

# Lucian LĂZĂRESCU

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Department of Manufacturing Engineering  
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## Work experience

01.10. 2006 – at present

### Teaching Assistant

Technical University of Cluj-Napoca, Faculty of Machine Building, Department of Manufacturing Engineering

## Research Interests

- Finite element modeling and simulation of cold forming processes;
- Computer Aided Process Planning and Computer Aided Design of tools for cold forming processes.
- Application of Artificial Neural Networks in cold forming processes.

## Education

01.11.2002 – at present

**PhD student** – full time: 01.11. 2002 – 31.09.2006; part time since 01.10.2006, Department of Manufacturing Engineering, Technical University of Cluj-Napoca; Advisor: Prof.Dr.Eng. Gheorghe ACHIMAȘ

01.10.2003-30.06.2004

### Master (MSc.)

Master of Science in the field of Plastics and Composite Products, Technical University of Cluj-Napoca, Faculty of Machine Building

01.10.1997-30.06.2002

### Mechanical Engineer Diploma (Licentiate)

Specialization: Manufacturing Engineering  
Technical University of Cluj-Napoca, Faculty of Machine Building

## Publications:

1. Ceclan Vasile Adrian, Achimaș Gheorghe, **Lăzărescu Lucian**, Groze Florica: (2007), *Influence of the internal pressure on the change of the wall thickness in the case of tubes subjected to bending*, Annals of DAAAM for 2007&Proceedings of the 18<sup>th</sup> International DAAAM Symposium, p. 133-134, ISSN 1726-9679, ISBN 3-901509-58-5,
2. Vasile Adrian Ceclan, Gheorghe Achimas, **Lucian Lazarescu**, Florica Mioara Groze: (2007), *Finite element simulation of tubes press bending process*, 7<sup>th</sup> International multidisciplinary conference , Baia Mare, Romania, may 17-18, p. 93-98, ISSN-1224-3264
3. Florica Groze, Gheorghe Achimaș, **Lucian Lăzărescu**, Vasile Ceclan: (2007), *Using artificial neural networks in the V bending process*, Buletinul Institutului Politehnic din Iași, Tomul LIII(LVII), Secția Construcții de Mașini, 2007, p. 401, ISSN 1582-6392
4. Groze Florica Mioara, Achimaș Gheorghe, **Lăzărescu Lucian**, Ceclan Vasile : (2007), *Artificial Intelligence Application in the bending process*, Annals of DAAAM for 2007 & Proceedings of the 18<sup>th</sup> International DAAAM Symposium, p. 307-308, ISSN 1726-9679, ISBN 3-901509-58-5,

5. Florica Groze, Gheorghe Achimaş, **Lucian Lăzărescu**, Vasile Ceclan : (2007), *Artificial Neural Networks – Principles and applications*, The 5<sup>th</sup> International Conference of Advanced Manufacturing Technologies ICAMaT 2007, pag.39, ISSN 1843-3162
6. Florica Mioara Groze, Gheorghe Achimas, **Lucian Lazarescu**, Vasile Adrian Ceclan: (2007), *Springback prediction of the V bending process using finite element simulation*, 7<sup>th</sup> International multidisciplinary conference , Baia Mare, Romania, may 17-18, 2007, pag. 259-266, ISSN-1224-3264
7. Gheorghe Achimas, Florica Groze, **Lucian Lazarescu**, Vasile Ceclan, *Theoretical aspects regarding the springback prediction for sheet metals subjected to V bending*, microcad 2007, International Scientific Conference, 22-23 march 2007, p. 3-8, ISBN 978-963-661-753-0
8. Gheorghe Achimas, Vasile Adrian Ceclan, **Lucian Lazarescu**, Florica Groze: (2007), *Experimental research concerning the influence of the bending radius on the wall thickness of the bent pipes*, microcad 2007, International Scientific Conference, 22-23 march 2007, p.9-12, ISBN 978-963-661-753-0
9. Achimas Gheorghe, **Lazarescu Lucian**, Groze Florica Mioara, Ceclan Vasile Adrian: (2007), *Investigations on springback of bent tubes using design of experiment and artificial neural networks*, MCPL 2007, 4<sup>th</sup> IFAC Conference on Management and Control of Production and Logistics, 27-30 September, p.331-336, ISBN 978-973-739-481-1
10. **Lazarescu Lucian**, Achimas Gheorghe, Groze Florica, *Studies on wall thickness change of bent tubes using finite Element Simulation*, Buletinul Institutului Politehnic din Iasi, Sectia Constructii de masini, Tomul LII (LVI), Fascicula 5B/2006, p. 529-534, ISSN: 1011-2855
11. Achimas Gheorghe, Groze Florica, **Lazarescu Lucian**, *Using Neural Networks in Sheet Metal Blanking Processes*, Academic Journal of Manufacturing Engineering, Publisher "Politehnica" University of Timișoara Volume 4, No. 1 / 2006, p. 6-11, ISSN: 1583-7904,
12. Achimas Gheorghe, Groze Florica, **Lazarescu Lucian**, *Finite Element Simulation of V Bending Process of Sheet Metals*, Academic Journal of Manufacturing Engineering, Publisher "Politehnica" University of Timișoara, Volume 4, No 4 / 2006, p. 6-12, ISSN: 1583-7904,
13. Achimaş, Gh.; Crişan, L.; Grozav, S.; **Lăzărescu, L.**: (2005), *Quality assurance of the bent tubes using Finite Element Simulation*, Preceedings of 3rd International Congres of Precision Machining, Viena, Austria, p. 43-48, ISBN 3-901-888-31-4.
14. Achimaş, Gh.; **Lăzărescu, L.**; Grozav, S.; Groze, F.: (2005), *Experimental research regarding ovality of bent tubes*, microCAD 2005 - International Scientific Conference, Section M, Miskolc, Hungary, p. 1-4, ISBN 963 661 646 9 ö, ISBN 963 661 659 0
15. **Lăzărescu, L.**; Achimaş, Gh.; Grozav, S.; Groze, F.: (2005), *Finite Element Simulation of Rotary Draw Tube Bending Process*, Proceedings of the 7th International Conference Modern Technologies in Manufacturing, MTeM, 6<sup>th</sup>-8<sup>th</sup> October 2005, Cluj-Napoca, Romania, p. 263-266, ISBN 973-9087-83-3.
16. **Lăzărescu, L.**; Achimaş, Gh.; Ognean, D.; Groze, F.: (2005), *Prediction of quality parameters in the tube bending process using artificial neural networks*, Conferința Internațională de Sisteme de Fabricație ICMS Iași, Buletinul Institutului Politehnic din Iași, Secția Construcții de Mașini , Tomul LI(LV), p. 229-234, ISSN 1582-6392
17. Groze, F.; Achimaş, Gh.; **Lăzărescu, L.**; Ognean, D.: (2005), *Applications of neural networks in cold forming*, Conferința Internațională de Sisteme de Fabricație ICMS Iași, Buletinul Institutului Politehnic din Iași , Secția Construcții de Mașini, Tomul LI(LV), p.235-240, ISSN 1582-6392
18. Achimaş, Gh. and **Lăzărescu, L.**: (2004), *A new method for springback prediction of bent parts*, 2004, ACADEMIC JOURNAL OF MANUFACTURING ENGINEERING, Volume 2, Number 1, Publisher "Politehnica" University of Timișoara, p. 53-57, ISSN 1583-7904

