

**Fișa de verificare a criteriului**  
**„Activitate de cercetare științifică, dezvoltare tehnologică și inovare” (CDI)**  
 Standarde minimale pentru domeniile științifice “Inginerie mecanică, mecatronică și robotică”:  
**Minim 10 puncte, din care minim 6 puncte din CDI-ART**

**Criteriul CDI**

Indicatori DID	Descriere	Punctaj	Observații
<b>CDI-ART</b> (min. 60% din punctajul minimal)	Articole științifice publicate în reviste de specialitate cotate ISI sau în reviste / volume indexate ISI sau BDI.	1 articol = $FI_{\text{articol}}^* + \sum FI_{\text{citare}}^*$ $FI^* = 0.1 + \text{Factor Impact}$	<ul style="list-style-type: none"> <li>• Factorul de impact corectat <math>FI^*</math> ia în considerare articolele în publicații indexate BDI sau indexate ISI (fără factor de impact) prin valoarea de prag 0.1;</li> <li>• Se pot lua în considerare articole cu <math>FI_{\text{articol}}^* = 0</math> dar cu <math>\sum FI_{\text{citare}}^* &gt; 0</math>;</li> <li>• Se exclud autocitățile;</li> <li>• Monografiile naționale trebuie să fie incluse în depozitul legal al Bibliotecii Naționale</li> </ul>
<b>CDI-BRV</b>	Brevete de invenție	1 brevet de invenție internațional = 3 puncte 1 brevet de invenție național = 1 punct	
<b>CDI-MON</b>	Monografii de specialitate sau capitole în monografii de specialitate	1 punct = 10 pagini contribuție monografie în editură de prestigiu din străinătate* 1 punct = 50 pagini contribuție în editură națională	

\* Edituri de prestigiu din străinătate: Elsevier, Springer, John Wiley & Sons, McGraw-Hill, CRC Press, Francis & Taylor, Oxford University Press, Cambridge University Press, Academic Press, Kluwer Academic Publishers.

