

# Prof. MUSTAFA İLHAN GÖKLER

## Personal Information

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## Education Information

Under Graduate, Middle East Technical University, Faculty of Engineering, Makine Mühendisliği Bölümü, Turkey 1974 - 1979

## Foreign Languages

English, C1 Advanced

## Academic Titles / Tasks

Professor, Middle East Technical University, Faculty of Engineering, 1998 - Continues

## Advising Theses

GÖKLER M. İ. , Developing test procedure and design of fixture for dynamic test of road ambulances, Post Graduate, S.Kaya(Student), 2019

GÖKLER M. İ. , Design of a sled test fixture for civilian helicopter seats, Post Graduate, A.Seçgin(Student), 2019

GÖKLER M. İ. , COMPUTER AIDED DESIGN AND ANALYSIS FOR FORGING OF COMMON RAIL, Post Graduate, A.GÜLBİKE(Student), 2017

GÖKLER M. İ. , Design of new die holder system for reducing die exchange time on 1000 ton hot forging press, Post Graduate, M.AHMAD(Student), 2015

DARENDELİLER H., GÖKLER M. İ. , DEVELOPMENT OF INTERNAL HEATING SYSTEM FOR HOT FORGING DIES, Doctorate, L.ERTONG(Student), 2013

GÖKLER M. İ. , Analysis of Whiplash during rear crash and development of an anti-whiplash seat mechanism, Doctorate, M.ÖZDEMİR(Student), 2013

GÖKLER M. İ. , Investigation of reducing run time in vehicle level finite element analyses for curtain airbag development, Post Graduate, K.ÖZDEN(Student), 2012

GÖKLER M. İ. , KALKANLI A., An Alternative process including sand casting, forging and heat treatment of 30mm diameter X48CrMoV8-1 tool steel, Post Graduate, İ.Alp(Student), 2012

GÖKLER M. İ. , Die System Design for Flashless Hot Forging of Sliding Elements, Post Graduate, E.ARSLAN(Student), 2012

KALKANLI A., GÖKLER M. İ. , An alternative process including sand casting forging and heat treatment of 30mm diameter X48CrMoV8-1 tool steel, Post Graduate, İ.ALP(Student), 2012

GÖKLER M. İ. , Developing of system to evaluate safety of child seat and restraints system according to ECE R44, Post Graduate, R.ÇÖL(Student), 2012

DARENDELİLER H., GÖKLER M. İ. , Analysis of Roller Hemming Process for a Vehicle Tailgate, Post Graduate, S.GÜRGEN(Student), 2011

GÖKLER M. İ. , Design of a Vehicle Seat Back Adjustment Mechanism, Post Graduate, A.MURAT(Student), 2010

DARENDELİLER H., GÖKLER M. İ. , DESIGN AND ANALYSIS OF COLD FORGING PROCESS ON MULTI-STATION

HORIZONTAL FORGING MACHINES, Post Graduate, C.YUMUŞ(Student), 2010

DARENDELİLER H., GÖKLER M. İ. , Analysis of hot forming of an Advanced High Strength Steel sheet metal component of A-Pillar in a vehicle, Post Graduate, S.DEMİRKAYA(Student), 2010

DARENDELİLER H., GÖKLER M. İ. , Experimental and numerical analysis of compression on a forging press, Post Graduate, G.BİÇER(Student), 2010

DARENDELİLER H., GÖKLER M. İ. , Effect of strain history on simulation of crashworthiness of a vehicle, Post Graduate, U.ÇAĞRI(Student), 2009

GÖKLER M. İ. , Analysis of coining process in production of medallion, Post Graduate, D.AKKUŞ(Student), 2009

DARENDELİLER H., GÖKLER M. İ. , Finite element analysis and manufacturing of fin connector rod by hot forging process, Post Graduate, B.ŞERBETÇİ(Student), 2009

DARENDELİLER H., GÖKLER M. İ. , Elastic-plastic finite element analysis of semi-hot forging dies, Post Graduate, M.HALİŞÇELİK(Student), 2009

DARENDELİLER H., GÖKLER M. İ. , ANALYSIS OF HIGH-G CAMERA SUPPORT STRUCTURE FOR CRASH TEST SYSTEM, Post Graduate, M.GÖKHAN(Student), 2009

GÖKLER M. İ. , Experimental whiplash analysis with hybrid III 50 percentile test dummy, Post Graduate, U.GÖÇMEN(Student), 2009

GÖKLER M. İ. , DAĞ S., Finite element analysis of a micro satellite structure under vibration induced loads during launch, Post Graduate, S.ONTAÇ(Student), 2008

