RESUME

Dr. RAMASWAMY NARAYANASAMY
Professor, Staff No.30
Production Engineering Department
National Institute of Technology
(Formerly known as Regional Engineering College)
Tiruchirappalli-620 015, Tamil Nadu, India

Date of Birth: 10 th April, 1954, E-mail id: narayan10455@yahoo.co.in

Contact number: 09443984160 (Mobile), Phone: 0431–2503504(O), 0431-2504504(R)

ADMINISTRATIVE EXPERIENCE & ACHIEVEMENTS

1**.** Chairman – Standing Committee of Anna University Trichy-24. Since January'2012.
2. Head of department of Production Engineering, National Institute of Technology (N.I.T),Trichy from February 2002 to November 2002.
3.**Scopus International Rankings.**

a)	Sheet Metal Forming Rank	-	3
b)	Formability Rank	-	3.
c)	Wrinkling Behaviour of Sheet metals Rank	-	1
d)	Forming Limit Diagram of Sheet metals Rank	-	1
e)	Fracture Limit Diagram of Sheet metals Rank	-	1
f)	Workability Rank	-	6
g)	Strain Hardening Rank	-	3
h)	Forging Rank	-	6
i)	Upset Forging Rank	-	1

ACHIEVEMENTS

I . (a) AWARDS RECEIVED :

a) Best Tamil Nadu Scientist Award – 2008 by the Tamil Nadu State Council for Science and Technology (TNSCST), Directorate of Technical Education Campus, Chennai - 25.
b) Best teacher award – 2007. National Institute of Technology, Tiruchirappalli – 15.

I . (b) GOVERNMENT OF INDIA / CANADA AND OTHER PROJECTS COMPLETED :

a) Wrinkling Behaviour of different steels sheet metals when Deep Drawing through conical and Tractrix dies- Research project sponsored by Natural Sciences and Engineering Research council of CANADA, Government of Canada, 1981-83,amount USD 5000.00.
b) Cold Extrusion of Bearing Races using AISI 5120 steel – Central Metal Forming Institute, HMT Ltd., Hyderabad, Government of India Undertaking, Co-ordinator, 1983-86, amount INR 10.00 Lakhs.

c) Establishment of Metal Forming Laboratory – Rs.18.00 Lakhs, Government of India, Co-ordinator, 1988-1990.
d) Formability of Ultra light weight sheet metals – Government of India, Fund Rs.5.00 Lakhs, Co-ordinator, 1988-1991.
e) Wrinkling behaviour of various stainless steel grades of sheet metals – U.G.C. Project, Govt. of India, Rs.5.00 Lakhs, Co-ordinator, 1994-1996.
f) Hot forging of different P/M steels using different dies, 1996, U.G.C. Project, Govt. of India, Fund Rs.6.00 Lakhs, Co-ordinator.
g) FLD(Forming Limit Diagram) and Wrinkling behavior of IF steels sheet metals, FORD India Limited, Chennai, India, Co-ordinator, 2003.
h) FLD(Forming Limit Diagram) and Wrinkling behavior of different automobile steels sheet metals, TATA IRON AND STEEL COMPANY, Jamshedpur, India, Fund Rs.13.00 Lakhs Co-ordinator, Completed 2006.
i) FLD(Forming Limit Diagram) and Wrinkling behavior of different steels sheet metals, Tube Products of India, Chennai, India, Co-ordinator, 2003.
j) Finite element analysis of P/M metals and alloys during forging, U.G.C. project, Govt. of India, 3.4 Lakhs, Co-ordinator, 2003.
k) FLD(Forming Limit Diagram) and Wrinkling behavior of different stainless steels sheet metals, SALEM STEEL PLANT, SAIL, Salem, India, Fund Rs.2.00 Lakhs Co-ordinator, Completed 2009.
l) Synthesis, characterization and mechanical workability behavior of nanocrystalline AA 6061 Al alloy reinforced with Titania nanocomposites prepared by mechanical alloying. With collaboration with Heavy Alloy Penetrator Project (HAPP), Ministry of Defense, Government of India. Co – ordinator,2011-2015.
m) FLD(Forming Limit Diagram) and Wrinkling behavior of different stainless steels sheet metals, SALEM STEEL PLANT, SAIL, Salem, India, co-ordinator ongoing project. Since 2011.
n) Hole expansion test on various steel sheets supplied by TATA Steels, India, Fund Rs 4.00 Lakhs, Co-ordinator, 2010.
o) Formability and fracture analysis of Stainless steel 441 grade and other grades of Stainless steels supplied by M/s. Jindal Steels, Hisar, India, 2016.

II. RESEARCH WORKS (funded by NIT, Trichy) COMPLETED :

a) Nanocomposites and its workability.
b) Powder Metallurgy composites and its workability.
c) Natural fiber composites and its studies.
d) Workability behavior of Aluminum and Magnesium alloys and composites.
e) Friction Welding behavior of Magnesium alloys and composites.
f) Wear studies on Aluminum and Magnesium alloys and composites.
g) Forming limit diagrams for aluminum and its alloys - sheet metals.
h) Cryorolling and formability studies on aluminum and its alloys.
i) Bending analysis of IF steel grades sheet metals.
j) Shrink Flanging of sheet metals.
k) Stretch flanging of sheet metals.

l) Cold extrusion of aluminum and copper alloys.
m) Diffusion welding of various metals and alloys.
n) Optimization of blank layout for blanking operation.
o) Expert system for cold extrusion of metals.
p) Curve fitting of stress-strain data using computer software.
q) Processing of Strain Data using optimization algorithm (CAD).
r) Computer aided design of progressive die for sheet metal blanking.
s) Drawability of all grades of Low Nickel Grades Stainless Steels and other sheets.
t) Drawability of various automobile grades of steel sheet metals.
u) Forging of P/M composite materials.
v) Cold forging of all ductile metals.
w) Yield behaviour for Powder metallurgy components.
x) Study of barreling aspects during forging.
y) Deep drawing of cups with radial pressure.
z) Ductile fracture criteria.
aa) Grain growth in low carbon steels.
bb) Processing of Al, Ti and Boron killed EDD quality steels.
cc) Theoretical analysis of wrinkling.
dd) Theoretical analysis of Tube bending and wrinkling.

III. PRESCRIBED RESEARCH – COURSES UNDERGONE :

(At McMaster University, CANADA, 1981-1983)

a) Finite Element analysis (Computer Aided Design course)
b) Theory of Plasticity
c) Theory of Elasticity
d) Manufacturing Processes
e) Fracture Mechanics and Mechanism
f) Dislocation theory

In all above higher order (Ph.D.) level courses, weekly assignment problems solved were submitted for valuation in addition to term project (solved using Computer as tool).

IV. RESEARCH PUBLICATIONS AND BOOKS

a) Author of more than **242** (two hundred and forty two) publications in International Journals.
(Please refer the enclosed list).
b) Number of publications in International Journals in Scopus: **222.**
c) Number of publications in Indian and International Conferences: **80**.
d) Number of publications in National Journals: **50**.
e) Number of publications in National Conferences: **60**.
f) Author of 4 books namely "**Metal Forming Technology**", "**Theory of Plasticity**" and "**Extrusion Technology**" **(Ahuja Book Publisher,2001, New Delhi)**. Fourth book is on **Mechanical behavior of materials (Pearson International, U.S.A. 2013.)**

g) Two national level conferences namely **Metal Forming and Powder Metallurgy** were organized.

V.LIST OF ISTE / OTHER COURSES ATTENDED:

a) Computer Graphics, November 1996.
b) Advance welding processes and Q.C., July 1991.
c) Advance welding science and technology, May 1988.
d) Alloy steels, Dec. 1986.
e) Effective speaking, conducted by Indo – American Society, Madras, June 1978.
f) Professional Development Course – Conducted by TTTI, Madras, June – July, 1990.
g) Recent trends in modeling of Manufacturing Systems, 2002.
h) Emerging Trends in CAD/CAM – Theory and Practice, conducted by NIT, Trichy, Dec. 2004.
i) Industry Institute Partnership conducted by REC, Trichy, March. 1997.
j) Performance Appraisal and Development System conducted by REC, Trichy, Jan.1997.
k) Joining of Materials conducted by IISC, Bangalore, December 2010.
l) Characterization of Materials by NIT, Trichy, November 2009.

VI. INDUSTRIAL AND TEACHING EXPERIENCE:

a) Working as Professor since 2004 at NIT, Tiruchirappalli.
b) Worked as Assistant Professor since 1996 – 2004 at NIT, Tiruchirappalli.
c) Worked as Lecturer, since 1986 at NIT, Tiruchirappalli.
d) Worked as Engineer (Research), Central Metal Forming Institute, HMT Limited, Hyderabad, from 1983 - 1986.
e) Worked as Teaching Assistant, McMaster University,Ontario, **CANADA**, 1981-1983.
f) Worked as Asst. Supdt., (R&D), Tube Products of India, Avadi, Madras, 1979-1981.
g) Worked as Trainee, Forge Division, H.A.L., Bangalore, 1978 (6 weeks).
h) Undergone In-plant training, P.S.G. Foundry, Coimbatore, 1974-1977, weekly 6
i) hours.

(Put up more than 36 years of Industrial and Teaching experience after M.Tech. degree).

VII. Ph.D. CANDIDATES GUIDED BY Dr. R.NARAYANASAMY:

a) Wrinkling behaviour of various Low Nickel Grades Stainless Steels – by Dr. V. Pakkirisamy – awarded 2001.
b) Barrelling behaviour of some metals during upsetting – by Dr.S.Sathiyanarayan – awarded 2001.
c) Theoretical aspects of forging of powder metallurgy components and sheet metal forming – by Mr. K.R. Subramaniam, awarded, 2003.
d) CAD/CAM extrusion – Upper bound solution, by Mr.P.Srinivasan, awarded, 2004.

e) Some theoretical aspects on deep drawing of sheet metals – by Mr.S.Raghuraman, awarded, 2004.
f) Barrelling behaviour of some non ferrous metals during cold forging – by Mr. S. Malayappan, awarded, 2005.
g) Barrelling aspects during cold forging of truncated cone solids – by Mr.Syed Abu, awarded, 2004.
h) Advances in CAD/CAM extrusion – Upper bound solution – by Mr. S. Venkatesan, awarded, 2005.
i) Cold forging of non axi-symmetric cylinders – by Mr. K.Manisekar, awarded, 2005.
j) Cold forging of Aluminium – Iron composites – by Mr. N. Selvakumar, awarded, 2005.
k) Wrinkling behavior of different grades of Aluminum sheets – by Mr. C. Loganathan, awarded, 2005
l) Formability analysis and its evaluation of sheet metals of various Indian steel grades – by C.Sathiya Narayanan, awarded, 2008.
m) Workability of some powder metallurgy composites during cold upsetting – by T. Ramesh, awarded, 2006.
n) Workability studies on powder metallurgy pure iron and iron – titanium carbide composite steels – V.Senthilkumar , awarded,2007.
o) Some studies on forging behavior of elliptical shaped billets during cold upsetting – K.Baskaran, awarded, 2008.
p) Forming and fracture behavior of some aluminium and its alloy sheets at room temperature – M.Ravichandran, awarded, 2008
q) Wrinkling behavior of some aluminium alloy sheet metal when drawn through conical and tractrix dies – J.Satheesh, Awarded 2009
r) Pore closure and workability on Powder Metallurgy of Carbon Steels – V.Anandakrishnan, Awarded, 2010
s) Air bending of I.F steels sheet metals – P.Padmanabhan, Awarded, 2009
t) Workability and Pore closure behavior on powder metallurgy of Al-SiC metal matrix composite – M. Prabhakar, Awarded, 2010
u) Mathematical analysis on Formability of sheet metals - N.V. Anbarasi – Awarded, 2010
v) Study on synthesis, characterization and workability behavior of nanocrystalline AA 6061 alloy reinforced with TiO2 composite – S.Sivasankaran, Awarded, 2011.
w) Studies on mechanical behaviors of filler added coir polyester composites – S.Sathiyamurthy, Awarded, 2012.
x) Formability, Void Coalesence and Texure analysis of cryorolled aluminum alloys- K.Chandrasekhar, Awarded, 2015.

y) Effect of various reinforcements on synthesis, Characterization, Workability and dry sliding wear behavior of AA 6061nanocomposites prepared by mechanical alloying- D.Jeyasimman, Awarded, 2015.

z) Cryorolling and Formability of sheet metals of Al alloy and SS 304 grades, ongoing, S.Vigneshwaran, Since 2015.

aa) Cryorolling and Formability of sheet metals of Al alloys and Cu alloys, ongoing, C.Chinthanai Selvan, Since 2016.

