

**FORMAT
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INFORMATII PERSONALE

Nume

BANABIC DOREL

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Data nasterii

EXPERIENTA PROFESIONALA

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UNIVERSITATEA TEHNICA DIN CLUJ NAPOCA

• Tipul activitatii sau Sector de activitate

Didactica, Cercetare

• Functia sau postul ocupat

Asistent, Sef lucrari, Conferintiar, Profesor (din 1996)

• Principalele activitati si responsabilitati

Didactica, cercetare

Director a mai multe proiecte de cercetare stiintifica si academice

1996-1998; 2000-2004

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Bursier Humboldt (1996-1998), Cercetator (2000-2004)

CERCETARE STIINTIFICA

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COORDONARE PROIECTE DE CERCETARE INDUSTRIALE (DAIMLER, AUDI, BMW)

COORDONARE PROIECTE DE CERCETARE EUROPENE (FP5, FP6)

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EDUCATIE SI FORMARE

• Perioada

1975-1980

• Numele si tipul institutiei de invatamant si al organizatiei profesionale prin care s-a realizat formarea profesionala

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• Domeniul studiat/aptitudini ocupationale

INGINERIE MECANICA

• Tipul calificarii/Diploma obtinuta

INGINER MECANIC

• Nivelul de clasificare a formei de instruire/invatamant

SUPERIOR

<ul style="list-style-type: none"> • Perioada • Numele si tipul institutiei de invatamant si al organizatiei profesionale prin care s-a realizat formarea profesionala • Domeniul studiat/aptitudini ocupationale • Tipul calificarii/Diploma obtinuta • Nivelul de clasificare a formei de instruire/invatamant 	1989-1993 UNIVERSITATEA TEHNICA DIN CLUJ NAPOCA
	DEFORMARI PLASTICE
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APTITUDINI SI COMPETENTE PROFESIONALE Dobandite in cursul vietii si carierei dar care nu sunt recunoscute neaparat printr-un certificate sau o diploma.	Stagii de cercetare la Universitatea din Varsovia, Polonia (1990-1993 4 luni) Stagiu de cercetare la CEMEF, Ecole des Mines de Paris (1993-3 luni) Cercetare postdoctorala (bursa Humboldt) (1997-2000 20 luni) Cursuri de limba germana la Institutul Goethe (1996-4 luni)
LIMBA MATERNA	Romana
LIMBI STRAINE CUNOSCUTE	
Franceza <ul style="list-style-type: none"> • abilitatea de a citi • abilitatea de a scrie • abilitatea de a vorbi 	F. Buna Buna F. BUNA
Engleza <ul style="list-style-type: none"> • abilitatea de a citi • abilitatea de a scrie • abilitatea de a vorbi 	f. buna Buna Buna
Germana <ul style="list-style-type: none"> • abilitatea de a citi • abilitatea de a scrie • abilitatea de a vorbi 	Buna Medie Buna
APTITUDINI SI COMPETENTE SOCIALE	Membru al Comisiei Prezidentiale pentru Analiza si Elaborarea Politicilor din Domeniul Educatiei si Cercetarii (din 2006)
APTITUDINI SI COMPETENTE ORGANIZATORICE	Director al centrului de Cercetare al UTCN (1994-1996) Director al Centrului de cercetari in Domeniul Deformarii Plastice a Tablelor Metalice (din 2000) Secretar al Asociatiei Europene de Deformarea Materialelor (ESAFORM) (2000-2008) Vicepresedinte al Asociatiei Europene de Deformarea Materialelor (ESAFORM) (din 2008) Editor sef al Buletinului ESAFORM (din 2005) Editor asociat al International Journal of Forming Processes (Hermes, Franta) Secretar al Filiale Cluj al Academiei de Stiinte Tehnice din Romania
APTITUDINI SI COMPETENTE TEHNICE	PROIECTAREA SISTEMELOR MECANICE SI HIDRAULICE MODELAREA PROCESELOR DE DEFORMARE PLASTICA PROIECTAREA TEHNOLOGIILOR DE DEFORMARE PLASTICA TEHNICI EXPERIMENTALE PENTRU ANALIZA PROCESELOR DE DEFORMARE PLASTICA
ALTE APTITUDINI SI COMPETENTE	Organizarea de conferinte si simpozioane internationale
PERMIS DE CONDUCERE	Da

