012.275.

Branisavljević N., Z. Kapelan, D. Prodanović (2011): Improved Real-time Data Anomaly Detection using Context Classification. Journal of Hydroinformatics, Vol. 13, No. 3, pages: 307-323.

Leitao J., N. Simoes, Č. Maksimović, F. Ferreira, D. Prodanović, J. Matos, A. Marques (2010): Real-time forecasting urban drainage models: full or simplified networks? Water Science and Technology, Vol. 62, No. 9, Pages: 2106-2114.

Branisavljević N., D. Prodanović, D. Pavlović (2010): Automatic, semi-automatic and manual validation of urban drainage data. Water Science and Technology, Vol. 62, No. 5, Pages: 1013-1021.

Leitao J., S. Boonya-aroonnet, Č. Maksimović, R. Allitt, D. Prodanović (2008): Modelling of flooding and analysis of pluvial flood risk – demo case of UK catchment. Flood Risk Management – Research and Practice, edited by P. Samuels, S. Huntington, W. Allsop and J. Harop, Oxford, pages: 49-56.

Makropoulos C., Č. Maksimović, M. Stanić, D. Prodanović, S. Đorđević, D. Koutsogiannis, T. Dašić, S. Prohaska, H. Wheater (2008): A multi-model approach to the simulation of large scale karst flows.

| Journal of Hydrology, Vol. 348, No. 3-4, Pages: 412-424. |  |  |  |  |  |
|--|--|--|--|--|--|
|  |  |  |  |  |  |
| Additional Information                                   |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |