### **Personal Information**

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#### **Address**

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**Associate Professor,** Department of Mechanical Engineering, R.V.R. & J.C. College of Engineering, Guntur

Program Officer, NSS Ladies unit, R.V.R. & J.C. College of Engineering, Guntur

#### Academics

- Ph.D. in Mechanical Engineering from Andhra University, Visakhapatnam (2015)
- M.Tech in CAD/CAM from R.V.R. & J.C. College of Engineering, Guntur (2005-2007)
- B.Tech in Mechanical Engineering from R.V.R. & J.C.O.P College of Engineering, Guntur (1991-1995)
- Intermediate from JKC College, Guntur (1989-1991)
- SSC from L.E.M. High school, Guntur (1977-1989)

# **Teaching Experience**

• 16 years

# **Industry Experience**

 Worked in the Design department of Videocon International Ltd, Aurangabad, Maharashtra (1995-1996)

# **Areas of Special Interest**

- Finite Element Analysis
- Evolutionary Algorithms

- Optimization
- Production Scheduling
- Robotics
- Operations Management and Research
- Computer Integrated Manufacturing

## Short term courses organized

- > Organized a three day Entrepreneurship Awareness Camp (EAC) under the aegis of National Science & Technology Entrepreneurship Development Board (NSTEDB), Department of Science and Technology, Govt. of India, New Delhi during 30 August - 1 September, 2018.
- > Co-cordinated a one week Short term Course of the NITTTR ICT based STC on "Product Design and Development" during 6-10 November, 2017.
- > Organized and coordinated a One week Short term course on "Optimization using MATLAB" in association with NITTTR Chandigarh during 17-21 July, 2017.

#### **Publications**

International	International	National	Total
Journals	Conferences	Conferences	
18	8	2	28

# International Journals (Scopus indexed-2, Web of Science indexed -1)

- 1. Radhika Sajja and Aparna Chaparala. "Optimization Using Evolutionary Metaheuristic Techniques- A Brief Review." Brazilian Journal of Operations & Production Management Vol. 15, No. 1, pp. 44-53, May 2018. (Web of Science indexed)
- 2. D.Neha Krishna, S.Radhika, D.Swapna, "Low Level Material Handling Applications using GSM based Wireless Controlled Robot", Journal of Mechanical Robotics, Volume 2 Issue 2, November 2017.

- 3. M.Jaya Pradeep and S.Radhika, "Modelling and Performance Test Analysis of Cycloid Speed Reducer", International Journal for Innovative Engineering and Management Research, Volume 6, Issue 11, November 2017.
- 4. B.Purna Chandra Sekhar, K.Srinivas, S.Radhika: "A selective survey of taguchi method used in hard turning process", International Journal of Advanced Research in Industrial Mechanics Volume 1 Issue 1, July 2017.
- 5. B.Purna Chandra Sekhar, K.Srinivas, S.Radhika: "Few Aspects in Hard Turning Process", International Journal of Research, Volume 04 Issue 08, July 2017.
- 6. D.Swapna, Ch.Srinivasa Rao and S.Radhika, "A Review on Deep Drawing Process", International Journal of Emerging Research in Management & Technology, Volume-6, Issue-6, June 2017.
- 7. S.Radhika and Ch.Srinivasa Rao, "Teaching Learning Based Optimization Approach for the Development of an Effective Master Production Schedule" Intern, ational Journal of Advanced Research in Computer Science and Software Engineering, Volume 7, Issue 5, May 2017.
- 8. D.Swapna, Ch.Srinivasa Rao and S.Radhika, "Few Aspects in Deep Drawing Process", Journal of Materials & Metallurgical Engineering, Volume 5, Issue 3, ISSN: 2231-3818 (2015).
- 9. B. Purna Chandra Sekhar, S. Radhika, D. Sameer Kumar, "Powder Mixed Dielectric in EDM –An overview", International Journal of Research Vol 2(2), Feb 2015, pp 720-726, ISSN: 2348-6848.
- 10.S. Radhika, D. Swapna, P. Manikanta, Sk. Sunain, "Design of a Compressed Air Vehicle", Journal of Refrigeration, Air Conditioning, Heating and Ventilation, Volume 1, Issue 3, 2015, pp 1-6.ISSN: 2394-1952.
- 11.Radhika Sajja, Srinivasa Rao Chalamalasetti, "A selective survey on multiobjective meta-heuristic methods for optimization of master production scheduling using evolutionary approaches", Int. J. Adv. Appl. Math. And Mech. Vol.1, No.3 (2014), pp 109 – 120, ISSN: 2347-2529.
- 12. Radhika. S and Rao C. S. "A New Multi-Objective Optimization of Master Production Scheduling Problems Using Differential Evolution", International Journal of Applied Science and Engineering, Vol.12, No.1 (2014), pp.75-86. ISSN 1727-2394. (Scopus indexed)