LISTA DE LUCRARI

A. CARTI

A.1 CARTI PUBLICATE IN ROMANIA

1. Tapalaga I., Achimas Gh., Iancau H., **Banabic D.**, Coldea A., *Tehnologia presarii la rece (Indrumator de lucrari de laborator)*, Litografia I.P.C.N., Cluj-Napoca, 1986, 244 pag.
2. Deacu L., **Banabic D.**, Radulescu M., Ratiu C., *Tehnica hidraulicii proportionale*, Editura Dacia, Cluj-Napoca, 1989, 312 pag.
3. **Banabic D.**, Dörr I.R., *Deformabilitatea tablelor metalice subtiri. Metoda curbelor limita de deformare*, Editura OIDICM, Bucuresti, 1992, 246 pag., ISBN 973-95641-1-9.
4. **Banabic D.**, Dörr I.R., *Modelarea matematica a proceselor de deformare plastica a tablelor metalice*, Editura Transilvania Press, Cluj-Napoca, 1995, 226 pag., ISBN -973-97041-9-0.
5. **Banabic D.**, *Introducere in teoria plasticitatii*, Universitatea Tehnica din Cluj-Napoca, 1994, 56 pag.
6. Vida Simiti I., **Banabic D.**, Bicsak E., Canta T., Domsa S., Kerekes L., Soporan V., *Deformabilitatea materialelor metalice*, Editura Dacia, Cluj-Napoca, 1996, 362 pag., ISBN 973-35-0555-2.
7. **Banabic D.**, Lucrarile Conferintei “*Tehnologii si masini pentru prelucrarea prin deformare plastica a metalelor*”, Editor: Banabic D., Editura Printek 2000, Cluj Napoca, 2000, 286 pag. ISBN 973-97486-5.
8. **Banabic D.**, Proc. of the “*Cold Metal Forming - TPR 2000*” Conference, Editor: **Banabic D.**, Printek 2000, Cluj-Napoca, 2000, 226 pag., ISBN 973-97486-3.
9. **Banabic D.** (Editor), *Proceedings of the 8th ESAFORM Conference on Material Forming*, The Publishing House of the Romanian Academy, Bucharest, 2005, Vol 1 and Vol. 2, XXII+539, XXII+584 pag. (Vol.1, ISBN: 973-27-1174-4, Vol. 2, ISBN: 973-27-1175-2).
10. Munteanu R., **Banabic D.**, Ingineria Românească: Trecut, Prezent și Viitor, Lucrările celei de-a Treia Conferințe Naționale a Academiei de Științe Tehnice din România, Mediamira, Cluj Napoca, 2008, 470 pag. (ISBN 978-973-713-223-9).
11. Wagner S., Baur J., **Banabic D.**, Umformtechnik, Litografia Universitatii Tehnice din Cluj Napoca, Cluj Napoca, 2008, 207 pag.

A.2 CARTI PUBLICATE IN STRAINATATE

1. **Banabic D.**, Bünge H.J., Pöhlandt K., Tekkaya A.E., *Formability of Metallic Materials*, Editor: **Banabic D.**, Springer Verlag, Heidelberg, 2000 (358 pag), ISBN 3-540-67906-5.
2. **Banabic D.**, (Editor), *Advanced Methods in Material Forming*, Springer, Heidelberg, 2007 (376 pag), ISBN 3-540-69844-2.
3. **Banabic D.**, (Guest Editor), *Modelling and Experiments in Material Forming*, Hermes-Lavoisier, Paris, 2007, ISBN 978-2-7462-1775-1 (134 pag).
4. **Banabic D.**, Hora P., Pöhlandt K., Schwarzer, R., Tekkaya E., *Metal Forming*, Springer, Heidelberg, 2009, (482 pag.) (in curs de aparitie).
5. **Banabic D.**, *Sheet Metal Forming Processes*, Springer, Heidelberg, 2009 (400 pag) (acceptata pentru publicare) ISBN 978-3-540-88112-4).

