

## DR. SHAILENDRA KUMAR



### Address

- (A) Office : Professor, Department of Mechanical Engineering  
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### Educational Qualification:

Degree	Division / Grade	Year	Institute / University
B.Sc. Engineering (Production Engineering & Management)	79% First class Distinction	1999	Regional Institute of Technology, Jamshedpur, India (Presently NIT Jamshedpur)
Ph.D.* (Mechanical Engineering)	-	March 2007	Maharshi Dayanand University, Rohtak, Haryana, India

\* **Title of Ph.D. Thesis:** “A Contribution to the Development of Knowledge-based System for Intelligent Design of Progressive Dies”

### Teaching Experience:

Organization	Post held	Duration	Responsibilities
Sardar Vallabhbhai National Institute of Technology (S.V.N.I.T.), Surat, India	Professor ( <b>Present Post</b> )	28 <sup>th</sup> January, 2019 onward	Teaching of UG & PG subjects, Research & Administrative work
S.V.N.I.T. Surat, India	Associate Professor	16 <sup>th</sup> August, 2007 to 27 <sup>th</sup> January, 2019	Teaching of UG & PG subjects, Research & Administrative work
Hindu College of Engineering, Sonapat, Haryana, India	Lecturer /Assistant Professor	9 <sup>th</sup> Nov’ 1999 to 14 <sup>th</sup> August 2007	Teaching of UG subjects, Research & Administrative work

### Subjects Taught during last five years:

- Under-Graduate: Machining Processes, Production Technology – II
- Post Graduate: Computer Aided Production Planning, Metal Forming, Flexible Manufacturing Systems, CIM, Non-traditional machining, Advanced Tool Design

### Research Publications:

- International Journals: 42
- National Journals: 14
- International Conferences: 49
- National Conferences: 35

(Kindly refer the List of Research Publications attached vide *Annexure – I*)

**Area of Research Interests:**

- AI Applications in Sheet Metal Forming
- Press Tool Design
- Non-traditional Machining
- Incremental Forming
- Additive Manufacturing
- Computer Aided Process Planning (CAPP)
- CAD/CAM/CIM
- Manufacturing Processes

**Research Projects:**

<b>Funding Agency</b>	<b>Title of Project</b>	<b>Grants Sanctioned</b>	<b>Duration</b>	<b>PI/Co-PI</b>	<b>Status</b>
DST, New Delhi (Under Fast Track Scheme for Young Scientist)	Development of an intelligent system for selection of materials for press tool components	3.60 Lakhs	2008-2011	PI	Completed
MHRD, New Delhi (Project was headed by IIT Kharagpur)	National Mission Project on Developing suitable pedagogical methods for various classes, intellectual calibers and research in e-learning	91.0 Lakhs (total 13 courses)	2013-2017	Institute Coordinator (Also developed one course as Principal Developer)	Completed
National Plan for Science and Technology (NPST), Kingdom of Saudi Arabia, Riyadh	Intelligent workshop in sheet metal dies	1651000 Saudi Riyals (Approx. Rs. 2.95 Crore)	July 2014- July 2016	Co-PI	Completed
Science & Engineering Research Board(SERB), New Delhi	Automation of design of compound dies for sheet metal industries	24.10 Lakhs	2014-2017	PI	Completed
Naval Research Board, Directorate of Naval R&D (DNRD), New Delhi	Investigation on the influence of Machining Parameters in the Machining of Carbon epoxy composite with AWJM to improve surface finish and minimize defects	22.9584 Lakhs	2015-2018	PI	Completed

### **Membership:**

- Life member of Indian Society of Mechanical Engineers (ISME), New Delhi (Membership No.: L 1088).
- Life member of International Association of Engineers (IAENG), Singapore (Membership No.: 65421).
- Life member of World Academy of Science, Engineering & Technology (WASET).
- Senior member of Universal Association of Mechanical and Aeronautical Engineers (UAMAE), IRED, New York, USA (Membership No.: SNM10100052506).

### **Workshop / Short Term Programmes / Conference Organized:**

1. National Workshop on Intelligent Systems, March 2007, HCE Sonapat, Haryana
2. Short Term Training programme (STTP) “Pedagogy (Teaching Methodology)”, 12-15 May, 2008, SVNIT Surat.
3. Workshop on Machine Tools & Applications (MTA-2008), 9-13 June, 2008, SVNIT Surat
4. Short Term Training programme (STTP) “Pedagogy and Research Methodology”, SVNIT, Surat, 3-7 August, 2009.
5. Short Term Training programme (STTP) “Advances in Manufacturing” 28<sup>th</sup> Dec 2009 to 1<sup>st</sup> Jan, 2010, SVNIT Surat.
6. 1st National Conference “Recent Advances in Manufacturing (RAM-2010)” (CSIR & DST, New Delhi sponsored), 19-21 July, 2010, SVNIT Surat.
7. One week Indo-US Council for Engineering Education (IUCEE) FLI course on “Advances in Manufacturing Systems”, 20-24 June, 2011, SVNIT, Surat.
8. 2nd National Conference “Recent Advances in Manufacturing (RAM-2011)” (DST sponsored), 15-17 September, 2016, SVNIT Sura.t
9. 3rd National Conference “Recent Advances in Manufacturing (RAM-2012)” (DST sponsored), 27-29 June, 2012, SVNIT Surat.
10. One day Regional Workshop on 28th August, 2013 (under MHRD Pedagogy project headed by IIT Kharagpur), SVNIT Surat
11. 4th National Conference “Recent Advances in Manufacturing (RAM-2014)” (DST sponsored), 26-28 June, 2014, SVNIT Surat.
12. Short Term Training programme (STTP) “Advances in Manufacturing”, 28th July- 1st Aug 2014, SVNIT Surat.
13. 5th National Conference “Recent Advances in Manufacturing (RAM-2015)” (DST, & TEQIP- II sponsored), 15-17 May, 2015, SVNIT Surat.
14. One day Regional Workshop 21st December, 2015 (under MHRD Pedagogy project headed by IIT Kharagpur), SVNIT Surat
15. 6th National Conference “Recent Advances in Manufacturing (RAM-2016)” (DST, & TEQIP- II sponsored), 12-14 May, 2016, SVNIT Surat.
16. Faculty development Programme on “Outcome Based Teaching - Learning”, 3-5 June, 2016, SVNIT Surat (TEQIP-II sponsored)

### **Expert / Key-note Lectures delivered: more than 20**

#### **Recent –**

1. Delivered a key-note lecture on “AI Applications in Sheet Metal Forming” in the 3rd International Conference on Innovative Design, Analysis and Development Practices in Aerospace and Automotive Engineering (I-DAD 2018), held at Veltech University, Chennai, 22-24 Feb, 2018.
2. Delivered a key-note lecture on “Knowledge-based System to Automate Die Design for Sheet Metal Industries” in the 9th International Conference on Mechatronics & Manufacturing (ICMM 2018) held at Phuket, Thailand, 27-29 January, 2018.

