

May 24-25, 2009 Razi International Conference Center, Tehran, Iran



**Mohammad Bakhshi-Jooybari**  
**Faculty of Mechanical Engineering**  
**Babol Noshirvani University of Technology**  
**Babol, Mazandaran, Iran**

**Personal Details**

First Name: Mohammad  
Family Name: Bakhshi-Jooybari  
Sex: Male  
Date of Birth: 28, 11, 1960  
Place of birth: Jooybar, Mazandaran, Iran  
Profession: Academic staff of Babol Noshirvani University of Technology  
Academic position: Associate professor

**EDUCATION**

Ph.D: Birmingham University, School of Manuf. & Mech. Eng., UK, 1/93 to 9/95  
Thesis: "Development of an Intelligent Knowledge-Based System (IKBS) for Forging Die Design"  
MSc: Tarbiat Modarres University, Mech. Eng. Dept., Tehran, Iran, 9/88 to 9/91  
Thesis: "Computer-Aided Design of Axisymmetric Forging Dies"  
Major: Master of Mech. Eng.  
B.Sc: Amir Kabir Univ. of Technology, Mech. Eng. Dept., Tehran, Iran, 9/79 to 2/87  
Major: Mech. Eng.

**EXPERIENCE**

**1-Industry**

CAD/CAM of forging dies, Arak Machine Design & Manufacture Company, Ministry of Industries, Iran. (1/90 to 10/92)

**2-University Activities**

- a- Teaching some basic and advanced courses of mechanical engineering (see next paragraph) at Mazandaran University. (1/95 to now)
- b- Principal for Research of Mazandaran University. (11/96 to 8/98)
- c- Dean of Faculty of Engineering, Mazandaran University. (8/98 to 9/2000)

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d- Vice-Chancellor for Research of Mazandaran University. (9/2000 to 10/2001)

e- Vice-Chancellor for Education of Mazandaran University. (10/2001 to 6/2004)

f- Member of Editorial Board of Journal of Engineering of Mazandaran University (9/98 to now)

3- Supervisor of Postgraduate students:

**3-1 Msc Students (the title of some of the thesis are given)**

1 Experimental study and numerical simulation of tube hydroforming of industrial parts.

2 Experimental study and numerical simulation of sheet hydroforming of industrial parts.

3 Experimental study and numerical simulation of the effect of the die profile in forward extrusion.

4 Experimental study and numerical simulation of the effect of the die profile in backward extrusion.

5 Experimental study and numerical simulation of the effect of the die geometry in deep drawing.

**3-2 PhD Students (the title of theses is given)**

1 Mechanism of improvement of formability in pulsing tube hydroforming

2 Experimental study and numerical simulation of sheet hydroforming of industrial parts.

3 A new die design for sheet hydroforming of industrial parts

4 A new die design for hydroforming of conical parts

**4-COURSES TAUGHT**

**a-Undergraduate Courses**

1. *Manufacturing Processes*

2. *Applied Plasticity and Metal forming Processes*

3. *Computer Numerical Control (CNC)*

4. *Computer-Aided Design and Manufacture (CAD/CAM)*

5. *Forging Die Design*

**b-Graduate Courses**

1. *Advanced Metal Forming Processes*

2. *Plasticity*

3. *Finite Element Method and the Metal Forming Processess*

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## PUBLICATIONS

### a-Journals Papers

1. Bakhshi-Jooybari, M.; Pillinger, I.; Dean, T. A. and Hartley, P. (1994), Development of an IKBS for forging die design, *J. Materials Processing Technology*, 45, pp. 689-694.
2. Bakhshi-Jooybari, M.; Pillinger, I.; Dean, T. A. and Hartley, P. (1996), Development of product and process comparison criteria for an IKBS for forging die design, *IMechE J. Engineering Manufacture*, 210, pp. 565-578.
3. Bakhshi-Jooybari, M.; Pillinger, I.; Dean, T. A. and Hartley, P. (1996), Finiteelement simulation and experimental study of hot closed-die upsetting, *Int. J. Mach. Tools Manufact*, 36, p., 1021-1032.
4. Nategh, M. J. and Bakhshi, M. (1998), AXIFOGE: A PC-based forging design program for computer-integrated engineering environments, *Int. J. Computer Applications in Technology*, 11, pp.33-44.
5. Bakhshi-Jooybari, M. (2002), A theoretical and experimental study of friction in metal forming by the use of the forward extrusion process, *J. Materials Processing Technology*, 125, pp 369-374.
6. Noorani-Azad, M.; Bakhshi-Jooybari, M.; Hosseini-pour, S. J. and Gorji, A. (2005), Experimental and numerical study of optimum die profile in cold forward extrusion of aluminum, *J. Materials Processing Technology*, 164-165, pp 1572-1577.
7. Bakhshi-Jooybari, M.; Saboori, M.; Hosseini-pour, S. J.; Shakeri, M. and Gorji, A. (2006), Experimental and numerical study of optimum die profile in backward rod extrusion, *J. Materials Processing Technology*, 177, pp 596-599.
8. Bakhshi-Jooybari, M.; Saboori, M.; Noorani-Azad, M. and (2006), Experimental and numerical study of energy consumption in forward and backward extrusion, *J. Materials Processing Technology*, 177, pp 612-616.
9. Bakhshi-Jooybari, M.; Saboori, M.; Noorani-Azad, M.; Hosseini-pour, S. J. (2007), Combined upper bound and slab method, finite element and experimental study of optimum die profile in extrusion, *Materials & Design*, Vol. 28, pp. 1812-1818.
10. Loh-Mousavi, M.; Mori, K.; Hyashi, K.; Maki, S. K. and Bakhshi, M. (2007), 3-D finite-element simulation of pulsating T-shape hydroforming of tubes, *Key Engineering Materials*, Vol. 340-341, pp. 353-358.
11. Loh-Mousavi, M.; Mori, K.; Hyashi, K. and Bakhshi-Jooybari, M. (2007), Improvement of Filling of Die Corners in Box-Shaped Tube Hydroforming by Control of Wrinkling, *Key Engineering Materials*, Vol. 344, pp. 461-46.
12. Bakhshi-Jooybari, M.; Loh-Mousavi, M.; Mori, K.; and Hyashi, K. (2008), Improvement of formability in T-shape hydroforming of tubes by pulsating pressure, *IMechE Journal of Engineering Manufacture*, Vol. 222, pp. 1139-1146.
13. Bakhshi-Jooybari, M.; Rahmani, B.; Daezadeh, V. and Gorji, A. (2008), The study of springback of CK67 steel sheet in V-die and U-die bending, *Materials & Design*,

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*in press.*

14. Elyasi, M.; Bakhshi-Jooybari, M.; Gorji, A.; Nourouzi, S. and Alinejad, G. (2008), Numerical and experimental investigation on forming metallic bellows in closed and open die hydroforming, *Steel Research International*, Vol. 79.

#### **b- Conference papers**

1. Bakhshi-Jooybari, M.; Pillinger, I.; Dean, T. A. and Hartley, P. (1996), *Proc. of the 1996 Eng. systems Design & Analysis Conf., Vol. 3, pp. 151-158, Montpellier, France, July 1-4.*
2. Bakhshi-Jooybari, *et al.*, (1999), Design and manufacture of a typical machine center table, *Proceeding of the 4th Manufacturing Eng. Conferenc, Vol. 1 pp. 355-364, Amir Kabir University of Technology, Tehran, Iran*
3. Loh-Mousavi, M. ; Bakhshi-Jooybari, M. and Hojjati (*in Persian*)., M. S., (2002), Finite-element simulation and experimental study of cold aluminum extrusion, *Proceeding of the 10<sup>th</sup> int. conference of Mechanical Engineering of Iran, pp. 915-921, Khajeh Nasir Toosi University of Technology, Tehran, Iran (in Persian).*
4. Bakhshi-Jooybari, M. and Hojjati, M. S., (2002), Using forward extrusion process in determination of friction factor in metal forming, *Proceeding of the 10<sup>th</sup> int. conference of Mechanical Engineering of Iran, pp. 193-200, Khajeh Nasir Toosi University of Technology, Tehran, Iran.*
5. Bakhshi-Jooybari, M., The study of billet temperature on die cavity filling in hot closed-die upsetting, proceeding of the 6<sup>th</sup> ESAFORM conference on material forming, Salerno, Italy, April 28-30, 2003.
6. Loh-Mousavi, M. and Bakhshi-Jooybari, M., Experimental study and modelling of hot closed-die upsetting by the finite element and finite volume techniques, proceeding of the 6<sup>th</sup> ESAFORM conference on material forming, Salerno, Italy, April 28-30, 2003.
7. Loh-Mousavi, M. and Bakhshi-Jooybari, M. (2003), An integrated computer aided design and simulation system for forging of connecting rod, *Proceeding of the 6th Manufacturing Eng. Conferenc, Amir Kabir University of Technology, Tehran, Iran.*
8. Loh-Mousavi, M. and Bakhshi-Jooybari, M (2004), Experimental study and finite volume simulation of hot extrusion of steel, *Proceeding of the 12<sup>th</sup> int. conference of Mechanical Engineering of Iran, pp. 321-333, Tarbiat Modares University, Tehran, Iran.*
9. Noorani-Azad, M.; Bakhshi-Jooybari, M. (2005), Optimum die profile in cold forward rod extrusion, *Proceeding of the 13<sup>th</sup> int. conference of Mechanical Engineering of Iran, Isfahan University of Technology, Isfahan, Iran.*
10. Saboori, M.; Bakhshi-Jooybari, M. (2005), Optimum die profile in cold backward rod extrusion, *Proceeding of the 13<sup>th</sup> int. conference of Mechanical Engineering of Iran, Isfahan University of Technology, Isfahan, Iran.*
11. Sarlak, M.; Hosseinipour, S. J. and Bakhshi-Jooybari, M. (2005), Obtaining

