

## LISTA DE LUCRĂRI

Candidat: **Andraș Andrei**, dr. din 2006, Șef lucrări din 2012.

### A) Lucrări relevante pentru realizările profesionale proprii (maxim 10 lucrări)

1. **Andras Andrei**, *Instalații de ridicat și transportat*, Editura Universitas Petroșani, 2014 - ISBN 978-973-741-302-4 (165 p.)
2. Radu Sorin Mihai, Popescu Florin Dumitru, **Andraș Andrei**, Kertesz Ildiko, *Transport si instalatii miniere*, Editura Universitas, Petroșani, ISBN 978-973-741-587-5, (281 p.) 2018.
3. Popescu, F.D.; Radu, S.M.; Kotwica, K.; **Andraș, A.**; Kertesz (Brînaș), I. *Simulation of the Time Response of the ERc 1400-30/7 Bucket Wheel Excavator's Boom during the Excavation Process*. *Sustainability* 2019, 11, 4357. [http://apps.webofknowledge.com.am.e-nformation.ro/full\\_record.do?product=UA&search\\_mode=AdvancedSearch&qid=4&SID=D55OIWpU2wpgM7GIQIZ&page=1&doc=1](http://apps.webofknowledge.com.am.e-nformation.ro/full_record.do?product=UA&search_mode=AdvancedSearch&qid=4&SID=D55OIWpU2wpgM7GIQIZ&page=1&doc=1) <https://doi.org/10.3390/su11164357>
4. Popescu, F. D., Radu, S. M., **Andraș Andrei**, & Kertész, I. (2019). *A grafo-numeric method of determination of the operation power of the rotor of EsRc-1400 bucket wheel excavator using computer simulation in SolidWorks*. In *MATEC Web of Conferences* (Vol. 290). EDP Sciences. <https://search.proquest.com/openview/f80d4b8357dd4911db5c7046c77d0712/1?pq-origsite=gscholar&cbl=2040549>
5. **A. Andraș**, I. Andraș, O.B. Tomuș, *Mathematical models of powered roof support interaction with surrounding rocks*, International Multidisciplinary Scientific GeoConference Surveying Geology and Mining Ecology Management, SGEM 17 (13), pp.529. DOI: 10.5593/sgem2017/13/S03.067 <https://www.scopus.com/record/display.uri?eid=2-s2.0-85032487107&origin=inward&txGid=008289372b6c76e66028ccb70d885684>
6. Popescu, F.D.; **Andraș, A.**; Kertesz (Brînaș), I., *Determination of the Operating Power of the Rotor of the ERc-1400 Type Bucket Wheel Excavator Using Numerical Methods*. Acta Technica Napocensis Series-Applied Mathematics Mechanics and Engineering, Volume: 63, Issue: 2, Pages: 137-142, Published: JUN 2020, ISSN: 1221-5872. **WOS:000550992100004**. [http://cel.webofknowledge.com/InboundService.do?customersID=Publons\\_CEL&smartRedirect=yes&mode=FullRecord&IsProductCode=Yes&product=CEL&Init=Yes&Func=Frame&action=retrieve&SrcApp=Publons&SrcAuth=Publons\\_CEL&SID=D5ie6RGIWAlw8cj55Yb&UT=WOS%3A000550992100004](http://cel.webofknowledge.com/InboundService.do?customersID=Publons_CEL&smartRedirect=yes&mode=FullRecord&IsProductCode=Yes&product=CEL&Init=Yes&Func=Frame&action=retrieve&SrcApp=Publons&SrcAuth=Publons_CEL&SID=D5ie6RGIWAlw8cj55Yb&UT=WOS%3A000550992100004) <https://publons.com/publon/33547455/>
7. Kertész (B.), I., **Andraș, A.**, Popescu, F.D., *Improving The Functional Performances Of The Bucket Wheel Excavators (Bwes) Cutting-Teeth*, Annals of the University of Petroșani, Mechanical Engineering, 19 (2017), pp.71-80, <https://www.upet.ro/annals/mechanical/pdf/Annals-Mechanical-Engineering-2017.pdf>

