

## RESUME

### **Dr. K.G.DURGA PRASAD**

Associate Professor & HOD

Department of Mechanical Engineering,

GAYATRI VIDYA PARISHAD SCHOOL OF ENGINEERING

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Born on 7<sup>th</sup> November, 1970 at Visakhapatnam, Andhra Pradesh, India.

### **EDUCATIONAL QUALIFICATIONS**

B.E. (Mechanical Engineering).. Andhra University.. 1994

M.E. (Industrial Engineering).. Andhra University.. 2004

Ph.D. (Mechanical Engineering).. Andhra University.. 2011

### **WORK EXPERIENCE**

Teaching experience: 19 years

Industry experience: 02 years

### **AWARDS**

2014 - International Journal of Advanced Research in Science and Technology announced **IJARST**

**Best Researcher Award - 2013** in the field of Mechanical Engineering.

### **PROJECTS SANCTIONED**

**DST-NIMAT Project** 2015-2016 for conducting Entrepreneurship Awareness Camp (EAC)

Sanctioned Amount : Rs. 20,000.

Sanctioned Agency: National Science & Technology Entrepreneurship Development Board (NSTEDB); **Department of Science and Technology (DST)**, Govt. of India, New Delhi.

Chief Co-ordinator : Prof. A.Rama Krishna; Co-ordinator: **Dr. K.G.Durga Prasad**

Status of the project : Completed in 2016.

### **MEMBERSHIPS IN PROFESSIONAL BODIES**

Life Member – Institution of Engineers (India), Kolkata.

Chartered Engineer – Institution of Engineers (India), Kolkata

## **CONFERENCES / WORKSHOP / SEMINARS ORGANISED**

1. Three day **Entrepreneurship Awareness Camp (EAC)**, Department of Mechanical Engineering, School of Engineering, Gayatri Vidya Parishad College for Degree & P.G.Courses, Visakhapatnam in association with National Science & Technology Entrepreneurship Development Board (NSTEDB); **Department of Science and Technology (DST)**, Govt. of India, New Delhi, 18-2-2016 to 20-2-2016.
2. Three day National Workshop on Computational Methodologies in Mechanical Engineering, Department of Mechanical Engineering, School of Engineering, Gayatri Vidya Parishad College for Degree & P.G.Courses, Visakhapatnam, 09-3-2017 to 11-3-2017.

## **SESSIONS CHAIRED**

1. Chaired a session of Two day International Conference on “Recent Innovations in Engineering, Science, Humanities and Management” held at School of Engineering, GVP College for Degree & P.G.Courses, Visakhapatnam during Aug. 11-12, 2016.

## **ATTENDED AS RESOURCE PERSON FOR WORKSHOPS/SEMINARS/CONFERENCES**

1. Invited as **Resource person** to deliver a lecture to the participants of **National Workshop on Computational Methodologies in Mechanical Engineering**, organized by the Department of Mechanical Engineering, School of Engineering, GVP College for Degree & P.G.Courses, Visakhapatnam held during 9<sup>th</sup> – 11<sup>th</sup> March, 2017.

## **PUBLICATION OF BOOKS**

1. K.Narayana Rao and **K.G.Durga Prasad**, A Text book of **Engineering Mechanics**, Falcon Publishers, Hyderabad (2006), ISBN: 93-60155-31-X
2. K.Narayana Rao and **K.G.Durga Prasad**, **General Mechanical Engineering**, Falcon Publishers, Hyderabad (2015), ISBN: 93-80155-41-7
3. **K.G.Durga Prasad**, **Integrating Product Design and Supply Chain Design through QFD**, Lambert Academic Publishing Company, Germany (2012), ISBN: 978-3-659-15430-0.

## **PUBLICATION OF CHAPTER (S) IN BOOKS**

1. **K.G. Durga Prasad** (2017), **Customer- focused Product Development through HOQ-AHP- GRA Hybrid methodology**, Chapter 13, pp.247-267, **Industrial Engineering & Management Practices (International Edition)**, IRPH, New Delhi. ISBN: 978-93-84443-56-6.
2. **K.G.Durga Prasad**, M.V.Prasad, Ch.Hima Gireesh and V.V.V.N.K.Chaitanya (2017): “**QFD-based conceptual design of ergonomic drafting table for engineering students**”, *Ergonomic Design of Products and Work Systems: 21<sup>st</sup> Century Perspectives of Asia*, Springer. (In press).

