CURRICULUM VITAE and BIBLIOGRAPHY

- 1. First, Father's and Family name: Đorđe Svetislav Čantrak, or Djordje Svetislav Cantrak
- 2. Title: Dr.
- 3. Nationality: Serbian
- 4. Affiliation: University of Belgrade, Faculty of Mechanical Engineering (UB FME), Hydraulic Machinery and Energy Systems Department (<u>http://hidro.mas.bg.ac.rs/djordje_cantrak-en.html</u>)

E-mail: djcantrak@mas.bg.ac.rs,

ORCID ID: https://orcid.org/0000-0003-1841-9187

Scopus Author ID: 23134310600

Link to Google Scholar: https://scholar.google.com/citations?use r=re_7W6UAAAAJ&hl=en

5. **Present position:** Full Professor at the UB FME (since October 2022.)

6. Education (main levels):

Institution [Date from - Date to]	Degree(s) or Diploma(s) obtained:
PhD studies: University of Belgrade, Faculty of Mechanical Engineering (2005-2012) (one part of experiments for PhD thesis were performed at Karlsruhe Institute of Technology, Faculty of Mechanical Engineering, Karlsruhe, Germany; Prof. DrIng. Martin Gabi, KIT, Karlsruhe was President of the PhD Committee)	PhD (public defense 30.07.2012.)
DiplIng. (M.Sc.) Studies: University of Belgrade, Faculty of Mechanical Engineering (1996-2001)	DiplIng. (M.Sc.), Hydropower engineering, The best student in generation with average 9.79, where 5-fail and 10-top score.

7. Language skills: Serbian (mother tongue), English (C), German (A2), French (A2) and Russian (A2).

8. Membership of professional bodies:

Member of the Scientific Board of the Society of Thermal Engineers of Serbia (STES) (since 2018),

Member of the Steering Committee of the Serbian Society of Mechanics (SSM) in two mandates (2019-2021 and 2021-2023),

Member of: SSM, GAMM (International Association of Applied Mathematics and Mechanics), Centre for renewable sources, Society of metrologists of Serbia, IAHR (International Association for Hydro-Environment Engineering and Research), EUROMECH (European Mechanics Society), STES, Fulbright Alumni Serbia, JICA Alumni Serbia.

9. Employed at the University of Belgrade: app. 21 years

10. Main research fields: Hydraulic machinery and energy systems, Energy efficiency, Applied Fluid Mechanics, Turbomachinery, Turbulence, Fans and compressors with systems, Fluid flow measurement techniques and calibration, Particle image velocimetry (PIV), laser Doppler anemometry (LDA).

11. Functions at the UB FME: Acting head of the Chair for hydraulic machinery and energy systems at the FME UB (October 3rd 2022-), Member of the Faculty Council (2012-2015. and 2015-2018.), Secretary of the Chair for Hydraulic Machinery and Energy Systems (1st Oct. 2012-31st March 2014., 8th Sept. 2014-7th March 2016.), Member of four Faculty commissions (2015-2018.), of which two of four are: commission for international projects and commission for laboratories and practical work, Member of a Council Commission for finances, Member of the Faculty Commission for the repository of scientific papers (since 2019), and etc.



12. Professional Experience:

Date from - to	Location	Company/Institution	Position	Description
November 8-9 2022	Belgrade, Serbia	University of Belgrade, Faculty of Mechanical Engineering	Keynote lecturer	Keynote lecturer at the International Conference Industrial Energy and Environmental Protection in the Countries of Southeast Europe, IEEP 2022, https://ieep-2022.drustvo-termicara.com/predavaci-po-pozivu , <a 1153.<="" d.o.o.,="" dec="" href="https://ieep-avaci-pot.drustvo-termicara.com/predavaci-pot.drustvo-termicara.com/predavaci-pot.drustvo-termicara.com/predavaci-pot.drustvo-termicara.com/predavaci-pot.drustvo-termicara.com/predavaci-pot.drustvo-termicara.com/predavaci-pot.drustvo-termicara.com/predavaci-pot.drustvo-termicara.com/predavaci-pot.drustvo-termicara.com/predavaci-pot.drustvo-termicara.com/predavaci-pot.drustvo-termicara.com/predavaci-pot.drustvo-termicara.com/predavaci-pot.drustvo-termicara.com/predavaci-pot.drustvo-termicara.com/predavaci-pot.drustvo-termica</td></tr><tr><td>October 19<sup>th</sup>
2022</td><td>Belgrade,
Serbia</td><td>University of Belgrade, Faculty of
Mechanical Engineering</td><td>Full professor</td><td>Full Professor at the Chair for Hydraulic Machinery and Energy Systems</td></tr><tr><td>October 3<sup>rd</sup>
2022</td><td>Belgrade,
Serbia</td><td>University of Belgrade, Faculty of
Mechanical Engineering</td><td>Acting Head</td><td>Acting Head of Chair for Hydraulic Machinery and Energy Systems</td></tr><tr><td>September
14-16 2022</td><td>Belgrade,
Serbia</td><td>University of Belgrade, Faculty of
Mechanical Engineering</td><td>Keynote speaker</td><td>Keynote speaker and Chairman at the International Symposium on Aircraft Technology, MRO &
Operations, ISATECH 2022, <u>https://2022.isatech.org/keynote-speakers/</u>, 14<sup>th</sup> September 2022.</td></tr><tr><td>2021-2022</td><td>-</td><td>SAGE Journals</td><td>Co-Guest Editor</td><td>Co-Editor of the Special Collection: Advanced Practices in Aerospace and Energy Engineering (ISSN: 1687-8132, Impact factor: 1.316)</td></tr><tr><td>2022</td><td>Belgrade,
Serbia</td><td>Innovation Fund, Republic of
Serbia</td><td>Project leader</td><td>Project title: Laboratory testing of the flexible ventilation duct of the innovative design type Quadro, with
company " id="" international"="" of="" td="" the="" voucher:="">
September 8-10 2022	Belgrade, Serbia	Mathematical Institute of the Serbian Academy of Sciences and Arts	Member of the International Scientific Committee and Chairman	Member of the International Scientific Committee, 1 st International Conference on Mathematical Modelling in Mechanics and Engineering, <u>http://www.mi.sanu.ac.rs/~icme2022/</u> and Chairman of the General Session
June 19-22 2022	Granada, Spain	IAHR	Member of the Advisory board	Member of the Advisory Board, IAHR World Congress, 2022, https://iahrworldcongress.org/international-scientific-committee/ https://cmswebonline.com/iahr2022/epro/html/iahr-39wc-frontmatter.pdf
November 7 th -10 th 2021	Szeged, Hungary	ELI ALPS (The Extreme Light Infrastructure – Attosecond Light Pulse Source) 8 th User Workshop	Participant and lecturer	Lecture title: "Laser insight in turbulence", panel "Superlasers for the Balkans", 10 th November at ELI- ALPS, invited and grant from the USA Embassy in Budapest for the travel and lodging expenses <u>https://www.eli-alps.hu/en/News/view/66</u>
September 28 th 2021	Szeged, Hungary	University of Szeged, Faculty of Engineering	Lecturer	Given Lecture on the topic: "Contemporary research and development in fans, pumps and accompanying systems at the Hydraulic Machinery and Energy Systems Department University of Belgrade FME", CEEPUS project stay
2021/2022	Europe	Central European Exchange Programme for University Studies	Local network partner for University of Belgrade, Faculty of Mechanical Engineering	CEEPUS III network: "Building Knowledge and Experience Exchange in CFD", CIII-RS-1012-07-2122 for 2021/2022.
September 2021.	Belgrade- Krakow	National Science Centre, Poland	Expert	Expert for the performance of the tasks commissioned by the National Science Centre, Poland
Jan 2021- Dec. 2022	Belgrade, Serbia – Vienna, Austria	Funded by The Science Fund of the Republic of Serbia	Project leader	Project title: Flow investigation within innovative designed regulative element of the control valve (Acronym: FIDE), project between Faculty of Mechanical Engineering, University of Belgrade, Belgrade and company in Austria VLL Solutions, Vienna.
February 15 th – 18 th	Warsaw, Poland	6 [™] IAHR Europe Congress Hydro-Environment Research	Convener of the special session	Special session KS6 – Measurement techniques and demonstration test rigs in hydraulic research (https://iahr2020.pl/approved-special-sessions/, https://meeting15.com/en/agenda?start=1153)