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forging preform die by reverse metal flow by the use of FEM, *Proceeding of the 13<sup>th</sup> int. conference of Mechanical Engineering of Iran, Isfahan University of Technology, Isfahan, Iran.*

12. Saboori, M., Bakhshi-Jooybari, M., Hosseini-pour, S. J., Shakeri, M. and Gorji, A. (2005), Experimental and numerical study of optimum die profile in backward rod extrusion of lead, *Proceeding of the 1st Tehran Int. Conf. on Manufacturing Eng., Tehran, Iran.*

13. Biglari, F. R., Bakhshi-Jooybari, M., Ghatrehnabi, M., Rohani, A. and Nikbin, N., Influence of height and location of V-ring indenter on void volume fraction variations during fine blanking process, *Proceeding of the 1st Tehran Int. Conf. on Manufacturing Eng., Tehran, Iran.*

14. Rahi, M., Shakeri, M., Bakhshi, M., Development of setup-free machining technology of plate like components (software and hardware), *Proceeding of the 1st Tehran Int. Conf. on Manufacturing Eng., Tehran, Iran.*

15. PourMohammad, A.A., Bakhshi-Jooybari, M. and Mohammadi-Daniali, H.R., (2006) The study of the effect of die profile in extrusion process using FEM simulation, *Proceeding of the 14<sup>th</sup> int. conference of Mechanical Engineering of Iran, Isfahan University of Technology, Isfahan, Iran.*

16. Elyasi, M. and Bakhshi-Jooybari, M., Experimental study of the effect of billet geometry on metal flow in precision closed-die forging (2006), *Proceeding of the 14<sup>th</sup> int. conference of Mechanical Engineering of Iran, Isfahan University of Technology, Isfahan, Iran.*

17. Loh-Mousavi, M., Mori, Ken-ichiro, Hayashi, K. and Bakhshi-Jooybari, M., Mechanism of improvement and shape accuracy in pulsating hydroforming of tube with box die (2006), *The proceedings of the 2006 Japanese spring conference for the technology of plasticity, Osaka, Japan.*

18. Loh-Mousavi, M., Mori, Ken-ichiro, Hayashi, K., Maki, S. and Bakhshi-Jooybari, M., 3-D finite element simulation of pulsating T-shape hydroforming of tubes (2006), *The 8<sup>th</sup> Asia-Pasific Symposium on Engineering Plasticity and its applications, Nagoya University, Nagoya, Japan.*

#### **c- Books**

1. Bakhshi-Jooybari, M. and Hojjati, M. S., (2001), The principles of manufacturing processes for metals, *Mazandaran University, Iran (in persian).*

2. Bakhshi-Jooybari, M., (2002), Computer-aided design and numerical control programming, *Mazandaran University, Iran (in persian).*