VIII. FELLOWSHIP AND OTHER AWARDS:

a) Awarded Government of India stipend for M.Tech programme at IIT, Madras, 1977-79.

b) Awarded McMaster University fellowship for M.Engg, (Research), Programme in **CANADA**, 1981 – 1983.

c) Post Doctoral Fellowship, McMaster University,Ontario, **CANADA**, 2001.

d) Awarded Post Doctoral Fellowship from IGCAR, Kalpakkam, Tamil Nadu, 2006.

e) Best Tamil Nadu Scientist Award – 2008 by The Tamil Nadu State Council for Science and Technology (TNSCST), Government of Tamil Nadu, Chennai - 25.

f) Best teacher award – 2007. National Institute of Technology, Tiruchirappalli – 15.

g) Life time achievement award – 2015 by Indian Society for Technical Education (ISTE).

IX. SUBJECTS HANDLED:

a) Theory of Plasticity.
b) Mechanics of Metal Forming.
c) Sheet Metal Technology.
d) Metal Forming technology.
e) Mechanical behavior of metals.
f) Materials Technology
g) Foundry Technology.
h) Welding Technology.
i) Tool Engineering Design.
j) Engineering Drawing.
k) Machine Design Drawing.
l) Value Engineering.
m) Computer aided design and Manufacturing.
n) Design for Manufacture and Assembly.

X. MEMBERSHIP IN PROFESSIONAL BODIES

a) Life member in Indian Society for Technical Education (ISTE).
b) Life member in Welding Society of India (WSI).

c) **Fellow** member in Indian Institute of Metals (IIM).
d) Life member in Powder Metallurgy Association of India(PMAI).
e) **Fellow** member in Institution of Engineers (India).

XI. EDUCATIONAL QUALIFICATIONS:

a)	**B.E. Degree** (1972-77) **Metallurgical Engineering**.	Obtained First Class, secured **Third Rank**, **PSG College of Technology**, **Madras University**, Studied **Metallurgical Engineering**. Foundry Technology as Elective.
b)	**M.Tech**. **Degree** (1977-79) **Metallurgy**	Obtained First Class, secured **Second Rank**, **IIT, Madras**, Studied Metal Forming subjects and other Material processing technology subjects.
c)	**M.Engg**. **(Research)** (1981-1983)	Obtained 85% marks, Degree from **McMaster University, Ontario, CANADA** (one of the best university in North America), studied Material processing technology subjects.
	Project	**Wrinkling behavior of various grades of sheet metals**
d)	**Ph.D. (Research)** **Production Engineering.** (1989-92)	Awarded degree in September 1993 from **Bharathidasan University**, Tiruchirappalli, Tamil Nadu.
	Title of thesis	**Drawing behavior of sheet metals through Conical and Tractrix dies**
e)	**D.Sc., (Research)** **Production Engineering** (1993-2001) – results awaited	**Upsetting of Powder Metallurgy forging –** thesis submitted, Dec, 2001, **Bharathidasan University**, Tiruchirappalli, Tamil Nadu.
g)	**Post –Doctoral** **(Research)** **N.I.T., Tiruchirappalli** (1993-2015)	Sheet Metal Forming, CAD/CAM Extrusion, FEM Applications, Hot and Cold Forging of Powder Metallurgy. Nanocomposites, Diffusion welding,Wear mechanism, Workability studies.

LIST OF PUBLICATION

INTERNATIONAL JOURNALS

(ELSEVIER -- Science Direct)

1. **Experimental and numerical analysis of magnesium alloy hot workability.** *Journal of Magnesium and Alloys***,** *Volume 4, December,2016, Pages 295-301*, F.Abbassi, M.Srinivasan, C.Loganathan, R.Narayanasamy, M.Gupta.
2. **A study on the work hardening and the effect of triaxiality on the fracture behaviour of some cryorolled aluminium alloys.** *Materials Science and Engineering: A, Volume 678, 15 December 2016, Pages 165-177*, S. Vigneshwaran, K.S.V.B.R. Krishna, K.Chandra Sekhar, K. Sivaprasad, K. Venkateswarlu, R. Narayanasamy.
3. **Effect of coarse grain content on microstructure, cold workability and strain hardening behavior of trimodaled AA 6061 nanocomposites reinforced with multi – walled carbon nanotubes.** *Advanced Powder Technology, Article in press, Available online 27 June 2016,* D.Jeyasimman, R.Narayanasamy.
4. **Effect of temperature and strain rate on compressive response of extruded magnesium nano-composite.** *Journal of Magnesium and Alloys, Volume 3, Issue 3, September 2015, Pages 224-230***.** B. Selvam, P. Marimuthu, R. Narayanasamy, V. Senthilkumar, K.S. Tun, M. Gupta.
5. **Role of hybrid reinforcement on microstructural observation, characterization and consolidation behavior of AA 6061 nanocomposite.** *Advanced Powder Technology, Volume 26,Issue 4, July 2015, Pages 1171-1182.* D. Jeyasimman, R. Narayanasamy, R. Ponalagusamy.
6. **Effect of cryorolling on the mechanical properties of AA 5083 alloy and the Portevin–Le Chatelier phenomenon .** *Materials & Design, Volume 67, 15 February 2015, Pages 107-117.* K.S.V.B.R. Krishna, K. Chandra Sekhar, R. Tejas, N. Naga Krishna, K. Sivaprasad, R. Narayanasamy, K. Venkateswarlu.
7. **The effects of various reinforcements on dry sliding wear behaviour of AA 6061 nanocomposites**. *Materials & Design, Volume 64, December 2014, Pages 783-793.* D. Jeyasimman, R. Narayanasamy, R. Ponalagusamy, V. Anandakrishnan, M. Kamaraj.
8. **Micro structural observation, consolidation and mechanical behaviour of AA 6061 nanocomposites reinforced by γ-Al_2O_3 nanoparticles.** *Advanced Powder Technology, Volume 26, Issue 1, January 2015, Pages 139-148.* D. Jeyasimman, K. Sivaprasad, S. Sivasankaran, R. Ponalagusamy, R. Narayanasamy, Vijayakumar Iyer.
9. **Synthesis of electric discharge alloyed nickel–tungsten coating on tool steel and its tribological studies.** *Materials & Design, Volume 63, November 2014, Pages 257-262.* Ilangovan Arun, Muthukannan Duraiselvam, V. Senthilkumar, R. Narayanasamy, V. Anandakrishnan.
10. **Formability, fracture and void coalescence analysis of a cryorolled Al–Mg–Si alloy**. *Materials & Design, Volume 57, May 2014, Pages 351-359.* K. Chandra Sekhar, R. Narayanasamy, K. Venkateswarlu.

11. **Experimental investigations on microstructure and formability of cryorolled AA 5052 sheets.** *Materials & Design, Volume 53, January 2014, Pages 1064-1070.* K. Chandra Sekhar, R. Narayanasamy, K. Velmanirajan.
12. **Dry sliding wear behaviour of zinc oxide reinforced magnesium matrix nano-composites.** *Materials & Design, Volume 58, June 2014, Pages 475-481.* B. Selvam, P. Marimuthu, R.Narayanasamy, V. Anandakrishnan, K.S. Tun, M. Gupta, M. Kamaraj.
13. **Experimental investigation of forming limit, void coalescence and crystallographic textures of aluminum alloy 8011 sheet annealed at various temperatures.** *Archives of Civil and Mechanical Engineering, Volume 14, Issue 3, May 2014, Pages 398-416.* K. Velmanirajan, K. Anuradha, A. Syed Abu Thaheer, R. Narayanasamy, R. Madhavan, Satyam Suwas.
14. **An investigation of the synthesis, consolidation and mechanical behaviour of Al 6061 nanocomposites reinforced by TiC via mechanical alloying.** *Materials & Design, Volume 57, May 2014, Pages 394-40* D. Jeyasimman, S. Sivasankaran, K. Sivaprasad, R. Narayanasamy, R.S. Kambali.
15. **Fabrication and consolidation behavior of Al 6061 nanocomposite powders reinforced by multi-walled carbon nanotubes.** *Powder Technology, Volume 258, May 2014, Pages 189-197.* D. Jeyasimman, K. Sivaprasad, S. Sivasankaran, R. Narayanasamy.
16. **Statistical evaluation of forming limit diagram for annealed Al 1350 alloy sheets using first order reliability method.** *Applied Mathematical Modeling, Volume 38, Issue 1, 1 January 2014, Pages 145-167.* K. Velmanirajan, K. Anuradha, A. Syed Abu Thaheer, R. Ponalagusamy, R. Narayanasamy.
17. **Experimental investigations on microstructure and formability of cryorolled AA 5052 sheets.** *Materials & Design, Volume 53, January 2014, Pages 1064-1070.* K. Chandra Sekhar, R. Narayanasamy, K. Velmanirajan.
18. **Forming limit diagram and void coalescence analysis of AA 5052 coated with molybdenum-based ceramic nanocomposites.** *Materials & Design, Volume 52, December 2013, Pages 393-403.* N. Selvakumar, M. Jinnah Sheik Mohamed, R. Narayanasamy, K. Venkateswarlu.
19. **Study on the wrinkling of bulged AA 5052 alloy sheet metal during restoration.** *Materials & Design, Volume 52, December 2013, Pages 541-546.* P.R. Jeyakrishnan, Kn.K.S.K. Chockalingam, R. Narayanasamy, K. Venkateswarlu.
20. **Numerical modelling, prediction of Cu–W nano powder composite in dry sliding wear condition using response surface methodology**. *Materials & Design, Volume 50, September 2013, Pages 977-996.* S.C. Vettivel, N. Selvakumar, R. Narayanasamy, N. Leema.
21. **Experimental investigation on workability and strain hardening behaviour of Fe–C–Mn sintered composites with different percentage of carbon and manganese content.** *Materials & Design, Volume 49, August 2013, Pages 791-801* A.P. Mohan Raj, N. Selvakumar, R. Narayanasamy, C. Kailasanathan.

