

<b>Name of teacher:</b>	Zoran Ren
<b>Employed at:</b> <b>Since:</b>	Univerza v Mariboru, Fakulteta za strojništvo, Slovenija 1987-1990; 1993-
<b>Title:</b> <b>Since:</b> <b>In:</b>	Full Professor 2005 Mechanics & Design
<b>e-mail address, web page</b>	<a href="mailto:zoran.ren@um.si">zoran.ren@um.si</a> ; <a href="http://lace.fs.uni-mb.si/wordpress/ren/">http://lace.fs.uni-mb.si/wordpress/ren/</a>
<b>Knowledge of foreign languages:</b>	Croatian, English, German, Russian

<b>Qualifications</b>	<ul style="list-style-type: none"> <li>- <b>date of birth, nationality:</b> 30.6.1963, Maribor, Slovenija</li> <li>- <b>First degree obtained at:</b> Tehniška fakulteta v Mariboru, Strojništvo, 1987.</li> <li>- <b>Master degree obtained at:</b> Tehniška fakulteta v Mariboru, Strojništvo, 1990.</li> <li>- <b>Ph.D. degree obtained at:</b> University of Wales Swansea, Department of Civil Engineering, 1994.</li> <li>- <b>additional education:</b></li> <li>- <b>previous employments:</b> 1990-1992- University of Wales Swansea, UK</li> </ul>
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<b>List of papers published in scientific journals</b>	<p>total 80 papers, 2 review; last 5 published papers:</p> <p>HOKAMOTO, Kazuyuki, SHIMOMIYA, Koshiro, NISHI, Masatoshi, KRSTULOVIC-OPARA, Lovre, VESENJAK, Matej, REN, Zoran. Synthesis of unidirectional porous-structured aluminum through explosive compaction using cylindrical geometry. <i>Sosei to kako</i>, ISSN 0038-1586. [Print ed.], 2017, vol. 58, no. 673, str. 156-160. <a href="https://www.jstage.jst.go.jp/browse/sosei">https://www.jstage.jst.go.jp/browse/sosei</a>. [COBISS.SI-ID 20309782]</p> <p>VESENJAK, Matej, REN, Zoran. Geometrical and mechanical analysis of various types of cellular metals. <i>Ciência e tecnologia dos materiais</i>, ISSN 0870-8312. [Print ed.], Jan.-Jun. 2016 (Special Issue on Cellular Materials), vol. 28, no. 1, str. 9-13. <a href="http://www.sciencedirect.com/science/article/pii/S0870831216300106">http://www.sciencedirect.com/science/article/pii/S0870831216300106</a>. [COBISS.SI-ID 19717654]</p> <p>KOVAČIČ, Aljaž, REN, Zoran. On the porosity of advanced pore morphology structures. <i>Composite structures</i>, ISSN 0263-8223. [Print ed.], Dec. 2016, vol. 158, str. 235-244. <a href="http://www.sciencedirect.com/science/article/pii/S0263822316309874">http://www.sciencedirect.com/science/article/pii/S0263822316309874</a>, doi: 10.1016/j.compstruct.2016.09.046. [COBISS.SI-ID 19812886]</p> <p>KRSTULOVIC-OPARA, Lovre, VESENJAK, Matej, DUARTE, Isabel, REN, Zoran, DOMAZET, Željko. Infrared thermography as a method for energy absorption evaluation of metal foams. V: NICOLETTO, Gianni (ur.), PASTRAMA, Stefan Dan (ur.), EMRI, Igor (ur.). <i>DAS 2015, 32nd Danubia Adria Symposium on Advances in Experimental Mechanics</i>, September 22-25, 2015, High Tatras, Slovakia, (Materials today: proceedings, ISSN 2214-7853, Vol. 3, iss. 4). [S. l.]: Elsevier, 2016, vol. 3, iss. 4, str. 1025-1030, doi: 10.1016/j.matpr.2016.03.041. [COBISS.SI-ID 19471894]</p> <p>VESENJAK, Matej, HOKAMOTO, Kazuyuki, SAKAMOTO, Motoki, NISHI, Takuya, KRSTULOVIC-OPARA Lovre, REN, Zoran. Mechanical and microstructural analysis of unidirectional porous (UniPore) copper. <i>Materials &amp; design</i>, ISSN 0264-1275, 15 Jan. 2016, vol. 90, str. 867-880. <a href="http://www.sciencedirect.com/science/article/pii/S0264127515307802">http://www.sciencedirect.com/science/article/pii/S0264127515307802</a>, doi: 10.1016/j.matdes.2015.11.038. [COBISS.SI-ID 19136534]</p>