Date from - to	Location	Company/Institution	Position	Description
2021.		and Engineering		
Since December 2020.	Podgorica, Montenegro	University of Montenegro, Faculty of Mechanical Engineering	Academic Coordinator	Erasmus+ mobility program (KA107) for academic years 2020/21 and 2021/2022 in the subject area Electricity and Energy
Since September 2020.	Serbia	"DEC INTERNATIONAL" DOO, Serbia	Project leader	Aerodynamic and acoustic testing of the ventilation ducts, ductwork components and valves
2019.	Serbia	Serbian Society of Mechanics	Member of the Steering Committee	Member of the Steering Committee of the Serbian Society of Mechanics
September 3-6, 2019.	Torino, Italy	17 th European Turbulence Conference, Università di Torino and Politecnico di Torino, Italy	Chairman	Chairman of the session "Vortex Dynamics and Structure Formation" http://www.symposium.it/files/eventi/84/etc-2019-561.pdf
July 21-27, 2019.	Brno, Czech Republic	Czech Metrology Institute, Regional Inspectorate Brno, The Primary Pressure, Vacuum and Mass Flow Department	Representative from Serbian side	Calibration of the air flow meter for four ranges: 0,1-2 ln/min, 2-10 ln/min, 10-50 ln/min и 50-100 ln/min, Manufactrurer: PRO-EKOS, Belgrade, Serbia, Model: DMP-LH-10 and for range 0-60 ln/min, Manufactrurer: PRO-EKOS, Belgrade, Serbia, Model: DMP-A Calibration is performed for University of Belgrade, Fac. Of Mech. Eng., Lab. Of Fluid Mechanics (first calibration of the second device)
2018-2021.	China, Shanghai and Hangzhou	Hydropower Engineering Technology Research Center of Ministry of Water Resources in China	researcher	Bilateral Project with China, Hydropower Engineering Technology Research Center of Ministry of Water Resources in China and Renewable Energy and Rural Electrification Zhejiang International Science and Technology Cooperation Base, Joint Research on the Development Technology of Low- head Run-of-the-river Hydropower, period 2018-2021.
June 24-26, 2019.	Sremski Karlovci, Serbia	7 th INTERNATIONAL CONGRESS OF SERBIAN SOCIETY OF MECHANICS	Organizer of the Minisymposium Turbulence	Organizer of the Minisymposium Turbulence
May 13-17, 2019.	Granada, Spain	University of Granada, Environmental Fluid Dynamics Department, Spain	Invited professor	Invited lectures in turbulence for master and phd students. Invitation by Assoc. Prof. Dr. María Clavero Gilabert (<u>https://gdfa.ugr.es/homepage/team/</u>). Financially supported by Erasmus+ project.
May 31 st 2018	Belgrade, Serbia	Society of Thermal Engineers of Serbia	Member of the Scientific Board	Member of the Scientific Board of the Society of Thermal Engineers of Serbia
December 2017	Belgrade, Serbia	Society of Thermal Engineers of Serbia	Guest Editor	Guest Editor of the special number of Journal "Thermal Science" dedicated to the Turbulence Workshop International Symposium, Vol. 21, Suppl. 3, 2017, <u>http://thermalscience.vinca.rs/2017/supplement-3</u>
Since 25.12. 2017.	Belgrade, Serbia	University of Belgrade (UB), Faculty of Mechanical Engineering (FME), Hydraulic Machinery and Energy Systems Department (HMESD)	Associate Professor	Teaching and research in the field of flow machinery, turbulence and flow measurement techniques.
June 19-22, 2017.	Mountain Tara, Serbia	6 [™] INTERNATIONAL CONGRESS OF SERBIAN SOCIETY OF MECHANICS	Organizer of the Minisymposium Turbulence	Organizer of the Minisymposium Turbulence
Since April 2017	Belgrade, Serbia	UB, FME, HMESD	Head	Head of the Laboratory for turbulence and velocimetry
March 19- 23, 2017.	Brno, Czech Republic	Czech Metrology Institute, Regional Inspectorate Brno, The Primary Pressure, Vacuum and	Representative from Serbian side	Calibration of the air flow meter for four ranges: 0,1-2 ln/min, 2-10 ln/min, 10-50 ln/min и 50-100 ln/min, Manufactrurer: PRO-EKOS, Belgrade, Serbia, Model: DMP-LH-10. Calibration is performed for University of Belgrade, Fac. Of Mech. Eng. , Lab. Of Fluid Mechanics (first calibration of this device)