22. **Study on hot deformation behavior and microstructure evolution of cast-extruded AZ31B magnesium alloy and nano composite using processing map**, *Materials & Design*, *Volume 47, May 2013, Pages 449-455,* M. Srinivasan, C. Loganathan, R. Narayanasamy, V. Senthilkumar, Q.B. Nguyen, M. Gupta.
23. **Tribological behaviour of powder metallurgy-processed aluminium hybrid composites with the addition of graphite solid lubricant**. *Ceramics International, Volume 39, Issue 2, March 2013, Pages 1169-1182.* P. Ravindran, K. Manisekar, R. Narayanasamy, P. Narayanasamy.
24. **Numerical modelling of aluminium sheets formability using response surface methodology**. *Materials & Design, Volume 41, October 2012, Pages 239-254.* K. Velmanirajan, A. Syed Abu Thaheer, R. Narayanasamy, C. Ahamed Basha.
25. **Workability studies on sintered Cu–10SiC preforms during cold axial upsetting**. *Materials & Design, Volume 39, August 2012, Pages 1-8.* M. Sumathi, N. Selvakumar, R. Narayanasamy.
26. **Application of factorial techniques to study the wear of Al hybrid composites with graphite addition**. *Materials & Design, Volume 39, August 2012, Pages 42-54.* P. Ravindran, K. Manisekar, P. Narayanasamy, N. Selvakumar, R. Narayanasamy.
27. **Experimental Investigation on Workability and Strain Hardening Behaviour of Fe-C-0.5Mn Sintered Composites**. *Materials & Design, Volume 41, October 2012, Pages 349-357.* N. Selvakumar, A.P. Mohan Raj, R. Narayanasamy.
28. **Analysis of hot deformation behavior of Al 5083–TiC nanocomposite using constitutive and dynamic material models**. *Materials & Design, Volume 37, May 2012, Pages 102-110.* V. Senthilkumar, A. Balaji, R. Narayanasamy.
29. **Influence of fibre treatments on mechanical properties of short *Sansevieria cylindrica*/polyester composites**. *Materials & Design, Volume 37, May 2012, Pages 111-121.* V.S. Sreenivasan, D. Ravindran, V. Manikandan, R. Narayanasamy.
30. **Effect of phase transformation and intermetallic compounds on the microstructure and tensile strength properties of diffusion-bonded joints between Ti–6Al–4V and AISI 304L**. *Materials & Design, Volume 36, April 2012, Pages 714-727.* T. Vigraman, D. Ravindran, R. Narayanasamy.
31. **Microstructure and mechanical property evaluation of diffusion-bonded joints made between SAE 2205 steel and AISI 1035 steel**. *Materials & Design, Volume 35, March 2012, Pages 156-169.* T. Vigraman, R. Narayanasamy, D. Ravindran.
32. **Effect of Glass and SiC in Aluminum matrix on workability and strain hardening behavior of powder metallurgy hybrid composites**. *Materials & Design, Volume 34, February 2012, Pages 120-136.* D.R. Kumar, R. Narayanasamy, C. Loganathan.
33. **Diffusion bonding of AISI 304L steel to low-carbon steel with AISI 304L steel interlayer** *Materials & Design, Volume 34, February 2012, Pages 594-602.* T. Vigraman, D. Ravindran, R. Narayanasamy.

34. **Some studies on sintered cold deformed plain carbon alloy steels**. *Materials & Design, Volume 33, January 2012, Pages 115-120.* A. Rajeshkannan, K.S. Pandey, S. Shanmugam, R. Narayanasamy, S. Narayan.

35. **Sliding wear behaviour of AZ31B magnesium alloy and nano-composite**. *Transactions of Nonferrous Metals Society of China, Volume 22, Issue 1, January 2012, Pages 60-65.* M. Srinivasan, C. Loganathan, M. Kamaraj, Q.B. Nguyen, M. Gupta, R. Narayanasamy.

36. **Microstructure, cold workability and strain hardening behavior of trimodaled AA 6061–TiO_2 nanocomposite prepared by mechanical alloying**. *Materials Science and Engineering: A, Volume 528, Issues 22–23, 25 August 2011, Pages 6776-6787.* S. Sivasankaran, K. Sivaprasad, R. Narayanasamy.

37. **X-ray peak broadening analysis of AA 6061_{100-x} − x wt.% Al_2O_3 nanocomposite prepared by mechanical alloying**, *Materials Characterization, Volume 62, Issue 7, July 2011, Pages 661-672.*S. Sivasankaran, K. Sivaprasad, R. Narayanasamy, P.V. Satyanarayana.

38. **Evaluation of compaction equations and prediction using adaptive neuro-fuzzy inference system on compressibility behavior of AA 6061_{100-x}–x wt.% TiO_2 nanocomposites prepared by mechanical alloying**, *Powder Technology, Volume 209, Issues 1–3, 15 May 2011, Pages 124-137.* S. Sivasankaran, K. Sivaprasad, R. Narayanasamy, Vijay Kumar Iyer.

39. **Effect of glass in aluminum matrix on workability and strain hardening behavior of powder metallurgy composite**. *Materials & Design, Volume 32, Issue 4, April 2011, Pages 2413-2422.* D.R. Kumar, C. Loganathan, R. Narayanasamy.

40. **Mechanical properties of randomly oriented short *Sansevieria cylindrica* fibre/polyester composites** *Materials & Design, Volume 32, Issue 4, April 2011, Pages 2444-2455.* V.S. Sreenivasan, D. Ravindran, V. Manikandan, R. Narayanasamy.

41. **Feasibility of joining AZ31B magnesium metal matrix composite by friction welding**. *Materials & Design, Volume 32, Issue 3, March 2011, Pages 1672-1676.* M. Srinivasan, C. Loganathan, V. Balasubramanian, Q.B. Nguyen, M. Gupta, R. Narayanasamy.

42. **Microstructural, physico-chemical and mechanical characterisation of *Sansevieria cylindrica* fibres – An exploratory investigation**. *Materials & Design, Volume 32, Issue 1, January 2011, Pages 453-461.* V.S. Sreenivasan, S. Somasundaram, D. Ravindran, V. Manikandan, R. Narayanasamy.

43. **Effect of strengthening mechanisms on cold workability and instantaneous strain hardening behavior during grain refinement of AA 6061-10 wt.% TiO_2 composite prepared by mechanical alloying**. *Journal of Alloys and Compounds, Volume 507, Issue 1, 24 September 2010, Pages 236-244.* S. Sivasankaran, K. Sivaprasad, R. Narayanasamy, Vijay Kumar Iyer.

44. **Studies on void coalescence analysis of nanocrystalline cryorolled commercially pure aluminium formed under different stress conditions**. *Materials & Design, Volume 31, Issue 7, August 2010, Pages 3578-3584.* N. Naga Krishna, A.K. Akash, K. Sivaprasad, R. Narayanasamy.

45. **An investigation on flowability and compressibility of AA 6061$_{100-x}$-x wt.% TiO_2 micro and nanocomposite powder prepared by blending and mechanical alloying**. *Powder Technology, Volume 201, Issue 1, 12 July 2010, Pages 70-82.* S. Sivasankaran, K. Sivaprasad, R. Narayanasamy, Vijay Kumar Iyer.

46. **Dry sliding wear behaviour of AA 6351-ZrB_2 in situ composite at room temperature**. *Materials & Design, Volume 31, Issue 3, March 2010, Pages 1526-1532.* G. Naveen Kumar, R. Narayanasamy, S. Natarajan, S.P. Kumaresh Babu, K. Sivaprasad, S. Sivasankaran.

47. **Synthesis, structure and sinterability of 6061 AA$_{100-x}$–x wt.% TiO_2 composites prepared by high-energy ball milling**. *Journal of Alloys and Compounds, Volume 491, Issues 1–2, 18 February 2010, Pages 712-721.* S. Sivasankaran, K. Sivaprasad, R. Narayanasamy, Vijay Kumar Iyer.

48. **Modelling of forming limit diagram of perforated commercial pure aluminium sheets using artificial neural network**. *Computational Materials Science, Volume 47, Issue 4, February 2010, Pages 1072-1078.* K. Elangovan, C. Sathiya Narayanan, R. Narayanasamy.

49. **Analysis of workability behavior of Al–SiC P/M composites using backpropagation neural network model and statistical technique**. *Computational Materials Science, Volume 47, Issue 1, November 2009, Pages 46-59.* S. Sivasankaran, R. Narayanasamy, T. Ramesh, M. Prabhakar.

50. **Modelling of wrinkling in deep drawing of different grades of annealed commercially pure aluminium sheets when drawn through a conical die using artificial neural network**. *Materials & Design, Volume 30, Issue 8, September 2009, Pages 3193-3205.* S. Sivasankaran, R. Narayanasamy, R. Jeyapaul, C. Loganathan.

51. **Effect of molybdenum addition on workability of powder metallurgy steels during cold upsetting** .*Materials Science and Engineering: A, Volume 517, Issues 1–2, 20 August 2009, Pages 30-36.* R. Narayanasamy, V. Anandakrishnan, K.S. Pandey.

52. **Sliding wear behaviour of Al 6063/TiB_2 in situ composites at elevated temperatures**. *Materials & Design, Volume 30, Issue 7, August 2009, Pages 2521-2531.*S. Natarajan, R. Narayanasamy, S.P. Kumaresh Babu, G. Dinesh, B. Anil Kumar, K. Sivaprasad.

53. **An analysis of void coalescence in Al 5052 alloy sheets annealed at different temperatures formed under different stress conditions**. *Materials Science and Engineering: A, Volume 507, Issues 1–2, 15 May 2009, Pages 252-267.* R. Ravindran, K. Manonmani, R. Narayanasamy .

54. **A crystallographic texture perspective formability investigation of aluminium 5052 alloy sheets at various annealing temperatures**. *Materials & Design, Volume 30, Issue 5, May 2009, Pages 1804-1817.* R. Narayanasamy, R. Ravindran, K. Manonmani, J. Satheesh.

55. **Effect of microstructure on void nucleation and coalescence during forming of three different HSLA steel sheets under different stress conditions**. *Materials & Design, Volume 30, Issue 4, April 2009, Pages 1310-1324.* R. Narayanasamy, N.L. Parthasarathi, C. Sathiya Narayanan.

56. **Effect of particle size of SiC in aluminium matrix on workability and strain hardening behaviour of P/M composite**. *Materials Science and Engineering: A, Volume 504, Issues 1–2, 25 March 2009, Pages 13-23.* R. Narayanasamy, T. Ramesh, M. Prabhakar.

57. **Study on abrasive and erosive wear behaviour of Al 6063/TiB_2 *in situ* composites**. *Materials Science and Engineering: A, Volume 498, Issues 1–2, 20 December 2008, Pages 495-500.*K. Sivaprasad, S. P. Kumaresh Babu, S. Natarajan, R. Narayanasamy, B. Anil Kumar, G. Dinesh.

58. **Effect of carbon content on instantaneous strain-hardening behaviour of powder metallurgy steels**. *Materials Science and Engineering: A, Volume 497, Issues 1–2, 15 December 2008, Pages 505-511.*R. Narayanasamy, V. Anandakrishnan, K.S. Pandey.

59. **Comparison of workability strain and stress parameters of powder metallurgy steels AISI 9840 and AISI 9845 during cold upsetting**. *Materials & Design, Volume 29, Issue 10, December 2008, Pages 1919-1925.* R. Narayanasamy, V. Anandakrishnan, K.S. Pandey.

60. **An experimental investigation on barreling of aluminium alloy billets during extrusion forging using different lubricants**. *Materials & Design, Volume 29, Issue 10, December 2008, Pages 2076-2088.* R. Narayanasamy, K. Baskaran, S. Arunachalam, D. Murali Krishna.

61. **Effect of various stress ratio parameters on cold upset forging of irregular shaped billets using graphite as lubricant under plane and triaxial stress state conditions**. *Materials & Design, Volume 29, Issue 10, December 2008, Pages 2089-2103.* K. Baskaran, R. Narayanasamy.

62. **Effect of carbon content on workability of powder metallurgy steels**. *Materials Science and Engineering: A, Volume 494, Issues 1–2, 25 October 2008, Pages 337-342.* R. Narayanasamy, V. Anandakrishnan, K.S. Pandey.

63. **Deformation behaviour of sintered high carbon alloy powder metallurgy steel in powder preform forging** . *Materials & Design, Volume 29, Issue 9, October 2008, Pages 1862-1867.* A. Rajeshkannan, K.S. Pandey, S. Shanmugam, R. Narayanasamy.