## **SHORT TERM COURSES / WORKSHOPS/SEMINARS/CONFERENCES ATTENDED**

1. Participated in **Entrepreneurship Awareness Camp** at Palakoderu, West Godavari Dist. from 30-10-92 to 31-10-92 sponsored by **APCOST** and organized by S.R.K.R. Engineering College, Bhimavaram.
2. Participated in **Quality Improvement Programme** at Hyderabad from 10-7-2000 to 14-7-2000 which was organized by **Technical Teachers’ Training Institute (TTTI)**.
3. Participated in AICTE sponsored work shop on **Optimization Methods for Engineering Design** by **Dr. S.S. Rao**, Chairman, Dept. of Mechanical Engg., **University of Miami, Florida, USA** from 5-7-2004 to 10-7-2004 organized by GITAM University at Visakhapatnam.
4. Participated in the **short term course on Total Quality Management in Service Organizations** conducted by the **IIT, Kharagpur** during March 22-26, 2007.
5. Participated in **3<sup>rd</sup> International Conference and 24<sup>th</sup> All India Manufacturing Technology, Design and Research (AIMTDR)** held at Andhra University, Visakhapatnam, India, during 13-15, December, 2010.
6. Participated in **International Congress on Productivity, Quality, Reliability, Optimization and Modeling**, held at New Delhi, India, during 7-8, February, 2011.
7. Participated in Twenty Seventh National Convention of Chemical Engineers on **Bio-Fuels towards Energy Security and Environment Protection**, conducted by The Institution of Engineers (India), Visakhapatnam Local Centre held at Visakhapatnam, India, during 30.9.2011 to 1.10.2011.

8. Participated in Awareness programme on **Product Life cycle Management**, conducted by The Institution of Engineers (India), Visakhapatnam Local Centre held at Visakhapatnam, India, 22<sup>nd</sup> January, 2012.
9. Participated in Two day National Workshop on **Advances In Manufacturing Processes (AMP)** conducted by the Department of Mechanical Engineering, University College of Engineering, **JNTU, Vizianagaram**, held on 28-2-2014 & 1-3-2014.
10. Participated in One day workshop on **Lean Manufacturing**, conducted by The Institution of Engineers (India), Visakhapatnam Local Centre held at Visakhapatnam, India, 16<sup>th</sup> March, 2014.
11. Participated in One day National seminar on **Recent Developments in Multi-Objective Optimization Techniques in the Field of Engineering** conducted by the Department of Mechanical Engineering, Raghu Engineering College, Visakhapatnam, held on 8-5-2014 & 9-5-2014.
12. Participated in International Conference on **Management of Ergonomic design, Industrial safety and Healthcare systems (MESH)** held at IIT, Kharagpur, India, during 20-23, December, 2016.
13. Participated in One day National workshop on **Quality Measures in Technical Education** conducted by the Internal Quality Assurance Cell (IQAC), Gayatri Vidya Parishad College of Engineering (A), Visakhapatnam, held on 18-3-2017.
14. Participated in One day National Seminar on **Materials and Manufacturing** conducted by the Department of Mechanical Engineering, Andhra University College of Engineering (A), Visakhapatnam, held on 23-3-2017.