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<b>List of publications which serve as a proof of teaching qualifications</b>	<p>total 27 papers; last 5 papers:</p> <p>VESENJAK, Matej, REN, Zoran. Yielding and post-yield behaviour of closed-cell cellular materials under multiaxial dynamic loading. <i>Metals and materials international</i>, ISSN 1598-9623, 2016, vol. 22, no. 3, str. 435-442, doi: 10.1007/s12540-016-5550-7. [COBISS.SI-ID 19461654]</p> <p>DUARTE, Isabel, VESENJAK, Matej, KRSTULOVIC-OPARA, Lovre, REN, Zoran. Static and dynamic axial crush performance of in-situ foam-filled tubes. <i>Composite structures</i>, ISSN 0263-8223. [Print ed.], Jun. 2015, vol. 124, str. 128-139. <a href="http://www.sciencedirect.com/science/article/pii/S0263822315000264#">http://www.sciencedirect.com/science/article/pii/S0263822315000264#</a>, doi: 10.1016/j.compstruct.2015.01.014. [COBISS.SI-ID 18369814]</p> <p>PODGRAJŠEK, Martin, GLODEŽ, Srečko, REN, Zoran. Failure analysis of forging die insert protected with diffusion layer and PVD coating. <i>Surface &amp; coatings technology</i>, ISSN 0257-8972. [Print ed.], 25 August 2015, vol. 276, str. 521-528, ilustr., doi: 10.1016/j.surfcoat.2015.06.021. [COBISS.SI-ID 18826006]</p>
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	<p>BOROVINŠEK, Matej, VESENJAK, Matej, REN, Zoran. Improving the crashworthiness of reinforced wooden road safety barrier using simulations of pre-stressed bolt connections with failure. Engineering failure analysis, ISSN 1350-6307. [Print ed.], Dec. 2013, vol. 35, str. 625-635, doi: 10.1016/j.engfailanal.2013.06.006. [COBISS.SI-ID 17350678]</p> <p>FAJDIGA, Gorazd, REN, Zoran, KRAMAR, Janez. Comparison of virtual crack extension and strain energy density methods applied to contact surface crack growth. Engineering fracture mechanics, ISSN 0013-7944. [Print ed.], 2007, vol. 74, iss. 17, str. 2721-2734. <a href="http://dx.doi.org/10.1016/j.engfracmech.2007.01.016">http://dx.doi.org/10.1016/j.engfracmech.2007.01.016</a>. [COBISS.SI-ID 11581974]</p>
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<b>Leader of the following research projects</b>	<p>total 23 completed projects; last 5 projects:</p> <p>REN, Zoran, DOMAZET, Željko, VESENJAK, Matej, BOROVINŠEK, Matej, NOVAK, Nejc, KRSTULOVIĆ-OPARA, Lovre, GOVORČIN, Danko. Karakterizacija naprednih celičnih struktur s spremenljivo poroznostjo : zaključno poročilo o izvajanju slovensko-hrvaškega projekta znanstvenega sodelovanja v letih 2014 in 2015 : šifra projekta: BI-HR/14-15-026 : čas trajanja projekta: 1. 5. 2014-31.12. 2015 = Characterisation of advanced cellular structures with variable porosity. Maribor: Fakulteta za strojništvo; Split: FESB, 2016. 11 f.</p> <p>REN, Zoran, ITOH, Shigeru, VESENJAK, Matej, BOROVINŠEK, Matej. Karakterizacija mehanskega obnašanja naprednih celičnih materialov pod vplivom udarnih obremenitev : zaključno poročilo o rezultatih znanstvenoraziskovalnega sodelovanja. Maribor: Fakulteta za strojništvo; Okinawa: Okinawa National College of Technology Henoko, Nago, Okinawa, Japonska, 2015. [10] f.</p> <p>REN, Zoran, YOH, Jai Ick, VESENJAK, Matej, SIROTKIN, Fedir. Večfizikalne simulacije visokoenergijskih celičnih gradiv = Multi physics simulation of cellular energetic materials : zaključno poročilo o rezultatih znanstvenoraziskovalnega sodelovanja : sodelujoča država Republika Koreja. Maribor: Fakulteta za strojništvo, 2013. [5] f.</p> <p>REN, Zoran, ITOH, Shigeru, VESENJAK, Matej, BOROVINŠEK, Matej, TANAKA, Shigeru, IRIE, Seiichi. Eksperimentalna in numerična analiza širjenja udarnih valov v celičnih materialih = Experimental and computational analysis of shock wave propagation in cellular materials : končno poročilo o izvajanju slovensko-japonskega bilateralnega projekta znanstvenega sodelovanja v letih 2009-2011. Maribor: Fakulteta za strojništvo; Kumamoto: Kumamoto University, The Shock Wave and Condensed Matter Research Center, 2012. 4 f.</p> <p>REN, Zoran, ALZAHABI, Basem, VESENJAK, Matej, BOROVINŠEK, Matej, RAMADAN, Basem, BERRY, K. Joel. Napredno računalniško modeliranje udarnih in NVH problemov = Advanced computational modeling of crash and NVH problems : končno poročilo o izvajanju projekta znanstveno - raziskovalnega sodelovanja med Republiko Slovenijo in ZDA v letih 2006-2007. Maribor: Fakulteta za strojništvo; Michigan: Kettering University, Department of Mechanical Engineering, 2008. 3 f.</p>