## **Books/Book Chapters:**

### • **Book Chapters:**

1. S. Kumar, "AI Applications to Metal Stamping Die Design", In: Artificial Intelligence: Approaches, Tools and Applications (ISBN 978-1-61324-019-9), Nova Science Publishers, New York, 2011, pp. 71-95.
2. S. Kashid, S. Kumar, "Prediction of life of compound die using ANN", In: Metal Forming 2014 (e-book), ISBN-13:978-3-03835-193-1, TTP, Switzerland, pp. 664-671.
3. S. Kumar, R. Singh, D. Panghal, S. Salunkhe, H. M. A. Hussein, "Feature Extraction and Manufacturability Assessment of Sheet Metal Parts", In: AI Applications in Sheet Metal Forming, ISBN 978-981-10-2250-0, Springer Science, Singapore, 2017
4. H.M.A. Hussein, W. Fengyin, A. F. Barakat, S. Kumar, "Knowledge Based System for Design of Blanking Dies", In: AI Applications in Sheet Metal Forming, ISBN 978-981-10-2250-0, Springer Science, Singapore, 2017
5. V. Naranje, S. Kumar, "Knowledge-Based System for Design of Deep Drawing Die for Axisymmetric Parts", In: AI Applications in Sheet Metal Forming, ISBN 978-981-10-2250-0, Springer Science, Singapore, 2017
6. S. Salunkhe, S. Kumar, H. M. A. Hussein, "An Expert System for Automatic Design of Compound Dies", In: AI Applications in Sheet Metal Forming, ISBN 978-981-10-2250-0, Springer Science, Singapore, 2017
7. S. Salunkhe, S. Kumar, H. M. A. Hussein, "Prediction of Die Life of Compound Die using ANN", In: AI Applications in Sheet Metal Forming, ISBN 978-981-10-2250-0, Springer Science, Singapore, 2017
8. D. Panghal, S. Kumar, H. M. A. Hussein, "Knowledge Based System for Automatic Design of Bending Dies", In: AI Applications in Sheet Metal Forming, ISBN 978-981-10-2250-0, Springer Science, Singapore, 2017
9. Sachin Salunkhe, Soham Teraiya, H. M. A. Hussein and Shailendra Kumar, "Smart System for Feature Recognition of Sheet Metal Parts: A Review", In: Innovative Design, Analysis and Development Practices in Aerospace and Automotive Engineering (I-DAD 2018), Lecture Notes in Mechanical Engineering, Springer Nature, Singapore, 2019.
10. Rahul Jagtap and Shailendra Kumar, "Incremental Sheet Forming: An Experimental Study on the Geometric Accuracy of Formed Parts", In: Innovative Design, Analysis and Development Practices in Aerospace and Automotive Engineering (I-DAD 2018), Lecture Notes in Mechanical Engineering, Springer Nature, Singapore, 2019.
11. Ravi Kumar Gupta, H. M.A. Hussein, S.S.Salunkhe, Mukur Gupta, S.Kumar, "Step toward computer-aided integration of sheet metal application", In: Innovative Design, Analysis and Development Practices in Aerospace and Automotive Engineering (I-DAD 2018), Lecture Notes in Mechanical Engineering, Springer Nature, Singapore, 2019.

### • **Edited Books/Proceedings:**

1. Proc. 1<sup>st</sup> National Conf. "Recent Advances in Manufacturing", ISBN:978-93-80697-05-5, (2010)
2. Proc. 2<sup>nd</sup> National Conf. "Recent Advances in Manufacturing", ISBN:978-93-80697-05-5 (2011)
3. Proc. 3<sup>rd</sup> National Conf. "Recent Advances in Manufacturing", ISBN:978-93-5067-338-6 (2012)
4. Proc. 4<sup>th</sup> National Conf. "Recent Advances in Manufacturing", ISBN:978-93-5156-755-4 (2014)
5. Proc. 5<sup>th</sup> National Conf. "Recent Advances in Manufacturing", ISBN:978-93-5212-649-1 (2015)
6. Proc. 6<sup>th</sup> National Conf. "Recent Advances in Manufacturing", ISBN:978-93-5265-309-6 (2016)

- **Shailendra Kumar, H.M.A. Hussein (Ed.), “AI Applications in Sheet Metal Forming, Springer Science, Singapore, ISBN 978-981-10-2250-0 (2017)**

**Books Reviewed:** 04 (Publisher - Tata-McGraw Hills, New Delhi)

**Ph.D. Guidance: 06 (Completed) + 06 (Ongoing)**

<b>Research scholar</b>	<b>Topic of Research</b>	<b>Status</b>
Vishal Naranje	A contribution to the development of knowledge-based system for intelligent design of deep drawing dies for axisymmetric parts	<b>Awarded</b> (April, 2013)
Sachin Kashid	A contribution to the development of expert system for intelligent design of compound dies and prediction of die life using ANN	<b>Awarded</b> (April, 2015)
Deepak Panghal	A contribution to the development of knowledge-based system for intelligent design of bending dies	<b>Awarded</b> (June, 2015)
Ajit Dhanwade	Experimental investigation on the influence of process parameters in machining of Carbon Epoxy Composites using abrasive water jet machining	<b>Awarded</b> (March, 2017)
Pramod Chougule	Energy and cost conscious flexible process routing for sustainable manufacturing	<b>Awarded</b> (July, 2018)
Rahul Jagtap	Experimental investigation on hybrid incremental forming	<b>Thesis submitted</b>
Vikas Sisodia	Experimental investigation on incremental forming with dummy sheet	Ongoing
Aniket Jadhav	Experimental investigation on laser assisted Machining	Ongoing
Swapnil Vyavahare	Experimental investigation on 3D Printing of PC, PC-ABS, ABS Parts	Ongoing
Kiran R More	Experimental investigation on incremental forming	Ongoing
Soham Teraiya	Experimental investigation on 3D Printing	Ongoing
Dattu Kumar Kulkarni	Experimental investigation on EDM	Ongoing

**M. Tech. Dissertation Guidance: 37 (Completed) + 04 (Ongoing)**

<b>Name of Student</b>	<b>Dissertation Topic</b>	<b>Academic Year</b>
Prajapati Harshkumar J	Experimental Investigation on Influence of Process Parameters of Abrasive Water Jet Machining on Kerf Properties of Glass Fiber Reinforced Polymer Composites	2017-18
Tank Bhavik D	Investigation on Influence of Process Parameters on Surface Roughness and Kerf Properties in Abrasive Water Jet Machining of Carbon Fiber Vinyl Ester Composites	2017-18
Vaghela Anilbhai R	An Experimental Investigation on the Geometrical Accuracy of Part Formed Using Single Point Incremental Forming (SPIF)	2017-18
Patel Sandeepkumar	An Experimental Study of Electrical Discharge Machining of Incoloy 825 Superalloy	2017-18