#### **PUBLICATION OF PAPERS IN INTERNATIONAL JOURNALS**

1. **K.G.Durga Prasad**, K.Venkata Subbaiah, K.Narayana Rao and C.V.R.S.Sastry (2010), 'Prioritization of customer needs in House of quality using Conjoint analysis', *International Journal for Quality Research*, Vol.4, No.2, pp.145-153. [ISSN: 1800-6450] (**SCOPUS**)
2. K.Venkata Subbaiah, **K.G.Durga Prasad** and K.Narayana Rao (2011), 'Customer-driven product planning using Conjoint analysis and QFD-ANP methodology', *International Journal of Productivity and Quality Management*, Vol. 7, No.3, pp.374-394. (Inderscience) (**SCOPUS**) [ISSN:1746-6474]

3. **K.G.Durga Prasad**, K.Venkata Subbaiah and K.Narayana Rao (2011), ‘Cost engineering with QFD: A mathematical model’, *International Journal for Quality Research*, Vol. 5, No.1, pp. 33-37. [ISSN: 1800-6450] (**SCOPUS**)
4. K.Venkata Subbaiah, **K.G.Durga Prasad**, M.U. Bharathi and K.S.S. Rao (2011), ‘Integrating Factor Analysis and Analytic Hierarchy Process for Library Service Quality’, *International Journal for Quality Research*, Vol.5, No.3, pp.505- 515. [ISSN: 1800-6450] (**SCOPUS**)
5. **K.G.Durga Prasad**, K.Venkata Subbaiah and G.Padmavathi (2012), ‘Application of Six sigma methodology in an Engineering Educational Institution’, *International Journal of Emerging Sciences*, Vol.2, No.2, pp.222-237. [ISSN:2222-4254]
6. **K.G.Durga Prasad**, K.Venkata Subbaiah and K.Narayana Rao (2012): ‘Aligning the competitive strategy with supply chain strategy through QFD’, *Journal of Advances in Management Research*, Vol.9, No.2, pp.189-198. [**Emerald**] [ISSN 0972-7981] (**SCOPUS**)
7. **K.G.Durga Prasad**, M.V.Prasad, A.Chakradhara Rao and P.V.S.C.Manjusha (2013): ‘DEA-based Taguchi method for Optimization of CNC End milling Process parameters’, *International Journal of Emerging Trends in Engineering and Development*, Vol.3, No.4, pp.202-211. [ISSN 2249-6149]
8. **K.G.Durga Prasad**, K.Venkata Subbaiah, G.Venu Gopala Rao and G.Padmavathi (2014): ‘Simulated Annealing Algorithm for U-Shaped Line Balancing Problem’, *International Journal of Advanced Research in Science and Technology* , Vol.3, No.1,pp. 1-7 [ISSN 2319-1783]
9. **K.G.Durga Prasad**, K.Venkata Subbaiah and K.Narayana Rao (2014): ‘Multi-objective optimization approach for cost management during product design at the conceptual phase’, *Journal of Industrial Engineering International* , Vol.10, No.1, pp. 1-12 [ **Springer**] [**GISI IF: 5.65**] (**SCOPUS**)
10. **K.G.Durga Prasad**, K.Venkata Subbaiah and K.Narayana Rao (2014): ‘Supply chain design through QFD-based Optimization’, *Journal of Manufacturing Technology Management* , Vol.25, No.5, pp.712-733 [**Emerald**] (**SCOPUS**)
11. **K.G.Durga Prasad**, M.V.Prasad and K.Venkata Subbaiah (2015): ‘Optimization of process parameters in CNC End milling of Glass – fibre reinforced plastic’, *International Journal for Research in Emerging Science and Technology*, Vol.2, No.6, pp.60-67. [E-ISSN: 2349-7610]