Date from - to	Location	Company/Institution	Position	Description	
		Mass Flow Department			
Oct. 2016- Oct. 2018	Podgorica Montenegro	Faculty of Mechanical Engineering, University of Montenegro	Project leader in Serbia	Investigation of the influence of turbulent swirl flow on the energy parameters of the axial fans by use of the contemporary measurement techniques.	
Jan. 2016- Dec. 2017	Clausthal, Germany	TU Clausthal, Institute of Applied Mechanics	Project leader in Serbia	Bilateral Project between Germany and Serbia: Computational and experimental investigation of the airflow in the human nasal cavity	
31.03.2014 01.07.2014.	Stanford and NASA Moffet Field, USA	Stanford University and NASA Ames Research Center, Fluid Mechanics Laboratory	Fulbright scholarship (Core Fulbright Visiting Scholar Program)	High speed stereo particle image velocimetry and flow visualization in air tunnels. Project: Time Resolved Stereo PIV Investigation of NASA Common Research Model in NASA Ames FML 48" x Indraft Tunnel <u>http://www.cies.org/grantee/dorde-cantrak</u> Senior Research Fellow at CTR, Stanford – <u>https://ctr.stanford.edu/former</u>	
18.09.2013 18.11.2014.	Belgrade, Serbia	Consortium leader: Institute Nikola Tesla, Belgrade. Participant of Consortium: University of Belgrade (UB), Faculty of Mechanical Engineering (FME).	Leader for hydropower activities in project	Project: "Analysis of Potential and Program of Organized Supervision and Improvements of Energy Efficiency in the Electro Power Industry of Serbia in Coal Production and Electricity and Thermal Energy Production and Distribution" (period: 2013-2014).	
Since 24.12. 2012.	Belgrade, Serbia	UB, FME, HMESD	Assistant Professor	Teaching and research in the field of flow machinery and turbulence measurements. Lectures in the following subjects: Measurements in Turbulence (PhD level), Measurements in hydropower engineering (M.Sc. level), Fans and Turbocompressors (M.Sc. level) and Basis of Flow Measurements (B.Sc. level)	
Since 2012.	Belgrade, Serbia	Accreditation Body of Serbia	Technical expert (since 2012) and technical evaluator (since 2013)	Technical systems with hydraulic machines, Calibration of volume flow meters and pressure measuring devices	
22.02.2002- December 2012.	Belgrade, Serbia	UB, FME, HMESD	Teaching and research assistant	Research (PhD thesis and scientific national and international projects) and teaching.	
October 2011- September 2018	Belgrade, Serbia	Tehnikum Taurunum, High Engineering School of B.Sc. studies	Lecturer	Teaching in the field of applied fluid mechanics and turbomachinery.	
May 2011- July 2012.	Belgrade, Serbia	GIZ (Deutsche Gesellschaft für Internationale Zusammednarbeit)	Researcher	Name of the project: Capacity building for Monitoring, Verification and Evaluation (M&V&E System) of the Energy Efficiency policy in SEE countries in terms of the EU accession process" (Modules 2 & 4), No. 08.2016.7-005.00, GIZ. Research in the field of energy efficiency.	
April-May 2010., July- August 2011., December 2011. December 2012.	Karlsruhe, Germany	Karlsruhe Institute of Technology (KIT), Institute of Fluid Maschinery	1 st period: participant 2 nd , 3 rd & 4 th period: Researcher	 period: TEMPUS project, International Accreditation of Engineering Studies 144856-TEMPUS- 2008-RS-JPGR; period: research at the Bilateral project between KIT and FME (high speed particle image velocimetry in turbomachinery); <u>https://www.kit.edu/downloads/KIT-Jahresbericht_pdf.pdf</u> period: research at the Bilateral project between KIT and FME (high speed particle image velocimetry in turbomachinery). <u>https://www.kit.edu/downloads/KIT-Jahresbericht_pdf.pdf</u> period: research at the Bilateral project between KIT and FME (high speed particle image velocimetry in turbomachinery). <u>https://www.kit.edu/downloads/KIT-Jahresbericht_pdf.pdf</u> period: research at the Bilateral project between KIT and FME (high speed particle image velocimetry in turbomachinery), lecture and contacts with pump industry. 	
10 ^{°°} of June 2010-2012	Belgrade, Serbia	HydroEnergyLab (accredited laboratory by the Accreditation	Examiner	Examiner in the field of testing pumps and fans in the laboratory and in-situ. Calibration of pressure transducers and anemometers. Investigation and generation of procedures for Laboratory.	

Date from - to	Location	Company/Institution	Position	Description
		Body of Serbia)		
April 2010.	Münich, Germany	TU Münich	Participant	TEMPUS project, International Accreditation of Engineering Studies 144856-TEMPUS-2008-RS-JPGR.
October- December 2003.	Stuttgart, Germany	Universität Stuttgart, Institut für Parallele und Verteilte Systeme (DAAD scholarship)	Researcher	Parallel codes for Computational fluid mechanics.
June-July 2001.	Urbana- Champaign, Illinois, USA	Air Conditioning and Refrigeration Centre	Researcher	Multiphase flow research.

13. Other relevant information

Title of the PhD thesis: Analysis of the Vortex Core and Turbulence Structure behind Axial Fans in a Straight Pipe using PIV, LDA and HWA Methods,

URL: http://doiserbia.nb.rs/phd/fulltext/BG20120730CANTRAK.pdf

Scientific field in general: Mechanical Engineering

Scientific field in particular: Hydraulic machines and energy systems - Applied fluid mechanics

Guest Editor for the Special Issue of the International Scientific Journal Thermal Science (<u>http://thermalscience.vinca.rs/2017/supplement-3</u>)</u>, published in December 2017. – dedicated to the Turbulence Workshop (<u>http://turbulenceworkshop.mas.bg.ac.rs/</u>)

Some awards, grants and fellowships:

- 1. 1999-2000. Scholarship of the University of Belgrade
- 2. 2000. Fellowship of the Kingdom of Norway embassy in Belgrade
- 3. January–March 2000. IAESTE (DAAD fellowship)
- 4. first place at Summer Academy at Ohrid 2000. (02.-13.09.2000.), the course "Thermo-Fluid Dynamics", organizers: Universities of Erlangen-Nuremberg and Augsburg, Deutschland.
- 5. On the occasion of the Day of the University of Belgrade 27.02.2002. two awards:
 a) the best student in generation at the Faculty of Mechanical Engineering average mark: 9.79 (nine and 79/100, where 5-fail, 10-top mark)
 b) best paper in the field of technical sciences at the University of Belgrade for the school year 2000/2001.
- 6. November 2001. Fellowship of the Government of the Republic of Serbia
- 7. March 2002. –Certificate of appreciation in recognition of a substantial contribution to SAE World Congress '02
- 8. October 2003.- January 2004. Simlab Scholarship Program, supported by the German Academic Exchange Service (DAAD) (<u>http://www5.in.tum.de/forschung/simlab/daad_stip.html</u>).
- 9. Nikola Tesla's Gold medal for new technology: Fan for sustaining ecological conditions in tunnels, Innovations–Belgrade 2009., Number 087-09, 22. May 2009.
- 10. December 2010. Categorized as researcher of the first category (T1) by the Ministry of science and Technological Development Republic of Serbia in the field of Technological Development.
- 11. October 2012. Charter for permanent employment for ten years at the UB FME
- 12. October 2012. Acknowledgement of the Accreditation Body of Serbia for successful cooperation and contribution to the development of an accreditation in Republic of Serbia.
- 13. Fulbright fellowship for the academic year 2013/2014. At the University of Stanford, Center for Turbulence Research and NASA Ames Laboratory for Fluid Mechanics. https://ctr.stanford.edu/former, https://www.cies.org/grantee/dorde-cantrak
- 14. November 7th-10th 2021 Grant from the USA embassy in Budapest for the participation in the ELI ALPS (The Extreme Light Infrastructure Attosecond Light Pulse Source), 8th User Workshop and "Superlaser for the Balkans" (roundtable discussion), in Szeged, Hungary, <u>https://www.eli-alps.hu/en/News/view/66</u>
- 15. October 2022. Charter for permanent employment for twenty years at the UB FME

Lecturer in subjects at the University of Belgrade, Faculty of Mechanical Engineering

- 1. Basics of the measurement techniques in fluid mechanics BSc studies
- 2. Fans and turbocompressors MSc studies
- 3. Measurements in hydropower engineering MSc studies
- 4. Hydraulic transmission MSc studies
- 5. Turbomachinery MSc studies
- 6. Pumps and fans MSc studies
- 7. Pumps MSc studies
- 8. Design of pumps, fans and turbocompressors MSc studies
- 9. Measurements in turbulent flows PhD studies
- 10. Turbulence in Turbomachinery PhD studies
- 11. Advanced Course in Pumps, Fans and Turbocompressors PhD studies

Chosen lectures at the national and international seminars and institutions:

- Čantrak, Dj. (2000): Vorticity, Circulation, Bernoulli's Equation and the Laws of Blasius and Kutta-Joukowski for Aerofoils, Summer Academy Ohrid 2000. (02.-13.09.2000.), the course "Thermo-Fluid Dynamics", Universities of Erlangen-Nuremberg and Augsburg, Deutschland, Ohrid.
- 2. Ćoćić A., Čantrak D. (2003): Ideas and fulfilling, Lecture at the Abteilung Simulation großer Systeme, Fakultät Informatik, Universität Stuttgart, Stuttgart, Deutschland, 18.12.2003. time: 15:10.