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<b>Participant in the following research projects</b>	<p>total 17 projects; last 5 projects:</p> <p>VESENJAK, Matej, DULIKRAVICH, George S., REN, Zoran, BOROVINŠEK, Matej, PACHECO, Cesar C., JHA, Rajesh, REDDY, Sohail. Večciljna topološka oblikovna optimizacija lahkih struktur, napoljenih s kovinsko peno : zaključno poročilo o izvajanju znanstvenoraziskovalnega sodelovanja med Republiko Slovenijo in ZDA v obdobju 2014 in 2015 : šifra projekta: BI-US/14-15-043 : čas trajanja projekta: 1. 1. 2014-31.12. 2015 = Multi-objective topological design optimization of lightweight metal foam filled structures. Maribor: Fakulteta za strojništvo; Miami, Florida: Florida International University, 2016. 8 f.</p> <p>VESENJAK, Matej, KRSTULOVIĆ-OPARA, Lovre, REN, Zoran, BOROVINŠEK, Matej, KOVAČIČ, Aljaž, DOMAZET, Željko, GOVORČIN, Danko. Eksperimentalno in računalniško testiranje APM krogel z napredno morfologijo por : zaključno poročilo : rezultati znanstvenoraziskovalnega sodelovanja[!a] s Hrvaško BI-HR/12-13-042 : čas trajanja projekta: 1. januar 2012-31. december 2013. Maribor: Fakulteta za strojništvo; Split: FESB, 2014. [9] f.</p> <p>STANA-KLEINSCHEK, Karin, SFILIGOJ-SMOLE, Majda, KREŽE, Tatjana, STRNAD, Simona, ŠAUPERL, Olivera, FRAS ZEMLJIČ, Lidija, ABRAM-ZVER, Marta, RUDOLF, Andreja, KREŠEVIČ VRAZ, Silva, GERŠAK, Jelka, REN, Zoran, ULBIN, Miran, KOS, Tanja, PETROVIČ, Romana, DEBELAK, Franci, ŽLABRAVEC, Verica, RIJAVEC, Tatjana, PAVKO-ČUDEN, Alenka. Funkcionalno oblačilo slovenskega bojvnika FOSB : zaključno poročilo o rezultatih opravljenega raziskovalnega dela na projektu ciljnega raziskovalnega programa (CRP) "Znanje za varnost in mir 2006-2010", (Slovenska vojska v okviru 21. stoletja). Maribor: Fakulteta za strojništvo, 2009. 52 str., ilustr.</p> <p>ULBIN, Miran, PLEŠEK, Dušan, VESENJAK, Matej, BOROVINŠEK, Matej, REN, Zoran, ŠRAML, Matjaž, KRAMBERGER, Janez, GABRIEL, Dušan, PLEŠEK, Jiří, POŽVILOVA, Alena, HRUBÝ, Zbyněk, LUKEŠ, Vladimír. Numerične simulacije širjenja napetostnih valov v trdninah in poroznih materialih = Numerical simulation of stress wave propagation in solids and porous media : zaključno poročilo o izvajanju slovensko-češkega bilateralnega projekta med leti 2007-2008. Maribor: Fakulteta za strojništvo; Praha: Ústav</p>
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	<p>Termomechaniky AVČR, 2009. 4 f.</p> <p>KÜHN, Günter, REN, Zoran, ŠKERGET, Leopold, HRIBERŠEK, Matjaž, KOLK, Karsten, HAAS, Michael. Advanced computational engineering mechanics : final report on academic cooperation between University of Maribor, Faculty of Mechanical Engineering, Maribor, Slovenia, Institute of Structures and Design, Institute of Power, Process and Environmental Engineering and Universität Erlangen-Nürnberg, Technische Fakultät, Erlangen, Deutschland, Lehrstuhl für Technische Mechanik. Maribor: Faculty of Mechanical Engineering; Erlangen: Technische fakultet, 2005. 9 f.</p>
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<b>Supervision of MSc theses</b>	11
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<b>Supervision of PhD theses</b>	7
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<b>Examination of MSc theses</b>	26
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