- 13.S. Radhika, Ch. Srinivasa Rao, K. Lakshmi Chaitanya, M. Vijaya: "Evolutionary Optimization in MPS: A Brief Review", Journal of Production Research and Management, Vol.4, No.1 (2014), pp 13 21. ISSN: 2249 4766.
- 14.D.Sameer Kumar, S. Radhika, K.N.S. Suman, "MADM Methods for Finding The Right Personnel in Academic Institutions", International Journal of u- and e-Service, Science and Technology Vol.6, No.5 (2013), pp.133-144 <a href="http://dx.doi.org/10.14257/ijunesst.2013.6.5.12">http://dx.doi.org/10.14257/ijunesst.2013.6.5.12</a>
- 15. S.Radhika, D.Sameer Kumar, D.Swapna, "VIKOR Method for multi criteria decision making in academic staff selection", Journal of Production Research and Management (JoPRM), Volume 3, Issue 2, ISSN: 2249 4766 JoPRM (2013) 30-35.
- 16. Radhika.S., Rao, C. S., and Pavan, K. K.: "A Differential Evolution based Optimization for Master Production Scheduling Problems", International Journal of Hybrid Information Technology Vol.6, No.5 (2013), pp.163-170 http://dx.doi.org/10.14257/ijhit.2013.6.5.15
- 17. Radhika. S., Rao, C. S. and Pavan, K. K. : "A study and performance evaluation of evolutionary optimization techniques for multi-objective master production scheduling problems", Journal of Production Research and Management Volume 3, Issue 2(2013), pp 12-22. ISSN: 2249 4766.
- 18.D.Sameer Kumar, S. Radhika, K.Ravindra, K.N.S. Suman, "Improved Design Optimization of a Composite Leaf Spring using Swarm Intelligence", International Journal of Applied Engineering Research, ISSN 0973-4562, Volume 6, Number 2 (2011) pp. 193–200. (Scopus indexed)

## **International Conferences**

- Radhika.S, Karteeka Pavan.K, Srinivasa Rao.Ch and Swapna D; "Evolutionary Optimization in Master Production Scheduling: A Case Study", Proceedings of the International Conference on Advanced Engineering Optimization Through Intelligent Techniques (AEOTIT), held during August 03-05, 2018 at SVNIT, Surat, Gujarat, India.
- 2. Aparna Chaparala, Radhika.S, Karteeka Pavan.K and Sreelatha M.; "Perfomance Evaluation of Jaya Optimization Technique for the Production Planning in a Dairy Industry", Proceedings of the International Conference on Advanced Engineering