- Škara V., Čantrak Đ. (2007): PIV (Particle Image Velocimetry) Basics and Example, Lecture at the Faculty of Civil Engineering University of Belgrade, Subject: Measurements in hydro-techniques, Teacher: Prof. Dr. Dušan Prodanović, December 2007.
- Čantrak D., Janković N. (2011): Turbulent Swirl Flow in Pipes Experimental Research, Introductory lecture at the International Workshop for Laser Flow Measurements, 7th June, Faculty of Mechanical Engineering, University of Belgrade.
- Čantrak Đ. (2012): Turbulent Swirl Flow Research by Use of Stereo PIV, LDA and Classical Measurement Techniques, Mechanics Seminar, Mechanics Department, Mathematical Institute of Serbian Academy of Sciences and Arts, lecture No. 1177, 11.01.2012.
- Čantrak Đ., Janković N. (2012): Experimental Investigation of the Vortex Core and Turbulence Structure behind Axial Fans in a Straight Pipe Using PIV and LDA, Lecture at the Seminar, 6th December, Institute of Fluid Machinery, Faculty of Mechanical Engineering, Karlsruhe Institute of Technology, Karlsruhe.
- 7. Čantrak Đ., Ćoćić A., Ilić D., Janković N. (2012): Challenging the Fluid, Lecture, 7th December, Company KSB, Frankenthal.
- 8. Čantrak Đ. (2014): Turbulent Swirl Flow Laser Research, Stanford University, Center for Turbulence Research, CTR, CTR seminar, 16⁰⁰, 06.06.2014. (<u>http://us3.campaign-archive1.com/?u=24625681a1e50ab6b80c962ca&id=d53794df4b&e=5ed8048497</u>)
- Čantrak Đ. (2014): Stereo PIV and LDA research of the turbulent swirl flow behind axial fan in pipe and high speed stereo PIV research of the CRM wing tip vortex, NASA Ames Research Center, Fluid Mechanics Laboratory (FML), 15⁰⁰, 26.06.2014.
- Invited lecture: Čantrak Đ. (2014): Optical measurement techniques (PIV and LDA) in turbulence research, University of Montenegro, Faculty of Mechanical Engineering, Podgorica (FML), 13⁰⁰, 09.07.2015.
- 11. Čantrak Đ. (2015): Information about the project applications for Horizon 2020, University of Belgrade, Faculty of Mechanical Engineering, 21.12.2015., room 513, time: 11-13.
- 12. Čantrak Đ. (2016): Scientific Fab lab at the Faculty of Mechanical Engineering, Belgrade, Fabelgrade, May 14-15., Belgrade Youth Center, <u>http://fabelgrade.io/speakers/#digital-fabrication-stem</u>, <u>http://cmit37.ru/news/fablab-prokachka-v-belgrade</u>
- Čantrak Đ. (2016): Water supply systems, sewage systems and systems for wastewater treatment, Training for energy managers in the field of municipal energy, University of Belgrade, Faculty of Mechanical Engineering, Belgrade, June 22.
- 14. Čantrak Đ., Janković N., Nedeljković M. (2016): The demonstration-educational pump installation, Tomas Bata University in Zlin, Czech Republic, August 23, SCOPES project.
- 15. Čantrak Đ. (2016): Compressors and distribution of the compressed air, Training for energy managers in the field of industrial energy, University of Belgrade, Faculty of Mechanical Engineering, Belgrade, November 17., December 14.
- Čantrak Đ. (2016): Pumps and liquids transportation, Training for energy managers in the field of industrial energy, University of Belgrade, Faculty of Mechanical Engineering, Belgrade, November 16. and 19., December 14.
- 17. Čantrak Đ., Janković N. (2016): Experimental turbulent swirl flow investigations iin pipe and jet, TU Clausthal, Institute of Applied Mechanics, Germany, December 22.
- 18. Čantrak Đ. (2016): Turbo pumps energy efficiency, NIS Gazprom Neft, Novi Sad, Serbia, 29.12.2016.
- Invited lecture: Čantrak Đ. (2017): Microfluidic chip fabrication for application in low-cost DIY microPIV, International Conference on Advanced Manufacturing Engineering and Technologies, NEWTECH 2017, Lecture Notes in Mechanical Engineering, June 5-9, Belgrade, Serbia.
- Invited lecture: Čantrak Đ. (2017): Experimental Investigation of Coherent Vortex Structures, Mechanics Seminar, Mechanics Department, Mathematical Institute of Serbian Academy of Sciences and Arts, lecture No. 1308, 03.05.2017.
- 21. Invited lecture: Čantrak Đ. (2017): Scientific FabLab at the Faculty of Mechanical Engineering University of Belgrade Support for Experimental Fluid Flow Research, The Abdus Salam International Centre for Theoretical Physics (ICTP Trieste), Italy, invited by Dr. Dr Enrique Canessa, Second Workshop on "Science Dissemination for the Disabled" followed by workshop on "Scientific Fabrication Laboratories (SciFabLabs)", section: SciFabLabs, October 24, 11¹⁵, SciFabLab, ICTP, <u>http://indico.ictp.it/event/7999/other-view?view=ictptimetable</u>
- 22. Čantrak Đ. (2017): Water supply systems, sewage systems and systems for wastewater treatment, Training for energy managers in the field of municipal energy, University of Belgrade, Faculty of Mechanical Engineering, Belgrade, October 26.
- Čantrak Đ. (2017): Overview of the experimental work in progress in the Laboratory for HMES and possibilities for future cooperation, TU Clausthal, Institute of Applied Mechanics, Germany, 21. Dec., closing Project workshop.
- 24. Čantrak Đ. (2018): Energy installations and machines (hydropower, pump, compressors and ventilation) development and research at the Hydraulic Machinery and Energy Systems Department Faculty of Mechanical Engineering University of Belgrade, Fifth International Industry Fair «EXPO-RUSSIA SERBIA 2018», March 14-16, Congress Center "Metropol Palace", Belgrade, March 15, 14⁰⁰-16⁰⁰, Round table in Cooperation with the Ministry of mining and energy Republic of Serbia.