12. G.Samkeerth, K.Venkata Subbaiah and **K.G.Durga Prasad**, (2015): ‘Analysis of key factors affecting labour productivity in steel manufacturing company’, *International Journal of Engineering and Management Research*, Vol.5, No.5, pp.123-128. [ISSN: 2394-6962]
13. **K.G.Durga Prasad**, M.V.Prasad and B.Lakshmi Manasa (2016): ‘Application of Six sigma approach for improving steel quality - A case study’, *International Journal of Scientific Development and Research*, Vol.1, No.6, pp. 256-261. [ISSN:2455-2631]
14. **K.G.Durga Prasad**, M.V.Prasad, S.V.V.Bhaskara Rao and C.S.Patro (2016): ‘Supplier selection through AHP-VIKOR integrated methodology’, *SSRG International Journal of Industrial Engineering*, Vol.3, No.5, pp.1-6.
15. **K.G.Durga Prasad**, K.Venkata Subbaiah and M.V. Prasad (2017): ‘Supplier evaluation and selection through DEA-AHP-GRA integrated approach ’, *Journal of Uncertain Supply Chain Management* , Vol.5, No.4, pp. 369-382.(SCOPUS).
16. Ch.Hima Gireesh , **K.G.Durga Prasad**, K.Ramji, and P.V.Vinay (2017): ‘Mechanical Characterization of Aluminium based metal matrix composite reinforced with Alovera Powder’, *Materials Today: Proceedings*.(In press). (Elsevier) (SCOPUS)
17. **K.G.Durga Prasad**, K.Venkata Subbaiah, Ch.Hima Gireesh and U.Koushik (2017): ‘Evaluation of conceptual product design solutions using House of quality – TOPSIS Integrated methodology, *SSRG International Journal of Mechanical Engineering*, Special issue, pp.206-212.
18. **K.G.Durga Prasad**, M.V.Prasad, R.Sravan Kumar and V.S.D.Prasad (2017): ‘Kano-based VIKOR decision model for supplier selection – A case study, *SSRG International Journal of Mechanical Engineering*, Special issue, pp.206-212.

#### **PUBLICATION OF PAPERS IN NATIONAL JOURNALS**

1. **K.G.Durga Prasad**, K.Narayana Rao, G.Padmavathi and K.Venkata Subbaiah (2004): ‘Total Quality Engineering Education: A Model Developed through QFD’, *The Journal of Engineering Education*, XVII, No. 4, 39-44. [ISSN:0971-5843] (ICI)
2. **K.G. Durga Prasad**, K. Venkata Subbaiah, K. Narayana Rao and G.Padmavathi (2007): ‘Enhancing Engineering Education through QFD – A Case Study’, *The Indian Journal of Technical Education*, Vol.30, No.3, pp. 91-98. [ISSN:0971-3034] (ICI)

3. **K.G. Durga Prasad**, K. Narayana Rao, G.Padmavathi and K. Venkata Subbaiah (2008), ‘Development of Total Quality Engineering Education model using QFD’, *The Journal of Engineering Education*, Vol.XXI, No.4, 1-6. [ISSN:0971-5843] (ICJ)
4. **K.G. Durga Prasad**, K. Venkata Subbaiah, Ch. Venu Gopala Rao and K. Narayana Rao (2012), ‘Supplier Evaluation through Data Envelopment Analysis’, *Journal of Supply chain Management Systems*, Vol.1, No.2, pp.1-11. [ISSN:2277-1387]

#### **PUBLICATION OF FULL PAPERS IN PROCEEDINGS OF THE CONFERENCES**

1. K. Venkata Subbaiah, K. Narayana Rao and **K.G. Durga Prasad**, (2005): ‘Evaluation of design requirements for quality engineering education using fuzzy outranking technique – a case study’ *Proceedings of 10<sup>th</sup> Annual International Conference on Industrial Engineering Theory, Applications and Practice*. Clear Water Florida, USA, December, pp.710-717.
2. **K.G.Durga Prasad**, K.Venkata Subbaiah and K.Narayana Rao (2010): ‘Aligning the competitive strategy with supply chain strategy through QFD’, *Proceedings of 3<sup>rd</sup> International Conference and 24<sup>th</sup> All India Manufacturing Technology, Design and Research (AIMTDR)* held at Andhra University, Visakhapatnam, India, during 13-15, December, Vol.2, pp.815-820.

#### **PUBLICATION OF ABSTRACTS IN PROCEEDINGS OF CONFERENCES**

1. K. Venkata Subbaiah, **K.G. Durga Prasad**, B. Satyanarayana and K. Narayana Rao, (2003): ‘Application of QFD for improving engineering education – A study’, presented at *International conference on Quality, Reliability and Information Technology: Trends and Future Directions*, New Delhi, India.
2. K.Narayana Rao, **K.G.Durga Prasad** and K.Venkata Subbaiah (2010), ‘Design of Supply chain with dynamic periodic review inventory policy in fuzzy environment, Presented at *International Conference on Statistics, Probability, Operations Research, Computer Science and Allied Areas in Conjunction with VII IISA and XXIX ISPS Annual Conventions*, 4-8, January, held at Andhra University, Visakhapatnam, India.
3. **K.G.Durga Prasad**, K.Venkata Subbaiah and K.Narayana Rao., ‘Design of Supply chain through Quality Function Deployment’ (2011), Presented at *International Congress on Productivity, Quality, Reliability, Optimization and Modelling*, 7-8, February, New Delhi, India.