- Optimization Through Intelligent Techniques (AEOTIT), held during August 03-05, 2018 at SVNIT, Surat, Gujarat, India.
- 3. D.Swapna, Ch.Srinivasa Rao, S.Radhika, S.Pavan Kumar, V.Atchyuth Kumar, " Influence of Process parameters and viscosity on radial stresses of magnesium lithium alloys in fluid assisted deep drawing process", proceedings of COPEN 10, 2017, organized by IIT Madras during 07-09 December 2017, pp 479-482, ISBN: 978-93-80689-28-9.
- 4. Radhika Sajja, B.S.Prashanti, P.S.Vineetha, D.Swapna and Neha krishna.D: "Design of GSM based Wireless Controlled Robot", Pg 97, Proceedings of the 1st International and 18th ISME Conference (ISME 18) held during February 23 25, 2017, at NIT Warangal, Telangana, India.
- 5. Radhika S, Srinivasa Rao Ch, Neha Krishna D and Swapna D: "Master Production Scheduling for the Production Planning in a Dairy Industry using Teaching Learning based Optimization Method", Pgs 860-862, Proceedings of 6th International & 27th All India Manufacturing Technology, Design and Research Conference (AIMTDR-2016), held during December 16-18, 2016, at College of Engineering, Pune, Maharashtra, INDIA. ISBN 978-93-86256-27-0.
- 6. Radhika S, Srinivasa Rao Ch, Neha Krishna D and Karteeka Pavan.K: "Multi-Objective Optimization of Master Production Scheduling Problems using Jaya Algorithm", Pgs 1729-1732, Proceedings of 6th International & 27th All India Manufacturing Technology, Design and Research Conference (AIMTDR-2016), held during December 16-18, 2016, at College of Engineering, Pune, Maharashtra, INDIA. ISBN 978-93-86256-27-0.
- 7. Radhika S, Manikanta.P and Sunain.Sk: "Design of a Compressed Air Vehicle", Pg 98, Proceedings of the International Conference on Environment and Energy (ICEE-2104), held during 15-17 December, 2014, at JNTU Hyderabad, Telangana, India. ISBN: 978-93-81212-96-7.
- 8. Radhika.S, Srinivasa Rao.Ch and Karteeka Pavan.K.; "A New Teaching-Learning-Based Optimization Method for Multi-Objective Optimization of Master Production Scheduling Problems", Pgs 459-463, Proceedings of the International Conference on Advanced Engineering Optimization Through Intelligent Techniques (AEOTIT), held during July 01-03, 2013 at SVNIT, Surat, Gujarat, India.

## **National Conferences**

- D.Swapna, Ch.Srinivasa Rao , S.Radhika and B.Ravi Raja: "Deep Drawing Process: A Brief Overview" in National Conference on Advancements in Metals and Manufacturing Systems (NCAMMS-2015) held at QIS College of Engineering and Technology, Ongole, Pgs12-16, Proceedings of National Conference NCAMMS- 2015 in September 2015.
- Radhika.S., Srinivasa Rao.Ch and Swapna.D: "A Review on MPS Using Meta-Heuristic Methods" National Conference on Innovations in Engineering & Technology (NCIET) held at Gudlavalleru Engineering College, Gudlavalleru, Pgs 199-205, Proceedings of National Conference NCIET 2013, ISBN: 978-1-4276-5484-7.

# Workshops/Seminars/Short term courses attended:

- Attended one week Short term Course of the NITTTR ICT based STC on "Artificial Neural networks and Fuzzy Logic" during 24-28 April, 2017.
- Attended the "Orientation workshop for top 253 participants (performers) of Use of ICT in Education for Online and Blended Learning" during 25-26 March 2017 at IIT B, Mumbai.
- Trained in a Two week Faculty Development Programme on "Entrepreneurship", organized by PSG-STEP, during 21<sup>st</sup> November- 2<sup>nd</sup> December 2016, at PSG College of Technology, Coimbatore, Tamilnadu.
- Attended AICTE approved 4-week FDP on "Use of ICT in Education for Online & Blended learning" conducted by IIT Bombay during 2<sup>nd</sup> May-10 July 2016.
- Joined a Two Day workshop on "Engineering Drawing", Under TEQIP-II S.C-1.1 organised by Dept of Mechanical Engineering, Malla Reddy Engineering College (A), Secunderabad on 12th & 13th September 2014.
- Attended one day national seminar on *Finite Element Methods and its Applications* organised by KKR & KSR ITS, Guntur on 24th September 2014.
- Two Day workshop on "Computational Mecahnics", organised by Dept of Civil and Mechanical Engineering, R.V.R.& J.C College of Engineering (A), Guntur on 15th & 16th July 2014.