- 25. Čantrak Đ. (2018): Development and application of contemporary measurement techniques in applied fluid mechanics and energetics, Fifth International Industry Fair «EXPO-RUSSIA SERBIA 2018», March 14-16, Congress Center "Metropol Palace", Belgrade, March 16, 11³⁰-14³⁰, Round table in Cooperation with the Ministry of education, science and technological development Republic of Serbia.
- 26. Čantrak Đ. (2019): Compressed air systems, EUREM (European Energy Manager) next project, Chamber of Commerce and Industry of Serbia, 9-17³⁰, March 28, 2019.
- Eight lectures in turbulence at University of Granada, Environmental Fluid Dynamics, to students at the M.Sc. and Ph.D. studies. This was followed by the research work at the Andalusian Inter-University Institute for Earth System Research (IISTA-CEAMA). Erasmus+ Project. Invited by Assoc. Prof. Dr. María Clavero Gilabert (2019)
- Čantrak Đ., Nedeljković M., Ilić D., Janković N., Nedeljković S. (2019): Recent Research Activities at the Hydraulic Machinery and Energy Systems Department, University of Belgrade, Faculty of Mechanical Engineering, HRC, 10th floor, Hangzhou, China, July 2.
- Čantrak Đ., Janković N., Ilić D., Nedeljković M. (2019): Some Research Activities at the Hydraulic Machinery and Energy Systems Department, Lomonosov Moscow State University, The Institute of Mechanics, July 9.
- 30. Čantrak Đ. S., Nedeljković M. S., Ilić D. B., Janković N. Z. (2019): Development of the Hydraulic Machines, Installations for Testing and Calibration, Softwares, and Novel Measurement Techniques in the Laboratory for Hydraulic Machinery and Energy Systems, Seminar on Low-Head Small Hydropower Technologies, 30.10.2019., 10³⁰-11⁰⁰, Faculty of Mechanical Engineering, University of Belgrade.
- 31. Invited lecture: Čantrak Đ. (2019): Numerical Modeling and Calculation of Pressure Field using Empirical Velocity Data, Seminar "Mechanics of Machines and Mechanisms – Models and Mathematical Methods", Mathematical Institute of the Serbian Academy of Sciences and Arts, Belgrade, Serbia, December 17 2019. (18⁰⁰-19⁰⁰), <u>http://www.mi.sanu.ac.rs/novi_sajt/seminars/programs/seminar21.dec2019.php</u> <u>https://miteam.mi.sanu.ac.rs/asset/aPAAh8p3PK8rmnpkC</u>
- 32. Čantrak Đ.S., Ilić D.B., Janković N.Z. (2021): "Contemporary research and development in fans, pumps and accompanying systems at the Hydraulic Machinery and Energy Systems Department University of Belgrade FME", University of Szeged, Faculty of Engineering, CEEPUS days, September 28th.
- Čantrak Đ. (2021): Laser insight in turbulence, ELI ALPS (The Extreme Light Infrastructure Attosecond Light Pulse Source) 8th User Workshop, Szeged, Hungary, panel: Superlasers for the Balkans, 10th November 2021.
- 34. Invited lecture : Čantrak Đ., Janković N., Ilić D.: Modern measurement techniques in the Laboratory for turbulence and velocimetry, organized by the Directorate of Measures and Precious Metals to mark the World Metrology Day, Faculty of Mechanical Engineering, University of Belgrade, 20th May 2022., 12³⁰-15³⁰, Belgrade, <u>https://www.dmdm.rs/en/vesti/svetski-dan-metrologije-20-maj-2022-godine-metrologija-u-digitalnoj-eri</u>
- Keynote speaker: Čantrak Đ.: Optical velocity measurement and fluid flow visualization techniques, International Symposium on Aircraft Technology, MRO & Operations, ISATECH 2022, September 14-16th 2022., <u>https://2022.isatech.org/keynote-speakers/</u>
- 36. Keynote lecturer: Čantrak Đ.S. (2022): The National standard for velocimetry and possibilities for it in Serbia, Industrial Energy and Environmental Protection in the Countries of Southeast Europe, IEEP 2022, 8-9th November 2022., Faculty of Mechanical Engineering University of Belgrade, prepared and sent paper for the Proceedings, <u>https://ieep-2022.drustvo-termicara.com/predavaci-po-pozivu</u>, 9th November 2022., 9⁰⁰ till 9²⁰, room 211.

Committees at the Ministry of Mining and Energy Republic of Serbia

- 1. Member of the examination committee for the energy manager in the field of municipal energy, since 2016.
- 2. Member of the examination committee for the energy manager in the field of industrial energy, since 2021.
- 3. Member of the Working Group for drafting bylaws based on the Law on Energy Efficiency and Rational Use of Energy, since 2021.

Participation in National Scientific Projects Funded by the Government of the Republic of Serbia, Ministry of Education, Science and Technological Development (Project leadership is listed in 14. Professional Experience):

- 1. Contemporary Problems of Fluid Mechcanics, Fundamental projects in mathematics and mechanics, Number: 1328, period: 2003-2005.
- 2. Small Hydropower Plants with Bulb Turbines for Energy Production and Direct Connectivity to the Pump Systems, Number: EE 271020, period: 2003-2007.
- 3. Small Hydropower Plants with Banki Turbines for Energy Production and Direct Connectivity to the Pump Systems, Number: EE 271019, period: 2003-2007.

- 4. Rationalization of Water Use in Pump Systems, Number: NPV-35A, period: 2004-2007.
- 5. Development and Realization of Equipment, Instruments and Probes for Turbulent Velocity Field Measurements, Number: TR 6381, period: 2005-2008.
- 6. Increase of Energy Efficiency, Disposal and Installed Power of Existing Units in Hydropower Plants in Electric Power Industry of Serbia, Number: NPEE-213009, period: 2006-2010.
- 7. Reversible Axial Jet Fans for Ecological Condition Sustain in Car Tunnels, Number: 451-01-2960/2006-85, period: 2007-2008.
- 8. Research and Development of Anemometer Probes, Measuring and Calibration Processes and Optical Methods for Technical Application, Number: TR14046, period: 2008-2010.
- Development and Implementation of Integral Mathematical-Experimental Methods of Modal Analysis and Structural Modification in Optimization of Dynamic Behavior of Free and Connected Rotating Blades, Number: 18022, period: 2008-2010.
- 10. Contemporary Automatic Control System of the Unit 3 House Unit of the HPP Bistrica, Number: 451-01-00065/2008-01/51, period: 2008-2009.
- 11. Integral Plan for Energy Ultra Efficient Multifamily Residential Building with Use of Technical and Technological Innovations and Contemporary EU Standards for Passive Buildings, Number: 391-00-00027/2009-02/164, period: 2010-2011.
- Application of Contemporary Measuring and Computation Techniques for Research of Ventilation Systems Flow Parameters on the Model of Energy Ultra Efficient (Passive) Object, Number: TR 35046, period: 2011-2019., in the period 2020-2021 contract number 451-03-68/2020-14/200105 and since Feb. 5th 2021. Contract number 451-03-9/2021-14/200105 (subproject: TR35046).

Partcipation in international Projects (Project leadership is listed in 14. Professional Experience):

- 1. International Accreditation of Engineering Studies 144856-TEMPUS-2008-RS-JPGR, (15.1.2009– 14.1.2012)
- Investigation of the Turbulent Structure Behind the Axial Fan Impellers by Use of the HWA, LDA and PIV Measuring Techniques and CFD Analysis, period: 2011-2012 (Bilaterally funded by the DAAD and Ministry of Science and Technological Development Republic of Serbia)
- Capacity building for Monitoring, Verification and Evaluation (M&V&E System) of the Energy Efficiency policy in SEE countries in terms of the EU accession process" (Modules 2 & 4), No. 08.2016.7-005.00, GTZ, May-June 2011.
- 4. Fab Initiative, U.S. Embassy Belgrade, Serbia, Alumni Program, May 2015-May 2016., US Federal Grant SRB100-15-GR-364, Project title: "Belgrade FabLab Conference 2016"
- The European Researchers' Night, activity Great Scientific Adventure, (topic "Laser secrets") Project "Science in Motion for Friday Night Commotion 2014-15" (SCIMFONICOM 2014-25, H2020-MSCA-NIGHT-633376), September 25 2015.
- 6. Member of the Working Groups 1 and 4 in COST action Flowing Matter MP1305
- SCOPES Project "Enabling Web-based Remote Laboratory Community and Infrastructure", 2015-2018, <u>http://p3.snf.ch/Project-160454#</u>
- Bilateral Project with China, Hydropower Engineering Technology Research Center of Ministry of Water Resources in China and Renewable Energy and Rural Electrification Zhejiang International Science and Technology Cooperation Base, Joint Research on the Development Technology of Lowhead Run-of-the-river Hydropower, period 2018-2021.
- 9. Erasmus+ Invited lectures in turbulence at the University of Granada, Environmental Fluid Dynamics Department, Spain in period May 13-17 2019.