8. I. Andraş, **A. Andraş**, O.B. Tomuş, *Optimization of geometric and strength parameters of teeth for bucket wheel excavator in view to increasing the cutting efficiency*, International Multidisciplinary Scientific GeoConference Surveying Geology and Mining Ecology Management, SGEM 17 (13), pp.741. DOI: 10.5593/sgem2017/13/S03.077 <https://www.scopus.com/record/display.uri?eid=2-s2.0-85032499187&origin=inward&txGid=44f114d6bc821fb620f8ae7bf170289a>
9. **Andraş Andrei**, Dinescu, S., *Open Pit Lignite Mining Process Reliability Assessment Using Bayesian Belief Networks*, Annals Of The University Of Petrosani, Mechanical Engineering, Vol. 10 (XXXVII) 2008, pag. 5-11; ISSN: 1454-9166 (revistă categoria B+, cod CNCSIS 26; Indexată în Ulrich's Periodicals Directory, EBSCO Publishing Inc., Columbia University Libraries, <http://upet.ro/annals/mechanical>)
10. Stela Dinescu, **Andrei Andras** *Analysis of Winning Performance of Shearer Loader Cutter Head using Modeling*, Proceedings of the 2nd WSEAS International Conference on ENGINEERING MECHANICS, STRUCTURES and ENGINEERING GEOLOGY (EMESEG '09), Rodos, Greece, July 22-24, 2009, ISSN: 1790-2769, ISBN: 978-960-474-101-4. <http://www.wseas.us/e-library/conferences/2009/rodos/EMESEG/EMESEG21.pdf> Pages: 145-148. [http://apps.webofknowledge.com.am.e-nformation.ro/full\\_record.do?product=WOS&search\\_mode=AdvancedSearch&qid=1&SID=E25YdPsMQP3TomlPNHX&page=1&doc=8](http://apps.webofknowledge.com.am.e-nformation.ro/full_record.do?product=WOS&search_mode=AdvancedSearch&qid=1&SID=E25YdPsMQP3TomlPNHX&page=1&doc=8)

## B) Teza de doctorat

*Studii privind perfecționarea metodologiei de proiectare a echipamentelor pentru industria extractivă*, Universitatea din Petroșani, Conducător științific: Prof. univ. dr. ing. Koronka Ferenc, Diploma de Doctor nr. 381/27.11.2016 Seria E nr. 0007654, confirmat prin Ordinul M.E.C. nr. 3824/03.05.2006.

## C) Teza(-ele) de abilitare

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## D) Lucrări care pun în evidență contribuția științifică:

- cărți sau capitole din cărți (monografii, tratate), publicate la edituri de prestigiu din străinătate;

1. Sorin Mihai Radu, Florin Dumitru Popescu, **Andrei Andraş**, Ildiko Kertesz, *Mining Transportation and Equipment*, LAP Lambert Academic Publishing, (2019). ISBN: 978-3-330-34503-4
2. Tomuş O.B., Jula D, **Andras A.**, Popescu F., *Study On The Operating Lifetime Of The Break Pads Of The Loadinghauling Machines, Monografia Problemy Transportu I Przerobki W Gornictwie Modelowanie Procesow.* (2017). Pp. 247–254, Akademia Gorniczo-Hutnicza. Krakow. ISBN 978-83-930353-7-3
3. **A. Andraş**, I. Andraş, C.A. Alexandru Stoica, *Optimal Design Of Teeth For Bucket Wheel Excavators In View To Increasing The Cutting Efficiency. Monografia Problemy Eksploatacji I Zarządzania W Górnictwie.* (2017). Pp. 9-16, Akademia Gorniczo-Hutnicza. Krakow. ISBN 978-83-930353-7-3
4. **Andraş Andrei**, Andraş, I., Kovacs, J, Tomuş. O.B., *Artificial Intelligence, Mechatronics and robotics in Mining Equipment Development, Monografia Problemy transportu i przeróbki w górnictwie. Modelowanie procesów.* (2015). Pp.134–149, Akademia Górnico-Hutnicza, Krakow, 978-83-930353-9-7

5. Radu, S.M, **Andraş Andrei**, Prip, I, Ionişescu, N., *An overview of results obtained in the field of water jet and water jet assisted cutting of different rocks and materials*, *Monografia Nowoczesne metody eksploatacji węgla i skał zwięzłych*.(2015). Pp. 52–59, Akademia Górniczo-Hutnicza, Krakow, 978-83-930353-5-9
6. Kovacs, J, Andraş, I., **Andraş Andrei**, Tomuş. O.B., *Overview Of The Results Obtained In The Field Of Rock Cutting In Underground And Open Pit Conditions*. *Monografia Nowoczesne metody eksploatacji węgla i skał zwięzłych*. (2013). Pp. 9–16, Akademia Górniczo-Hutnicza. Krakow, 978-83-930353-1-1

- cărți sau capitole din cărți (monografii, tratate), publicate la edituri din țară, recunoscute de CNCS;

1. Radu Sorin Mihai, Popescu Florin Dumitru, **Andraş Andrei**, Kertesz Ildiko, *Transport si instalatii miniere*, Editura Universitas, Petroşani, ISBN 978-973-741-587-5, (281 p.) 2018.
2. **Andraş Andrei**, *Ingineria proiectării echipamentelor pentru industria extractivă*, Editura Universitas, Petroşani, ISBN 978-973-741-300-0 (176 p.) 2014.