DARENDELİLER H., GÖKLER M. İ. , Analysis and design for aluminum forging process, Post Graduate, H.ÖZTÜRK(Student), 2008

DARENDELİLER H., GÖKLER M. İ. , Thermo-mechanically coupled numerical and experimental study on 7075 aluminum forging process and dies, Post Graduate, M.CİHAT(Student), 2008

GÖKLER M. İ. , An experimental study on single crystal diamond turning of optical quality silicon, Post Graduate, S.ÇALI(Student), 2008

GÖKLER M. İ. , Design of fixturing system for forging dies, Post Graduate, Ö.CAVBOZAR(Student), 2008

GÖKLER M. İ. , Cutting strategies for forging die manufacturing on CNC milling machines, Post Graduate, A.ÖZGEN(Student), 2008

GÖKLER M. İ. , Development of a methodology for prediction of surface roughness of curved cavities manufactured by 5-axes CNC milling, Post Graduate, K.ARDA(Student), 2007

GÖKLER M. İ. , Development of a methodology for prediction of surface roughness of curved cavities manufactured by 5-axes cnc milling, Post Graduate, K.Arda(Student), 2007

DARENDELİLER H., GÖKLER M. İ. , Design and thermo-mechanical analysis of warm forging process and dies, Post Graduate, S.SARAÇ(Student), 2007

GÖKLER M. İ. , Design and analysis of fixturing in assembly of sheet metal components of helicopters, Post Graduate, F.MEHMET(Student), 2007

DARENDELİLER H., GÖKLER M. İ. , Effects of induction heating parameters on forging billet temperature, Post Graduate, İ.DURUKAN(Student), 2007

DARENDELİLER H., GÖKLER M. İ. , Design and implementation of hot precision forging die for a spur gear, Post Graduate, M.MAŞAT(Student), 2007

GÖKLER M. İ. , BALKAN R. T. , Acquisition of field data for agricultural tractor, Post Graduate, A.KOYUNCU(Student), 2006

GÖKLER M. İ. , Preliminary design and construction of a prototype canola seed oil extraction machine, Post Graduate, P.SARI(Student), 2006

ERDAL ERDOĞMUŞ M., GÖKLER M. İ. , Effects of production parameters on porosity and hole properties in laser sintering rapid prototyping process, Post Graduate, Ö.İLKĞÜN(Student), 2005

GÖKLER M. İ. , Development of postprocessor, simulation and verification software for a five-axis CNC milling machine, Post Graduate, E.CENGİZ(Student), 2005

DARENDELİLER H., GÖKLER M. İ. , Analysis of roll-forging process, Post Graduate, H.KARACAOVALI(Student), 2005

GÖKLER M. İ. , Analysis of tube upsetting, Post Graduate, A.TÜZÜN(Student), 2004

GÖKLER M. İ. , Preform design for forging of heavy vehicle steering joint, Post Graduate, S.Gülbahar(Student), 2004

AKKÖK M., GÖKLER M. İ. , Wear analysis of hot forging dies, Post Graduate, S.ABACHİ(Student), 2004

DARENDELİLER H., GÖKLER M. İ. , Analysis and preform design for long press forgings with non-planar parting surfaces,

Post Graduate, A.BARIŞ(Student), 2003

DARENDELİLER H., GÖKLER M. İ. , Analysis of forging for three different alloy steels, Post Graduate, B.CİVELEKOĞLU(Student), 2003

GÖKLER M. İ. , Computerized cost estimation for forging industry, Post Graduate, M.TUNÇ(Student), 2003

DARENDELİLER H., GÖKLER M. İ. , Finite element analysis of springback in bending process., Post Graduate, V.ESAT(Student), 2002

GÖKLER M. İ. , Design and analysis of hot upset forgings with non-circular cross-sections., Post Graduate, E.KAZANCI(Student), 2002

DARENDELİLER H., GÖKLER M. İ. , Finite element analysis of hot upset forging dies., Post Graduate, M.CERAN(Student), 2002

GÖKLER M. İ. , Alternative prototyping of large sized plastic parts by using CNC milling machines: A comparative study, Post Graduate, M.AYTAÇ(Student), 2002

GÖKLER M. İ. , Analysis and design of preforms for non-axisymmetric press forgings, Post Graduate, A.ERKİN(Student), 2001

GÖKLER M. İ. , Alternative prototyping of large sized plastic parts by using CNC milling machines - a comparative study., Post Graduate, M.Aytaç(Student), 2001