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B. CONTRIBUTII LA CARTI

B.1 PUBLICATE IN ROMANIA

1. Deacu L., **Banabic D.**, Radulescu M., Ratiu C., *Sisteme hidraulice proportionale*, In: TCMM, Vol.2, Editura Tehnica, Bucuresti, 1987, p.152-187.
2. **Banabic D.**, Anisotropic behaviour modelling of metallic materials, In: *Research Trends in Mechanics*, (Ed. Chiroiu V.), Editura Academiei Romane, 2008 (in pregatire).

B.2 PUBLICATE IN STRAINATATE

1. **Banabic D.**, Sheet metal predicted by using the new (1993) Hill's yield criterion, In:

Advanced Methods in Materials Processing Defects (Studies in Applied Mechanics Serie, Vol. 45), (Editors: Predeleanu M., Gilormini P.), Elsevier Science, Amsterdam, 1997, p.257-265, ISBN 0-444-82271-2.

2. Barlat F., Cazacu O., Zyczkowski M., **Banabic D.**, Yoon J.-W., Yield surface plasticity and anisotropy, In: *Continuum Scale Simulation of Engineering Materials.*

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3. **Banabic D.**, Tekkaya E.A., Forming Simulation, In: *Virtual Fabrication of Aluminum Alloys: Microstructural Modeling in Industrial Aluminum Production*, (Editor: J. Hirsch), Wiley-VCH, Weinheim 2006, p. 275-303 (ISBN: 3-527-31363-X).

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C. ARTICOLE PUBLICATE IN REVISTE

C.1 PUBLICATE IN REVISTE ISI

1. **Banabic D.**, Valasutean S., The effect of vibratory straining upon Forming Limit Diagrams, In: Journal of Materials Processing Technology, Elsevier, Amsterdam, Vol.34(1992), p.431-437.

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4. **Banabic D.**, Formability of aluminium sheets in pulsatory straining, Materials Science Forum, Zurich, Vol.217-222(1996), p. 1335-1342.

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21. **D. Banabic**, M. Vos, Modelling of the Forming Limit Band –A new Method to Increase the Robustness in the Simulation of Sheet Metal Forming Processes, Annals of CIRP, 56(2007), p. 249-252.

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C.1 PUBLICATE IN REVISTE FARA ISI

1. **Banabic D.**, Asupra elementelor fluidice cu turbulenta (pneumistori), Buletinul Stiintific Seria Tehnica-matematica, vol.III, Institutul de învățământ superior Sibiu, Sibiu, 1980 pag.304-309.

2. **Banabic D.**, Modelarea curbilor limita de deformare în condiții vibratorii utilizând teoria Marciniak-Kuczynski, Buletinul stiintific I.P.C.N., seria Metalurgie, 1992, 7-13.

3. **Banabic D.**, s.a., The theoretical determination of FLD in vibrating conditions, In: Gepyartastechnologia, Budapest, (1992), Nr.9-10, p.412-417.

4. **Banabic D.**, Modelling of the FLD in pulsatory conditions, In: Constructia de masini, Bucuresti, 44(1993), Nr.1-2(Jan.-Febr.), p.39-45

5. **Banabic D.**, Tapalaga I., Review of the criteria for determination of the blank-holding forces in deep-drawing processes, Journal of Plastic Deformation, Sibiu, 1(1994), Nr.1, p.42-47.

6. **Banabic D.**, New contributions on the mathematical modelling of the stretching process in pulsatory straining, Journal of Metallurgical Research and New Materials, Bucuresti, 3(1995), Nr.3-4, p.112-118.

