



## **Dr. S Devaki Rani**

**Professor & HOD**

**LMIIM, MISTE**

Metallurgical Engineering

**Areas of Interest:**

Metallurgy and Material Science

**- ▶ Educational & Professional**

**- ▶ Academic Qualifications**

- ▶ Ph.D in Mechanical Metallurgy, AU (1999-2002)

**▶ Professional Experience**

**- ▶ Teaching Experience**

- ▶ Associate, 13 (2000 - Till Date)

**- ▶ At JNTUH**

- ▶ Professor, JNTUH CEH (2016 - Till Date)
- ▶ Associate prof, JNTUH CEH (2013 - 2016)

**- ▶ Research**

**- ▶ Research Projects**

- ▶ *Point Stirring A Novel technique in MMC*, funded by AICTE R&D - 4.65 lakhs (2004 - 2007)

**- ▶ Publications**

- **International Journals**

- ▶ Dr. S Devaki Rani, *Artificial neural network based optimization of pre requisite properties for the design of bio compatible Titanium alloys*, computational materials science, ISBN No.0927-0256, Vol No.149, pp.259-266, March, 2018
- ▶ Dr. S Devaki Rani, *Beta Transus Prediction of Titanium Alloys Through Integration of Artificial Neural Network And Multifactor Dimensionality Reduction Analysis*, Materials Discovery, ISBN No.2352-9245, Vol No.2, pp.16-23, January, 2016
- ▶ Srinivasa Rao, Dr.S.Devaki Rani, *Evaluation of Compression Behavior of Aluminum Alloy (AA2219)*, IJIET, February, 2016
- ▶ Noori Bhanu, Dr.S.Devaki Rani, *Beta transus prediction of titanium alloys through integration of artificial neural network and multifactor dimensionality reduction analyses*, Materials Discovery, January, 2016
- ▶ Dr. S Devaki Rani, *Development of An Artificial Neural Network Model to Predict The properties of Alpha and Near Alpha Titanium Alloys As a Function of Their Composition*, IJRSET, ISBN No.2319-8753, Vol No.3, Issue No.4, pp.11279-11288, April, 2014
- ▶ Dr. S Devaki Rani, *Corrosion Behavior of NIMONIC -90 Alloy*, IJIET, ISBN No.2319-1058, April, 2014
- ▶ Dr. S Devaki Rani, *Production and Characterization of Al-7%Si-0.3%Mg Alloy*, IJIET, ISBN No.2319- 1058, Vol No.3, Issue No.3, pp.148-152, February, 2014
- ▶ Dr. S Devaki Rani, *Effect of B4C particle Size On Evolution of Microstructure Of In-Situ (TiB-TiC)/Titanium Matrix Composites*, IJIET, ISBN No.2319-1058, Vol No.3, Issue No.3, pp.77-82, February, 2014
- ▶ Dr. S Devaki Rani, *Characterization of Precipitation Hardenable Stainless Steels*, IJTARME, ISBN No.2319-3182, Vol No.3, Issue No.1, pp.40-43, January, 2014
- ▶ Dr. S Devaki Rani, *Effect of Cold Deformation In AA2219 Aluminum Alloy*, IJTARME, ISBN No.2319-3182, Vol No.3, Issue No.1, pp.62-67, January, 2014
- ▶ Dr. S Devaki Rani, *Characterization of Sn-Bi and Sn-Bi-Zn Alloys*, IJAMMC, ISBN No.2347-1891, January, 2014
- ▶ Dr. K. Srinivasa Vadayar, Dr.S.Devaki Rani, *Production and Characterization of Al-7%Si-0.3%Mg Alloy*, International Journal of Innovations in Engineering and Technology (IJIET), ISBN No.ISSN:2319-1058 , Vol No.vol-3, Issue No.Issue-3, February, 2014
- ▶ Dr. S Devaki Rani, *Synthesis And Characterization Of Ti- TiB-TiC Composites*, TPMAI, ISBN No.0377-9416, pp.37-41, December, 2013
- ▶ Dr. S Devaki Rani, *Micro Structural and Mechanical Characteristics of In- Situ Titanium Metal Matrix Composites*, IJTARME, ISBN No.2319-3182, Vol No.2, Issue No.4, pp.12-16, December, 2013
- ▶ Dr. S Devaki Rani, *Production and Characterization of Titanium Matrix Composites By VHP Route*, IJAMMC, ISBN No.2277-3886, Vol No.3, Issue No.2, pp.508-510, July, 2013
- ▶ Dr. S Devaki Rani, *Flexural Strength Of (TiB+TiC)/Ti Matrix composites Synthesized by Pressureless Sintering*, IJSAA, ISBN No.2277-2677, Vol No.3, Issue No.1, pp.96-98, May, 2013
- ▶ Dr. S Devaki Rani, *Hot Corrosion Behaviour of Nickel Based Super Alloys*, IJARME, ISBN No.2231-5950, Vol No.3, Issue No.1, pp.1-5, January, 2013
- ▶ Dr. S Devaki Rani, *Evaluation of Bulk Mechanical Properties of Selected Lead Free Solders in Tension and in Shear*, Journal of Material Engineering and Performance, ISBN No.2359-2365, Vol No.22, Issue No.8, pp.2359-2365, August , 2013
- ▶ Dr. S Devaki Rani, *Impression Creep of tin based lead free solders*, Materials Science and Technology, Vol No.20, Issue No.3, pp.403-408, July, 2013
- ▶ Dr.S.Devaki Rani, G.S.Murthy, *Evaluation of Bulk Mechanical Properties of Selected Lead Free Solders in Tension and in Shear*, Journal of Materials Engineering and Performance (JMEP), ISBN No.ISSN 1059-9495, March, 2013