Vaghela Shubham N	Experimental Investigation on Influence of Anisotropy of AA6061-T6 Material on Tensile Strength of Weld Prepared by Friction Stir Welding	2017-18
Patel Mitenkumar Vinodbhai	Investigation on influence of process parameters of abrasive water jet machining on kerf taper of Kevlar fiber reinforced polymer composites	2016-17
Dharmanshu Singh Sodha	Experimental investigation on formability and surface finish in single point incremental forming with dummy sheet	2016-17
Shekhar Saxena	Experimental investigation on influence of process parameters on surface roughness in single point incremental forming (SPIF) of Aluminium Alloy 1050	2016-17
Sahil Kumar Gupta	Investigation on influence of process parameters of Abrasive Water Jet Machining on surface roughness and kerf taper of hardened AISI 440C Stainless Steel	2016-17
Arun Kumar Rouniyar	Investigation on influence of process parameters on surface roughness of abrasive water jet machined lead zirconate titanate ceramic material	2015-16
Pratik S. Parwatwar	Investigation on sheet thickness and surface quality in Hybrid incremental sheet forming process	2015-16
Ravi Prakash Upadhyai	Investigation on influence of process parameters on kerf properties in abrasive water jet machining of lead zirconate titanate ceramic material	2015-16
Gothi Nitinbhai M.	Automatic feature extraction and process planning of sheet metal parts produced on compound die	2015-16
Balkesh	An investigation on sheet thickness distribution and surface roughness in multistage incremental sheet forming process	2015-16
Shweta Jagdale	Investigation on influence of process parameters in AWJM of carbon epoxy composite to minimize kerf taper	2014-15
Pratik Bose	Investigation on influence of process parameters in AWJM of Glass epoxy composite to improve surface finish	2014-15
Amol Patil	An Investigation on the effect of process parameters in Single Point Incremental Sheet Forming (SPIF)	2014-15
Soham Teraiya	Automatic feature recognition of sheet metal parts	2014-15
Vikas Sisodia	Study of dynamic behaviour, design and development of interface operating mechanical linkage between the drive and the disconnecter switch of 420KV gas insulated switch gear	2014-15
Mahul Chaudhari	Experimental investigation on the influence of process parameters on accuracy and surface roughness in SPIF	2013-14
Ankur Vasava	Scheduling of AGVs in different FMS environment	2013-14
Sujit Mulay	A knowledge based system for selection of bending die components	2012-13
Rahul Jagtap	An experimental study on the influence of process parameters in single point incremental sheet forming (SPIF)	2012-13
Ravi Kumar	Life estimation of compound die using artificial neural network	2012-13
Jai Kishan	Computer aided process planning for bending	2011-12
Kirtesh A. Patel	Development of a Computer Aided System for Bottleneck Analysis of FMS	2011-12
Mayur R. Patel	Development of a Computer Aided System for Single Model Manual Assembly Line Balancing	2011-12
Dhaval B. Chaudhari	Optimization of He-cooled divertor cooling finger's geometry by thermal stress analysis.	2011-12
Udai Singh	Development of an Intelligent CAD System for Process Planning of Deep Drawing Die	2010-11

Ankush Sharma	Development of a Computer-Aided System for Scheduling of FMS	2010-11
Prakash P. Mali	Finite Element Analysis of Crankshaft with Analytical Verification	2010-11
Shreesh P. S.	Finite Element Study of Spring back in Sheet Metal Stretch Forming	2010-11
Madhusudan Chaudhari	An Intelligent System for Manufacturability Evaluation of Sheet Metal Parts	2010-11
Sachin S. Kashid	Design and FE Analysis of End Effector	2009-10
Mahesh K. Prajapati	Modeling and Analysis of Centrifugal Air Compressor Suction Filter using CFD Techniques	2009-10
Isai Sagar Sharad	Structural Analysis of 6-wheeler chassis	2009-10

**Visits Abroad for participation in International Conferences:**

<b>Place visited</b>	<b>Duration</b>	<b>Purpose</b>
<b>Brisbane &amp; Melbourne, Australia</b>	2-10 December, 2018	Participated in 14 <sup>th</sup> Global Congress in Manufacturing & Management (GCMM 2018) held at Brisbane, Australia during 5-7 Dec'2018 Presented one research paper
<b>Phuket, &amp; Bangkok, Thailand</b>	26- 31 January, 2018	Participated in International Conference ICMM 2018 held at Phuket, Thailand Delivered one Key-note lecture, Chaired one session, and Presented one research paper (Won award for best paper presentation)
<b>Tokyo, Japan</b>	17-23 January, 2017	Participated in International Conference ICMM 2017 held at Chuo University, Tokyo. Presented one research paper
<b>Zurich, Switzerland, &amp; Munich, Germany</b>	8-14 October, 2015	Participated in International Conference AMRE 2015 held at Zurich Presented one research paper
<b>Dubai, UAE</b>	16-20 November, 2014	Participated in International Conference AMPT 2014 held at Atlantis The Palm, Dubai. Presented five research papers
<b>Detroit, MI USA</b>	9-13 June, 2014	Participated in 42 <sup>nd</sup> North American Manufacturing Research Conference (NAMRC42) hosted by University of Michigan, Ann Arbor, MI, USA. Presented one research paper.
<b>Belfast Northern Ireland, UK</b>	24-28 March, 2013	Participated in 15 <sup>th</sup> International Conference on Sheet Metal (SheMet-2013) hosted by University of Ulster, Belfast, UK Presented two research papers.
<b>Leuven (near to Brussels), Belgium</b>	18-22 April, 2011	Participated in 14 <sup>th</sup> International Conference on Sheet Metal (SheMet-2011) organized by K.U. Leuven, Belgium. Presented one research paper.
<b>Singapore</b>	17-22 December, 2010	Participated in International Conference ICISE-2010 & ICIME-2010 organized by WASET (World Academy of Science, Engineering and Technology). Presented two research papers and chaired one session.

Paris, <b>France</b>	28 July- 2 August, 2010	Participated in International Conference ICMAME – 2010 organized by WASET (World Academy of Science, Engineering and Technology). Presented one research paper
San Francisco, & Los Angeles, <b>USA</b>	20 October -1 November, 2008	Participated in International Conference on Intelligent Automation and Robotics ICIAR 2008, organized by the Int. Association of Engineers, Singapore and held at University of California, Berkeley, San-Francisco, California, USA. Presented one research paper.
Las Vegas, & Los Angeles, <b>USA</b>	29 July - 7 August, 2006	Attended the International Conference AMPT-2006 jointly organized by the Ohio University, Athens and University of Nevada, Las Vegas. Presented two research papers.
Dublin, <b>Ireland</b>	7- 14 July, 2003	Attended the International Conference AMPT-2003 organized by the Dublin City University, Dublin. Presented one research paper.

**Administrative Assignments at SVNIT, Surat :**

- PG Incharge, M.Tech. CAD-CAM w.e.f. 12<sup>th</sup> January, 2018
- Chairman, Local Organising Committee & Technical Committee of Centralised Counselling for M.Tech./M.Arch./M.Plan. (CCMT 2017) Admissions of all NITs (30), IITs (04) and CFTIs (07).
- Member, Core Committee of 14<sup>th</sup> Convocation of the Institute held on 22<sup>nd</sup> Jan' 2017 (O.O. No. Dean (Acad)/Convocation/398/2016-17, Dtd. 12<sup>th</sup> Dec' 2016)
- Chief Coordinator, Examinations w.e.f. September, 2015 to June, 2017
- QIP Coordinator w.e.f. January, 2015 to June, 2017
- Associate Dean (Academic) w.e.f. 5<sup>th</sup> May, 2014 to 8<sup>th</sup> June, 2017 (O.O. No. E/96, Dtd. 5<sup>th</sup> May, 2014)
- Member of National Core Committee and Technical Committee of CCMT-2015 which was responsible for framing guidelines for M.Tech. Admissions in all NITs and some IITs and CFTIs.
- Center in-charge of Help Centre and Reporting Centre of CCMT-2014, 2015 & 2016
- Institute Coordinator, Main phase of the National Mission Project on "Developing suitable pedagogical methods for various classes, intellectual calibres and research in e-learning", funded by the MHRD, Govt. of India with IIT Kharagpur as the Anchor Institute.
- PG Incharge - Industrial Process and Equipment Design (IPED) during 2012-2014 (O.O. No. MED/2012-13/1607, Dtd. 24/08/2012)
- PG Incharge - Manufacturing Engineering from 01/01/2013 to 01/01/2015 (O.O. No. MED/2012-13/2879-A, Dtd. 15/02/2012)
- Chief Hostel Warden (in the Centralized system of all hostels of SVNIT) during December, 2008 to August, 2011.
- Member of Institute Discipline Committee till August 2011
- Member of Institute Level Anti-Ragging Committee till August 2011
- Member of Institute Purchase Committee during 2008-2011 (O.O. No. C/BOG(14)/1423, Dtd. 24/01/2008)
- Senate Member from December, 2008 to August, 2011; May 2014 to June, 2017
- Professor-Incharge, Gardening, Institute beautification & Road Networking, 2007-2008 (O.O.No. E//1488, Dtd. 31/01/2008)