4. K.Venkata Subbaiah, **K.G.Durga Prasad**, G.Padmavathi and K.Narayana Rao., ‘Enhancing Quality in Engineering Education through Six sigma Approach (2011), presented at *Twenty Sixth Indian Engineering Congress*, conducted by The Institution of Engineers (India), Karnataka State Centre, 15-18, December, Bangalore, India.
5. K.Venkata Subbaiah, CH.Suresh and **K.G.Durga Prasad** , ‘Prioritization of Engineering Characteristics of a product using HOQ-ANP Approach (2013), presented at *Indian Technology Congress*, conducted by NIMHANS Convention Centre, 24-25, July, Bangalore, India.
6. K.Venkata Subbaiah, **K.G.Durga Prasad** and N.Sameera , ‘Kano-GRA-HOQ Approach for Prioritizing the Supplier Selection Attributes – A Case Study (2013), presented at *Twenty Eight Indian Engineering Congress*, conducted by The Institution of Engineers (India), Tamilnadu State Centre, 20-22, December, Chennai, India.
7. K.Venkata Subbaiah, **K.G.Durga Prasad** and M.V.Prasad , ‘Supplier Evaluation and Selection through DEA-AHP-GRA Integrated approach – A case study (2014), presented at *Indian Technology Congress*, conducted by NIMHANS Convention Centre, 21-22, August, Bangalore, India.
8. **K.G.Durga Prasad**, M.V.Prasad, Ch.Hima Gireesh and V.V.V.N.K.Chaitanya (2016): ‘QFD-based conceptual design of Ergonomic drafting table for engineering students’, *Proceedings of the International Conference on Management of Ergonomic design, Industrial safety and Healthcare systems (MESH)* held at IIT, Kharagpur, during 20-23, December.
9. **K.G.Durga Prasad**, K.Venkata Subbaiah, G.V.Gourav and Ch.Hima Gireesh (2017): ‘QFD-frame work for enhancing quality in engineering educational institutions, *Proceedings of the International Symposium on Social Business and Sustainable Development (SBSD)* held at Andhra University, Visakhapatnam, during 5-7, January.
10. **K.G.Durga Prasad**, A.Rama Krishna, B.V.A.Naidu, Ch.Hima Gireesh and D.S.Kumar (2017): ‘Bridging the employability skill gap through robust convergence of industry and academia, *Proceedings of the International Symposium on Social Business and Sustainable Development (SBSD)* held at Andhra University, Visakhapatnam, during 5-7, January.
11. **K.G.Durga Prasad**, K.Venkata Subbaiah, Ch.Hima Gireesh and U.Koushik (2017): ‘Evaluation of conceptual product design solutions using House of quality – TOPSIS Integrated methodology, *Proceedings of the National Conference on Recent Advances in Mechanical Engineering (RAME)* held at Andhra University, Visakhapatnam, during 10-11, March.



12. **K.G.Durga Prasad**, M.V.Prasad, R.Sravan Kumar and V.S.D.Prasad (2017): ‘Kano-based VIKOR decision model for supplier selection – A case study, *Proceedings of the National Conference on Recent Advances in Mechanical Engineering (RAME)* held at Andhra University, Visakhapatnam, during 10-11, March.
13. Ch.Hima Gireesh , **K.G.Durga Prasad**, K.Ramji, and P.V.Vinay (2017): ‘Mechanical Characterization of Aluminium based metal matrix composite reinforced with Alovera Powder’, *Proceedings of the International Conference on Material Processing and Characterization (ICMPC)* held at **GRIET, Hyderabad**, during 17-19, March.