GÖKLER M. İ. , DARENDELİLER H., Finite element analysis of effects of tapered preforms on final product in cold upsetting, Post Graduate, Ö.Doğan(Student), 2000

GÖKLER M. İ. , DARENDELİLER H., Finite element analysis of piercing operation on forging machines, Post Graduate, T.Moğulkoç(Student), 1999

GÖKLER M. İ. , Experimental investigation of effects of cutting parameters on surface roughness in wedm process., Post Graduate, A.Mithat(Student), 1998

GÖKLER M. İ. , Development of a methodology and a software to convert 2D engineering drawings to 3D solid models., Post Graduate, L.Ertong(Student), 1998

GÖKLER M. İ. , Experimental investigation of effects of cutting parameters of surface roughness in WEDM process, Post Graduate, A.MİTHAT(Student), 1998

GÖKLER M. İ. , Development of a methodology and a software to convert 2D engineering drawings to 3D solid models, Post Graduate, L.ERTONG(Student), 1998

GÖKLER M. İ. , Experimental investigation of hydroforming of dishwasher parts, Post Graduate, T.Akın(Student), 1997

GÖKLER M. İ. , Design of automatic tool changer for CNC machines, Post Graduate, M.BİLGİN(Student), 1995

GÖKLER M. İ. , A graphical database for modular fixturing assemblies, Post Graduate, M.EMRE(Student), 1995

GÖKLER M. İ. , Blending in surface modelling, Post Graduate, C.ÖZBAL(Student), 1995

GÖKLER M. İ. , Computer aided design of drop forging dies, Post Graduate, T.GÜLEÇ(Student), 1994

GÖKLER M. İ. , Surface modelling based on bezier and B-spline techniques, Post Graduate, M.YABAN(Student), 1993

GÖKLER M. İ. , Hidden-surface elimination and shading technique in solid modelling, Post Graduate, M.Anıl(Student), 1991

GÖKLER M. İ. , Sweep-based primitive creation in solid modelling, Post Graduate, C.ÖZÇELİK(Student), 1991

GÖKLER M. İ. , Hidden-surface elimination and shading techniques in solid modelling, Post Graduate, M.ANIL(Student), 1991

GÖKLER M. İ. , Computerized classification and shape coding and solid modeling applications for hot upset forgings, Post Graduate, A.Alpan(Student), 1991

GÖKLER M. İ. , Computer aided design of progressive press dies for cutting operations, Post Graduate, K.HAKAN(Student), 1990

GÖKLER M. İ. , Union, intersection and difference in solid modeling applications, Post Graduate, M.ÇANGA(Student), 1990

GÖKLER M. İ. , Development of data Bank for sheet metal presswork die sets and auxiliary components, Post Graduate, M.İbrahim(Student), 1989

GÖKLER M. İ. , Implementation of computer graphics on computer aided process planning system for rotational parts, Post Graduate, M.Ünlüsoy(Student), 1989

GÖKLER M. İ. , Development of data bank for sheet metal presswork die sets and auxiliary components, Post Graduate, M.İBRAHİM(Student), 1989

GÖKLER M. İ. , Implementation of computer graphics on computer aided process planning system for rotational parts,

Post Graduate, M.ÜNLESOY(Student), 1989

GÖKLER M. İ. , Computer aided part programme generation for machining upset forging dies on NC milling machines, Post Graduate, H.BAŞTÜRK(Student), 1987

GÖKLER M. İ. , Computer aided operations sequence and die design for cold extrusion, Post Graduate, M.GÜNEŞ(Student), 1987

GÖKLER M. İ. , Computer aided striplayout and die design for sheet metal press cutting operations, Post Graduate, H.BÜYÜKBAŞ(Student), 1987

## Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **Experimental and numerical investigation of comparability of whiplash sled test results**  
ÖZDEMİR M., İDER S. K. , GÖKLER M. İ.  
JOURNAL OF THE BRAZILIAN SOCIETY OF MECHANICAL SCIENCES AND ENGINEERING, vol.38, no.2, pp.395-402, 2016 (Journal Indexed in SCI)
- II. **Parametric analysis of an anti-whiplash system composed of a seat suspension arrangement**  
Ozdemir M., İDER S. K. , GÖKLER M. İ.  
JOURNAL OF THE BRAZILIAN SOCIETY OF MECHANICAL SCIENCES AND ENGINEERING, vol.37, no.2, pp.777-784, 2015 (Journal Indexed in SCI)
- III. **Development of a design verification methodology including strength and fatigue life prediction for agricultural tractors**  
Koyuncu A., GÖKLER M. İ. , Balkan T.  
INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY, vol.60, pp.777-785, 2012 (Journal Indexed in SCI)
- IV. **Wear analysis of hot forging dies**  
Abachi S., AKKÖK M., GÖKLER M. İ.  
TRIBOLOGY INTERNATIONAL, vol.43, pp.467-473, 2010 (Journal Indexed in SCI)
- V. **Experimental investigation of effects of cutting parameters on surface roughness in the WEDM process**  
Gokler M., Ozanozgu A.  
INTERNATIONAL JOURNAL OF MACHINE TOOLS & MANUFACTURE, vol.40, no.13, pp.1831-1848, 2000 (Journal Indexed in SCI)
- VI. **Analysis of tapered preforms in cold upsetting**  
Gokler M., Darendeliler H., Elmaskaya N.  
INTERNATIONAL JOURNAL OF MACHINE TOOLS & MANUFACTURE, vol.39, no.1, pp.1-16, 1999 (Journal Indexed in SCI)
- VII. **Design of an automatic tool changer with disc magazine for a CNC horizontal machining center**  
Gokler M., Koc M.  
INTERNATIONAL JOURNAL OF MACHINE TOOLS & MANUFACTURE, vol.37, no.3, pp.277-286, 1997 (Journal Indexed in SCI)
- VIII. **Computerized analysis of parameters affecting shape and thickness in cold rolling of strip for soft materials**  
Senalp A., Gokler M., Akkok M.  
JSME INTERNATIONAL JOURNAL SERIES C-MECHANICAL SYSTEMS MACHINE ELEMENTS AND MANUFACTURING, vol.40, no.1, pp.170-179, 1997 (Journal Indexed in SCI)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Predicting the Effective Cutting Length of Laser Micro Jet Process Using Machine Learning**  
Subaşı L., GÖKLER M. İ. , YAMAN U.

International Conference and Exhibition on Digital Transformation and Smart Systems, Ankara, Turkey, 23 - 25 October 2019

**II. Effects of forming history on crash simulation of a vehicle**

GÖKLER M. İ. , Dogan U. C. , DARENDELİLER H.

10th International Conference and Workshop on Numerical Simulation of 3D Sheet Metal Forming Processes, Bristol, United Kingdom, 4 - 09 September 2016, vol.734

**III. Analysis of Hot Forming of a Sheet Metal Component Made of Advanced High Strength Steel**

Demirkaya S., DARENDELİLER H., GÖKLER M. İ. , Ayhaner M.

11th International Conference on Numerical Methods in Industrial Forming Processes (NUMIFORM), Shenyang, China, 6 - 10 July 2013, vol.1532, pp.421-426

**IV. Analysis of Roller Hemming Process for a Vehicle Tailgate Closure**

Gurgen S., GÖKLER M. İ. , DARENDELİLER H., Celikkaya C. C. , Erden K.

11th International Conference on Numerical Methods in Industrial Forming Processes (NUMIFORM), Shenyang, China, 6 - 10 July 2013, vol.1532, pp.367-374

**V. Finite element analysis of shearing processes**

Isbir S., DARENDELİLER H., GÖKLER M. İ.

5th International Conference on Engineering Computational Technology, ECT 2006, Las Palmas de Gran Canaria, Spain, 12 - 15 September 2006

**VI. Finite element analysis of header dies for taper upsetting**

Ceran M., GÖKLER M. İ. , DARENDELİLER H.

8th International Conference on Computational Structures Technology, CST 2006, Las Palmas de Gran Canaria, Spain, 12 - 15 September 2006, vol.83

**VII. Finite element analysis of the effects of tapered preforms on the final product in cold upsetting**

Dogan O., GÖKLER M. İ. , DARENDELİLER H.

Proceedings of the Third International Conference on Engineering Computational Technology, Prague, Czech Republic, 4 - 06 September 2002, pp.105-106

## Supported Projects

Gökler M. İ. , Akar G., Yaman U., Köksal G., Eren P. E. , Ertekin Bolelli Ş., Gürbüz T., Erdil E., AB IPA Project, MIDDLE EAST TECHNICAL UNIVERSITY DIGITAL INNOVATION CENTER, 2021 - 2024

GÖKLER M. İ. , CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, Otomotiv Sanayinde Tasarım ve Analize Yönelik Yüksek İvmeli Hasarsız Çarpışma Laboratuvarı, 2006 - 2011

## Citations

Total Citations (WOS):123

h-index (WOS):4