## CDI-ART

Articole susținute in reviste sau la conferințe indexate ISI Proceedings		
1.	Filip, S. M., Avrigean E., s.a. (2017): <i>Research on the Internal pressure of metal gas distribution pipelines with different types of tubing defects.</i> Conferinta MSE din 6-7 iunie 2017, Universitatea Lucian Blaga din Sibiu. ISSN.	0.100
2.	ROLL Filip S., Avrigean Eugen, s.a. (2017): <b>Determining the temperature field at welding the polyethylene sockets.</b> 2016 Revista de Chimie – Revista Materiale Plastice, Vol. 53, Nr. 4 - 2016, Bucuresti, Romania, 2016. <a href="http://www.revistadechimie.ro/">http://www.revistadechimie.ro/</a> factor impact 0,289 si SRI 0,183 - adeverinta	0.100+0.289
3.	ROLL Avrigean Eugen, s.a. (2017): <b>Determining the temperature field at welding the polyethylene sockets.</b> 2016 Revista de Chimie – Revista Materiale Plastice, Vol. 53, Nr. 4 - 2016, Bucuresti, Romania, 2016. <a href="http://www.revistadechimie.ro/">http://www.revistadechimie.ro/</a> factor impact 0,289 si SRI 0,183 - adeverinta	0.100+0.289
4.	ROLL Avrigean Eugen, s.a. (2017): <b>Determining the temperature field at welding the polyethylene sockets.</b> 2016 Revista de Chimie – Revista Materiale Plastice, Vol. 53, Nr. 4 - 2016, Bucuresti, Romania, 2016. <a href="http://www.revistadechimie.ro/">http://www.revistadechimie.ro/</a> factor impact 0,289 si SRI 0,183 - adeverinta	0.100+0.289
5.	Filip + Avrigean Eugen, s.a. (2017): <b>Studies and research on the electrical resistance of the polyethylene insulation used for the chemical protection of the steel pipelines intended for the natural gas distribution.</b> 2017 Revista de Chimie – Revista Materiale Plastice, Vol. 54, Nr. 1 - 2017, Bucuresti, Romania. <a href="http://www.revistadechimie.ro/">http://www.revistadechimie.ro/</a> factor impact 0,289 si SRI 0,183	0.100+0.289
6.	Avrigean Eugen, s.a. (2016): <b>Theoretical and Experimental Determination of the Fracture-Risk Areas on the Electrofusion Socket Made of High Density Polyethylene.</b> 2016 Revista de Chimie – Revista Materiale Plastice, Vol. 53, Nr. 3 - 2016, Bucuresti, Romania, 2016. <a href="http://www.revistadechimie.ro/">http://www.revistadechimie.ro/</a> factor impact 0,289 si SRI 0,183	0.100+0.289
7.	Stetiu Mircea, Avrigean Eugen, s.a. (2016): <b>Determining the temperature field at welding the polyethylene sockets.</b> 2016 Revista de Chimie – Revista Materiale Plastice, Vol. 53, Nr. 4 - 2016, Bucuresti, Romania, 2016. <a href="http://www.revistadechimie.ro/">http://www.revistadechimie.ro/</a> factor impact 0,289 si SRI 0,183	0.100+0.289
8.	Avrigean Eugen, Oleksik Valentin Stefan, Pascu Adrian Marius (2015): <b>Experimentally Testing the Polyethylene Pipes upon Being Strained with the Squeeze-Off Tool.</b> ISSN: 2352-5401, 2015 International Conference on Sustainable Energy and Environmental Engineering (SEEE2015), October 25-26, 2015, Bangkok, Thailand, 2015. <a href="http://www.seee2015.org/regen.htm">http://www.seee2015.org/regen.htm</a> / (ISI Conference Proceedings)	0.100
9.	Avrigean Eugen, Oleksik Mihaela Emilia (2015): <b>Determining the Forces in the Polyethylene Pipes after Squeezing them off with Specific Equipment.</b> ISSN: 2352-5401, 2015 International Conference on Advanced Materials and Construction Engineering, September 26-27, 2015, Changsha, China <a href="http://icamce.org/">http://icamce.org/</a> (ISI Conference Proceedings)	0.100
10.	Avrigean Eugen, Bondrea Ioan (2015): <b>Theoretical and Experimental Comparative Study of Strains Acting on the Hub Fork of a Cardan Joint.</b> ISBN 978-1-138-02793-0 - CAT# K26262, The 2015 2nd International Conference on Advanced Materials, Structures and Mechanical Engineering (ICAMSME 2015), Incheon National University, South-Korea, May 29-31, 2015. <a href="http://www.icamsme.com/">http://www.icamsme.com/</a> (ISI Conference Proceedings)	0.100
11.	Avrigean Eugen, Hunyadi Laszlo (2015): <b>Studies and Researches on the Temperature Fields for Electrofusion Welding the High Density Polyethylene Elbows-Pipes Assemblies.</b> ISSN: , 2015 International Conference on Power Electronics and Energy Engineering (PEEE2015) Hong Kong, April 19-20, 2015. <a href="http://www.peee2015.org/">http://www.peee2015.org/</a> (ISI Conference Proceedings)	0.100
12.	Avrigean Eugen, Hunyadi Laszlo (2015): <b>Study on Temperature Distribution in the Jointing Fittings for Polyethylene Natural Gas Pipes.</b> ISSN: , 2015 3rd International	0.100