- Chairman, Institute Literary & Debate Committee during 2007-2008 (Circular No. SC/2007-08/751, Dtd. 05/09/2007).

**Awards and Recognitions:**

- Member of Technical Committee of 9th Int. Conf. on Mechatronics and Manufacturing (ICMM-2018), Jan 27-29, 2018, Phuket, Thailand. Delivered one Key-note lecture and Chaired one session, and also received award for **Best Paper**
- Member of Technical Committee of 8th Int. Conf. on Mechatronics and Manufacturing (ICMM-2017), Jan 20-22, 2017, Tokyo, Japan
- Member of Advisory Committee of many International and National Conferences.
- Acting as REVIEWER of reputed International Journals (published by Elsevier, Inderscience, SAGE, SME), National Journals and for various International & National Conferences.
- Chaired sessions in various reputed International and National Conferences.
- Editorial member of American Journal of Intelligent Systems.
- Young Scientist Award (2008-2011) from Dept. of Science & Technology, Govt. of India: This award carries a grant for a fast track research project
- Topped throughout the academic career during studies and received merit scholarships by the State Govt. of Haryana, India.
- Biography has been published in the International Biographical Centre (IBC), Cambridge, England for publication in its leading title: “2000 Outstanding Intellectuals of the 21<sup>st</sup> Century”

*(Dr. Shailendra Kumar)*

**Encl:** List of Research Publication (Annexure-1)

**RESEARCH PUBLICATION**

<b>S. N.</b>	<b>Author(s)</b>	<b>Title of paper</b>	<b>Name of Journals/Conference</b>	<b>Year of Pub.</b>	<b>Page Nos. / DOI</b>
<b>INTERNATIONAL JOURNALS:</b>					
1	S. Kumar, and R. Singh	A low cost knowledge base system framework for progressive die design	Journal of Material Processing Technology, Vol.153-154 (Elsevier)	2004	958-964
2	S. Kumar, and R. Singh	Trends and developments in intelligent computer aided design of progressive dies	Journal of Advanced Materials Research, Vol. 6-8 (Elsevier)	2005	241-248
3	S. Kumar, and R. Singh	An intelligent system for selection of die-set of press tool for metal stampings	Journal of Materials Processing Technology, Vol. 164-165 (Elsevier)	2005	1395-1401
4	S. Kumar, R. Singh, and G. S. Sekhon	CCKBS: A component check knowledge base system for accessing manufacturability of sheet metal parts	Journal of Materials Processing Technology, Vol. 172. (Elsevier)	2006	64-69
5	S. Kumar, and R. Singh	A knowledge-based system for selection of progressive die components	Journal of Achievements in Materials and Manufacturing Engineering, Vol. 20	2007	475-479
6	S. Kumar, and R. Singh	A short note on an intelligent system for selection of materials for progressive die components	Journal of Materials Processing Technology, Vol. 182 (Elsevier)	2007	456-461
7	S. Kumar , and R. Singh	An intelligent system for modeling and material selection for progressive die components	Journal - Key Engineering Materials, Vol. 344 (Trans Tech Pub.)	2007	873 -880
8	S. Kumar , and R. Singh	An intelligent system for automatic modeling of progressive die	Journal of Materials Processing Technology, Vol. 194 (Elsevier)	2007	176-183
9	S. Kumar, and R. Singh	A knowledge-based system to automate the selection of progressive die components	International Journal of Computational Mateial Science and Surface Engineering, Vol. 1. (Inderscience)	2007	85-96
10	S. Kumar, and R. Singh	Automation of strip-layout design for sheet metal work on progressive die	Journal of Materials Processing Technology, Vol. 195. (Elsevier)	2008	94-100

11	H. M. A. Hussein, and S. Kumar	A Computerized Retrieval System for Sheet Metal Parts	Asian Int. Journal of Science and Technology in Production and Manufacturing Engineering, Vol.1(2)	2008	31-40
12	S. Kumar, R. Singh, and G. S. Sekhon	An Expert System for Design of Blanking Dies for Sheet Metal Operations	Journal: Lecture Notes in Engineering and Computer Science, ISSN:20780958, Vol. 2173 (1)	2008	699-704
13	S. Kumar, and R. Singh	An Automated Design System for Progressive Dies	Expert Systems with Applications, Vol.38 (Elsevier)	2011	4482-4489
14	S. Kumar	An Intelligent System for Selection of Materials for Press Tool Components	Journal of Engg. Research & Studies, Vol. 2	2011	119-130
15	V. Naranje, and S.Kumar	A knowledge based system for manufacturability assessment of deep drawn sheet metal parts	Key Engineering Materials, Vol.473	2011	749-756
16	V. Naranje, and S. Kumar	A knowledge based system for selection of components of deep drawing die	American Journal of Intelligent Systems, Vol.2 (2) (SAP, USA)	2012	1-11
17	S. Kashid, and S. Kumar	Applications of ANN to sheet metal work: A review	American Journal of Intelligent Systems, Vol.2 (7)	2012	168-176
18	D. Panghal, and S. Kumar	An expert system framework for design of bending die	American Journal of Intelligent Systems, Vol.2 (7)	2012	163-167
19	V. Naranje, and S. Kumar	A knowledge based system for process planning of axisymmetric parts	Key Engineering Materials, Vol. 549	2013	239-246
20	D. Panghal, and S. Kumar	A low cost knowledge based system framework for design of bending die	Key Engineering Materials, Vol. 549	2013	284-291
21	V. Naranje, and S. Kumar	A knowledge-based system for design of strip layout for progressive deep drawing dies	Int. Journal of Computer Applications in Technology, Vol.48 (3)	2013	222-234
22	V. Naranje, and S. Kumar	An intelligent CAD system for automatic modeling of deep drawing die	Int. Journal of Computer Applications in Technology, Vo.48 (4) (Inderscience)	2013	330-344
23	V. Naranje, and S. Kumar	A knowledge based system for automated design of deep drawing die for axisymmetric parts	Expert Systems with Applications, Vol. 41 (4) (Elsevier)	2014	1419-1431