#### **PRESENTATION OF PAPERS IN CONFERENCES**

1. **K.G.Durga Prasad**, K.Venkata Subbaiah and K.Narayana Rao (2010): ‘Aligning the competitive strategy with supply chain strategy through QFD’, *Proceedings of 3<sup>rd</sup> International Conference and 24<sup>th</sup> All India Manufacturing Technology, Design and Research (AIMTDR)* held at Andhra University, Visakhapatnam, India , during 13-15, December , Vol.2, pp.815-820.
2. **K.G.Durga Prasad**, K.Venkata Subbaiah and K.Narayana Rao., ‘Design of Supply chain through Quality Function Deployment’ (2011), Presented at *International Congress on Productivity, Quality, Reliability, Optimization and Modelling*, 7-8, February, New Delhi, India.
3. **K.G.Durga Prasad**, M.V.Prasad, Ch.Hima Gireesh and V.V.V.N.K.Chaitanya (2016): ‘QFD-based conceptual design of Ergonomic drafting table for engineering students’, *Proceedings of the International Conference on Management of Ergonomic design, Industrial Safety and Healthcare systems (MESH)* held at **IIT, Kharagpur**, during 20-23, December.

#### **REVIEWER OF INTERNATIONAL JOURNALS**

1. **Journal of Advances in Management Research**, Emerald Publications in association with **IIT**, Delhi.
2. **Journal of Thermal Engineering**, publishing by Yildiz Technical University, Turkey.

#### **CITATION INDICES – Google Scholar (Since last 5 years)**

Number of citations: **95**

h-Index : **05**

i 10-Index : **02**

## **B.E/B.Tech/AMIE PROJECT GUIDANCE**

1. Application of Six sigma methodology to enhance quality in engineering education-A study – *K .B.Rama Lakshmi, S.Salomi, Y.K.Kumar, P.S.Rao, P.Prabhakar and D.S.Varma, 2007.*
2. Controlling of NO<sub>x</sub> Emissions in Automobiles by using Nitrogen Membranes - A study – *K. Veera Raghavulu, 2007.*
3. Performance evaluation of a diesel engine working with CSO-diesel blends – *I.Manoj Krishna, M.Yellaji, M.Santhosh Kumar and G.Siva Kumar, 2009.*
4. Trouble shooting in machining of Rudder Housing Bearing bush onboard ship-A case study – *Satynarayana Sahu, 2010.*
5. Study of marine boiler construction and tube failure analysis – *Abhishek Kumar Singh, 2012.*
6. Water jet flow meter across high pressure turbine blades and nozzle box blades in marine gas turbines – *S.S.Chouhan, 2012.*
7. Shipboard impressed current cathodic protection system – *Ankur Kumar Gupta, 2012*
8. Supplier selection through AHP-Grey Relational Analysis – *N.Devi, B.Balaji, O.N.Varma and Ch.Syam Kumar, 2013.*
9. GRA-based Taguchi approach for optimization of turning parameters – *V.Manjusha, Santhoshi Lakshmi and G.V.N.Varma, 2013.*
10. Conceptual design of a product through HOQ-based optimization – *P.Divaker , M. Swapna, K. Satyanand , 2013.*
11. A study on preventing the leakage of crude oil in crude oil transfer pump – *M. Sravan Kumar, 2014.*
12. Fault Diagnosis in Fan and Blowers using Vibration Signature analysis – *S.D.Ganesh, 2014.*
13. HOQ-AHP-TOPSIS Integrated Methodology for Conceptual design of a product – *V.Ravi Teja , V.Chrinjeevi, N. Mani Babu and D.Sravan Kumar, 2015.*
14. Supplier selection through AHP-VIKOR Integrated Methodology – *S.V.V.Bhaskara Rao , T.Yamini Lakshmi, G.Daya Sagar and Ch.S.Krishna Teja, 2015.*
15. Development of HOQ-GRA Integrated approach for prioritizing the design requirements of a product – *G.Drikanth , U.Koushik, S.Jagadeep, P.Rohit and K.Sravan Kumar, 2017.*

**(Dr.K.G.Durga Prasad)**