Membership in Ph. D. committees, publications, lectures, technical solutions, reviews, projects, etc.:

	Quantity:
Mentor of the PhD thesis (+potential mentor)	1(+1)
Member of the PhD committees	5
Scientific paper in the internationally known editions	9
Scientific papers in the journals of the international significance (SCI list)	13+2*
Scientific papers in the national journals	15
Papers presented at the international conference printed in proceedings	52
Papers presented at the national conference printed in proceedings	7
Papers printed in the book of abstracts of the international conferences	39
Papers printed in the book of abstracts of the national conferences	3
Lectures (invited lectures)	44(10)
Books	3
Technical solutions	10
Patent	1
Reviews (books)	2
Reviewer in the international scientific journals at the SCI list (number of journals)	7
Reviewer in the international scientific Open Access journals, on the SCI list (number	11

of journals)		
Reviewer in the international scientific Open Access journals, not on the SCI list		
(number of journals)		
Reviewer in the national scientific journals (number of journals)	4	
Reviewer for the congresses (number of congresses)	20	
Reviewer/expert for the National Science Centre, Poland	1	
Projects for industry (in the field of turbomachinery, energy systems, applied fluid	95	
mechanics, calibration of flow meters, anemometers, pressure transducers, energy		
efficiency, ventilation equipment, and etc.)		
Leader in projects for industry	31	
Technical examiner and expert for the Accreditation Body of Serbia	33	
Mentor of DiplIng. and M.Sc. thesis (+ No. in progress)	20 + 2	
Mentor of B.Sc. thesis (+ No. in progress)	17 + 1	

*Editorials in journals at the SCI list.

- Organization of conferences, symposia, seminars and lectures, chairman, membership in scientific, technical and program committees:
 - 1. Member of the organizing committee of the International Conference on Classics and Fashion in Fluid Machinery, Faculty of Mechanical Engineering University of Belgrade, Serbia, 18-20. October 2002.
 - Organizer of the International Workshop for Laser Flow Measurements, Faculty of Mechanical Engineering, University of Belgrade, Serbia, 7th June 2011.
 - 3. Member of the organizing committee 4th International Meeting on Cavitation and Dynamic Problems in Hydraulic Machienry & Systems, IAHR-WG2011, IAHR Division II, Section 1, Faculty of Mechanical Engineering, University of Belgrade, Serbia, October 26-28, 2011., <u>http://iahrwg2011.mas.bg.ac.rs/local.htm</u>
 - Executive Symposium Chairman Turbulence Workshop International Symposium, Faculty of Mechanical Engineering, University of Belgrade, 31.8-2.9.2015. http://turbulenceworkshop.mas.bg.ac.rs/
 - 5. Organizer of twelve lectures of foreign researchers at the Faculty of Mechanical Engineering, University of Belgrade
 - Organizer of the special session "Fablabs in Science and Education" MEDO (Multidisciplinary Engineering Design Optimization) 2016, IEEE conference, September 14-16, 2016, Metropol Palace Hotel, Belgrade. Other activities: chairman.
 - Chairman of the session Fablab NEWTECH 2017 (The 5th International Conference on Advanced Manufacturing Engineering and Technologies), Organizer: Chair for Production Engineering, Faculty of Mechanical Engineering (FME), University of Belgrade (UB), location: FME, Belgrade, May 9 2017., time 9-10:40, room 514.
 - Organizer and chairman of the Minisymposium: "Turbulence" at the Sixth Congress of Serbian Society of Mechanics, June 19-22. 2017., <u>http://www.ssm.org.rs/congress 2017/pdf/second ann.pdf</u> <u>http://www.ssm.org.rs/congress 2017/pdf/Technical programme v4.pdf</u>
 - Member of the Organizing Committee of the VI Regional Conference Industry Energetics and Environment Protection in the Southeastern Europe Countries (IEEP '17), Organizers: Serbian Society of Thermal Engineers, Zlatibor, Serbia, June 21-24 2017.
 - Chairman of the Session Pump and Pump Sysytems Examples of Good Practice and Solutins for Increasing Enery Efficiency, Congress: IEEP '17, Zlatibor, SerbiaJune 23. јун 2017.
 - 11. Joint Workshop with Dr. Andreja Jović (U. S. Speaker Program): Do-it-yourself Microfluidics Workshop, FME, UB, room 145, September 20 2017., (29 participants, 8 institutions).
 - 12. Organizer and chairman of the Minisymposium: "Turbulence" at the Seventh Congress of Serbian Society of Mechanics, June 24-26. 2019., http://www.ssm.org.rs/congress_2019/index.html
 - 13. Member of the Program Committee of the Seventh Regional Conference IEEP '19 Industrial Energy and Environmental Protection in South Eastern Europe, 19-22. June, Zlatibor, Serbia.
 - 14. Organizer and chairman of the session "Pumps design and application in the function of the energy efficient solutions", Seventh Regional Conference IEEP '19 Industrial Energy and Environmental Protection in South Eastern Europe, June 19-22, Zlatibor, Serbia, June 21ts 2019., 15:30-16:30.
 - Minisymposium organizer: "Turbulence" at the Seventh International Congress of the Sebian Society of Mechanics, 24-26. June 2019., Sremski Karlovci, Serbia, June 25th 2019, <u>http://www.ssm.org.rs/congress_2019/topics.html</u>
 - 16. Session chairman "Vortex dynamics and structure formation", 17th European Turbulence Conference, EUROMECH, September 3-6 2019., Turin, Italy, <u>http://www.symposium.it/files/eventi/84/etc-2019-558.pdf</u>, <u>http://www.symposium.it/application/archive/media/File/Sessions%20chairs(1).pdf</u>

- 17. One of the organizers of the seminar "Seminar on Low-Head Small Hydropower Technologies", 29.10.-1.11.2019., Faculty of Mechanical Engineering University of Belgrade.
- 18. Member of the technical program committee The Twelfth International Conference on Mobile, Hybrid, and On-line Learning, eLmL 2020, 21-25. November 2020., Valencia, Spain, http://www.iaria.org/conferences2020/ComeLmL20.html
- 19. Chairman of the round table/session "Mining, agricultural and energy resources of Kosovo and Metohia", Faculty of Mechanical Engineering University of Belgrade, February 27 2020, 14⁰⁰-17⁰⁰.
- 20. Member of the technical program committee The Thirteenth International Conference on Mobile, Hybrid, and On-line Learning, eLmL 2021, 18-22. July 2021., Nice, France, <u>https://www.iaria.org/conferences2021/ComeLmL21.html</u>
- Member of the Scientific committee of the 19th congress of the Serbian Society for Hydraulic Research and Serbian Society for Hydrology (SSHR and SSH), 18-19 October 2021, Belgrade <u>http://hikom.grf.bg.ac.rs/SDHI/naucni-odbor.pdf</u>
- 22. Member of the Program Committee of the "11th International Conference on Digital Image Processing and Pattern Recognition (DPPR 2021)", November 27-28, 2021, Dubai, UAE, <u>https://cndc2021.org/dppr/committee</u>
- 23. Organizer and chairman of the Minisymposium "Turbulence" at the 8th International Congress of the Sebian Society of Mechanics, 28-30. June 2021., Kragujevac, Serbia, June 30th 2021, 14³⁰-17³⁰, <u>http://www.ssm.kg.ac.rs/congress 2021/topics/</u>
 24. Member of the Advisory Board, IAHR World Congress, 2022,
- 24. Member of the Advisory Board, IAHR World Congress, 2022, <u>https://iahrworldcongress.org/international-scientific-committee/,</u> <u>https://cmswebonline.com/iahr2022/epro/html/iahr-39wc-frontmatter.pdf</u>
- 25. Member of International Scientific Committee of the conference "1st International Conference on Mathematical Modelling in Mechanics and Engineering", and Chairman of the General Session on 9th Sept., Mathematical Institute of the Serbian Academy of Sciences and Arts, September 8-10. 2022., Belgrade Serbia, <u>http://www.mi.sanu.ac.rs/~icme2022/</u>
- 26. Session Chair "Keynote Speaker Session II", ISATECH'22, 14th September 2022. 17⁰⁰ till 18³⁰, University of Belgrade, Faculty of Mechanical Engineering, room 211.