64. **A study on fracture behaviour of three different high strength low alloy steel sheets during formation with different strain ratios**. *Materials & Design, Volume 29, Issue 9, October 2008, Pages 1868-1885.* R. Narayanasamy, N.L. Parthasarathi, C. Sathiya Narayanan, T. Venugopal, H.T. Pradhan.

65. **Finite difference method for analysis of open-die forging of sintered cylindrical billets**. *Materials & Design, Volume 29, Issue 9, October 2008, Pages 1886-1892.* R. Ponalagusamy, R. Narayanasamy.

66. **Strain Limit of Extra Galvannealed Interstitial-Free and Bake Hardened Steel Sheets Under Different Stress Conditions** . *Journal of Iron and Steel Research, International, Volume 15, Issue 5, September 2008, Pages 56-60.*R Narayanasamy, NL Parthasarathi, R Ravindran, C Sathiya Narayanan.

67. **Sintered Fe-0.8%C-1. 0%Si-0.4%Cu P/M Steel Preform Behaviour During Cold Upsetting**. *Journal of Iron and Steel Research, International, Volume 15, Issue 5, September 2008, Pages 81-87.*A Rajeshkannan, K S Pandey, S Shanmugam, R Narayanasamy.

68. **Some aspects of barrelling in elliptical shaped billets of aluminium during cold upset forging with lubricant**. *Materials & Design, Volume 29, Issue 3, 2008, Pages 638-661.* K. Baskaran, R. Narayanasamy.

69. **Wrinkling behaviour of different grades of annealed commercially pure aluminium sheets when drawing through a conical die** . *Materials & Design, Volume 29, Issue 3, 2008, Pages 662-700.* C. Loganathan, R. Narayanasamy.

70. **Effect of particle size on new constitutive relationship of aluminium–iron powder metallurgy composite during cold upsetting** . *Materials & Design, Volume 29, Issue 5, 2008, Pages 1011-1026.* R. Narayanasamy, T. Ramesh, K.S. Pandey, S.K. Pandey.

71. **Some features on hot forging of powder metallurgy sintered high strength 4%titanium carbide composite steel preforms under different stress state conditions**. *Materials & Design, Volume 29, Issue 7, 2008, Pages 1380-1400.* R. Narayanasamy, V. Senthilkumar, K.S. Pandey.

72. **Effect of geometric work-hardening and matrix work-hardening on workability and densification of aluminium–3.5% alumina composite during cold upsetting**. *Materials & Design, Volume 29, Issue 8, 2008, Pages 1582-1599.* R. Narayanasamy, V. Anandakrishnan, K.S. Pandey.

73. **Study on wrinkling limit of interstitial free steel sheets of different thickness when drawn through Conical and Tractrix dies**. *Materials & Design, Volume 29, Issue 7, 2008, Pages 1401-1411.* R. Narayanasamy, C. Loganathan.

74. **Comparison of barreling in lubricated truncated cone billets during cold upset forging of various metals**. *Materials & Design, Volume 29, Issue 5, 2008, Pages 1027-1035.* A. Syed Abu Thaheer, R. Narayanasamy.

75. **Some aspects on cold forging of aluminium–alumina powder metallurgy composite under triaxial stress state condition**. *Materials & Design, Volume 29, Issue 6, 2008, Pages 1212-1227.*R. Narayanasamy, T. Ramesh, K.S. Pandey.

76. **Computer-aided metal flow investigation in streamlined extrusion dies**. *Materials & Design, Volume 29, Issue 6, 2008, Pages 1228-1239.* R. Ponalagusamy, R. Narayanasamy, R. Venkatesan, S. Senthilkumar.

77. **An experimental investigation on work hardening behaviour of elliptical shaped billets of aluminium during cold upsetting**. *Materials & Design, Volume 29, Issue 6, 2008, Pages 1240-1265.* K. Baskaran, R. Narayanasamy.

78. **Some studies on stresses and strains of aluminium alloy during extrusion-forging at room temperature**. *Materials & Design, Volume 29, Issue 8, 2008, Pages 1623-1632.* R. Narayanasamy, K. Baskaran, D. Muralikrishna.

79. **Effect of annealing on formability of aluminium grade 19000**. *Materials & Design, Volume 29, Issue 8, 2008, Pages 1633-1653.* R. Narayanasamy, M. Ravi chandran, N.L. Parthasarathi.

80. **Some study on wrinkling behaviour of commercially pure aluminium sheet metals of different grades when drawn through conical and tractrix dies**. *Materials & Design, Volume 29, Issue 8, 2008, Pages 1654-1665.* R. Narayanasamy, C. Loganathan, J. Satheesh.

81. **The effect of strain rate sensitivity on theoretical prediction of limiting draw ratio for cylindrical cup drawing process**. *Materials & Design, Volume 29, Issue 4, 2008, Pages 884-890.* R. Narayanasamy, R. Ponalagusamy, S. Raghuraman.

82. **Some aspects on cold forging of aluminium–iron powder metallurgy composite under triaxial stress state condition**. *Materials & Design, Volume 29, Issue 4, 2008, Pages 891-903.* R. Narayanasamy, T. Ramesh, K.S. Pandey.

83. **Forming, fracture and wrinkling limit diagram for IF steel sheets of different thickness**, *Materials & Design, Volume 29, Issue 7, 2008, Pages 1467-1475.* R. Narayanasamy, C. Sathiya Narayanan.

84. **Effect of titanium carbide particle addition on the densification behavior of sintered P/M high strength steel preforms during cold upset forming**. *Materials Science and Engineering: A, Volume 456, Issues 1–2, 15 May 2007, Pages 180-188.* R. Narayanasamy, V. Senthilkumar, K.S. Pandey.

85. **Some analysis on stress and strain limit for necking and fracture during forming of some HSLA steel sheets**. *Materials Science and Engineering: A, Volumes 445–446, 15 February 2007, Pages 427-439*. R. Narayanasamy, C. Sathiya Narayanan, N.L. Parthasarathi.

86. **Forming limit diagram for interstitial free steels supplied by Ford India Motors**. *Materials & Design, Volume 28, Issue 1, 2007, Pages 16-35*. R. Narayanasamy, C. Sathiya Narayanan.

87. **Barrelling in truncated lubricated zinc cone billets during cold upset forging**. *Materials & Design, Volume 28, Issue 2, 2007, Pages 434-440.* A. Syed Abu Thaheer, R. Narayanasamy.

88. **Experimental analysis and evaluation of forming limit diagram for interstitial free steels**. *Materials & Design, Volume 28, Issue 5, 2007, Pages 1490-1512.* R. Narayanasamy, C. Sathiya Narayanan.

89. **Modelling the effect of particle size and iron content on forming of Al–Fe composite preforms using neural network**. *Materials & Design, Volume 28, Issue 1, 2007, Pages 119-130,* N. Selvakumar, P. Ganesan, P. Radha, R. Narayanasamy, K.S. Pandey.

90. **An experimental investigation on strain hardening behaviour of aluminium – 3.5% alumina powder metallurgy composite preform under various stress states during cold upset forming**. *Materials & Design, Volume 28, Issue 4, 2007, Pages 1211-1223.* R. Narayanasamy, T. Ramesh, K.S. Pandey.

91. **Evaluation of limiting strains and strain distribution for interstitial free steel sheets while forming under different strain conditions**. *Materials & Design, Volume 28, Issue 5, 2007, Pages 1555-1576.* R. Narayanasamy, C. Sathiya Narayanan.

92. **The influence of friction on the prediction of wrinkling of prestrained blanks when drawing through a conical die**. *Materials & Design, Volume 28, Issue 3, 2007, Pages 904-912.* R. Narayanasamy, C. Loganathan.

93. **Prediction of limit strains in sheet metals by using new generalized yield criteria**. *Materials & Design, Volume 28, Issue 3, 2007, Pages 913-920.* R. Ponalagusamy, R. Narayanasamy, K.R. Subramanian.

94. **A study on barrelling behaviour of aluminium billets during cold upsetting with an extrusion die constraint at one end**. *Materials & Design, Volume 28, Issue 3, 2007, Pages 954-96.1* S. Malayappan, R. Narayanasamy, K. Kalidasamurugavel.

95. **Effect of friction on barrelling in square and rectangular billets of aluminium during cold upset forging**. *Materials & Design, Volume 28, Issue 2, 2007, Pages 592-598* K. Manisekar, R. Narayanasamy.

96. **Wrinkling behaviour of interstitial free steel sheets when drawn through tapered dies**. *Materials & Design, Volume 28, Issue 1, 2007, Pages 254-259.* R. Narayanasamy, C. Sathiya Narayanan.

97. **Phenomenon of instantaneous strain hardening behaviour of sintered Al–Fe composite preforms during cold axial forming**. *Materials & Design, Volume 28, Issue 4, 2007, Pages 1358-136.3* R. Narayanasamy, N. Selvakumar, K.S. Pandey.

98. **Barrelling of aluminium solid cylinders during cold upset forging with constraint at both ends**. *Materials & Design, Volume 28, Issue 4, 2007, Pages 1404-1411.* S. Malayappan, R. Narayanasamy, G. Esakkimuthu.

99. **Some aspects of workability studies on hot forging of sintered high strength 4% titanium carbide composite steel preforms** . *Materials Science and Engineering: A, Volume 425, Issues 1–2, 15 June 2006, Pages 121-130.* R. Narayanasamy, V. Senthilkumar, K.S. Pandey.

100. **Some aspects on hot forging features of P/M sintered iron preforms under various stress state conditions**. *Mechanics of Materials, Volume 38, Issue 4, April 2006, Pages 367-386.* R. Narayanasamy, V. Senthilkumar, K.S. Pandey.

101. **Study on wrinkling limit of commercially pure aluminium sheet metals of different grades when drawn through conical and tractrix dies**.
Materials Science and Engineering: A, Volume 419, Issues 1–2, 15 March 2006, Pages 249-261. R. Narayanasamy, C. Loganathan.

102. **Wrinkling of commercially pure aluminium sheet metals of different grades when drawn through conical and tractrix dies**. *Materials Science and Engineering: A, Volume 419, Issues 1–2, 15 March 2006, Pages 331-343*. C. Loganathan, R. Narayanasamy.

103. **Some aspects on fracture limit diagram developed for different steel sheets**. *Materials Science and Engineering: A, Volume 417, Issues 1–2, 15 February 2006, Pages 197-224*.
R. Narayanasamy, C. Sathiya Narayanan.

104. **Some aspects on strain hardening behaviour in three dimensions of aluminium–iron powder metallurgy composite during cold upsetting**. *Materials & Design, Volume 27, Issue 8, 2006, Pages 640-650.* R. Narayanasamy, T. Ramesh, K.S. Pandey.

105. **Workability studies on cold upsetting of Al–Al_2O_3 composite material**. *Materials & Design, Volume 27, Issue 7, 2006, Pages 566-575.* R. Narayanasamy, T. Ramesh, K.S. Pandey.

106. **An upper bound solution to extrusion of circular billet to circular shape through cosine dies**. *Materials & Design, Volume 27, Issue 5, 2006, Pages 411-415.*
R. Narayanasamy, R. Ponalagusamy, R. Venkatesan, P. Srinivasan.

107. **Effect of friction on barrelling in square billets of aluminium during cold upset forging**.
Materials & Design, Volume 27, Issue 2, 2006, Pages 147-155. K. Manisekar,
R. Narayanasamy, S. Malayappan.

108. **Forming limit diagram for Indian interstitial free steels** . *Materials & Design, Volume 27, Issue 10, 2006, Pages 882-899.* R. Narayanasamy, C. Sathiya Narayanan.

