Dr **MILOSAV OGNJANOVIĆ**, professor emeritus

University of Belgrade, Faculty of mechanical engineering

**EDUCATION:**

* Born 23.10.1950, Plažane, Despotovac, Serbia
* Primary school - Plažane, Technical school – Despotovac,
* 1969-1974 – Dipl. Ing. of Production, 1975-1977- Magisterium work, 1979-1984- Doctoral work-University of Belgrade, Faculty of mechanical engineering.

**POSITIONS HELD:**

* 1974-1975-Research fellow in the Test Centre of the Railway Car Factory in Kraljevo
* 1975-1979-Research assistant, 1979-1986-Teaching assistant, 1986-1991-Dozent, 1991-1996-Associated professor, 1996…… -Full professor, University of Belgrade, Faculty of mechanical engineering
* 2006-2008-Head of Department of general machine design
* 2006-2016-Head of master education module for Design in mechanical engineering.

**Honours and Awards:**

* 1996 – October award of the Belgrade city for the science contribution of monography book *“The noise generation in mechanical systems”*.
* 2004 – Associated member of *Academy of engineering sciences of Serbia*, and 2012 – Full member of *Academy of engineering sciences of Serbia.*
* 2016 – Danubia-Adria Society for experimental mechanics *Gratitude note* for long term scientific contribution and service as representative of Serbia in Scientific Committee.
* 2017 – *Professor emeritus* of University of Belgrade, Faculty of mechanical engineering.

**ACADEMIC EXPERIENCE AND SERVICE:**

**A. TEACHING:**

**Courses Developed and Taught:**

* Machine elements 1, 2 and 3
* Fundamentals of engineering design
* Machine design
* Fundamentals of technical innovations
* Innovative design of technical systems (Engineering design methodology)
* Engineering design methods
* Reliability of gear transmission units
* Structure testing methods
* Product Development in Mechanical Engineering
* Reliability and dynamics of gear transmission units

**Master education module founded:**

* Master education module for Design in mechanical engineering he developed and oriented to teach approaches and methodology of innovative design of technical systems. The module contains all aspects, methods and tools in relation to market recognition of the new innovative products.

**B. RESEARCH:**

**Areas of interest:**

* Design Science: *Design Methods; Innovative product development, Property-based Design*
* Machine Systems Dynamics: *Operating loads, Generation of Noise and Vibration*
* Safety and Reliability: *Fatigue, Tribology, Damage accumulation, Fracture*
* Gear Transmission: *Design, Vibration and Noise, Fatigue and fracture*

**The main scientific contributions:**

* Synthesis of renewable free vibrations caused by collisions of machine parts.
* Identification of the load capacity of mechanical systems based on condition indicators and operating conditions.
* A robust approach to the selection of design parameters of the gear transmission units.

**The main engineering contributions:**

* Installations and laboratory testing procedure of failure probability, vibration and noise of gears and complete gear transmission units.
* Design solutions of specific power transmission units of high compactness for extreme heavy operating conditions.
* Identified causes of failures and new design solutions of components for various applications.

**Supervisor of thesis which are defended:**

* Doctoral and Ph.D. theses: *Petar Kočović, Božidar Rosić, Predrag Petrović, Aleksandar Subić, Fathi Agemi, Predrag Živković, Snežana Ćirić-Kostić, Matug Benur, Miroslav Milutinović.*
* Magisterium and M.Sc. theses: *Vasilije Drecun, Aleksandar Subić, Vladimir Petković, Snežana Kostić, Predrag Živković, Vojislav Batinić, Mustafa Ederwish, Sanja Vasin, Stefan Ivković, Žarko Marković, Dragan Barišić, Miloš Stančić, Davor Drobac, Dragan Džodan.*

**Research arrangement:**

* Coordinator of TEMPUS project (2006-2008)
* Managing of working packet of the project FP-7 (2008-2011)
* Managing and participation in 11 state scientific and innovative projects
* Arrangement and realisation more than 70 engineering realisation for industry
* Chairman of commissions for national standards

**C. COMMITTE SERVICE:**

**Committees of the Faculty of mechanical engineering:**

* Chairman of committee for election of teaching staff and of committee for Ph.D. studies (2008-2016)
* Editor-in-chief of scientific journal *FME Transactions* (2005-2007)
* Member of Faculty Council, Commission for education curriculum, Commission for book edition, etc

**Committees of the University of Belgrade:**

* Chairman of the council for scientific fields of technical sciences (2008-2016)
* Member of expert council of mechanical, mine-geological and organization sciences (2001-2007)

**Outside Committees:**

* Hold conferences four international conferences and member of scientific committee of 30 conferences.
* Member of editorial boards of three international journals.
* Member of seven scientific societies.
* Reviewer of the set of international scientific journals.
* Cooperation with about 15 international universities and all domestic.

**PUBLICATIONS:**

**A. SELECTED BOOKS from the list of 18 titles:**

* Ognjanovic M.: *Machine elements* –Faculty of mechanical engineering, editions 2003-2016.
* Ognjanovic M.: *Innovative development of technical systems* –Faculty of mechanical engineering, 2014.

**B. SELECTED PAPERS:**

* Ognjanovic M.: *Decisions in Gear Train Transmission Design* - Journal on Research in Engineering Design, 8(1996),178 -187
* Ognjanovic M., Agemi F.: *Gear vibrations in supercritical mesh-frequency range caused by teeth impacts*, - Journal of Mechanical Engineering 56 (2010)10, 653-662
* Ognjanovic M., Benur M.: *Experimental Research for Robust Design of Power Transmission Components*, Meccanica, 46 (2011) 4, 699-710,
* Ognjanovic M., Ciric Kostic S.: *Gear Unit Housing Effect on the Noise Generation Caused by Gear Teeth Impacts*, –Journal of Mechanical Engineering, 58 (2012) 5, 327-337
* Ognjanovic M., Ristic M., Zivkovic P.: Reliability for Design of Planetary gear Transmission Units, Meccanica, 49 (4), (2014), 829-841
* Vasin S., Ognjanović M., Miloš M.: *Wind turbine with continual variation of transmittion ratio – design and testing methodology*, - Proceedings of the Romanian Academy Series A-Mathematics Physics Technicalsciences Information Science, 2(2015), 184-192.