Technical solutions and one patent are in the field of:

- construction of flow meters
- energy efficiency
- designing bulb and cross-flow hydraulic turbines
- designing laboratory test rigs for testing pumps, turbines, fans and variety of hydraulic components
- micropositioning device with 9 translations and 6 rotations (patent)
- software for designing axial fans.

Certificates since 2014.:

- NASA Certificate of Completion Laser Safety training at NASA Ames Research Center on 4/11/14
- NASA Certificate of Completion Introduction to Information technology security for new employees on 4/17/14
- NASA Certificate of Completion FY2014 Annual information technology security and privacy awareness training on 4/17/14
- Certificate of training for: Ultrasonic flow meter, Electromagnetic flow meters, portable low pressure controller, portable pressure calibration set, dead weight calibrator of pressure measuring device, Nov-Dec. 2014, ECHO Research & Development S.p.a., Italy, on 3/28/2015.
- Certificate of training The Course of the technical training for training facilities provided by Japan International Cooperation Agency (JICA), under the auspices of the JICA Project Team of "Project for Assistance of Enhancement of Energy Management System in Energy Consumption Sectors in the Republic of Serbia", period: 28-30 March 2016.
- Certificate of training The Course of the instructor training for Energy Auditor for Factory provided by Japan International Cooperation Agency (JICA), under the auspices of the JICA Project Team of "Project for Assistance of Enhancement of Energy Management System in Energy Consumption Sectors in the Republic of Serbia", period: 20-30 June 2016.
- Certificate for presenting a paper at the 4th International Symposium on Environment-Friendly Energies and Applications and 1st International Conference Multidisciplinary Engineering Design Optimization
- Certificate for presence at the Presentation of the new standard SRPS ISO/IEC 17025:2017, organized by the Accreditation body of Serbia, April 23, 2018, Belgrade.
- Certificate for presence at the workshop "Which are the biggest challenges in work with students and how they could be overcome?", organized in ERASMUS+ project "Re@WBC - Enhancement of HE research potential contributing to further growth of the WB region", organizer: Center for continuing education, University of Belgrade, No. 00770, March 14, 2019, Belgrade.

- APTIS for teachers listening, reading, speaking, writing (British Council), Overall CEFR Grade: C, October 23rd, 2019.
- Certificate of Achievement, Course: Orientation to Educational Neuroscience, Central Queensland University, Average test score: 96%, August 11th, 2020. <u>https://www.futurelearn.com/certificates/q9p8ems</u>
- Certificate successfully attended the Training for ISO 50001:2018 Energy Management System basics, implementation, connection with: ISO 14001, EMAS, Eco-design, Life Cycle Analysis, Energy Audit (from 25th to 29th January 2021., 2.5 days), issued on 1st February 2021., Ministry of Mining and Energy of the Republic of Serbia, EU project: Establishing and strengthening of capacities of the conformity assessment bodies for the implementation of Energy Labeling and Eco-design Directives
- Certificate successfully attended the Training for ISO 50001:2018 Energy Management System Course for Internal Auditors (from 25th to 29th January 2021., 2.5 days), issued on 1st February 2021., Ministry of Mining and Energy of the Republic of Serbia, EU project: Establishing and strengthening of capacities of the conformity assessment bodies for the implementation of Energy Labeling and Eco-design Directives
- Certificate of Successfully Completed Training for Teaching in English, by Foundation Tempus, in period: Nov.-Dec. 2019., awarded: January 21st 2022.
- Certificate of Attendance at the 1st International Conference on Mathematical Modelling in Mechanics and Engineering held at the Mathematical Institute if the Serbian Academy of Sciences and Arts, Belgrade, Serbia, 8-10 September 2022.
- Reviewer in the journals on the SCI list:
 - 1. Applied Mathematics and Computation (ISSN 0096-3003) -
 - http://www.journals.elsevier.com/applied-mathematics-and-computation/
 - 2. Thermal Science http://thermalscience.vinca.rs/
 - 3. AIAA Journal https://mc.manuscriptcentral.com/aiaa-j
 - 4. Aerospace Science & Technology <u>http://www.journals.elsevier.com/aerospace-science-and-technology/</u>
 - 5. Mechanics and Industry http://www.mechanics-industry.org/
 - 6. Journal of Hydrodynamics https://link.springer.com/journal/42241
 - 7. Measurement (ISSN 0263-2241) https://www.journals.elsevier.com/measurement
- Reviewer in the journal with the Open Access on the SCI list:
 - 1. IEEE Access The Multidisciplinary Open Access Journal https://ieeeaccess.ieee.org/?http://ieeeaccess_ieee_org/
 - Processes Multidisciplinary Digital Publishing Institute (MDPI) E-ISSN 2227-9717 <u>https://www.mdpi.com/journal/processes</u> - Reviewer Acknowledgments in 2019
 - 3. Journal of Building Engineering ISSN 2352-7102, Elsevier https://www.journals.elsevier.com/journal-of-building-engineering
 - 4. Remote Sensing MDPI ISSN 2072-4292, https://www.mdpi.com/journal/remotesensing
 - 5. Archive of Applied Mechanics (ISSN 0939-1533) https://www.springer.com/journal/419
 - 6. Applied Sciences MDPI ISSN 2076-3417, https://www.mdpi.com/journal/applsci
 - 7. Energies https://www.mdpi.com/journal/energies
 - 8. Sensors (ISSN 1424-8220; CODEN: SENSC9) https://www.mdpi.com/journal/sensors
 - 9. Actuators (ISSN 2076-0825) https://www.mdpi.com/journal/actuators, MDPI
 - Water Science and Technology Water Supply (ISSN 1606-9749) https://iwaponline.com/ws/issue, International Water Association (IWA)
 - 11. Lubricants (ISSN 2075-4442) https://www.mdpi.com/journal/lubricants, MDPI
- Reviewer in the journal with the Open Access not on the SCI list:
 - 1. International Journal of Turbomachinery, Propulsion and Power Open Access Journal <u>https://www.mdpi.com/journal/ijtpp/imprint</u>
 - Springer Nature Applied Sciences <u>https://www.springer.com/engineering/journal/42452</u> ISSN: 2523-3971
 - Computation Open Access Journal <u>https://www.mdpi.com/journal/computation</u>, ISSN: 2079-3197
 - 4. Fluids Open Access Journal <u>https://www.mdpi.com/journal/fluids</u>, ISSN: 2311-5521, CODEN: FLUICM, publisher: MDPI
 - 5. Aerospace Open Access Journal <u>https://www.mdpi.com/journal/aerospace</u>, ISSN: 2226-4310, publisher: MDPI
- Reviewer in the national journals:
 - 1. Scientific Technical Review <u>http://www.vti.mod.gov.rs/ntp/</u> (http://www.vti.mod.gov.rs/ntp/program/l-recenzent.htm)
 - 2. FME Transactions http://www.mas.bg.ac.rs/istrazivanje/fme/start
 - 3. Theoretical and Applied Mechanics http://www.mi.sanu.ac.rs/tam/
 - 4. Technique http://www.sits.org.rs/textview.php?file=348.html

• Participation in project administration: Participated in the drafting of the technical specification for the tender procurement of equipment for the scientific project of the Ministry of Education, Science and Technological Development, as well as for the HETIP projects of the EU Commission.