- Attended the DST sponsored two day national seminar FTNCF-2013 at R.V.R. & J.C. College of Engineering ,Guntur during 06-07, September 2013.
- Attended the UGC sponsored two day national seminar "SEHTPVAS 13" at R.V.R.
  & J.C. College of Engineering ,Guntur during 21-22, June 2013.
- Have taken One week Short Term Training Programme on "Advanced Engineering Optimization Through Intelligent Techniques (AEOTIT)" at SVNIT Surat, Gujarat during 07-11 January 2013.
- Participated in the A.P Pollution Board sponsored one day national seminar on 'Management of Environmental Pollution' organised by the department of Chemistry at R.V.R. & J.C. College of Engineering ,Guntur on 22nd March 2011.
- Attended the "Induction Training For Young Faculty" organised by ISTE Chapter, R.V.R. & J.C. College of Engineering ,Guntur during 07-08 September 2009.
- Attended the AICTE sponsored two day national seminar on "Micro Machining" at R.V.R. & J.C. College of Engineering ,Guntur during 19-20, December 2008.
- Participated in ISTE course on "Induction Training For Young Faculty" organised by ISTE Chapter, R.V.R. & J.C. College of Engineering ,Guntur during 25-26 July 2008.

#### **Professional Societies**

- Member of the Editorial board for
  - o Journal of Mechanical and Mechanics Engineering
  - o Journal of Recent Activities in Production
  - Journal of Mechanical Robotics
- ❖ Life Member of ISTE
- ❖ Member of the Institution of Engineers (MIE)
- ❖ Member of IAENG
- ❖ Member of IAEST
- Member of Universal Association of Mechanical and Aeronautical Engineers (UAMAE)

#### **Achievements**

 Was Sanctioned with an amount of rupees 60,000/- (sixty thousand only) for conducting three Entrepreneurship Awareness Camps (EACs') for students of our

- college, under the Department of Science and Technology-National Implementing and Monitoring Agency for Training (DST-NIMAT) Project 2018-19.
- Recipent of the **Award of Excellence** (SAP fellowship award) from IIT Bombay in October 2016.
- Was one amongst the Top Performers of the 4-week FDP on "Use of ICT in Education for Online & Blended learning" conducted by IIT Bombay, during 2<sup>nd</sup> May-10 July 2016.
- **Topped** the M.Tech (CAD/CAM) 2005-2007 batch of Acharya Nagarjuna University.
- Won **academic excellence** awards for two consecutive years (2006 & 2007)
- Was elected as School People Leader once and twice as a Lady Representative during schooling at LEMH school, Guntur.

## Other Responsibilities handled

- > Co-coordinated a one week Short term Course of the NITTTR ICT based STC on "Product Design and Development" during 6-10 November, 2017.
- > Delivered a Guest lecture on "An overview of FEM and its applications" at, Rama Chandra College of Engineering (RCCE), on 13th September 2017.
- > Successfully organized and coordinated a One week Short term course on "Optimization using MATLAB" in association with NITTTR Chandigarh during 17-21 July, 2017.
- > Had **co-chaired** the Session IVF, on Metal Cutting, on 17th December 2016 at AIMTDR 2016, organized by the Department of Production Engineering and Industrial Management, College of Engineering, Pune (COEP), Maharashtra.
- > Successfully organized and coordinated a Two day National Seminar, "March to Make in India through Engineering Advancements" (MMIEA) during 29-30 September, 2016.
- > Delivered a Guest lecture on "Evolutionary algorithms DE and TLBO", in a Three day National workshop on Computational Research Using Matalab (CRUM) organized by the Department of Mechanical Engineering, Rama Chandra College of Engineering (RCCE), on 11th November 2016.

# **Administrative Positions held**

- > Program officer for NSS Ladies unit since June 2018.
- > Member of AP College Teachers Badminton Association (APCTBA).
- > As an active member of the college Sports committee, not only organizes various competitions for the entire Lady faculty of the college but also have been bagging few prizes in the AP State College Teachers Shuttle Badminton Competition since 5 years. (2011-2017)
- > Served as Organizing secretary of Club Waltz (dance club), which comes under the wing of Literary and Cultural Committee. (2010-2015)
- > Organized and conducted "Mr.& Miss Mech Mantra" contest in National Level Technical students meet, *Mech Mantra* for 7 consecutive times.
- > Discharged duties as Co-ordinator for Cultural events in "*COLORIDOS*", a National Level Cultural and Sports fest of R.V.R. & J.C.C.E (December 2011), held as part of Silver Jubilee Celebrations.