- cărți sau capitole din cărți (monografii, tratate), cu ISBN, publicate într-o editură din țară;

- articole publicate în reviste de circulație internațională, specifice domeniului, cotate ISI sau indexate în baze de date internaționale;

1. András, J., Kovács, J., **András, E.**, Kertész, I. and Tomuş, O.B., 2020. *Remaining Lifetime Assessment of Bucket Wheel Excavator's Boom Structure by Using Non-destructive Method*. *Acta Materialia Transylvanica*, 3(1), pp.10-14. <https://doi.org/10.33924/amt-2020-01-02>  
<https://content.sciendo.com/view/journals/amt/3/1/article-p10.xml>
2. András, J., Kovács, J., **András, E.**, Kertész, I. and Tomuş, O.B., 2020. *A marótársas kotrógépek gémszerkezete maradék élettartamának meghatározása roncsolásmentes módszerrel*. *Acta Materialia Transylvanica*, 3(1), pp.10-14. <https://doi.org/10.33923/amt-2020-01-02>  
<https://eda.emc.ro/bitstream/handle/10598/31878/Acta2020-1-HU-02-Andras.pdf?sequence=1&isAllowed=y>
3. Popescu, F.D.; **Andraş, A.**; Kertesz (Brînaş), I., *Determination of the Operating Power of the Rotor of the ERc-1400 Type Bucket Wheel Excavator Using Numerical Methods*. *Acta Technica Napocensis Series-Applied Mathematics Mechanics and Engineering*, Volume: 63, Issue: 2, Pages: 137-142, Published: JUN 2020, ISSN: 1221-5872. **WOS:000550992100004**.  
<https://publons.com/publon/33547455/>  
[http://cel.webofknowledge.com/InboundService.do?customersID=Publons\\_CEL&smartRedirect=yes&mode=FullRecord&IsProductCode=Yes&product=CEL&Init=Yes&Func=Frame&action=retrieve&SrcApp=Publons&SrcAuth=Publons\\_CEL&SID=C4LCkIqZ8UfZ4RYkftw&UT=WOS%3A000550992100004](http://cel.webofknowledge.com/InboundService.do?customersID=Publons_CEL&smartRedirect=yes&mode=FullRecord&IsProductCode=Yes&product=CEL&Init=Yes&Func=Frame&action=retrieve&SrcApp=Publons&SrcAuth=Publons_CEL&SID=C4LCkIqZ8UfZ4RYkftw&UT=WOS%3A000550992100004)
4. Popescu, F.D.; Radu, S.M.; Kotwica, K.; **Andraş, A.**; Kertesz (Brînaş), I. *Simulation of the Time Response of the ERc 1400-30/7 Bucket Wheel Excavator's Boom during the Excavation Process*. *Sustainability* 2019, 11, 4357. <https://doi.org/10.3390/su11164357>  
**WOS:000484472500101** <https://publons.com/publon/21231929/>  
[http://cel.webofknowledge.com/InboundService.do?customersID=Publons\\_CEL&smartRedirect=yes&mode=FullRecord&IsProductCode=Yes&product=CEL&Init=Yes&Func=Frame&action=retrieve&SrcApp=Publons&SrcAuth=Publons\\_CEL&SID=C1WcNkoCngcqD6o3t](http://cel.webofknowledge.com/InboundService.do?customersID=Publons_CEL&smartRedirect=yes&mode=FullRecord&IsProductCode=Yes&product=CEL&Init=Yes&Func=Frame&action=retrieve&SrcApp=Publons&SrcAuth=Publons_CEL&SID=C1WcNkoCngcqD6o3t)

[vX&UT=WOS%3A000484472500101](#)