24	V. Naranje, and S. Kumar	An expert system for selection of process parameters and strip layout design for production of deep drawn sheet metal parts	International Journal of Internet Manufacturing and Services, Vol. 3 (3) (Inderscience),	2014	263-278
25	S.Kashid, and S.Kumar	Prediction of Life of Die Block using Artificial Neural Network	Applied Mechanics and Materials Vols. 592-594 (Trans Tech Pub.)	2014	689-693
26	S.Kashid, and S.Kumar	Prediction of Life of Compound Die using Artificial Neural Network	Key Engineering Materials, Vol. 622-623	2014	664-671
27	S.Kashid, and S.Kumar	An expert system for selection of components of compound die	Journal of Advanced Manufacturing Systems Vol. 13 (3)	2014	181–195
28	H.M.A.Hussein, and S.Kumar	A framework for development of an intelligent system for design and manufacturing of stamping dies.	Materials Science and Engineering (IOP Science)	2014	DOI:10.1088/1757-899X/65/1/012029
29	S. Kashid, S. Kumar, and Hussein Mohamed Hussein	Selection, Modeling and Prediction of Life of Stripper of Compound Die	Key Engineering Materials, Vol. 639	2015	501-508
30	Puneet Trivedi, Ajit Dhanawade & Shailendra Kumar	An experimental investigation on cutting performance of abrasive water jet machining of austenite steel (AISI 316L)	Advances in Materials and Processing Technologies (Taylor & Francis)	2016	DOI: 10.1080/2374068X.201.1128176
31	Deepak Panghal, S. Kashid, Shailendra Kumar & H.M.A. Hussein	An automatic system for deciding bend sequence of bending parts	Advances in Materials and Processing Technologies	2016	DOI: 10.1080/2374068X.201.1116232
32	Sachin Kashid, Deepak Panghal, Shailendra Kumar, and H. M. A. Hussein	CAD system for automatic modelling of compound dies	Advances in Materials and Processing Technologies	2016	DOI: 10.1080/2374068X.201.1116228
33	Rahul Jagtap, Sachin Kashid, Shailendra Kumar, and H. M. A. Hussein	An experimental study on the influence of tool path, tool diameter and pitch in single point incremental forming	Advances in Materials and Processing Technologies	2016	DOI: 10.1080/2374068X.201.1128171
34	V. Naranje, S. Kumar, S. Kashid, A. Ghodke & H. M. A. Hussein	Prediction of life of deep drawing die using artificial neural network	Advances in Materials and Processing Technologies	April 2016	DOI: 10.1080/2374068X.201.1160601
35	H. M. A. Hussein, S. Kumar and Emad S Abouel Nasr	Computer-aided design and simulation of strip layout for progressive die planning using Petri nets	Advances in Mechanical Engineering 2016, Vol. 8(4) (SAGE Pub.)	2016	1-9

36	Sachin Salunkhe, Deepak Panghal, Shailendra Kumar, and H M A Hussein	An expert system for process planning of sheet metal parts produced on compound die for use in stamping industries	Sadhna Academy Proceedings in Engineering Sciences (Springer)	2016	DOI:10.1007/s12046-016-0521-8
37	Ajit Dhanawade, Shailendra Kumar, and R.V. Kalmekar	Abrasive Water Jet Machining of Carbon Epoxy Composite	Defence Science Journal, Vol. 66 (5), Published by DRDO, Govt. of India	Sept' 2016	522-528 DOI : 10.14429/ds.j.66.9501
38	Ajit Dhanawade, and Shailendra Kumar	Experimental study of delamination and kerf geometry of carbon epoxy composite machined by abrasive water jet	Journal of Composite Materials (SAGE Pub.)	2017	1-18 DOI: 10.1177/0021998316688950
39	Ajit Dhanawade, and Shailendra Kumar	Experimental study on abrasive water jet machining of PZT ceramic	Journal of Physics: Conf. series, 870	2017	DOI : 10.1088/1742-6596 / 870 /1/012019
40	Ajit Dhanawade, and Shailendra Kumar	Study on carbon epoxy composite surfaces machined by abrasive water jet machining	Journal of Composite Materials	2018	1-16 DOI: 10.1177/0021998318807278
41	Vikas Sisodia and Shailendra Kumar	Influence of process parameters on surface roughness in single point incremental forming using dummy sheet	IOP Conf. series: Material Science & Engineering, 361	2018	DOI:10.1088/1757-899X/361/1/012003
42	Rahul Jagtap and Shailendra Kumar	Optimisation and modelling of thinning and geometric accuracy in incremental sheet forming combined with stretch forming	Int. Journal of Materials Engineering Innovation, Vol. 10 (1)	2019	2-19

#### **NATIONAL JOURNALS:**

1	S. Kumar ,and R. Singh	An expert system for selection of piloting for sheet metal work on progressive die	Journal of Scientific & Industrial Research, Vol. 67 (10) (NISCAIR)	2008	774-779
2	S. Kumar, and R. Singh	An expert system for design of progressive die for use in sheet metal industries	Journal of Scientific & Industrial Research, Vol. 69. (NISCAIR)	2010	510-514
3	V. Naranje, and S.Kumar	Design of deep drawing die: An expert system approach	Journal of Manufacturing Engineering, Vol.6 (2)	2011	99-105

4	V. Naranje, and S.Kumar	An expert system for selection of process parameters of deep drawing process	Journal of Manufacturing Engineering, Vol.6 (4)	2011	233-239
5	V. Naranje, and S.Kumar	An expert system for design of die block of deep drawing die	Journal of Manufacturing Engineering, Vol.7 (3)	2012	134-140
6	S. Kashid, and S.Kumar	A review on applications of expert system to die design	Journal of Manufacturing Engineering, Vol.7 (4)	2012	208-214
7	S. Kashid, and S.Kumar	Applications of Artificial Neural Network to sheet metal work: A review	Journal of Manufacturing Engineering, Vol.2 (7)	2012	168-176
8	S. Kashid, and S.Kumar	CDPUN: An expert system for selection of compound die punches	Journal of Manufacturing Engineering, Vol.9 (1)	2014	16-21
9	A. Dhanawade and S. Kumar	Abrasive water jet machining of composites: a review	Journal of Manufacturing Engineering, Vol.9 (3)	2014	136-142
10	A. Dhanawade and S. Kumar	An experimental study of surface roughness in abrasive waterjet machining of carbon fiber reinforced polymer using orthogonal array with grey relational analysis	Journal of Manufacturing Engineering, Vol. 11(1)	2016	1-6
11	Shweta Jagdale, Ajit Dhanawade, and Shailendra Kumar	An experimental study of influence of process parameters on kerf properties of abrasive waterjet machined carbon fibre reinforced polymer	Journal of the Association of Engineers, India, Vol. 86, No. 1 & 2 [ISSN 0368-1106]	2016	15-22
12	P D Chougale, S Kumar, and H K Raval	Energy and cost conscious process routing	Journal of Manufacturing Engineering, Vol. 11 (3)	2016	151-156
13	Arun Kumar Rouniyar, Ajit Dhanawade, Shailendra Kumar and Raj Kalmekar	An investigation on surface roughness in abrasive water jet machining of PZT ceramic	Journal of Manufacturing Engineering, Vol. 11 (4)	2016	198-202
14	Ajit Dhanawade, and Shailendra Kumar	Multi-performance optimization of abrasive water jet machining of carbon epoxy composite material	Indian Journal of Engineering & Materials Sciences, Vol. 25 (NISCAIR)	2018	406-416