	<b>Conference on Recent Trends in Materials and Mechanical Engineering (ICRTMME 2015)</b> Auckland, New Zealand, January 15-16, 2015. <a href="http://www.imme2015.org/">http://www.imme2015.org/</a> (ISI Conference Proceedings)	
13.	Avrigean Eugen, Oleksik Valentin, Pascu Adrian (2014): Model of a constructive functional optimization of the cardan cross. ISSN: , International Conference on Civil, Materials and Computing Engineering ICCMC 2014 Taiwan, December 6-7, 2014 <a href="http://www.hk-ceis.com/iccmc2014">http://www.hk-ceis.com/iccmc2014</a> (ISI Conference Proceedings) 10.4028/www.scientific.net/AMM.741.147	0.100
14.	Avrigean Eugen (2014): Model of a constructive functional optimization of the cardan cross. ISSN: , International Conference on Civil, Materials and Computing Engineering ICCMC 2014 Taiwan, December 6-7, 2014 <a href="http://www.hk-ceis.com/iccmc2014">http://www.hk-ceis.com/iccmc2014</a> (ISI Conference Proceedings) 10.4028/www.scientific.net/AMM.741.147	0.100
15.	Avrigean Eugen (2014): Comparative Study of the Loads Acting on the Operating Cardanic Transmission in the Closed and Open Loop Configurations, 2014 4th International Conference on Civil Engineering and Transportation ICCET 2014, December 24-25, Xiamen, China. 2014. <a href="http://www.iccet.net/">http://www.iccet.net/</a> (ISI Conference Proceedings) 10.4028/www.scientific.net/AMM.744-746.17	0.100
16.	Avrigean Eugen (2014): Verifying the strength on the cardan transmission joint through the finite element method. ISSN: 1022-6680, International Conference on Civil, Materials and Computing Engineering ICCMC 2014 Taiwan, December 6-7, 2014 <a href="http://www.hk-ceis.com/iccmc2014">http://www.hk-ceis.com/iccmc2014</a> (ISI Conference Proceedings) 10.4028/www.scientific.net/AMM.749-751.86	0.100
17.	Avrigean Eugen (2014): Study of the cardan cross using experimental and analytical method. The jubilee 25th DAAAM Symposium, Viena, Austria, November 26-29, 2014. (ISI Conference Proceedings)	0.100
18.	Avrigean Eugen, Stetiu Mircea (2014): Theoretical and experimental model for the analysis of a cardan cross. 2nd International Conference on Structural Engineering, Vibration and Aerospace Engineering (SEVAE 2014), Shenzhen - China, November 15-16, 2014 (ISI Conference Proceedings) 10.4028/www.scientific.net/AMM.724.156	0.100
19.	Avrigean Eugen (2014): Static and Dynamic Comparative Study on the Cardanic Transmission. The 4 <sup>th</sup> International Conference on Energy, Environment and Sustainable Development - EESD 2014, Nanjing - China, October 25-26, 2014 (ISI Conference Proceedings) 10.4028/www.scientific.net/AMM.724.126	0.100
20.	Avrigean Eugen, Oleksik Valentin, Pascu Adrian (2014): Experimental Determining of Mechanical and Elastic Characteristics for the Material used in the Manufacturing of Cardan Crosses. ISSN 978-0-00001-840-3_2440, Innovative Manufacturing Engineering Conference IManE 2014; 29-30 mai 2014, pag. 427 – 431; Chisinau, Republica Moldova. (ISI Conference Proceedings) 10.4028/www.scientific.net/AMM.657.427	0.100
21.	Oleksik Valentin, Pascu Adrian, Avrigean Eugen, Bondrea Ioan (2013): Theoretical and Experimental Studies on the Influence of Process Parameters on Strains and Forces of Single Point Incremental Forming, Proceedings of the 16 <sup>th</sup> International Conference on Advances in Materials & Processing Technologies, Taiwan, 22-26 September 2013 (ISI Conference Proceedings, conferință ERA clasa A)	0,100
22.	Pascu Adrian, Frățila Marcu, Avrigean Eugen, Vasiloaica Constantin (2011): Temperature and loading speed influence on the polyamide 6.6 yarn-to-yarn friction. Proceedings of 28 <sup>th</sup> Danubia-Adria-Symposium on Advances in Experimental Mechanics, 28 <sup>th</sup> September – 01 October, 2011, Siofok, Hungary, ISBN 978-963-9058-32-3, pag. 277-278.	0,100
23.	Pascu Adrian, Oleksik Valentin, Curtu Ioan, Avrigean Eugen (2009): Determination of Forces at the Bending of Perforated Plates with Slotted Holes through Experimental and FEM. The 20th DAAAM International World Symposium, 25-28 November 2009, Vienna, Austria, ISSN 1726-9679, pag. 799-800. (ISI Conference Proceedings) <a href="http://connection.ebscohost.com/c/articles/47080893/determination-forces-bending-perforated-plates-slotted-holes-through-experimental-fem">http://connection.ebscohost.com/c/articles/47080893/determination-forces-bending-perforated-plates-slotted-holes-through-experimental-fem</a>	0,100
24.	Pascu Adrian, Oleksik Valentin, Curtu Ioan, Avrigean Eugen (2009): Stress and Strain Field Distribution in Ankle-Foot Orthosis (AFO) using FEM. The 20th DAAAM International World	0,100