109. **Effect of annealing on the wrinkling behaviour of the commercial pure aluminium grades when drawn through a conical die**. *Materials & Design, Volume 27, Issue 10, 2006, Pages 1163-1168.* C. Loganathan, R. Narayanasamy, S. Sathiyanarayanan.

110. **Effect of mechanical properties on the wrinkling behaviour of three different commercially pure aluminium grades when drawn through conical and tractrix dies**.
Materials Science and Engineering: A, Volume 406, Issues 1–2, 15 October 2005, Pages 229-253. C. Loganathan, R. Narayanasamy.

111. **Forming limit diagram for interstitial free steels Part I**.
Materials Science and Engineering: A, Volume 399, Issues 1–2, 15 June 2005, Pages 292-307.R. Narayanasamy, C. Sathiya Narayanan.

112. **Design and development of streamlined extrusion dies a Bezier curve approach** . *Journal of Materials Processing Technology, Volume 161, Issue 3, 30 April 2005, Pages 375-380*. R. Ponalagusamy, R. Narayanasamy, P. Srinivasan.

113. **An investigation on instantaneous strain hardening behaviour in three dimensions of aluminium–iron composites during cold upsetting**. *Materials Science and Engineering: A, Volume 394, Issues 1–2, 15 March 2005, Pages 149-160,* R. Narayanasamy, T. Ramesh, K.S. Pandey.

114. **Some aspects on workability of aluminium–iron powder metallurgy composite during cold upsetting**. *Materials Science and Engineering: A, Volume 391, Issues 1–2, 25 January 2005, Pages 418-426*. R. Narayanasamy, T. Ramesh, K.S. Pandey.

115. **Phenomenon of strain hardening behaviour of sintered aluminium preforms during cold axial forming**. *Journal of Materials Processing Technology, Volume 142, Issue 2, 25 November 2003, Pages 347-354.* N Selvakumar, R Narayanasamy.

116. **Computer aided design and manufacture of streamlined extrusion dies**. *Journal of Materials Processing Technology, Volume 138, Issues 1–3, 20 July 2003, Pages 262-264.* R Narayanasamy, P Srinivasan, R Venkatesan.

117. **Some aspects on barrelling in aluminium solid cylinders during cold upset forging using a die with constraints**. *Journal of Materials Processing Technology, Volume 135, Issue 1, 1 April 2003, Pages 18-29.* S.Malayappan, R. Narayanasamy.

118. **Generalized yield criteria of porous sintered powder metallurgy metals**. *Journal of Materials Processing Technology, Volume 110, Issue 2, 19 March 2001, Pages 182-185.* R. Narayanasamy, R. Ponalagusamy, K.R. Subramanian.

119. **Uniaxial tensile behaviour of ZM-21 magnesium alloy at room temperature**. *Journal of Materials Processing Technology, Volume 102, Issues 1–3, 15 May 2000, Pages 56-58*. R Narayanasamy, S Sathiyanarayanan, R Ponalagusamy.

120. **A study on barrelling in magnesium alloy solid cylinders during cold upset forming**. *Journal of Materials Processing Technology, Volume 101, Issues 1–3, 14 April 2000, Pages 64-69*. R Narayanasamy, S Sathiyanarayanan, R Ponalagusamy.

121. **A study on the barrelling of sintered iron preforms during hot upset forging**. *Journal of Materials Processing Technology, Volume 100, Issues 1–3, 3 April 2000, Pages 87-94.* R Narayanasamy, K.S Pandey.

122. **A mathematical theory of plasticity for compressible powder metallurgy materials — Part III** . *Journal of Materials Processing Technology, Volume 100, Issues 1–3, 3 April 2000, Pages 262-26.5* R. Narayanasamy, R. Ponalagusamy.

123. **A mathematical theory of plasticity for the upsetting of compressible P/M materials**. *Journal of Materials Processing Technology, Volume 97, Issues 1–3, 1 January 2000, Pages 107-109.* R Narayanasamy, R Ponalagusamy.

124. **A mathematical theory of plasticity for compressible powder metallurgy materials — Part II**. *Journal of Materials Processing Technology, Volume 97, Issues 1–3, 1 January 2000, Pages 110-113.* R. Narayanasamy, R. Ponalagusamy.

125. **Some aspects of work hardening in sintered aluminium–iron composite preforms during cold axial forming**. *Journal of Materials Processing Technology, Volume 84, Issues 1–3, 1 December 1998, Pages 136-142.* R Narayanasamy, KS Pandey.

126. **Strain-hardening behaviour in sintered aluminium–3.5% alumina composite preforms during axial compression with and without annealing**.
Journal of Materials Processing Technology, Volume 84, Issues 1–3, 1 December 1998, Pages 143-148. A.J.R. Inigoraj, R. Narayanasamy, K.S. Pandey.

127. **A mathematical theory of plasticity for compressible P/M materials**. *Journal of Materials Processing Technology, Volume 86, Issues 1–3, 15 February 1998, Pages 159-162*.
R. Narayanasamy, R. Ponalagusamy.

128. **Salient features in the cold upset-forming of sintered aluminium–3.5% alumina powder composite preforms** . *Journal of Materials Processing Technology, Volume 72, Issue 2, 7 December 1997, Pages 201-20.7* R. Narayanasamy, K.S. Pandey.

129. **Phenomenon of barrelling in aluminium solid cylinders during cold upset-forming**.
Journal of Materials Processing Technology, Volume 70, Issues 1–3, October 1997, Pages 17-21. R. Narayanasamy, K.S. Pandey.

130. **Wrinkling behaviour of cold-rolled sheet metals when drawing through a tractrix die**.
Journal of Materials Processing Technology, Volume 49, Issues 1–2, 1 February 1995, Pages 199-211. R. Narayanasamy, R. Sowerby.

131. **Wrinkling of sheet metals when drawing through a conical die**. *Journal of Materials Processing Technology, Volume 41, Issue 3, March 1994, Pages 275-290.* R. Narayanasamy, R. Sowerby

132. **Forming behaviour of some sheet steel materials when drawn through a conical die**.
Journal of Materials Processing Technology, Volume 39, Issues 1–2, October 1993, Pages 43-53, R. Narayanasamy, R. Sowerby.

133. **Prediction of the barreling of solid cylinders under uniaxial compressive load**. *Journal of Mechanical Working Technology, Volume 16, Issue 1, February 1988, Pages 21-30*.
R. Narayanasamy, R.S.N. Murthy, K. Viswanatham, G.R. Chary**.**

134. **A comparative study of deep drawing with conventional, isostatic, and hydrostatic pressure**. *Journal of Mechanical Working Technology, Volume 6, Issues 2–3, March 1982, Pages 227-234*. R. Narayanaswamy, S.M. Doraivelu, V. Gopinathan, V.C. Venkatesh.

(SPRINGER LINK JOURNALS)

1. **Study of Dissimilar Header Welding Between 2.25Cr–1Mo Steel and 9Cr–1Mo Steel with 9018 B9 Electrode Under Various Conditions of Post Weld Heat Treatment.** *Transaction of the Indian Institute of Metals. DOI 10.1007/s12666-016-1029-y.* Abdur Rahman Sultan, R. Ravibharath and R.Narayanasamy.

2. **Mechanical behavior and void coalescence analysis of cryorolled AA8090 alloy.** *International journal of Advanced Manufacturing Technology. DOI 10.1007/s00170-016-8863-2.* K. S. V. B. R. Krishna, S. Vigneshwaran, K. Chandra Sekhar, Sarma S. R. Akella, K. Sivaprasad, R. Narayanasamy and K. Venkateswarlu.

3. **Effect of coarse grain matrix content on the mechanical behavior of trimodaled AA 6061-TiO_2 nanocomposite prepared by mechanical alloying.** *International journal of Advanced Manufacturing Technology. DOI 10.1007/s00170-014-6639-0.* S.Sivasankaran, K.Sivaprasad, R.Narayanasamy and M.Saravanan.

4. **Effect of Annealing temperature in Al 1145 Alloy sheets on formability void coalescence and texture analysis.** *Journal of Materials Engineering and performance, April 2013, Volume 22, Issue 4, pp 1091-1107.* K. Velmanirajan, A. Syed Abu Thaheer and R.Narayanasamy.

5. **Effect of chemical composition on Texture using Response surface methodology.** *Journal of Materials Engineering and performance, November 2013, Volume 22, Issue 11, pp 3237-3257.* K. Velmanirajan, R.Narayanasamy and K.Anuradha.

6. **Studies on Buckling behavior of Honeycomb Sandwich Panel.** *The International Journal of Advanced Manufacturing Technology, March 2013, Volume 65, Issue 5-8, pp 803-815.* P.R. Jeyakrishnan, Kn K. S. K. Chockalingam and R.Narayanasamy.

7. **Modelling the correlation between the geometrical features and the forming limit strains of perforated Al 8011 sheets using artificial neural network.** *International Journal of Material Forming, December 2011, Volume 4, Issue 4, pp 389-399.* K. Elangovan, C. Sathiya Narayanan and R. Narayanasamy.

8. **Effect of SiC particle size and content on strain-based pore closure rate studies on Al–SiC P/M composites during cold upsetting .** *The International Journal of Advanced Manufacturing Technology, March 2010, Volume 47, Issue 1-4, pp 295-311.*R. Narayanasamy, T. Ramesh and M. Prabhakar.

9. **Effect of mechanical and fractographic properties on hole expandability of various automobile steels during hole expansion test.** *The International Journal of Advanced Manufacturing Technology, March 2010, Volume 47, Issue 1-4, pp 365-380.* R. Narayanasamy, C. Sathiya Narayanan, Palani Padmanabhan and T. Venugopalan.

10. **Application of response surface methodology for predicting bend force during air bending process in interstitial free steel sheet.** *The International Journal of Advanced Manufacturing Technology, September 2009, Volume 44, Issue 1-2, pp 38-48.* R. Narayanasamy and P. Padmanabhan.

11. **Comparison of regression and artificial neural network model for the prediction of springback during air bending process of interstitial free steel sheet.** *Journal of Intelligent Manufacturing, 2012, June 2012, Volume 23, Issue 3, pp 357-364.*R. Narayanasamy and P. Padmanabhan ,

12. **Modeling of spring back on air bending process of interstitial free steel sheet using multiple regression analysis.** *International Journal on Interactive Design and Manufacturing, February 2009, Volume 3, Issue 1, pp 25-33.*R. Narayanasamy and P. Padmanabhan.

13. **Effect of annealing on combined forming, fracture and wrinkling limit diagram of Aluminium 5086 alloy sheets.** *International Journal of Mechanics and Materials in Design, March 2008, Volume 4, Issue 1, pp 31-43.*R. Narayanasamy, J. Satheesh and C. Sathiya Narayanan.

14. **Effect of mechanical properties on wrinkling limit diagrams for Aluminum 5086 alloy annealed at different temperature.** *Journal of Materials Science, January 2008, Volume 43, Issue 1, pp 43-54.* R. Narayanasamy, J. Satheesh and C. Loganathan.

15. **Effect of annealing temperature on void coalescence in 5086 aluminium alloy formed under different stress conditions.** *International Journal of Mechanics and Materials in Design, December 2006, Volume 3, Issue 4, pp 293-307.*R. Narayanasamy, M. Ravi chandran, C. Sathiya Narayanan, N. L. Parthasarathi and R. Ravindran.

16. **Analysis of fracture limit curves and void coalescence in high strength interstitial free steel sheets formed under different stress conditions.** *Journal of Materials Science, May 2008, Volume 43, Issue 9, pp 3351-3363.*R. Narayanasamy, N. L. Parthasarathi, R. Ravindran and C. Sathiya Narayanan.