19. Achimaş, Gh.; **Lăzărescu, L.**; Ognean, D.; Groze, F.: (2005), *Factori de influență asupra ovalizării secțiunii transversale a țevilor îndoite*, 2005, Conferința Științifică "Tehnomus" ediția a XIII-a, Editura Universității din Suceava, p. 67-70, ISBN 973-666-154-7
20. **Lăzărescu, L.** and Achimaş, Gh.: (2004), *Investigations about springback of bent tubes*, JOURNAL OF MANUFACTURING ENGINEERING, Volume 2, Number 2, Publisher "Politehnica" University of Timișoara, p. 38-44, ISSN 1583-7904
21. **Lăzărescu, L.** & Achimaş, Gh.: (2004), *An Artificial Neural Network Control System for Errors Compensation in the Three-Dimensional Tube Bending Process*, Annals of DAAAM International for 2004 & Proceedings of the 15<sup>th</sup> International DAAAM Symposium, Published by DAAAM International, Vienna, Austria, Editor B. Katalinic. p. 249-250, ISBN 3-901509-42-9
22. **Lăzărescu, L.**; Achimaş, Gh.; Ognean, A.; Grozav, S.: (2004), *Considerations concerning the elaboration of a new perforated sheet shape for design*, MicroCAD 2004 International Scientific Conference 18-19 March, Miskolc, Hungary , p. 113-116, ISBN 963 661 608 6 ö, ISBN 963 661 618 3
23. **Lăzărescu, L.**; Achimaş, Gh.; Grozav, S. : (2004), *Spring-back prediction of bent tubes using Artificial Neural Networks*, MicroCAD 2004 International Scientific Conference 18-19 March, Miskolc, Hungary, p.117-129, ISBN 963 661 608 6 ö, ISBN 963 661 618 3
24. Achimaş, Gh.; **Lăzărescu, L.**: (2004), *Experimental investigations about influences on springback of bent tubes*, 2004, The 1<sup>st</sup> International Conference on Computing and Solutions in Manufacturing Engineering, CoSME`04, Editura Universității „Transilvania” Braşov, p. 177-178, ISBN 973-635-372-9
25. Achimaş, Gh.; **Lăzărescu, L.**: (2004), *Influences on the capacity of the Artificial Neural Networks to predict the springback of bent tubes*, The 1<sup>st</sup> International Conference on Computing and Solutions in Manufacturing Engineering, CoSME`04, Editura Universității „Transilvania” Braşov, p. 179-180, ISBN 973-635-372-9
26. Hancu, L.; Achimaş, Gh.; **Lăzărescu, L.**: (2003), *Researches and Equipment Concerning Cryogenic Recovery of Stainless Steel*, Miskolcer Gespräche 2003, „Die Neuesten Ergebnisse auf dem Gebiet Fördertechnik und Logistik“ Seminarband, Herausgeber J. Cselenyi, Verleger: Universität Miskolc, p. 7-9, ISBN 963 661 595 0
27. **Lăzărescu, L.**; Achimaş, Gh.: (2003), *Software for Simulation of Manufacturing, Material Handling and Logistics Systems*, Miskolcer Gespräche 2003, „Die Neuesten Ergebnisse auf dem Gebiet Fördertechnik und Logistik“ Seminarband, Herausgeber J. Cselenyi, Verleger: Universität Miskolc, p. 53-59, ISBN 963 661 595 0