<b>INTERNATIONAL CONFERENCES:</b>					
1	S. Kumar ,and R. Singh	A low cost knowledge base system framework for progressive die design	Int. Conf. on Advances in Materials and Processing Technology (AMPT-2003), Dublin City University, Dublin, Republic of Ireland	July 8-11, 2003	1614-1617
2	S. Kumar, and R. Singh	An intelligent system for selection of die-set of press tool for metal stampings	Int. Conf. on Advances in Materials and Processing Technologies (AMPT-2005), Wisla, Poland	May 16-19, 2005	309-312
3	S. Kumar, and R. Singh	ISSLD: An intelligent system for strip layout design for sheet metal operations on progressive die	14th ISME Int. Conf. on Mechanical Engg. in Knowledge Age, D.C. E., Delhi	Dec 12-14, 2005	490-494
4	S. Kumar, and R. Singh	A knowledge-based system for design of strip-layout of metal stamping work on progressive die	Int. Conf. on Advances in Materials and Processing Technology (AMPT-2006), Ohio Uni., Las Vegas, USA	Jul 30-Aug 03, 2006	AII 243 CD-ROM
5	S. Kumar, and R. Singh	A review on development of knowledge-based systems for progressive die design	Global Conf. on Production and Industrial Engineering, NIT Jalandhar, India	March 22-24, 2007.	CD-ROM
6	S. Kumar, and R. Singh	A knowledge-based system for design of die block of progressive die	Global Conf. on Production and Industrial Engineering, NIT Jalandhar	March 22-24, 2007	CD-ROM
7	S. Kumar, and R. Singh	An intelligent system for modeling and material selection for progressive die components	Int. Conf. on Sheet Metal (SheMet-2007), Palermo, Italy	April 1-4, 2007.	CD-ROM
8	S. Kumar, and R. Singh	An expert system for stamping operations on press tool	Int. Conf. on Advances in Mechanical Engineering (IC-ICAME-2008), IISc. Banglore, India	July 2-4, 2008.	CD-ROM
9	S.Kumar	An intelligent CAD system for selection of materials for progressive press tool	Int. Conf. TEAM TECH 2008, IISC Banglore , India	Sept 22-24, 2008	CD-ROM

10	S. Kumar, R. Singh, and G. S. Sekhon	An expert system for design of blanking dies for sheet metal operations,	Int. Conf. on Intelligent Automation and Robotics (ICIAR-2008), San-Francisco, USA	Oct 22-24, 2008.	CD-ROM
11	S. Kumar, and R. Singh	An expert system for process planning of stamping operations on progressive die	9 <sup>th</sup> Global Conf. on Manufacturing and Management (GCMM - 2008), Surfers Paradise, Australia	Nov 12 -14, 2008.	Paper No. 111, CD-ROM
12	H. M. A. Hussein, and S. Kumar	A computerized retrieval system for sheet metal parts	9 <sup>th</sup> Global Conf. on Manufacturing and Management (GCMM -2008), Surfers Paradise, Australia	Nov 12 -14, 2008.	Paper No. 47, CD-ROM
13	H. M. A. Hussein, and S. Kumar	Computer aided check on manufacturability of sheet metal parts	Int. Conf. on Advances in Mechanical Engineering, SVNIT Surat , India	Dec 15-17, 2008	736-741
14	H. M. A. Hussein, and S. Kumar	Computer Assisted Stamping Processes Selection	Int. Conf. on Production Engineering Design and Control, PEDAC2009, Alexandria, Egypt	Feb 2009	Paper No. 57, CD-ROM
15	V. Naranje, and S.Kumar	AI Applications to Metal Stamping Die Design: A Review	Int. Conf. on Mech., Aeronautical & Manufacturing Engg. (ICMAME-2010), Paris	July 28-30, 2010	555-561
16	V. Naranje, and S.Kumar	A Low Cost KBS Framework for Design of Deep Drawing Die	Int. Conf. ICIME 2010 (Organised by WASET), Singapore	Dec 18-20, 2010	121-126
17	V. Naranje and S.Kumar	A KBS for Sheet Metal Operations on Press Tool	Int. Conf. ICISE 2010 (Organised by WASET), Singapore	Dec 18-20, 2010	127-130
18	V. Naranje, and S.Kumar	A Knowledge-Based System for Manufacturability Assessment of Deep Drawn Sheet Metal Parts	14 <sup>th</sup> Int. Conf. on Sheet Metal (SheMet-2011) organized by K.U. Leuven, Belgium.	April 18-20, 2011	749-756
19	A.Sharma, V.Naranje, and S.Kumar	A Computer-Aided System for Scheduling of FMS	Int. Conf. on Industrial Engg. (ICIE-2011), SVNIT, Surat	Nov 17-19, 2011	258-262
20	M.Chaudhari, V.Naranje, and S.Kumar	A Knowledge Based Design Advisory System for Assessing Manufacturability of Sheet Metal Parts	Int. Conf. on Industrial Engg. (ICIE-2011), SVNIT, Surat	Nov 17-19, 2011	416-421



21	V. Naranje, and S.Kumar	An expert system for selection of process parameters and strip-layout design for production of deep drawn sheet metal parts	4 <sup>th</sup> International AIMTDR Conf., Jadavpur University, Kokata, India	Dec 14-16, 2012	68-73
22	V. Naranje, and S.Kumar	A knowledge based system for process planning of axisymmetric deep drawn parts	15 <sup>th</sup> Int. Conf. on Sheet Metal (SheMet-2013) organized by University of Ulster, Belfast, UK	March 25-27, 2013	239-246
23	Deepak Panghal, and S.Kumar	A low cost knowledge base system for design of bending die	15 <sup>th</sup> Int. Conf. on Sheet Metal (SheMet-2013) organized by University of Ulster, Belfast, UK	March 25-27, 2013	284-291
24	Sachin Kashid, and S.Kumar	An expert system for manufacturability assessment of sheet metal parts	3 <sup>rd</sup> Int. Conf. on Production and Industrial Engineering (CPIE-2013), NIT Jalandhar	March 29-31, 2013	58-62
25	V. Naranje, and S.Kumar	A Knowledge based system for part modeling and blank size determination for axisymmetric deep drawn parts	3 <sup>rd</sup> Int. Conf. on Production and Industrial Engineering (CPIE-2013), NIT Jalandhar	March 29-31, 2013	819-823
26	A.A. Khan, H.M.A Hussain, and S. Kumar	Geometric data extraction from STEP using object oriented approach	3 <sup>rd</sup> Int. Conf. on Production and Industrial Engineering (CPIE-2013), NIT Jalandhar	March 29-31, 2013	158-164
27	A.A. Khan, H.M.A Hussain, and S. Kumar	An automatic feature recognition system for prismatic parts	3 <sup>rd</sup> Int. Conf. on Production and Industrial Engineering (CPIE-2013), NIT Jalandhar	March 29-31, 2013	170-175
28	P. M. Trivedi and S. Kumar	An investigation on influence of process parameters on surface roughness in abrasive water jet machining of AISI 316L	2 <sup>nd</sup> Int. Conf. on Industrial Engg. (ICIE-2013), SVNIT, Surat	Nov 20-22, 2013	1020-1024
29	P.D.Chougule, S.Kumar and H.K.Raval	Methods to Minimize Manufacturing Energy of a Product for Sustainable Manufacturing - A Review	2 <sup>nd</sup> Int. Conf. on Industrial Engg. (ICIE-2013), SVNIT, Surat	Nov 20-22, 2013	299-304