17. **Some aspects of workability studies on P/M sintered high strength 4% Titanium carbide composite steel preforms during cold upsetting.** *International Journal of Mechanics and Materials in Design, March 2006, Volume 3, Issue 1, pp 39-57.* R. Narayanasamy, V. Senthilkumar and K. S. Pandey.

18. **An experimental analysis of upset forging of aluminium cylindrical billets considering the dissimilar frictional conditions at flat die surfaces.** *The International Journal of Advanced Manufacturing Technology, May 2004, Volume 23, Issue 9-10, pp 636-643.* S. Malayappan and R. Narayanasamy.

19. **Phenomenon of Barrelling in Square Billets of Aluminium During Cold Upset Forging.** *The International Journal of Advanced Manufacturing Technology, January 2003, Volume 21, Issue 2, pp 84-90.* K. Manisekar and R. Narayanasamy,

20. **Effect of friction factor on barrelling in elliptical shaped billets during cold upset forging .** *Journal of Materials Science, September 2007, Volume 42, Issue 18, pp 7630-7637.* K. Baskaran, R. Narayanasamy and S. Arunachalam.

21. **Some Aspects of Cold Upset Forming of Sintered Aluminum Preforms Using Different Lubricants.** *Powder Metallurgy and Metal Ceramics, July 2004, Volume 43, Issue 7-8, pp 349-354.* N. Selvakumar, R. Narayanasamy and K. S. Pandey.

22. **Effect of geometric work-hardening and matrix work-hardening on new constitutive relationship for aluminium–alumina P/M composite during cold upsetting.** *International Journal of Mechanics and Materials in Design, September 2008, Volume 4, Issue 3, pp 301-315.* R. Narayanasamy, V. Anandakrishnan and K. S. Pandey.

23. **Workability studies on powder metallurgy pure iron preforms during hot forging under triaxial stress state condition.** *International Journal of Mechanics and Materials in Design, June 2006, Volume 3, Issue 2, pp 175-184.* R. Narayanasamy, V. Senthilkumar and K. S. Pandey,

24. **Some aspects of workability studies on sintered high strength P/M steel composite preforms of varying TiC contents during hot forging.** , *Journal of Materials Science, January 2008, Volume 43, Issue 1, pp 102-116.* R. Narayanasamy, V. Senthilkumar and K. S. Pandey.

25. **Some studies on wrinkling limit of commercially pure aluminium sheet metals of different gradess when drawn through Conical and Tractrix dies.** *International Journal of Mechanics and Materials in Design, June 2006, Volume 3, Issue 2, pp 129-144.* R. Narayanasamy and C. Loganathan,

26. **Some aspects on plastic deformation of copper and copper–titanium carbide powder metallurgy composite preforms during cold upsetting.** *International Journal of Material Forming,* 2008, Volume 1, Number 4, pp 189-209. R.Narayanasamy, V. Anandakrishnan and K. S. Pandey.

27. **Effect of initial preform geometry and friction on the cold deformation behaviour of sintered titanium carbide composite steel.** *International Journal of Material Forming,* 2006, Volume 3, Number 1, pp 39-57.V. Senthilkumar, R.Narayanasamy and K. S. Pandey.

28. **Influence of Lubrication on Springback in Air Bending Process of Interstitial Free Steel Sheet** R. Narayanasamy and P. Padmanabhan**,** *Journal of Materials Engineering and Performance, March 2010, Volume 19, Issue 2, pp 246-251.*

29. **Workability studies on Al–5%SiC powder metallurgy composite during cold upsetting.** *The International Journal of Advanced Manufacturing Technology, September 2009, Volume 44, Issue 3-4, pp 389-398.*T. Ramesh, M. Prabhakar and R. Narayanasamy.

Other International Journals (Partial List)

1. Some Aspects on Hot Forging Features of P/M Sintered High-Strength Titanium Carbide Composite Steel Performs Under Different Stress State Conditions
J. Eng. Mater. Technol. 129, 113 (2007)
R. Narayanasamy, V. Senthilkumar, and K. S. Pandey

2. Deformation Behavior of Cold Upset Forming of Sintered Al-Fe Composite Performs
J. Eng. Mater. Technol. 127, 251 (2005)
N. Selvakumar and R. Narayanasamy

3. Barrelling of porous solid cylinders under axial compression
Journal of P/M Science and Technology, Vol.1, 1990 (23 – 34).
R.Narayansamy and K.S.Pandey

4. Some studies on the barrelling of powder performs during upsetting
Journal of P/M Science and Technology, Vol.1, 1990 (10 – 23).
R.Narayansamy and K.S.Pandey

5. Theoretical aspects on barrelling in porous materials
Proceedings of the transactions of PMAI, Dec. 1993, Vol 20, (33-40)
R.Narayansamy and K.S.Pandey

6.Work hardening behavior in sintered Al – Alumina composites performs during cold deformation
Journal of P/M Science and Technology, Vol.51, Jan. 1994, (5 – 12).
R.Narayanasamy and K.S.Pandey

7.Densification in Al – Alumina composites performs during deformation
Journal of P/M Science and Technology,
R.Narayanasamy and K.S.Pandey

8.Effect of Annealing on densification in Al – Alumina composites perform during deformation
Journal of P/M Science and Technology,
R.Narayanasamy and K.S.Pandey

9.Wrinkling phenomenon in drawing during the use of cold rolled Al and copper sheets
Journal of IES, Singapore, Vol. 40, No.4, 2000, (13-29).
R.Narayanasamy and K.S.Pandey

10.Forming behaviour of steel sheets when drawing through taper dies
Journal of IES, Singapore, 2000
R.Narayanasamy and K.S.Pandey

11. Comparative study in barrelling of non-ferrous solids during cold upset forming
Journal of IES, Singapore, 2000
R.Narayanasamy and S.Sathiyanarayanan

12. CAD/CAM of streamlined extrusion dies
Journal of Institution of Engineers of Singapore, Vol. 40, 2000, (35 – 39)
R.Narayanasamy and K.Duraiselvam

13. Barrelling of Aluminium solid cylinders during cold upset forging with constraint at one end
Materials Science and Technology, vol. 19, 2003, (1 – 6)
R.Narayanasamy and S.Malayappan
14. Some observations on barrelling of Aluminium solid cylinders during cold Upsetting using different lubricants
Materials Science and Technology, 2003
R.Narayanasamy and S.Malayappan
15. Some aspects of cold upset forming of sintered Al performs using graphite lubricant
Materials Science and Technology, U.K., Nov. 2003, Vol. 19, No.11, (1507 – 1512)
R.Narayanasamy and N.Selvakumar
16.Cold upset forming of sintered Aluminium performs by using different lubricants
*Materials Science and Technology, 200*3
N.Selvakumar, R.Narayanasamy and K.S.Pandey
17.Barrelling of Aluminium solid cylinders during cold upset forging wit constraint at one end
Materials Science and Technology, vol. 19, 2003, (507– 511)
S.Malayappan and R.Narayanasamy
18. Some observations on barrelling of Aluminium solid cylinders during cold upsetting using different lubricants
Materials Science and Technology, Vol. 19, Dec. 2003 (1 – 5)
S.Malayappan and R.Narayanasamy
19.Work hardening behavior in sintered Al – Alumina composites performs during cold deformation
Journal of P/M Science and Technology, Vol.5, No.2, 1993, (5 – 12).
R.Narayanasamy and K.S.Pandey

20.Workability studies on Al-5% and 10% SiC P/M composites
International Journal of Materials and Product Technology Accepted for publication, xx, pp. xxx, (2008). T. Ramesh, M. Prabhakar, R. Narayanasamy,
21. Effect of annealing on forming limit diagram and crystallographic textures of aluminium 5086 grades annealed at four different temperatures
Materials Science and Technology, Volume 25, Issue 10 (01 October 2009), pp. 1193-1206.
R. Narayanasamy, M. Ravi Chandran1, C. Vanitha and C. Sathiya Narayanan
22. Some aspects of workability studies in cold forging of pure aluminium powder metallurgy compacts.
Materials Science and Technology, 2005, Vol 21, No.8, pp 912 - 916
R.Narayanasamy, T.Ramesh, K.S.Pandey
23. Effect of Mechanical Properties on combined Wrinkling, Forming and fracture limit diagram of Aluminium 5052 alloy sheets at different annealed temperatures
Journal of Nature science and Sustainable Technology, 2008; Vol 2 (4)
R.Narayanasamy and J.Satheesh

24. Experimental evaluation of wrinkling limit diagrams for aluminium alloy 5052 Sheets annealed at different temperature
Journal of Strain Analysis , DOI: 10.1243/03093247JSA357, 2008; Vol 43.
R Narayanasamy, J Satheeesh, and C S Narayanan.

Indian Journals (Partial List)

1. **Carbon Nanotube reinforced Aluminum alloys-A review**. Journal of manufacturing Engineering.vol 8, Issue 2, pp 75-84. Jeyasimman D, Sivaprasad K, Senthilkumar V, Narayanasamy R.
2. **Limiting Draw Ratios in deep drawing of sheet metals according to New Yield Criteria**
   Journal of Engineering Production, Vol.17, 1986 (12-16), India.
   R.Narayanasamy
3. **Formability of zinc sheet metal when drawing through a Tractrix die**
   Journal of Metals, Materials and Processes, 1998, vol.10, No.2., pp. 177-182.
   R.Narayanasamy and R.Sowerby
4. **Densification in Al- Alumina composite during upset forming operation**
   Journal of Metals, Materials and processes, accepted for publication, 2003.
   R.Narayanasamy and K.S.Pandey
5. **Phenomenon of barreling in Zinc solid cylinders during cold upset forming**
   Journal of Engineering and Material Science, Vol.6, 1999, pp. 22-26.
   R.Narayanasamy and S.Sathiyanarayanan
6. **Phenomenon of barrelling in copper solid cylinders during cold upset forming**
   Journal of Metals, Materials and processes, 1998, Vol.10, No.2, pp. 183-188.
   R.Narayanasamy and S.Sathiyanarayanan
7. **The effect of Process parameters on theoretical drawing ratio for cup drawing process**
   Journal of Engineering Materials, CISR, New Delhi, 2003.
   R.Narayanasamy, R.Ponalagusamy and S.Raghuraman
8. **A knowledge based system for process sequence design in deep drawing operation**
   Journal of Metals, Materials and processes, 2003.
   R.Narayanasamy and K.Duraiselvam
9. **Effect of the coefficient of friction on limiting draw ratio during cup drawing process**
   Journal of Institution of Engineers, India, 2001.
   R.Narayanasamy, R.Ponalagusamy and S.Raghuraman
10. **Some aspects on barrelling in Al solid cylinders during cold upset forging with no lubricants using die with constraints**
    Journal of Metals, Materials and processes, 2003.
    R.Narayanasamy and S.Raghuraman
11. **Effect of Coefficient of Friction on limiting Draw ratio during cup drawing process**
    Journal of Institution of Engineers, India, 2003.
    R.Narayanasamy, R.Ponalagusamy and S.Raghuraman