5. Radu, SM; Popescu, FD; **Andras, A**; Brinas, IK; Tomus, OB , *Increasing the quality of the well drilling process by finite element analysis of the drilling fluid flow parameters*, QUALITY-ACCESS TO SUCCESS, Vol. 20, pp. 359-364, 2019, ISSN: 1582-2559. **WOS:000459686300063** [https://publons.com/publon/33547455/http://cel.webofknowledge.com/InboundService.do?customersID=Publons\\_CEL&smartRedirect=yes&mode=FullRecord&IsProductCode=Yes&product=CEL&Init=Yes&Func=Frame&action=retrieve&SrcApp=Publons&SrcAuth=Publons\\_CEL&SID=F2mrTP8FDfjA7ZnjiWX&UT=WOS%3A000459686300063](https://publons.com/publon/33547455/http://cel.webofknowledge.com/InboundService.do?customersID=Publons_CEL&smartRedirect=yes&mode=FullRecord&IsProductCode=Yes&product=CEL&Init=Yes&Func=Frame&action=retrieve&SrcApp=Publons&SrcAuth=Publons_CEL&SID=F2mrTP8FDfjA7ZnjiWX&UT=WOS%3A000459686300063)
6. **Andraş, A.**, Kertész (Brînaş), I., Popescu, F.D., *Comparative study of the projecting distance of pedestrians in frontal collisions with vehicles using computer simulation.*, Annals of the University of Petrosani Mechanical Engineering. Vol. 21 (2019). ISSN 1454-9166 <https://www.upet.ro/annals/mechanical/pdf/2019>
7. Popescu, F.D., **Andraş, A.**, Kertész (Brînaş), I., *Determination of the capacity of a continuous transport system using spline type interpolation*, Annals of the University of Petrosani Mechanical Engineering. Vol. 21 (2019). ISSN 1454-9166 <https://www.upet.ro/annals/mechanical/pdf/2019>
8. FD Popescu, SM Radu, **A Andraş**, IK Brînaş. (2019) *Simulation of the frequency response of the ERC 1400 Bucket Wheel Excavator boom, during the excavation process*, New Trends in Production Engineering 2 (1), 153-167. ISSN: 2545-2843 [Sciendo, Google Scholar]. DOI 10.2478/ntpe-2019-0016 [https://content.sciendo.com/configurable/contentpage/journals\\$002fntpe\\$002f2\\$002f1\\$002farticle-p153.xml](https://content.sciendo.com/configurable/contentpage/journals$002fntpe$002f2$002f1$002farticle-p153.xml)
9. FD Popescu, SM Radu, K Kotwica, **A Andraş**, IK Brînaş, S Dinescu. (2019) *Vibration analysis of a bucket wheel excavator boom using Rayleigh's damping model*, New Trends in Production Engineering 2 (1), 233-241. ISSN: 2545-2843 [Sciendo, Google Scholar.] DOI 10.2478/ntpe-2019-0024 <https://content.sciendo.com/view/journals/ntpe/2/1/article-p233.xml>
10. András, J., Kovács, J., **András, E.**, Kertész, I., Tomus, O. B. (2019). *A New Method for the Calculation of Energy and Power Requirements of Bucket Wheel Excavators*. *Műszaki Tudományos Közlemények (Papers On Technical Science)*, 10(1), 15-20. <https://content.sciendo.com/view/journals/mtk/10/1/article-p15.xml>
11. Florin Dumitru Popescu, Sorin Mihai Radu, **Andrei Andraş**, *Study of functional performance improvements for cutting teeth mounted on bucket wheel excavators operating in Oltenia coal basin – Romania*, Mining – Informatics, Automation and Electrical Engineering, Nr 3 (355) 2018, pp. 7, 16, © Wydawnictwa AGH, Kraków 2018, ISSN 2449-6421 (online) ISSN 2450-7326 (printed) <https://journals.indexcopernicus.com/search/details?id=44891> (Copernicus)
12. S. M. Radu, F. D. Popescu, **Andrei Andras**, I. Kertesz Brinas, O. B. Tomus, *Simulation and modelling of the forces acting on the rotor shaft of bwes, in order to improve the quality of the cutting process*, Annals of the University of Petroşani, Mechanical Engineering, Vol. 20 (2018), (XLVII), 2018, ISSN 1454-9166 <https://www.upet.ro/annals/mechanical/>
13. Kertész (B.), I., Andraş Andrei, Popescu, F.D., *Improving The Functional Performances Of The Bucket Wheel Excavators (Bwes) Cutting-Teeth*, Annals of the University of Petroşani, Mechanical Engineering, 19 (2017), pp.71-80, <https://www.upet.ro/annals/mechanical/pdf/Annals-Mechanical-Engineering-2017.pdf>