30	R.K.Jagtap and S.Kumar	An Experimental Study on the Influence of Process Parameters in Single Point Incremental Sheet Forming	2 <sup>nd</sup> Int. Conf. on Industrial Engg. (ICIE-2013), SVNIT, Surat	Nov 20-22, 2013	1030-1034
31	D.Panghal and S.Kumar	Determination of Bend Sequencing using Bend Grouping Method	2 <sup>nd</sup> Int. Conf. on Industrial Engg. (ICIE-2013), SVNIT, Surat	Nov 20-22, 2013	511-515
32	S.Mulay, D.Panghal and S.Kumar	Selection of Components of Bending Die: A KBS Approach	2 <sup>nd</sup> Int. Conf. on Industrial Engg. (ICIE-2013), SVNIT, Surat	Nov 20-22, 2013	909-913
33	S.S.Kashid, and S.Kumar	An expert system for process planning of sheet metal parts produced on compound die	2 <sup>nd</sup> Int. Conf. on Industrial Engg. (ICIE-2013), SVNIT, Surat	Nov 20-22, 2013	813-818
34	S.S.Kashid, and S.Kumar	An expert system for selection of punches of compound die	2 <sup>nd</sup> Int. Conf. on Industrial Engg. (ICIE-2013), SVNIT, Surat	Nov 20-22, 2013	833-838
35	S.S.Kashid, and S.Kumar	An Expert System for Manufacturability Assessment and Process Planning of Sheet Metal Parts Produced on Compound Die	42 <sup>nd</sup> North American Manufacturing Research Conference (NAMRC42), Detroit, MI, USA	June 9-13, 2014	Paper No. 4421, CD-ROM
36	V. Naranje, S. Kumar, S.Kashid, A. Ghodke, H.M.A.Hussein	Prediction of life of deep drawing die using artificial neural network	Int. Conf. on Advances in Materials and Processing Technology (AMPT-2014), Dubai	Nov 16-20, 2014	Paper No. 35, CD-ROM
37	Sachin Kashid, Deepak Panghal, Shailendra Kumar, H.M.A.Hussein	CAD System for Automatic Modeling of Compound Dies	Int. Conf. on Advances in Materials and Processing Technology (AMPT-2014), Dubai	Nov 16-20, 2014	Paper No. 281, CD-ROM
38	Deepak Panghal, S. Kashid, H.M.A.Hussein, S.Kumar	An Automatic System for Deciding Bend Sequence of Bending Parts	Int. Conf. on Advances in Materials and Processing Technology (AMPT-2014), Dubai	Nov 16-20, 2014	Paper No. 479, CD-ROM
39	Rahul Jagtap, Sachin Kashid, Shailendra Kumar, H.M.A.Hussein	An Experimental Study on the Influence of Tool path, Tool diameter and Pitch in SPIF	Int. Conf. on Advances in Materials and Processing Technology (AMPT-2014), Dubai	Nov 16-20, 2014	Paper No. 525, CD-ROM
40	Puneet Trivedi, Ajit Dhanawade, Shailendra Kumar, H.M.A.Hussein	An Experimental Investigation on Cutting Performance of Abrasive Water Jet Machining of Austenite Steel (AISI 316L)	Int. Conf. on Advances in Materials and Processing Technology (AMPT-2014), Dubai	Nov 16-20, 2014	Paper No. 541, CD-ROM

41	S.Kashid, and S.Kumar	Prediction of life of punches of compound die using artificial neural network (ANN)	AIMTDR-2014 Conference, IIT Guwahati	Dec 12-14, 2014	Paper No. O0062, CD-ROM
42	P.D.Chougule, S.Kumar, and H.K.Raval	An expert system for selection of carbide cutting tools for turning operation	AIMTDR-2014 Conference, IIT Guwahati	Dec 12-14, 2014	Paper No. 00252, CD-ROM
43	Pratik Bose, Shweta Jagdale, Ajit Dhanawade, S.Kumar	A literature review on AWJM of composites	Int. Conf. on Advances in Materials and Product Design (AMPD-2015), SVNIT, Surat	Jan 10-11, 2015	247-253
44	Soham Teraiya, Sachin Kashid, and S.Kumar	Automatic feature recognition of sheet metal parts: A review	Int. Conf. AMPD -2015, SVNIT, Surat	Jan 10-11, 2015	292-297
45	Amol Patil, Rahul Jagtap, and S.Kumar	A review on incremental sheet forming	Int. Conf. AMPD - 2015, SVNIT, Surat	Jan 10-11, 2015	329-333
46	Rahul Jagtap, Amol Patil and S.Kumar	An Experimental Study on the Effect of Process Parameters on Surface Roughness in Single Point Incremental Forming	Intl. Conf. on Advances in Mechanical and Robotics Engineering - AMRE 2015, Zurich, Switzerland (ISBN: 978-1-63248-066-8)	Oct 10-11, 2015	33-37
47	Ajit Dhanawade and Shailendra Kumar	Abrasive Water Jet Machining of Carbon Epoxy Composite-Modelling and Optimization	6 <sup>th</sup> Int. AIMTDR Conf., COE Pune	Dec 16-18, 2016	184-188
48	Soham Teraiya, Sachin Kashid, Deepak Panghal, S. Kumar	Automatic feature recognition of flat, bend and deep drawn sheet metal parts	4 <sup>th</sup> Int. Conf. on Production and Industrial Engineering (CPIE-2016), NIT Jalandhar	Dec 19-21, 2016	CD- ROM
49	A. Dhanawade, R. Upadhyai, A. Rouniyar and S. Kumar	Experimental Study on Abrasive Water Jet Machining of PZT Ceramic	Int. Conf. ICM-2017, Chuo University, Tokyo	Jan 20-22, 2017	CD-ROM
<b>NATIONAL CONFERENCES:</b>					
1	S. Kumar and R. Singh	Developmental framework of KBS for engineering problems	National Symp. on Power and Energy for Sustainable Growth, IE (India), Haryana State Centre, CRSCE, Murthal, Haryana	Feb 20-21, 2003	290-295
2	S. Kumar and R. Singh	A knowledge base system for checking manufacturability of sheet metal component for progressive dies	National conf. on Advances in Materials & Manufacturing Techniques (AMMT-2004), Hyderabad	March 8-9, 2004	234-238