12. **Effect of Process parameters on LDR**
    Journal of Engineering and Material Science, CSIR, New Delhi, 2003.
    R.Narayanasamy, R.Ponalagusamy and S.Raghuraman
13. **An experimental analysis of upset forging of copper cylindrical billets considering the dissimilar frictional conditions at flat die surfaces**
    Journal of Metals, Materials and processes, Vol.14, No.4, 2002.
    R.Narayanasamy and S.Malayappan
14. **Cold upsetting behaviour of sintered Aluminium performs**
    Journal of Metals, Materials and processes, Vol.14, No.4, 2002.
    N.Selvakumar and R.Narayanasamy
15. **Deformation behaviour of Cold upset forged Aluminium Iron Cylinders**
    Trans. of Indian Institute of Metals, Vol.5(3), June 2005.
    N.Selvakumar and R.Narayanasamy
16. **Work hardening behaviour of sintered Aluminium preforms during cold axial compression**
    Journal of Metal-s Materials and Processes, Vol.No3, pp.197-206, 2002.
    N.Selvakumar and R.Narayanasamy
17. **A study of barrelling during cold upsetting of Aluminium solid cylinders using a die with constraints**
    Journal of Metals, Material-s and Processes, Vol.13, pp. 61-70, 2001.
    R.Narayanasamy and S.Malayappan
18. **Effect of strain rate sensitivity of theoretical limiting draw ratio for cup drawing process**
    Journal of Metals, Materials and Processes, Vol.13, p. 2001.
    R.Narayanasamy, R.Ponalagusamy and S.Raghuraman
19. **Theoretical prediction of limiting draw ratio for cup drawing process**
    Journal of Metals, Materials and Processes, Vol.12, pp.337-350, 2000.
    R.Narayanasamy, R.Ponalagusamy and S.Raghuraman
20. **Some aspects of barrelling in unlubricated copper solids of truncated cone billets during cold upset forging**
    Journal of Metals, Materials and Processes, 2003.
    A.Syed Abu Thaheer, R.Narayanasamy and K.Ganesh Babu
21. **Barrelling in unlubricated Aluminium solids of truncated cone billets during cold upset forging**
    Trans. of Indian Institute of Metals, 2003.
    A.Syed Abu Thaheer, R.Narayanasamy and K.S.Pandey
22. **Features of sintered aluminium preforms in cold upset forming using graphite lubricant**
    Journal of Metals, Materials and Processes, 2003.
    N.Selvakumar, R.Narayanasamy and D.Rajesh
23. **Experimental investigation of work hardening behaviour of sintered preforms by using different lubricants**
    Journal of Metals, Materials and Processes, 2003.
    N.Selvakumar, R.Narayanasamy and P.GaneshaPandian

24. **Experimental investigation of strain hardening behaviour of sintered aluminium performs**
    Trans. of Indian Institute of Metals, Vol.58(3), June 2003.
    N.Selvakumar and R.Narayanasamy
25. **An experimental analysis of upset forging of copper cylindrical billets considering the dissimilar frictional at flat die surfaces**
    Journal of Metals, Materials and Processes, 2003.
    S.Malayappan and R.Narayanasamy
26. **Mathematical treatment of barrelling in porous solid cylinders under axial compression**
    Transaction of Powder Metallurgy Association of India, Vol.20, 1993, pp.33-39.
    R.Narayanasamy, M.N.Rao and K.S.Pandey
27. **Densification in aluminium-alumina composite sintered preforms during cold deformation**
    Journal of Metals, Materials and Processes, Vol.10, 1998, pp.167-176.
    A.J.R.Inigoraj, R.Narayanasamy and K.S.Pandey
28. **Cold upsetting behaviour of sintered Aluminium performs**
    Journal of Metals, Materials and Processes, Vol.14, No.4, Dec.2002 , pp.277- 284.
    N.Selvakumar, R.Narayanasamy and D.Rajesh
29. **An experimental analysis of upset forging of copper cylindrical billets considering the dissimilar frictional conditions at flat die surfaces**
    Journal of Metals Materials and Processes, Vol.14, No.4, Dec.2002, pp.285-294.
    S.Malayappan and R.Narayanasamy
30. **Some aspects of barrelling in unlubricated Copper solids of truncated cone billets during cold upset forging**
    Metals Materials and Processes, Vol.14, NO.4, Dec.2002. pp.295- 304.
    A.Syed Abu Thaheer, R.Narayanasamy and K.Ganesh Babu
31. **Work hardening behaviour of sintered Aluminium preforms during cold axial compression**
    Metals Materials and Processes, Vol.14, No.3, Dec.2002, pp.197-206.
    N.Selvakumar, R.Narayanasamy and P.RamKumar
32. **Phenomenon of Instantaneous strain hardening behaviour of sintered Al - Fe composite preforms during cold axial forming**
    Indian Journal of Engg. and Material Science, 2004.
    R.Narayanasamy, T.Ramesh and K.S.Pandey
33. **Forming Limit Diagram for Interstitial Free steels supplied by TISCO Part-I**
    Indian Journal of Engg. and Material Science, 2004.
    R.Narayanasamy and C.SathiyaNarayanan
34. **Forming Limit Diagram for Interstitial Free steels supplied by TISCO Part-II**
    Indian Journal of Engg. and Material Science, 2004.
    R.Narayanasamy and C.SathiyaNarayanan

35. **A generalized mathematical theory of plasticity for compressible powder metallurgy materials**
    Indian Journal of Engg. and Material Science, 2004.
    R.Narayanasamy and R.Ponalagusamy
36. **Barrelling in square billets of aluminium during cold upset forging with different lubricants**
    Indian Journal of Engg. and Material Science, 2004.
    R.Narayanasamy and K.Manisekar
37. **Workability studies on cold upsetting of sintered copper - Titanium carbide composite materials**
    Journal of Metals Materials and Processes, Vol. 17, No. 2, 2005, pp. 87-90.
    R.Narayanasamy, T.Ramesh and K.S.Pandey
38. **Formability of HSLA and EDDQ Steels of tube products of India**
    Indian Journal of Engg. and Material Sciences, Vol.12, April 2005, pp 141-150.
    R.Narayanasamy and C.SathiyaNarayanan
39. **Wrinkling behaviour of different grades of annealed commercially pure aluminium sheets when drawing through two different dies**
    Indian journal of engineering and material sciences, 2005,
    R.Narayanasamy and C. Loaganathan
40. **Some aspects on barrelling in solid billets of non-circular aluminium during cold upset forging with different lubricants**
    Indian Journal of Engineering and Materials Sciences, Vol. 12, February 2005, pp. 24-32.
    K. Manisekar and R. Narayanasamy
41. **Deformation behaviour of cold upset forged aluminium-iron cylinders**
    Trans. Indian Inst. Metals, Vol. 58, No. 1, February 2005, pp.19-28.
    N. Selvakumar and R.Narayanasamy
42. **Barrelling in square billets of aluminium during cold upset forging under dissimilar friction**
    Trans. Indian Inst. Metals, Vol. 57, No. 2, April 2004, pp. 141-147.
    K. Manisekar and R. Narayanasamy
43. **Experimental investigation of strain hardening behaviour of sintered aluminium performs**
    Trans. Indian Inst. Metals, Vol. 58, No. 3, June 2005, pp.1-7.
    N. Selvakumar and R. Narayanasamy
44. **Workability studies on Al – 15 % SiC P/M**
    Journal of Manufacturing Engineering, 2006, Vol 1, No 1.
    T. Ramesh , M. Prabhakar and R. Narayanasamy

International Conferences (Partial List)

1. **Drawing behaviour of some sheet materials when drawing through a Tractrix die**
   Proceedings of the 2nd ICDMT, Sept. 1992, Singapore.
   R.Narayanasamy and R.Sowerby
2. **Forming behaviour of some sheet materials when drawing through a tapered die**
   Proceedings of the Asia Pacific Conf. On Materials Processing, Feb.1993, Singapore.
   R.Narayanasamy and R.Sowerby
3. **Wrinkling behaviour in SS 304 grade thin sheet when drawn through a conical die**
   Proceedings of the 3rd ICDMT, Taiwan, Sept. 1995.
   R.Narayanasamy and R.Sowerby
4. **Cold forgeability of Ductile Cast irons**
   Proceedings of the 3rd ICDMT, Taiwan, Sept. 1995.
   R.Narayanasamy and S.Muthupandi
5. **Drawing behaviour of some steels when drawn through a Tractrix die**
   Proceedings of the International Conf. on Nickel Cobalt 1997, Canada.
   R.Narayanasamy and R.Sowerby
6. **Wrinkling phenomenon in drawing cold rolled sheets of Al and Cu through a conical die**
   Proceedings of the International Conference AMPT, 1997, Portugal.
   R.Narayanasamy and K.S.Pandey
7. **Mathematical modelling and development of computer software for the prediction of strain and spring back in sheet metal bending**
   Proceedings of the Int. conference AMPT 1997, Portugal.
   R.Narayanasamy
8. **Deep drawability of stainless steel sheets when drawn through a Tractrix die**
   Proceedings of ICM-2000, Jan. 2000, Bangladesh.
   R.Narayanasamy and V.Pakkirisamy
9. **Computer Aided Design of Streamlined Extrusion dies for rectangular cross section**
   Proceedings of International Conference on Advance Manufacturing, China, Dec.2001.
   R.Narayanasamy, R.Ponalagusamy and P.Srinivasan
10. **Computer Aided Design of streamlined Extrusion dies for various cross section**
    Proceedings of the Int. Conf. IMS 2000, Hong Kong.
    R.Narayanasamy, R.Ponalagusamy and P.Srinivasan
11. **Yield Behaviour of porous sintered P/M Metals**
    Proceedings of the 51 ISTAUM Conference, held in Dec.2000, Mepco Engg. College, Sivakasi, India.
    R.Narayanasamy, R.Ponalagusamy and K.R.Subramanian
12. **Performance comparison of various methods of designing streamlined extrusion dies,** *Proceedings of the ICME 2001, International Conference held in Dhaka, Dec.2001.*
    R.Narayanasamy, R.Ponalagusamy and P.Srinivasan
13. **Design of streamlined extrusions dies for non polygonal sections**
    Proceedings of the international conference held in Germany, 1999.
    R.Narayanasamy, R.Ponalagusamy and P.Srinivasan
14. **Design of streamlined Extrusion Dies for non polygonal sections**
    Proceedings of the International Conference held in Germany, 2002.

R.Narayanasamy, R.Ponalagusamy and P.Srinivasan

15. **Performance comparison of streamlined Extrusion dies**
    Proceedings of ICME 2001, International Conference held in Dhaka, Bangladesh, 2001.
    R.Narayanasamy, R.Ponalagusamy and P.Srinivasan
16. **Metal Flow analysis in extrusion dies**
    Proceedings of ICME, 2002, Dhaka, Dec. 2002.
    R.Narayanasamy, R.Ponalagusamy and S.Venkatesan
17. **Computer Aided Metal Flow analysis in various types of extrusion dies**
    Proceedings of the International Conference on Research and Development in Net shape Manufacturing, April 2001, University of Birmingham, U.K.
    R.Narayanasamy, R.Ponalagusamy and S.Venkatesan
18. **Application of genetic algorithm and simulated annealing algorithm for optimization of extrusion die ratio and die cone angle**
    Proceedings of 12th International Scientific Conference Achievements in Mechanical and Materials Engineering, AMME-2003, Poland.
    R.Narayanasamy, R.Ponalagusamy and S.Venkatesan
19. **Synthesis and characterization of CNT reinforced Al-based composites by PM route,** *Proceeding of PM-09 International Conference and Exhibition, PMAI 2009, India*
    M.S.Senthil Saravanan, S.P.Kumaresh Babu, K.Sivaprasad, R.Narayanasamy
20. **Synthesis and characterization of CNT reinforced Al-based composite powders by high energy ball milling**
    Proceeding of PM-09 International Conference and Exhibition, PMAI 2009, India
    M.S.Senthil Saravanan, N.Selvakumar, S.P.Kumaresh Babu, R.Narayanasamy, K.Sivaprasad
21. **Influence of carbon content on workability behavior of powder metallurgy steels**
    Proceeding of PM-09 International Conference and Exhibition, PMAI 2009, India
    R.Narayanasamy, V.Anandakrishnan, K.S.Pandey, and S.Sivasankaran
22. **Mechanical alloying of Aluminium Based-Metal Matrix Composites – Review**
    Procedding of 2nd International Conference on Recent Advances in Material Processing Technology, RAMPT'09, Society for Manufacturing Engineers, India
    R.Narayanasamy, K.Sivaprasad, V.Anandakrishnan, and S.Sivasankaran
23. **Relation between springback and bend angle of Interstitial Free steel sheet during air bending process**
    Procedding of 2nd International Conference on Recent Advances in Material Processing Technology, RAMPT'09, Society for Manufacturing Engineers, India
    R.Narayanasamy, and P.Padmanabhan
24. **Effect of SiC particle size on workability of Al-10% SiC metal matrix P/M composites during cold upsetting**
    Procedding of 2nd International Conference on Recent Advances in Material Processing Technology, RAMPT'09, Society for Manufacturing Engineers, India
    T.Ramesh, M.Prabhakar, and R.Narayanasamy
25. **A review on forming of perforated sheets**
    Procedding of 2nd International Conference on Recent Advances in Material Processing Technology, RAMPT'09, Society for Manufacturing Engineers, India
    K.Elangovan, C.Pandivelan, C.Sathiya Narayana and R.Narayanasamy