BIBLIOGRAPHY

Scientific papers in the internationally known editions:

- Čantrak Đ.S., Kushner L.K., Heineck J.T. (2014): Time-resolved stereo PIV investigation of the NASA Common Research Model in the NASA Ames Fluid Mechanics Laboratory 32- by 48-in indraft wind tunnel, CTR Research Publications, Center for Turbulence Research, Annual Research Briefs 2014, pp. 179-191, Eds.: P. Moin and J. Urzay, Center for Turbulence Research, Stanford University / NASA Ames.
- https://web.stanford.edu/group/ctr/ResBriefs/2014/18_cantrak.pdf
- Pejović Simeunović J., Gađanski I., Janićijević Ž., Janković M., Barjaktarović M., Janković N. Z., Čantrak Đ. S. (2017): Microfluidic Chip Fabrication for Application in Low-Cost DIY MicroPIV, Proceedings, Eds.: Majstorović V., Jakovljević Z., Proceedings of 5th International Conference on Advanced Manufacturing Engineering and Technologies, NEWTECH 2017, Lecture Notes in Mechanical Engineering. Springer, Cham, DOI: 10.1007/978-3-319-56430-2_34, pp. 451-459. <u>https://link.springer.com/chapter/10.1007/978-3-319-56430-2_34</u>
- Čantrak Đ. S., Janković N. Z., Ilić D. B. (2021): LDA Experimental Research of Turbulent Swirling Flow Behind the Axial Fans in Pipe, Jet and Diffuser. In: Mitrovic N., Mladenovic G., Mitrovic A. (eds) Experimental and Computational Investigations in Engineering. CNNTech 2020. Lecture Notes in Networks and Systems, vol 153. Springer, Cham, pp. 184-202. <u>https://doi.org/10.1007/978-3-030-58362-0_12</u>
- Jović A., Janićijević Ž., Janković M. M., Janković N. Z., Barjaktarović M., Čantrak Đ. S., Gadjanski I. (2017): Simulating Fluid Flow in "Shrinky Dink" Microfluidic Chips - Potential for Combination with Low-Cost DIY MicroPIV, Proceedings, IEEE EWDTS, Novi Sad, Serbia, ISBN 978-1-5386-3298-7, September 29-October 2, pp. 494-498., DOI: 10.1109/EWDTS.2017.8110052, <u>http://ieeexplore.ieee.org/document/8110052/</u>
- Nedeljkovic M.S., Jankovic N., Cantrak D., Ilic D., Matijevic M. (2019) Poster: Remote Engineering Education Set-Up of Hydraulic Pump and System. In: Auer M., Langmann R. (eds) Smart Industry & Smart Education. REV 2018. Lecture Notes in Networks and Systems, vol 47. Springer, Cham, pp. 304-311, <u>https://link.springer.com/chapter/10.1007/978-3-319-95678-7_35</u>
- Nedeljkovic M.S., Cantrak D., Jankovic N., Ilic D., Matijevic M. (2019) Virtual Instrumentation Used in Engineering Education Set-Up of Hydraulic Pump and System. In: Auer M., Langmann R. (eds) Smart Industry & Smart Education. REV 2018. Lecture Notes in Networks and Systems, vol 47. Springer, Cham, pp. 686-693, <u>https://link.springer.com/chapter/10.1007%2F978-3-319-95678-7_75</u>
- Nedeljkovic M.S., Cantrak D.S., Jankovic N.Z., Ilic D.B., Matijevic M.S. (2018): Virtual Instruments and Experiments in Engineering Education Lab Setup with Hydraulic Pump, Proceedings, 2018 IEEE Global Engineering Education Conference (EDUCON), April 17-20, Santa Cruz de Tenerife, Canary Islands, Spain, pp. 1145-1152, DOI: 10.1109/EDUCON.2018.8363358, https://ieeexplore.ieee.org/document/8363358
- Nedeljkovic M.S., Jankovic N.Z., Cantrak D.S., Ilic D.B., Matijevic M.S. (2018): Engineering Education Lab Setup Ready for Remote Operation - Pump System Hydraulic Performance, Proceedings, 2018 IEEE Global Engineering Education Conference (EDUCON), April 17-20, Santa Cruz de Tenerife, Canary Islands, Spain, pp. 1175-1182, DOI: 10.1109/EDUCON.2018.8363362, <u>https://ieeexplore.ieee.org/document/8363362</u>
- Veljovic A., Matijevic M., Nedeljkovic M., Cantrak D. (2018): An Approach to Design of the Cyber-Physical Systems for Engineering Education, Proceedings, 2018 IEEE Global Engineering Education Conference (EDUCON), April 17-20, Santa Cruz de Tenerife, Canary Islands, Spain, pp. 1408-1413, DOI: 10.1109/EDUCON.2018.8363393, <u>https://ieeexplore.ieee.org/document/8363393</u>

Scientific papers in the journals of the international significance (SCI list):

- Ilić J., Čantrak Dj., Srećković M. (2007): Laser Sheet Scattering and the Cameras' Positions in Particle Image Velocimetry, Acta Physica Polonica A, Vol. 112, No 5., ISSN 0587-4246 (printed version), PL ISSN 1898-794X (electronic version), pp. 1113-1118., IF for 2007.: 0.34, <u>http://przyrbwn.icm.edu.pl/APP/PDF/112/a112z563.pdf</u>
- Lečić M.R., Čantrak Đ.S., Ćoćić A.S., Banjac M.J. (2009): Piezoresistant Velocity Probe, Experimental Techniques, Wiley, May/June 2009, Vol. 33, Issue 3, pp. 73-79, ISSN 0732-8818, IF for 2009.: 0.5, <u>http://onlinelibrary.wiley.com/doi/10.1111/j.1747-1567.2008.00365.x/abstract</u>
- Benišek M.H., Lečić M.R., Ilić D.B., Čantrak Đ.S. (2010): Aplication of New Classical Probes in Swirl Fluid Flow Measurements, Experimental Techniques, Wiley, May/June 2010, Vol. 34, Issue 3, pp. 74-81, ISSN 0732-8818, IF for 2010.: 0.505. https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1747-1567.2009.00482.x

- Protić Z.D., Nedeljković M.S., Čantrak D.S., Janković N.Z. (2010): Novel Methods for Axial Fan Impeller Geometry Analysis and Experimental Investigations of the Generated Swirl Turbulent Flow, Thermal Science, Vol. 14, Suppl., pp. S125-S139, ISSN 2334-7163 (online edition), ISSN 0354-9836 (printed edition), IF for 2010.: 0.706, <u>http://www.doiserbia.nb.rs/img/doi/0354-9836/2010/0354-98361000025P.pdf</u>
- Benišek M.H., Ilić D.B., Čantrak D.S., Božić I.O. (2010): Investigation of the Turbulent Swirl Flows in a Conical Diffuser, Thermal Science, Vol. 14, Suppl., pp. S141-S154, ISSN 0354-9836, IF for 2010.: 0.706, <u>http://www.doiserbia.nb.rs/img/doi/0354-9836/2010/0354-98361000026B.pdf</u>
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