## - ▶ **Events Participated/Organized**

### - **Presented**

- ▶ Presented a paper in *PMAI-13*, PMAI, PUNE, 07-02-2013 to 09-02-2013
- ▶ Presented a paper in *PMAI-13*, PUNE, 06-02-2013 to 09-02-2013

### - **Resource Person**

- ▶ Resource Person in a Conference on *International Conference on Environment and Energy*, ICEE, 18-06-2019 to

### - **Participated**

- ▶ Participated in a Workshop on *NBA Accreditation (SAR Filling and Preparedness for Assessment)*, UGC HRD Auditorium JNTUH, 14-12-2017 to 16-12-2017
- ▶ Participated in a Conference on *Recent Advances in Chemistry and Chemical Engineering (ICRACCE)*, JNTUH, 11-07-2016 to 13-07-2016
- ▶ Participated in a Workshop on *NBA Accreditation*, Gachi Bowli, Hyderabad., 15-12-2015 to 17-12-2015
- ▶ Participated in a Workshop on *NBA Accreditation*, ESCI, Hyderabad, 01-12-2015 to
- ▶ Participated in a Refresher Course on *e-Learning and ICT for Teaching Learning*, UGC-HRD Centre, JNTUH, Hyd, 02-11-2015 to 07-11-2015
- ▶ Participated in a Workshop on *Awareness Workshop on Outcome Based Education and Accreditation*, TEQIP-II, JNTUH CEH, 14-09-2015 to
- ▶ Participated in a Workshop on *Awareness Workshop on Outcome Based Education and Accreditation*, JNTUHCEH, 14-09-2015
- ▶ Participated in a Workshop on *Iron and Steel Making (IWIS) 2014*, IISC, Bangalore, 03-12-2014 to 05-12-2014
- ▶ Participated in a Workshop on *Iron and steel Making (IWIS) 2014*, IISC, Bangalore, 03-12-2014 to 05-12-2014
- ▶ Participated in a Refresher Course on *Bio-Nano Technology*, UGC-ASC., 22-09-2014 to 24-09-2014
- ▶ Participated in a Workshop on *Workshop on Mentoring skills and thinking skills for Engineering Faculty*, JNTUHCEH, HYD, 18-07-2014 to 19-07-2014
- ▶ Participated in a FDP on *Characterization of Materials and Processing of High Strength Materials*, GRIET, Hyderabad, 25-06-2013 to 06-07-2013
- ▶ Participated in a Refresher Course on *Trends and Advances in Heat Treatment of steels*, NIT Warangal, TEQIP-Phase-II, 30-07-2012 to 03-08-2012

## - ▶ **Honors & Professional Activities**

### - ▶ **Professional Activities**

#### - ▶ **Teaching**

Laboratory classes

Mentoring

Student project works guidance

Administrative works

Member in COE and in other committees constituted by the college/Universities.

Helping the authorities as and when required in various other fields etc.,

### - ▶ **Teaching**

- ▶ particulate Material Technology in M.Tech (Metallurgy) II-Semester (2020)
- ▶ Iron making & Steel Making Technologies in B.Tech (Metallurgical Engineering) I-Semester (2020)

- ▶ **Administrative Positions Held**

- ▶ BOS Chairperson, JNTUH CEH, 17 Dec 2016 - Present
- ▶ Head of the department, JNTUH CEH, 14 Oct 2014 - 06 Feb 2017
- ▶ BOS Chairperson, JNTUH CEH, 01 May 2010 - 06 Oct 2012

- ▶ **Project/Research Guidance**

- **Students**

Student Name	Title	Year	Download
Smt. Noori Bhanu	MODELING OF ALFA, BETA, ALFA+BETA TITANIUM ALLOYS BY USING ARTIFICIAL NEURAL NETWORKS AND GENETIC ALGORITHMS.	2018	

- ▶ **Consultancy**

- ▶ 1. Dr. S. Devaki Rani, Associate Professor as a co - coordinator of A consultancy project titled "Critical Analysis of Accretion Formation(RING) in Rotary Kiln Process at SIU, Paloncha" from NMDC, Hyderabad in September 2013.
- ▶ 2. Testing of Meshes, HAL Balanagar, Hyd.

**Contact :**

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Metallurgical Engineering

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