14. S.M. Radu, W. Chmielarz, **A. Andras** - *Mining Technological System's Performance Analysis*, Annals of the University of Craiova for Journalism, Communication and Management, Volume 2, 2016, ISSN 2501-3513. [Indexata RePEc](http://www.aucjc.ro/wp-content/uploads/2016/10/aucjcm-vol-2-2016-56-64.pdf), Google Scholar [www.aucjc.ro/wp-content/uploads/2016/10/aucjcm-vol-2-2016-56-64.pdf](http://www.aucjc.ro/wp-content/uploads/2016/10/aucjcm-vol-2-2016-56-64.pdf)
15. Andraş, I., **Andraş Andrei**, Petrilean, D.C. - *Application of the theory of sonics in the design of percussive equipment for rock cutting*, Annals of the University of Petroşani, Mechanical Engineering, Vol. 18 (XLV), 2016, pag. 5-10, ISSN 1454-9166; (revistă categoria **B+**, cod CNCISIS **26**; Indexată în Ulrich's Periodicals Directory, EBSCO Publishing Inc., <http://upet.ro/annals/mechanical>)
16. **Andraş Andrei**, Andraş, I., Radu, S.M. - *Study regarding the bucket-wheel excavators used in hard rock excavations*, Annals of the University of Petroşani, Mechanical Engineering, Vol. 18 (XLV), 2016, pag. 11-22, ISSN 1454-9166; (revistă categoria **B+**, cod CNCISIS **26**; Indexată în Ulrich's Periodicals Directory, EBSCO Publishing Inc., Columbia University Libraries, SCIRIUS, Periodicals.ru, Suweco - <http://upet.ro/annals/mechanical>)
17. Petrilean D.C., Doşa, I., **Andraş Andrei**, Preda., L. - *Pollutant Variation Estimation According to the Wind Speed and the Mass Flow of the Pollutant for Paroseni Thermal Power Station*, Annals of the University of Petroşani, Mechanical Engineering, Vol. 18 (XLV), 2016, pag. 127-132, ISSN 1454-9166; (revistă categoria **B+**, cod CNCISIS **26**; Indexată în Ulrich's Periodicals Directory, EBSCO Publishing Inc., Columbia University Libraries, SCIRIUS, Periodicals.ru, Suweco - <http://upet.ro/annals/mechanical>)
18. **Andraş Andrei**, Andraş, I. - *Applications of Artificial Intelligence and Mechatronics in Mining Equipment Development*. Annals of the University of Petroşani, Mechanical Engineering, 17 (2015), (XLIV), 2015, pag. 5-20, ISSN 1454-9166; (revistă categoria **B+**, cod CNCISIS **26**; Indexată în Ulrich's Periodicals Directory, EBSCO Publishing Inc., Columbia University Libraries, SCIRIUS, Periodicals.ru, Suweco - <http://upet.ro/annals/mechanical>)
19. Teseleanu G., Radu S.M., **Andras A.**, *Modeling and simulation of coal winning process*, Polish Journal of Management Studies, Volume 10, 2014, Czestochowa University of Technology, pp.189-194, ISSN 2081-7452;
20. Kovacs, I., Nan, M.S., Andraş, I., Tomuş, O.B., **Andraş, A.** - *Comparative study of mechanical rock cutting*. Annals of the University of Petroşani, Mechanical Engineering, 14 (2012), (XLI), 2012, pag. 82-87, ISSN 1454-9166; (revistă categoria **B+**, cod CNCISIS **26**; Indexată în Ulrich's Periodicals Directory, EBSCO Publishing Inc., Columbia University Libraries, SCIRIUS, <http://upet.ro/annals/mechanical>)
21. N. Ilias, I.Andras, **A. Andras**, S. Dinescu, *Reliability Assessment of Continuous Mining Technological Systems* , Сучасні технології в машинобудуванні , nr. 4/2010 (ISSN 2078-7499) (Indexată Google Scholar, Scientific and technical library Kharkiv Politechnical Institute, Periodicals.ru) [http://library.kpi.kharkov.ua/files/JUR/sutech4\\_2010.pdf](http://library.kpi.kharkov.ua/files/JUR/sutech4_2010.pdf)
22. Dinescu, S., **Andraş Andrei**, *Modeling of Shearer Loader Cutter Head in Order to Improve Energy Consumption* , Annals Of The University Of Petrosani Mechanical Engineering , Vol. 11 (XXXVIII) 2009, pag. 67-72 ISSN: 1454-9166; (revistă categoria **B+**, cod CNCISIS **26**; Indexată în Ulrich's Periodicals Directory, EBSCO Publishing Inc., Columbia University Libraries, SCIRIUS, <http://upet.ro/annals/mechanical>)
23. **Andraş Andrei**, Andraş, I., *Longwall Support Effectiveness Assessment Using Artificial Intelligence Methods*, Annals Of The University Of Petrosani Mechanical Engineering , Vol. 11 (XXXVIII) 2009, pag. 11 -14; ISSN: 1454-9166 (revistă categoria **B+**, cod CNCISIS **26**;