	Symposium, 25-28 November 2009, Vienna, Austria, ISSN 1726-9679, pag. 801-802. (ISI Conference Proceedings) <a href="http://connection.ebscohost.com/c/articles/47080894/stress-strain-field-distribution-ankle-foot-orthosis-afo-using-fem">http://connection.ebscohost.com/c/articles/47080894/stress-strain-field-distribution-ankle-foot-orthosis-afo-using-fem</a>	
<i>articole publicate în reviste BDI</i>		
1.	<b>Filip, S.M., Avrigean Eugen, s.a. (2016): Numerical Analysis on Polyethylene Insulation of Steel Pipelines. International Journal of Science and Research (IJSR). ISSN (Online): 2319-7064, Impact Factor (2015): 3.358 ISSN No: 2249 – 555X) Website: <a href="http://www.ijsr.net">www.ijsr.net</a> IMPACT FACTOR 2014: 6.391, Index Copernicus Value 2014: 6.14, (<a href="http://www.ijsr.net/archive/v3i10">http://www.ijsr.net/archive/v3i10</a>)</b>	0.100
2.	<b>Avrigean E., Oleksik M. (2015): Determination of the Fracture-Risk Areas on the Electrofusion Elbow Made of High Density Polyethylene (IJSR)ISSN (Online): 2319-7064, Impact Factor (2014): 3.358 ISSN No: 2249 – 555X) Website: <a href="http://www.ijsr.net">www.ijsr.net</a> IMPACT FACTOR 2014: 3,358, Index Copernicus Value 2014: 5.34 (<a href="http://www.ijsr.net/archive/v3i10/TONUMTQ1Nzc=.pdf">http://www.ijsr.net/archive/v3i10/TONUMTQ1Nzc=.pdf</a>)</b>	0,100
3.	<b>Avrigean, E. Method of Analyzing the Forces Acting upon Butt Welded Polyethylene Pipes. The 3 rd Virtual Multidisciplinary Conference. 7-11 decembrie 2015, Quaesti 2015, Zilina Slovakia. ISBN 978-80-554-1170-5.</b>	0,100
4.	<b>Avrigean, E. Bondrea, I. Research on the optimization model of the cardanic transmission hub fork based on stress and Strains. The 4 th Advanced Research in Scientific Areas. 9-13 noiembrie 2015, ARSA 2015, Zilina Slovakia. ISBN 978-80-554-1126-2.</b>	0,100
5.	<b>Avrigean, E. Study on Temperature Distribution in the Jointing Fittings for Polyethylene Natural Gas Pipes . Conferinta Post-doctorala din 5-6 iunie 2015, Universitatea Lucian Blaga din Sibiu. Acta Universitatis Cibiniensis, Technical Series, Volumes XV. ISSN 1583 – 7149.</b>	0,100
6.	<b>Avrigean E., Hunyadi, L. Comparative study on the temperatures of welding the polyethylene fittings- sockets – high density polyethylene pipe. Academic Journal of Manufacturing Engineering, vol. 12, Issue 4 / 2014. ISSN 1583-7904.</b>	0,100
7.	<b>Avrigean E., Grecu, V. Market research regarding problems in using polyethylene pipe and fittings. Academic Journal of Manufacturing Engineering, vol. 12, Issue 4 / 2014. ISSN 1583-7904.</b>	0,100
8.	<b>Avrigean E. Theoretical and experimental research on the assembly welding of fitting polyethylene - PEHD PE100 . Craiova, septembrie 2014. Joint International Conference of Doctoral and Post-Doctoral Researches Conference, Editura ALMA. ISBN 978-606-567-265-9. ISBN 978-606-567-267-3.</b>	0,100
9.	<b>Avrigean E. Market research regarding problems in using polyethylene pipe and fitting. Craiova, septembrie 2014. Joint International Conference of Doctoral and Post-Doctoral Researches Conference, Editura ALMA. ISBN 978-606-567-265-9. ISBN 978-606-567-267-3.</b>	0,100
10.	<b>Avrigean Eugen (2014): Verifying the deformations of cardan crosses using the tensometric method - Slovakia 1-4 september 2014. ISSN 1338-7871</b>	0,100
11.	<b>Oleksik, V., Pascu, A., i. Bondrea, Avrigean, E., L. Rosca (2014): Comparative study for springback prediction on single point incremental forming process , Key Engineering Materials Vols. 622-623 (2014) pp 375-381, ISSN: 1662-9795. <b>0.19 Impact Factor</b></b>	0,1+0,19= 0,29
12.	<b>Pascu Adrian, Oleksik Mihaela, Frățilă Marcu, Avrigean Eugen (2010): Stress and strain analysis in plate with slotted holes placed in two different patterns, loading in perpendicular plane of plate. Acta Technica Napociensis – Applied Mathematics and Mechanics, no. 53, vol. II, (2010), pag. 189-194, ISSN 1221-5872 (B+, Index Copernicus - Cod CNCISIS 118) <a href="http://www.atna-mam.utcluj.ro/pdf/2010no53vollI_cuprins_si_rezumat.pdf#page=24">http://www.atna-mam.utcluj.ro/pdf/2010no53vollI_cuprins_si_rezumat.pdf#page=24</a></b>	0,100
13.	<b>Avrigean Eugen, Pascu Adrian, Oleksik Valentin (2009): Realising of the component elements of loaded cardan transmissions with the help of rapid prototyping. MOCM – Volume 15 (4) 2009 – Romanian Technical Sciences Academy, ISSN 1224-7480, pp. 6-9 (B+, indexata in doua baze de date internationale: VINITI, CSA)</b>	0.100
14.	<b>Avrigean Eugen (2014): COMPARATIVE THEORETICAL AND EXPERIMENTAL STUDY ON THE STRESSES AND STRAINS IN THE CARDAN SHAFT (Studiul comparativ teoretic si experimental pentru tensiunile si deformatiile aparute la arborele cardanic) (INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH - ISSN No: 2277 – 8179) Website: <a href="http://www.theglobaljournals.com">www.theglobaljournals.com</a> IMPACT FACTOR : 1.8651</b>	0,100