7. **Banabic D.**, New developments on the mathematical model of the Forming Limit Diagrams in pulsatory straining, Journal of Metallurgical Research and New Materials, Bucuresti, 3(1995), Nr.3-4, p.119-125.

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11. **Banabic D.**, Mathematical model of the Forming Limit Diagrams using the new yield criterion, In: Metallurgy and new materials researches, 4(1996), Nr. 1, p.22-28.

12. **Banabic D.**, Pöhlant K., Yield criteria for the anisotropic sheet metal, UTF Science, 4(2001), 19-27.

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criterion, Proceedings of the Romanian Academy, 2(2001), No.3, p.17-21.

14. **D. Banabic**, O. Cazacu, F. Barlat, D.S. Comsa, S. Wagner, K. Siegert, Recent anisotropic yield criteria for sheet metals, Proceedings of the Romanian Academy, 3(2002), No. 3, p.91-99.

15. **Banabic D.**, Wagner S., Anisotropic behaviour of aluminium alloy sheets, Aluminium, 78(2002), No. 10, p.926-930.

16. Poehlandt K., **Banabic D.**, Lange K., On the determination of friction coefficients by ring compression, Wire, 52(2002), No.4, p.46-49.

17. **D. Banabic**, O. Cazacu, F. Barlat, D.S. Comsa, S. Wagner, K. Siegert, Plastic behaviour of AA3103-0 aluminium alloy using some recent anisotropic yield criteria. (Part 1. Theoretical aspects), Acta Tehnica Napocensis, (2002), p.353-359.

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19. K. Pöhlandt, **D. Banabic**, K. Lange, Plastic behavior characterisation of sheet metals using a new concept: equi-biaxial anisotropy coefficient, Acta Tehnica Napocensis, (2002), p.365-371.

20. Pöhlandt K., **Banabic D.**, Lange K., Charakterisierung der plastische Anisotropie von Blechen, UTF Science, 2003, Nr. 1, p.1-8.

21. Pöhlandt K., **Banabic D.**, Lange K., On the determination of friction coefficients by ring compression in bulk metal forming, UTF-Science, (2004), No.3, p.1-3.

22. R. V. Florian, D. David, D. Ciuparu, D. Szedlacsek, Ș. Szedlacsek, **D. Banabic**, A. D. Corlan, N. Dan, P. T. Frangopol, D. Funeriu, M. Ionac, T. Luchian, M. Miclea, R. C. Mureșan, E. Stamate, Sugestii de reglementări și schimbări legislative pentru domeniul cercetării, dezvoltării, inovării, Paper online, http://www.adastra.ro/docs/2008_modificari_legislative_cercetare.pdf

23. M. O'Donnell, **D. Banabic**, A. G. Leacock, D. Brown, R. J. McMurray, The Effect of Pre-Strain and Inter-Stage Annealing on the Formability of a 2024 Aluminium Alloy, International Journal of Material Forming, 2008, (doi: 10.1007/s12289-008-0356-x).

24. M. O'Donnell, A. G. Leacock, **D. Banabic**, D. Brown, R. J. McMurray, The Effect of

Pre-Strain and Solution Heat Treatment on the Formability of a 2024 Aluminium Alloy, International Journal of Material Forming, 2008, (doi: 10.1007/s12289-008-0353-0).

25. Soare S., **Banabic D.**, A note on the MK computational model for predicting the forming limit strains, International Journal of Material Forming, 2008. (doi: 10.1007/s12289-008-0347-y).

26. S. Soare, **D. Banabic**, About the mechanical data required to describe the anisotropy of thin sheets to correctly predict the earing of deep-drawn cups, International Journal of Material Forming, 2008. (doi: 10.1007/s12289-008-0348-x).

C. LUCRARI PUBLICATE IN VOLUMELE CONFERINTELOR INTERNATIONALE

1. Tapalaga I., Cherebetiu T., Hancu L., **Banabic D.**, Issledovanie povedenia necotórîh kompozitnîh electroizolacionîh materialov pri 77 K ispîtaniem na restiajenie, Seminarul de supraconductibilitate, Poiana Brasov, 3-6 sept.1988.