- Indexată în Ulrich's Periodicals Directory, EBSCO Publishing Inc., Columbia University Libraries, SCIRIUS, <http://upet.ro/annals/mechanical>)
24. Iosif Andras, Nicolae Ilias, **Andrei Andras**, Attila Kovacs, Victor Badarca, Florin Nicolae, *Quality Assurance By Design Of Mining Equipment*, Fiabilitate si Durabilitate - Fiability & Durability nr.2/2008 Editura "Academica Brâncuși", ) ISSN 2144-3669, ISSN-L 1844 – 640X (Revistă categoria **B+**, cod. CNCSIS **80**; Indexată în Copernicus, Ebsco, DOAJ, Ulrich, Scipio - [http://www.utgjiu.ro/rev\\_mec/?page=curent&nr=2008-02](http://www.utgjiu.ro/rev_mec/?page=curent&nr=2008-02))
  25. Iosif ANDRAS, Stela DINESCU, **Andrei ANDRAS**, *Comparative Analysis Of Different Methods Of Reliability Assessment For Continuous Mining Technological Systems*, North University Baia Mare Scientific Bulletin Series C, Volume XXII (2008) Fascicle Mechanics, Tribology, Machine Manufacturing Technology, pag. 7-12; ISSN: 1224-3264. (revistă categoria **B+**, cod CNCSIS **610**; Indexată în Proquest, Ebsco, CSA - <http://www.nordtech.ubm.ro/list.php>)
  26. Tomuș O.B., **Andraș A.** *Analysis of rock cutting with bucket wheel excavators using the chip breakout pattern method*. North University Baia Mare Scientific Bulletin Series C, Volume XXII (2008) Fascicle Mechanics, Tribology, Machine Manufacturing Technology, pag. 463-466, ISSN 1224-3264; - <http://www.nordtech.ubm.ro/list.php>)
  27. Dinescu, S., **Andraș Andrei**, *Environmental Friendly Equipment and Technology for Underground Civil Excavations*, Annals Of The University Of Petrosani, Mechanical Engineering, Vol. 10 (XXXVII) 2008, pag. 47-52; ISSN: 1454-9166 (revistă categoria **B+**, cod CNCSIS **26**; Indexată în Ulrich's Periodicals Directory, EBSCO Publishing Inc., Columbia University Libraries, <http://upet.ro/annals/mechanical>)
  28. **Andraș Andrei**, Dinescu, S., *Open Pit Lignite Mining Process Reliability Assessment Using Bayesian Belief Networks*, Annals Of The University Of Petrosani, Mechanical Engineering, Vol. 10 (XXXVII) 2008, pag. 5-11; ISSN: 1454-9166 (revistă categoria **B+**, cod CNCSIS **26**; Indexată în Ulrich's Periodicals Directory, EBSCO Publishing Inc., Columbia University Libraries, <http://upet.ro/annals/mechanical>)
  29. Dafinoiu M., Tomuș O.B., Dinescu S., Stănilă S.D., **Andraș A.** *Improved Shape of the Tooth for Bucket Wheel Excavator for the Condition of Romanian Open Pits* Volume XXI (2007), Fascicle Mechanics, Tribology, Machine Manufacturing Technology pag. 161-164, ISSN 1224-3264; (revistă categoria **B+**, cod CNCSIS **610**; Indexată în Proquest, Ebsco, CSA - <http://www.nordtech.ubm.ro/list.php>)
  30. Nicolae ILIAS, Iosif ANDRAS, Attila KOVACS, **Andrei ANDRAS**, Emanoil VENESCU, Livia ILIAS, *Constructive Design Principles Applied To Enhance Support Equipment Quality*, North University Baia Mare Scientific Bulletin Series C, Volume XX (2006) Fascicle Mechanics, Tribology, Machine Manufacturing Technology (revistă categoria **B+**, cod CNCSIS **610**; Indexată în Proquest, Ebsco, CSA - <http://www.nordtech.ubm.ro/list.php>)
  31. **Andras A.**, Andras I., *Tehnologia realitatii virtuale un instrument modern in proiectarea echipamentelor pentru industria extractiva (Virtual Reality Technology-an up to date Tool in The Design and Development of Mineral Resources Related Equipment)* Revista Minelor nr.11-12/2006 (revistă categoria **B+**, cod CNCSIS **293**, ISSN-L 1220-2053/ISSN 2247-8590; BDI: EBSCO Publishing Inc. – SUA <http://upet.ro/revistaminelor/>)
  32. **Andras A.**, Andras I., *Tehnologia realitatii virtuale un instrument modern in proiectarea echipamentelor pentru industria extractiva (Virtual Reality Technology-an up to date Tool in The Design and Development of Mineral Resources Related Equipment)* Revista Minelor

nr.11-12/2006 (revistă categoria **B+**, cod CNCISIS **293**, ISSN-L 1220-2053/ISSN 2247-8590; BDI: EBSCO Publishing Inc. – SUA - <http://upet.ro/revistaminelor/>)

33. **Andras, A.**, *Electromechanics vs. Mechatronics –points of view*, Conferința internațională „Tinerii și Cercetarea Multidisciplinară”, Reșița, 2005, publ. Analele Universitatii Eftimie Murgu Resita Fascicola De Inginerie, XII, nr. 1, 2005, ISSN 1453-7394 (revistă categoria **B+**, cod CNCISIS 330; Indexată în Ebsco, DOAJ, RePec. Proquest, Copernicus etc - <http://www.anale-ing.uem.ro>)
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- articole publicate în reviste din străinătate, specifice domeniului, necotate ISI sau care nu se află în baze de date internaționale;