3	S. Kumar and R. Singh	An intelligent system for selection of die-gages for progressive dies	2 <sup>nd</sup> National Conf. on Intelligent Systems & Networks, HEC Jagadhri	Feb 25-26, 2005	112-117
4	S. Kumar and R. Singh	A knowledge-based system for staging of operations on progressive die	National Conf. on Advancements & Futuristic Trends in Mechanical & Materials Engg, GZSCET, Bhatinda	Oct 13-14, 2006	
5	S. Kumar	Investigation for automating the selection of materials for press tool components	National Conf. on Recent Advances in Manufacturing Technology & Management (RAMTM-2010), Jadavpur University, Kolkata	Feb 19-20, 2010	207-212
6	V. Naranje and S. Kumar	Applications of AI techniques in metal stamping die design	National Conf. on Recent Advances in Manufacturing Technology & Management (RAMTM-2010), Jadavpur University, Kolkata	Feb 19-20, 2010	213-218
7	M.K.Prajapati and S.Kumar	Pressure loss prediction of centrifugal air compressor suction filter housing using CFD techniques	National Conf. on Recent Advances in Manufacturing, SVNIT, Surat	July 19-21, 2010	399-404
8	V. Naranje, and S. Kumar	Expert system for design of deep drawing die: A review	National Conf. on Recent Advances in Manufacturing, SVNIT, Surat	July 19-21, 2010	217-22
9	V. Naranje, and S. Kumar	An expert system framework for design of deep drawing die	National Conf. on Recent Advances in Manufacturing, SVNIT, Surat	July 19-21, 2010	242-246
10	S. Kumar and R.Singh	CAD module for maximum utilization of sheet metal	National Conf. on Recent Advances in Manufacturing, SVNIT, Surat	July 19-21, 2010	223-228
11	Sachin Kashid and Shailendra Kumar	Application of AI to metal forming product design: A review	2 <sup>nd</sup> National Conf. on Recent Advances in Manufacturing, SVNIT, Surat	Sept 15-17, 2011	44-49
12	Vishal Naranje, and Shailendra Kumar	An intelligent system for selection of process parameters for deep drawing process	2 <sup>nd</sup> National Conf. on Recent Advances in Manufacturing, SVNIT, Surat	Sept 15-17, 2011	51-56
13	Deepak Panghal, and Shailendra Kumar	Expert system for design of bending die: A review	2 <sup>nd</sup> National Conf. on Recent Advances in Manufacturing, SVNIT, Surat	Sept 15-17, 2011	69-76
14	Udai Singh, V. Naranje, and S.Kumar	An Intelligent CAD System for Process Planning of Deep Drawing Die	2 <sup>nd</sup> National Conf. on Recent Advances in Manufacturing, SVNIT, Surat	Sept 15-17, 2011	83-88

15	P. D. Chougule, S.Kumar, and H.K.Raval	Techniques used in Computer Aided Process Planning and their Classification: A Review	2 <sup>nd</sup> National Conf. on Recent Advances in Manufacturing, SVNIT, Surat	Sept 15-17, 2011	63-68
16	S. Kashid, and S.Kumar	Expert systems for die design: A Review	3 <sup>rd</sup> National Conf. on Recent Advances in Manufacturing, SVNIT, Surat	July 27-29, 2012	126-131
17	V. Naranje, and S.Kumar	An intelligent CAD system for design of die block of deep drawing die	3 <sup>rd</sup> National Conf. on Recent Advances in Manufacturing, SVNIT, Surat	July 27-29, 2012	114-119
18	R. Jagtap, and S.Kumar	A review on research and development in incremental sheet forming (ISF) process	3 <sup>rd</sup> National Conf. on Recent Advances in Manufacturing, SVNIT, Surat	July 27-29, 2012	64-68
19	P. D. Chougule, S. Kumar, & H. K. Raval	Methods of manufacturing cost estimation in the early stage of design: A review	3 <sup>rd</sup> National Conf. on Recent Advances in Manufacturing, SVNIT, Surat	July 27-29, 2012	310-315
20	P. M. Trivedi, and S. Kumar	Influence of process parameters in Abrasive Jet Machine (AJM): A review	3 <sup>rd</sup> National Conf. on Recent Advances in Manufacturing, SVNIT, Surat	July 27-29, 2012	52-57
21	A.Rajandekar, V. Naranje, and S. Kumar	A computer simulation approach to improve productivity of assembly line	3 <sup>rd</sup> National Conf. on Recent Advances in Manufacturing, SVNIT, Surat	July 27-29, 2012	187-192
22	Ajit Dhanawade and S.Kumar	Abrasive water jet machining of metals, hard to cut materials and composites: A review	4 <sup>th</sup> National Conf. on Recent Advances in Manufacturing, SVNIT, Surat	June 26-28, 2014	191-196
23	S. Kashid and S.Kumar	CDCOMP: An expert system for selection of components of compound die	4 <sup>th</sup> National Conf. on Recent Advances in Manufacturing, SVNIT, Surat	June 26-28, 2014	207-212
24	S. Kashid and S.Kumar	Prediction of life of stripper using Artificial Neural Network (ANN)	4 <sup>th</sup> National Conf. on Recent Advances in Manufacturing, SVNIT, Surat	June 26-28, 2014	213-218
25	P.D.Chougule, S.Kumar, and H.K.Raval	Development of energy model for vertical machining centre	5 <sup>th</sup> National Conf. on Recent Advances in Manufacturing, SVNIT, Surat	May 15-17, 2015	44-49
26	Amol Patil, Rahul Jagtap, and S.Kumar	An investigation on the effect of process parameters on surface roughness in SPIF of cold rolled steel sheet DC04	5 <sup>th</sup> National Conf. on Recent Advances in Manufacturing, SVNIT, Surat	May 15-17, 2015	113-118

27	Ajit Dhanawade and S.Kumar	Optimization of process parameters of AWJM of carbon epoxy composite using Grey Relational Analysis	5 <sup>th</sup> National Conf. on Recent Advances in Manufacturing, SVNIT, Surat	May 15-17, 2015	171-176
28	Pratik Bose, Ajit Dhanawade, and S.Kumar	Investigation on the influence of process parameters on surface roughness in AWJM of glass epoxy composite	5 <sup>th</sup> National Conf. on Recent Advances in Manufacturing, SVNIT, Surat	May 15-17, 2015	177-182
29	Shweta Jagdale, Ajit Dhanawade, and S.Kumar	Investigation on the influence of process parameters on kerf top width in AWJM of glass epoxy composite	5 <sup>th</sup> National Conf. on Recent Advances in Manufacturing, SVNIT, Surat	May 15-17, 2015	189-194
30	Soham Teraiya, S.Kashid, and S.Kumar	Automatic feature recognition of sheet metal parts	5 <sup>th</sup> National Conf. on Recent Advances in Manufacturing, SVNIT, Surat	May 15-17, 2015	221-226
31	Pratik Parwatwar, Rahul Jagtap, & S. Kumar	An investigation of the surface quality in hybrid incremental sheet metal forming process	6 <sup>th</sup> National Conf. on Recent Advances in Manufacturing, SVNIT, Surat	May 12-14, 2016	131-136
32	Rahul Jagtap, Mehul Choudhari, and S.Kumar	Experimental investigation on accuracy and surface roughness in single point incremental forming process	6 <sup>th</sup> National Conf. on Recent Advances in Manufacturing, SVNIT, Surat	May 12-14, 2016	137-142
33	Vikas Sisodia, Rahul Jagtap, & S. Kumar	A review on experimental study of incremental sheet forming process	6 <sup>th</sup> National Conf. on Recent Advances in Manufacturing, SVNIT, Surat	May 12-14, 2016	143-148
34	Ajit Dhanawade and S. Kumar	Development of predictive model for kerf taper ratio in abrasive water jet machining of carbon epoxy composite	6 <sup>th</sup> National Conf. on Recent Advances in Manufacturing, SVNIT, Surat	May 12-14, 2016	207-212
35	Aniket Jadhav, and S. Kumar	Laser beam machining - A review	6 <sup>th</sup> National Conf. on Recent Advances in Manufacturing, SVNIT, Surat	May 12-14, 2016	237-242