26. **A compatibility study on welding between AISI 316 and AISI 410 in a Tailor Welded Blank**
    Procedding of 2nd International Conference on Recent Advances in Material Processing Technology, RAMPT'09, Society for Manufacturing Engineers, India
    N.L.Parthasarathi, M.Duraiselvam, and R.Narayanasamy
27. **A comparative study of nano-size reinforcement on peak broadening analysis of Al 6061 alloy nanocomposite.** D.Jeyasimman, R.Ponalagusamy, R.Narayanasamy, R.S.Kambali, Vijayakumar Iyer. International Conference on Powder Metallurgy (PM'14), India, 2014.
28. **Carbon nanotube reinforced aluminium alloy composites- A Review.** D.Jeyasimman, K.Sivaprasad, V.Senthilkumar, R.Narayanasamy. International Conference on Recent Advances in Materials Processing Technology (RAMPT' 13), Kovilpatti, India 2013

Indian Conferences (Partial List)

1. **Effect of radial pressure on the maximum drawing ratio during cylindrical drawing**
   Proceedings of the 9 th AIMTDR Conference, Dec. 1980, IIT, Kanpur, India.
   R.Narayanasamy, S.M.Doraivelu and V.Gopinathan
2. **Wrinkling when deep drawing through conical and tractrix dies**
   Proceedings of the 11th AIMTDR conference, 1984, IIT, Madras, India.
   R.Narayanasamy and R.Sowerby
3. **A Comparative study of Microstructure and Microhardness of deep drawn cups using conventional and unconventional tools**
   Paper presented in the 11th AIMTDR Conference, 1984, IIT, Madras, India.
   R.Narayanasamy, S.M.Doraivelu and V.Gopinathan
4. **Formability of Austenitic Stainless Steels Sheets when Drawing through Tapered Dies**
   Proceedings of the Seminar on Modern Trends in Metal Forming, organised by Madras Metallurgical Society, Jan.1985, Madras, India. Also presented in USA in AMIE conference, 1983. R.Narayanasamy
5. **Cold Extrusion of Steels**
   Proceedings of the seminar on Cold Forming Technology, organised by Association of Indian Engineering Industries, Western Region, Bombay, March 1985, Bombay, India.
   R.Narayanasamy
6. **Drawability of SS 304 at various temperature**
   Proceedings of the 47th ATM, IIM, 1993, Hyderabad, India.
   R.Narayanasamy
7. **Cold forgeability of 70:30 Brass**
   Proceedings of the National Seminar on Fracture, IIT, Kanpur, 1993.
   R.Narayanasamy and K.S.Pandey
8. **Design and Developments of Streamlined Extrusion Dies for Various Cross section**
   Proceedings of IFAMS 2000, Coimbatore, India, pp 194-203.
   R.Narayanasamy and P.Srinivasan
9. **Wrinkling behaviour of SS 302, SS 316, SS 410 and SS 430 grades stainless steel of various diameters during deep drawing Process**

Proceedings of IFAMS 2000, Coimbatore, India, pp 32-40.
R.Narayanasamy and S.Raghuraman

10. **Computer Aided Design and simulation of Deep drawing Process**
Proceedings of the Int. Conference on CAD/CAM, Bangalore, 1998, pp 76-79.
R.Narayanasamy and K.Duraiselvam
11. **Deep drawability behaviour of stainless steel sheets when drawn through a tapered die** *Proceedings of National Conf. on Advances in Metal Forming, Anna University, Madras, March 2000.* R.Narayanasamy and V.Pakkirisamy
12. **Wrinkling behaviour of stainless steel sheets during drawing through a conical die**
Proceedings of National Conf. on Materials Processing, Trichy, May 2003.
R.Narayanasamy and V.Pakkirisamy
13. **Computer Aided Design of streamlined Extrusion dies for square cross section**
Proceedings of National Conf. on Metal Forming, March 2000, Madras.
R.Narayanasamy, R.Ponalagusamy and P.Srinivasan
14. **Computer Aided Design and simulation of Deep drawing process**
Proceedings of the Quest 99 Conference, held in May 1999, Bangalore, India.
R.Narayanasamy and K.Duraiselvam
15. **Some aspects on Forging of Powder Preforms**
Proceedings of the National Conference on Materials Processing, Coimbatore, India, 2002.
R.Narayanasamy and K.S.Pandey
16. **Computer Aided Design and Manufacture of streamlined extrusion dies**
Published in IFANs'2000, held at CIT, Coimbatore, Jan.2000, India.
R.Narayanasamy, R.Ponalagusamy and P.Srinivasan
17. **Computer Aided Design of Streamlined Extrusion dies for square cross section**
Proceedings of the National Seminar at METFORM 2000 held at M.I.T, Chennai, Mar.2000, India.
R.Narayanasamy, R.Ponalagusamy and P.Srinivasan
18. **Computer Aided Metal flow analysis through streamlined extrusion dies**
Proceedings of the RAMP'2001, Annamalai University, Oct.2001.
R.Narayanasamy, R.Ponalagusamy and S.Venkatesan
19. **Experimental investigation on performance of streamlined Extrusion dies**
Proceedings of the National Conference at PSG Tech., Coimbatore, India, 2002.
R.Narayanasamy, R.Ponalagusamy and P.Srinivasan
20. **Computer aided metal flow analysis in off-centric extrusion dies**
Proceedings of All India Manufacturing Technology Design and Research Conference, Birla Institute of Technology, Ranchi, India, Dec. 2002.
R.Narayanasamy, R.Ponalagusamy and S.Venkatesan
21. **Experimental Investigation on performance of streamlined extrusion dies**
Proceedings of National conference on Materials Processing", held in P.S.G. Technology, Coimbatore, India, 2002.
R.Narayanasamy, R.Ponalagusamy and P.Srinivasan

22. **Computer Aided Metal flow analysis in streamlined extrusion dies for hexagonal cross section**
    Proceedings of National Conference of Processing of metals, P.S.G. Tech., Coimbatore, India, P.461, 2002.
    R.Narayanasamy, R.Ponalagusamy and S.Venkatesan
23. **Theory of plasticity for P/M porous metals**
    Proceedings of the Conference on Advances in Metal Forming, IGCAR, Kalpakkam, Chennai, India, Jan.2003.
    R.Narayanasamy, R.Ponalagusamy and K.R.Subramanian
24. **Design of Streamlined Extrusion Dies for Non polygonal re-entry sections**
    Proceedings of the National Conference on Advances in Metal Forming, IGCAR, Kalpakkam, Chennai, India, Jan.2003.
    R.Narayanasamy, R.Ponalagusamy and P.Srinivasan
25. **Theoretical Comparison of Metal Flow through streamlined Extrusion dies with off centric die**
    Proceedings of the National Conference on Advances in Metal Forming, IGCAR, Kalpakkam, Chennai, India, Jan.2003.
    R.Narayanasamy, R.Ponalagusamy and S.Venkatesan
26. **Effect of Process parameters on LDR during deep drawing***Proceedings of the National Conference on Advances in Metal Forming, IGCAR, Kalpakkam, Chennai, India, Jan.2003.*
    R.Narayanasamy, R.Ponalagusamy and S.Raghuraman
27. **Effect of Relative density on LDR during deep drawing**
    Proceedings of the National Conference on Advances in Metal Forming", IGCAR, Kalpakkam, Chennai, India, Jan.2003.
    R.Narayanasamy, R.Ponalagusamy and S.Raghuraman
28. **Effect of friction on LDR during deep drawing**
    Proceedings of the National conference on advances in Metal Forming, IGCAR, Kalpakkam, Chennai, India, Jan.2003.
    R.Narayanasamy, R.Ponalagusamy and S.Raghuraman
29. **Extrusion Die profile optimization using genetic algorithm**
    Proceedings of the National Conference on Modelling and simulation in manufacture, March 15-16, 2003, pp. A22-A27, India.
    R.Narayanasamy, R.Ponalagusamy and S.Venkatesan
30. **Computer aided metal flow analysis in off-centric extrusion dies**
    Proceedings of 20th AIMDTR conference, held in Ranchi, India, 2002.
    R.Narayanasamy, R.Ponalagusamy and S.Venkatesan
31. **Finite element analysis for open die forging of sintered cylindrical billets**
    Proceedings of the National Conference on Materials Processing and Failure analysis, June 2003, R.E.C, Tiruchirappalli-620 015, India.
    R.Narayanasamy and R.Ponalagusamy
32. **Extrusion Die Profile Optimization using Genetic Algorithm**
    Proceedings of the Conference on Modeling and Simulation, MOSIM 2003, Annamalai University, 2003.
    R.Narayanasamy, R.Ponalagusamy and S.Venkatesan

33. Some aspects on FLD of stainless steel 430 Grade
Proceedings of the National Conference on Advanced manufacturing, Kovilpatty, Tamilnadu, India, Jan.2004.
R.Narayanasamy, R.Ponalagusamy and C.Sathiyanarayanan

34. Density Maximization of Powder Preforms using Genetic Algorithm
Proceedings of the 21 st AIMTDR Conference, Vellore, Tamilnadu, India, 2004.
N.Selvakumar, R.Narayanasamy, P.Ganesan and M.Joseph Davidson

35. A Theoretical Study for Role of Strain Rate Sensitivity on Maximum Drawing Load in Cup Drawing Process
Proceedings of the 21 st AIMTDR Conference, Vellore, Tamilnadu, India, 2004.
R.Ponalagusamy, R.Narayanasamy and S.Raghuraman

36. Effect of Barreling in Square Billets of Aluminium by Introducing Die Constraints At One End under Unlubricated Condition During Cold Upset Forging
Proceedings of the 21 st AIMTDR Conference, Vellore, Tamilnadu, India, 2004.
K.Manisekar, S.Malayappan and R.Narayanasamy

37. Formability of HSLA and EDDQ Steels
Proceedings of the 21 st AIMTDR Conference, Vellore, Tamilnadu, India, 2004.
R.Narayanasamy, R.Ponalagusamy and C.SathiyaNarayanan

38. Workability Studies for Conventional Metal
Proceedings of the 21 st AIMTDR Conference, Vellore, Tamilnadu, India, 2004.
R.Narayanasamy, R.Ponalagusamy and T.Ramesh

39. Forming Limit Diagram for Stainless Steel Sheet 430 Grade
National conference on Recent Advances in Mechanical Engineering at National Engineering College, Kovilpatti, Tamilnadu, India, January 2004.
R.Narayanasamy and C.Sathiya Narayanan

Dr. RAMASWAMY NARAYANASAMY