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43. Andras I., Kovacs I., Nan M.S., **Andraș A.**, Tomuş O.B., *A szénhez kötött (CBM) és a szénbányászattal összefüggő (CMM) metán hasznosítása, mint környezetbarát technológia, (The Coal Bed And Coal Mine Methane Beneficiation As An Environment-Friendly Technology. )* XIV. Mining, Metallurgy and Geology Conference, Erdélyi Magyar Műszaki Tudományos Társaság. 29 martie - 01 aprilie 2012 Arad, pag. 24-26, ISSN: 1842-9440.
44. Iosif Andras, Florin Tiberiu Iacob-Ridzi, **Andrei Andras**, *Artificial Intelligence Based Methods In Modelling Some Mining Equipment Operation* , microCAD 2011, International Scientific Conference Miskolc, 31 march – 01 april 2011, ISBN 978-963-661-966-4.
45. Jula D., Kovács I., Dumitrescu I., **Andras A.**, Tomuş O.B. - *Upgrading the Boom Positioning Mechanism of Bucket Wheel Excavators Utilized in Romanian Open Pit Lignite Mines*. microCAD 2011, International Scientific Conference Miskolc, 31 march – 01 april 2011, ISBN 978-963-661-925-1 Ő, ISBN 978-963-661-916-9.

46. Andras, I.; Kovacs, I.; **Andras, A.**; Tomuş, B. *Computer Aided Simulation of Coal Extraction Process with Complex Technological Systems* The 10th International Conference Modern Technologies In Manufacturing MTeM 2011, Cluj-Napoca (Indexata Dspace -<http://www.muri.utcluj.ro:8080/xmlui/handle/123456789/90>, Google Scholar )

- lucrări/studii publicate în volumele unor manifestări științifice (sesiuni de comunicări, conferințe etc.) naționale recunoscute (cu ISSN sau ISBN), lucrări prezentate la diferite seminarii/expoziții și nepublicate;

- brevete de invenție.

#### **E) Lucrări care pun în evidență activitatea didactică:**

- cursuri universitare publicate;

1. Dinescu Stela, **Andras Andrei**, *Analiza accidentelor de circulatie - accidentologie*, Editura Universitas, Petrosani, 2019, ISBN 978-973-741-627-8, (212 p.)
2. Radu Sorin Mihai, Popescu Florin Dumitru, **Andras Andrei**, Kertesz Ildiko, *Transport si instalatii miniere – varianta electronica, aplicatii interactive*, Editura Universitas, Petroșani, 2018, ISBN 978-973-741-588-2, (442 p.)
3. **Andras Andrei**, *Instalații de ridicat și transportat*, Editura Universitas Petroșani, 2014 - ISBN 978-973-741-302-4 (165 p.)
4. **Andras Andrei**, *Modelare și simulare în transporturi, curs*, format digital realizat in Lectora, 2013. (219 p.)

- îndrumătoare publicate;

1. **Andras Andrei**, *Instalații de transportat pe cablu. Construcție și calcul* Editura Universitas Petroșani, 2014-ISBN 978-973-741-303-1 (126 p.)
2. **Andras Andrei**, *Teoria sistemelor de transport. Exemple de calcul*, Editura Universitas Petroșani, 2014-ISBN 978-973-741-301-7 (218 p.)

#### **F) Lucrări care pun în evidență activitatea de cercetare:**

- proiecte de cercetare pe bază de contracte/granturi internaționale;

1. **Director proiect** - MIWACUT, *Investigating The Microwave Assisted Cutting Of Carbonate Rocks. (Studiul taierii asistate cu microunde a rocilor carbonatice)*. Finanțat de UEFISCDI, P3 - Cooperare Europeană și Internațională, Subprogram 3.2, Orizont 2020. Valoare partener Upet: 53.200 Euro (252.168 lei). **Depus în cadrul ERA-NET Cofund on Raw Materials (ERA-MIN 2)** [https://www.era-min.eu/sites/default/files/docs/era-min\\_joint\\_call\\_2018\\_-\\_list\\_of\\_funded\\_projects\\_table.pdf](https://www.era-min.eu/sites/default/files/docs/era-min_joint_call_2018_-_list_of_funded_projects_table.pdf).
2. **Membru în echipă** - RFCR-CT - 2015-00003 – Horizon 2020 – RFCS 2015-2018 - *Bucket wheel excavators operating under difficult mining conditions including unmineable inclusions and geological structures with excessive mining resistance (BEWEXMIN)*, Valoare totală: 473158 Euro, [https://ec.europa.eu/research/industrial\\_technologies/pdf/rfcs/synopsis\\_projects\\_2015.pdf](https://ec.europa.eu/research/industrial_technologies/pdf/rfcs/synopsis_projects_2015.pdf)
3. **Membru în echipă** - CASC- *Cities and Science Communication: Innovative Approaches to Engaging the Public* /FP7 Coordination and support actions (Science in Society Priority). [http://cordis.europa.eu/project/ren/91174\\_en.html](http://cordis.europa.eu/project/ren/91174_en.html)

- proiecte de cercetare pe bază de contracte/granturi naționale;