	<a href="http://www.theglobaljournals.com/ijar/issues.php?m=November&amp;y=2014&amp;id=40">http://www.theglobaljournals.com/ijar/issues.php?m=November&amp;y=2014&amp;id=40</a>	
15.	<b>Avrigean Eugen</b> (2014): <i>THEORETICAL AND EXPERIMENTAL STUDIES ON THE ANGULAR DEFORMATION OF THE RIGID CARDANIC TRANSMISSION (STUDII TEORETICE SI EXPERIMENTALE ASUPRA DEFORMATIEI UNGHIULARE A TRANSMISIEI CARDANICE RIGIDIZATE</i> (Indian Journal of Applied Research ISSN No: 2249 – 555X) Website: <a href="http://www.theglobaljournals.com">www.theglobaljournals.com</a> IMPACT FACTOR : 2,1652	0,100
16.	<b>Avrigean Eugen</b> (2014): <i>Determining the Fatigue Characteristics of the Vehicle cardanic Joint</i> (International Journal of Science and Research (IJSR)ISSN (Online): 2319-7064, Impact Factor (2014): 3.358 ISSN No: 2249 – 555X) Website: <a href="http://www.ijsr.net">www.ijsr.net</a> IMPACT FACTOR 2014: 3,358, Index Copernicus Value 2014: 5.34 ( <a href="http://www.ijsr.net/archive/v3i10/T0NUMTQ1Nzc=.pdf">http://www.ijsr.net/archive/v3i10/T0NUMTQ1Nzc=.pdf</a> )	0.100
<b>Total puncte CDI-ART</b>		<b>5,924</b>

**CDI-BRV**

Nr. crt.	Titlul brevetului	Punctaj
		0
<b>Total puncte CDI-BRV</b>		<b>0,000</b>

**CDI-MON**

Nr. crt.	Titlul monografiei	Punctaj
1.	<b>Avrigean, E., Pascu, A., M., Oleksik, V., S.</b> <i>Studii si cercetari asupra transmisiilor cardanice. ISBN 978-973-739-875-8.</i> Editura Universitatii "Lucian Blaga" Sibiu, pag. 204, 2009. Pag. 61-68; 143 – 155; 195-201;	Total: 35 pag:50 = 0,7
2.	Duse, D. M. , Bondrea, I., <b>Avrigean, E.</b> <i>Fabricatia integrata de calculator CIM a transmisiilor cardanice. ISBN 973-651-609-1.</i> Editura Universitatii "Lucian Blaga" Sibiu, pag. 432, 2003. Pag. 235-269.	Total: 34 pag:50 = 0,68
3.	Bondrea, I., <b>Avrigean, E.</b> <i>Optimizarea produselor si proceselor tehnologice de prelucrare ISBN 973-651-363-7.</i> Editura Universitatii "Lucian Blaga" Sibiu, pag. 212, 2001. Pag. 69 - 105	Total: 36 pag:50 = 0,72
<b>Total puncte CDI-MON</b>		<b>2,1</b>

Criteriul	Standard minimal	Punctaj realizat
„Activitate de cercetare științifică, dezvoltare tehnologică și inovare” (CDI)	5	<b>5,879</b>

Se poate constata faptul că în punctajul pentru criteriul „Activitate de cercetare științifică, dezvoltare tehnologică și inovare (CDI)”, ponderea (CDI-ART) este de 61,75%, mai mare de 60%, prin urmare, în conformitate cu prevederile anexei 17 la Ordinul Ministrului nr. 6560/20.12.2012, îmi permit să apreciez că **CRITERIUL DE EVALUARE CDI ESTE ÎNDEPLINIT.**

15.06.2016

Conf. lucrări dr. ing. Eugen AVRIGEAN