2. Tapalaga I., Berce P., **Banabic D.**, Moga I., Deep-drawing in cryogenic condition, In: Proc.3rd International Conference on Technology of Plasticity. 1-6 July 1990, Kyoto.

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4. **Banabic D.**, Tapalaga I., Moga I., Influence of punch speed on deep-drawing at cryogenic temperature, The 5th International Conference on Metal-Forming, Győr, 19-21 June 1991, p.L60-L68.

5. **Banabic D.**, Moga I., The optimum punch speed on deep-drawing at cryogenic temperature, The 4th International Conference on Numerical Methods in Industrial Forming Process- NUMIFORM'92 -, Sophia Antipolis, France, Sept.1992, p.403-408.

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8. **Banabic D.**, Theoretical and experimental research on the FLD in pulsatory straining, Proc. of the 4th International Symposium DAAAM, Brno, Sept. 1993, p.021-022.
9. **Banabic D.**, Experimental research on the sheets metal formability in pulsatory regime, Proc. of the 1st International Conference on Materials and Manufacturing Technologies "MATEHN'94", May 1994, Cluj-Napoca, p.
10. **Banabic D.**, Forming Limit Diagrams in pulsatory straining, In: 5th Int. Conf. on Metal Forming, Birmingham, Sept. 1994., p.551-556.
11. **Banabic D.**, Dorr I.R., Theoretical and experimental researches in formability on deepdrawing steel sheet, In: Proc.of the 18th Biennial Congress, Lisbon, May 1994, p.473-478.
12. **Banabic D.** Formability on sheets metal in pulsatory straining, In: Proc. of the 6th Int. Conf. "Formability '94", Ostrava, oct.1994.
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15. **Banabic D.**, Modelling of the sheets metal formability in pulsatory straining, Proc. of the Int. Computer Science Conf. "microCAD'95", Miskolc, Febr.1995., p.32-36.
16. **Banabic D.**, Prediction of the forming limit diagrams using the new Hill's yield criterion for the orthotropic sheet metals, Proc. of the 4th Int. Metallurgical Symposium, Ostrava, May 1995.
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17. **Banabic D.**, Mathematical modelling of the forming limit diagrams using the new Hill's yield criterion, Proc. of the 2th Int. Conf. Design to Manufacture in Modern Industry "DMI'95", Bled, May 1995.
18. **Banabic D.**, Tapalaga I., Dorr I.R., Modelling of the stretching process in pulsatory straining, IDDRG Meeting, Colmar, May 1995, p. WGIII.1-8.
19. **Banabic D.**, A new mathematical model of the Forming Limit Diagrams, Proc. of the 6 International Symposium DAAAM-95, Krakow, 1995, p. 19-20.
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23. **Banabic D.**, Achimas Gh., Comsa D. S., Deep drawing by avoiding the flange thickening, Proc. of the Int. Conf. on Modelling and Simulation in Metallurgical Engineering and Material Science MSMM'96, Beijing, 1996.
24. **Banabic D.**, Formability of aluminium sheets in pulsatory straining, Proc of the 5th Int. Conf. on Aluminium Alloys ICAA-5", Grenoble, 1996.
25. **Banabic D.**, Forming limit diagrams predicted by using the new Hill's yield criterion, Proc. of the 3th Int. Conf. on Numerical Simulation of 3-D sheet forming processes NUMISHEET'96", Dearborn- Michigan, 1996, p.240-245.
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29. **Banabic D.** Stretchability of aluminium sheets in pulsatory straining, In: Proc. of Int. Conf. On Industrial Tools (ICIT'97), Maribor, 1997, p. 83-87.
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33. **Banabic D.** Sheet metal predicted by using the new Hill's yield criterion, Proc. Of the third Int. Conf. On Materials Processing Defects, Cachan, 1997, p.257-265.
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