1. **Responsabil contract** - Contract de cercetare științifică Nr.78/11366 din 04.04.2018, ,  
“Plan de mobilitate urbană a Orașului Petrila”, Contractat prin SEAP, (Valoare încasată  
august 2018 15.589 lei)
2. **Membru în echipă** - Grant Nr.45/SGU/NC/I din 23.11. 2017 (Studentii – Prezentul și  
Viitorul văii Jiului)
3. **Membru în echipă** - POCU/320/6/21/ 122773, Cod 122773 (DINAMIC - optimizarea  
ofertelor de studii din învățământ terțiar universitar și non-universitar tehnic în sprijinul  
angajabilității)
4. **Membru în echipă** - Materiale metalice cu structuri compozite utilizabile in atmosfera  
potențial explozivă GRANT 849 CEEEX-M1-C2- 3607, 2006-2008
5. **Membru în echipă** - Reducerea consumurilor electroenergetice și a cheltuielilor de  
exploatare a excavatoarelor de mare putere prin optimizarea parametrilor regimului de  
dislocare” grant CNC SIS 13182.
6. **Membru în echipă** - Asigurarea competitivității și corelarea cu reglementările UE în  
domeniul prevenirii și combaterii riscurilor formării atmosferelor potențial explozive la  
minele de cărbune din Valea Jiului, Fazele I, II, III , IV și V, Grant C59-CEEEX-II 03/2006,  
beneficiar Ministerul Educației și Cercetării, 2006-2008.
7. **Membru în echipă** - Tehnologie eficientă de exploatare mecanizată a carbunelui cu banc  
subminat la minele din Valea Jiului aliniata la performantele inregistrate in tarile U.E. Grant  
269/29.10. AMCSIT Politehnica Bucuresti, Program Inovare, 2008-2010

- contracte de cercetare derulate cu agenții economici;

1. **Membru în echipă** - Contract de cercetare nr. 5/12.04.2016 - Majorarea eficienței energetice  
prin elaborarea, analiza și optimizarea instalațiilor energetice din cadrul SC ASVJ SA  
Petroșani
2. **Membru în echipă** - Contract de cercetare nr. 3/14.01.2015, - Intocmire măsurători de  
performanță și raport tehnic pentru determinarea unor indicatori necesari calificării producției  
de energie electrică în cogenerare de înaltă eficiență pentru Grupul Energetic nr. 4 de 150  
MW din Complexul Energetic Hunedoara SA – Sucursala Electrocentrale Paroșeni (2015).  
Director contract: Șef lucr.dr.ing. Petrilean Dan Coduț
3. **Membru în echipă** - Elaborarea și analiza bilanțului energetic complex pentru consumatorii  
semnificativi din conturul de bilanț aferent secțiilor de producție BCA la punctele de lucru  
Deva și Oradea, Contr. Nr. 11/15.07.2011 , Beneficiar: SC MACON SRL Deva, Director  
contract: Șef lucr.dr.ing. Petrilean Dan Coduț
4. **Membru în echipă** - Retechnologizarea fluxurilor de transport de la unitățile miniere din  
cadrul CNH SA, Contract 142 ASL/2007 Compania Națională a Huilei Petroșani
5. **Membru în echipă** - Studiul posibilităților de creștere a performanțelor în exploatare a  
rotorului excavatoarelor utilizate în carierele S.N.L.Oltenia, ținând seama de caracteristicile la  
tăiere ale lignitului și rocilor din descoperță. Contract nr. 1170/S/06.12.2006 cu S.N.L.O. Tg-  
Jiu.
6. **Membru în echipă** - Cercetări teoretice și experimentale privind creșterea gradului de  
utilizare a utilajelor de excavatoare în carierele de lignit aparținând S.C. Complexul Energetic  
Turceni S.A. Contract nr. nr. 1/2006 cu S.C. Complexul Energetic Turceni S.A. (5 faze).
7. **Membru în echipă** - Cercetări teoretice și experimentale privind îmbunătățirea  
performanțelor în exploatarea sistemelor de transport continuu la minele din cadrul C.N.H.-  
S.A. Petroșani. Contract nr. 4/2005 încheiat între Universitatea din Petroșani și Compania  
Națională a Huilei Petroșani.

8. **Membru în echipă** - Studiul comportării la tăiere mecanică a rocilor sterile din descoperta stratelor de lignit și a lignitului în carierele aparținând CNL Oltenia în vederea creșterii performanțelor tehnice și economice a extragerii cu ajutorul excavatoarelor cu rotor. Contract nr. 6/2002 cu CNLO Târgu-Jiu (faza 4).

19.08.2020

Candidat,  
Șef lucr. dr. ing. Andraș  
Andrei

A handwritten signature in blue ink, consisting of a vertical line on the left and a horizontal line on the right, with a small loop at the end of the horizontal line. The signature is positioned above a solid horizontal line.