

BRIEF RESUME OF PROF. VEDALA RAMA SASTRY



Name : **DR. VEDALA RAMA SASTRY**

Present Position : **Professor – HAG (From April 1997)**
Dept. of Mining Engineering
NITK – Surathkal, Mangalore (Govt. of India)
vedala_sastry@yahoo.co.in; Ph: 9845428905

Academic Qualifications : Ph.D (IIT-BHU), M.Tech (IIT-BHU); BE (Mining Engg.) (OU)

Degree	Year	University/Institute	% of Marks
BE (Mining Engineering)	1980	Osmania University	83 With Distinction
M.TECH (Mine Planning)	1983	Institute of Technology, Banaras Hindu University, Varanasi	81
PH.D (Mining Engg.)	1989	Institute of Technology, Banaras Hindu University, Varanasi	

Academic Experience: **38 years of Teaching, Research & Consultancy**
(7 ½ years as Lecturer at IIT-BHU + 29 years 6 months at NITK-Surathkal)

Administrative Experience : 29 Years

- Vice -Chancellor: Dr. Babasaheb Ambedkar Technological University, Govt. of Maharashtra (2 Years)
- Member-Governing Body & Governing Council, National Institute of Rock Mechanics, Min. of Mines (GOI) 2016-19)
- Member – Board of R&D Projects Review & Management, CSIR – CIMFR, Dhanbad (from 2016-19)
- Member & Alternate Chairperson: Peer Review Committee, National Institute of Rock Mechanics, Ministry of Mines (GoI) – Bangalore (2016-19)
- Un-Official Adviser: UPSC, Govt. of India
- Independent Director – Central Mine Planning & Design Institute Limited, Ranchi (a GoI PSE) (2009 – 14)
- Independent Director – KIOCL Limited (a GoI PSE) Bangalore (2011 – 14)
- Member – Task Force on MOU (2008 – 09), Min. of Heavy Industries, GOI
- HOD – Mining Engineering (1992-95; 1998-2004 & 2017-19)
- Dean (Students Welfare), NITK (2004 – 2009)
- HOD – Training & Placement, NITK (2008 – 11)
- Member – Task Force on MOU (2008 – 09), Min. of Heavy Industries, GOI
- Chairman: Institute Ambiance Committee (2004 – 2006), NITK-Surathkal.
- **Convener – Institute Convocation (2006-09), NITK-Surathkal.**

- Chairman - Finance Committee: Golden Jubilee Celebrations (2009-10), NITK-Suratkal.
- Member: Board of Governors, Dr. Thimmaiah Institute of Technology (KGF),

R & D Projects Handled: 16 [@Rs. 2.24 Crores]

Research Guidance: Ph.Ds – Awarded-10; Ongoing-2; M.Tech (Geo-technical Engg. & Construction Technology Management - Civil Engg.) – 49

Areas of Specialization: Rock Engineering; Tunneling; Controlled Blasting; Rock Dredging; Tendering & Contracting

Ph.D Guidance:

Awarded: 10

1. Name: Vijay Kumar Gogineni
Topic: A study into the Optimization of Fan Pressures for Single and Multiple Fan Networks
2. Name: H.S. Venkatesh
Topic: Influence of Explosive Charge on Blast Vibrations in Surface Mines.
3. Name: M.S. Venkata Ramaiah
Topic: Studies on the Influence of Contact Roof Zone and Worked Out Lower Seam on Strata Behaviour in Longwall Panels in Godavari Valley Coalfields, India.
4. Name: Nair Roshan
Topic: Investigation into Stability and Design of Barriers in Longwall Panels.
5. Name: Karra Ram Chandar
Topic: Study of the Influence of Initiation System and Pattern on Blast Results.
6. Name: Nalini Elizabeth Rebello
Topic: Studies on Underground Openings Under Static and Dynamic Loads.
7. Name: Sandy Kumar Reddy
Topic: Stability of Barrier Pillars and Development of Design Guidelines for Blasting Gallery Panels in Thick Coal Seams.
8. Name: Nagesha K.V.
Topic: Prediction of Dust Dispersion from Drilling Operation in Surface Mines
9. Name: Sripad
Topic: Study of Stability Issues of Large Caverns in Himalayan Region
10. Name: Raghu Chandra. G
Topic: Studies on Seismic Energy of Ground Vibrations due to Blasting based on Signal Processing and Electrical Energy Generation.

On Going: 3

1. Name: G.C. Naveen (Reg. No. 177063 MN501)
Topic: Study on prediction of crack initiation and propagation in structures due to blast induced ground vibrations using digital image processing.
2. Name: Santosh Chandu Pawar (Reg. No. 187080 MN 500)
Topic: Rock mechanics instrumentation – High speed videography
3. Name: N. Channabassamma (Reg. No. 217 MN 002)
Topic: Numerical modelling of the stability of large underground caverns

Industrial Consultancy Projects Handled : 202

[Ports (19) + Coal (28) + Limestone & Iron Ore Mines (52) + Stone Quarries (59) + Civil & Infra Projects (44)]

[Mine Planning, **Blast Design**, **Controlled Blasting**, **Slope Stability**, **Geotechnical Investigations**, **Rock Dredging & Under Water Blasting**]

Some of the Important Clients:

- *GAIL India Limited (CNG Pipeline Projects)*
- *Punj Lloyd Limited (CNG Pipeline Project of GAIL, Govt. of India)*
- *HPCL (CNG Pipeline Projects) & Development of Phase-II Installation of Mangalore Project.*
- *ISPRL, Mangalore*
- *Bangalore Metro Rail Corporation Ltd.(2011 - 2015 for 4 years)*
- *Project Seabird, Karwar*
- *Kudankulam Nuclear Power Project*
- *Indian Navy, Mumbai, Rock Dredging in Navy Harbour*
- *Dredging Corporation of India Limited, Govt. of India*
- *Visakhapatnam Steel Plant, Rashtriya Ispat Nigam Limited*
- *Ham Dredging & Marine Contractors, Netherlands*
- *L&T-Hochtief JV, Project Seabird, Karwar*
- *New Mangalore Port Trust, Govt. of India*
- *Mangalore Refinery & Petrochemicals Ltd., Govt. of India*
- *Tuticorin Port Trust, Govt. of India*
- *Cochin Port Trust*
- *Mumbai Port Trust*
- *Karnataka Neeravari Nigam Ltd., Dept. of Irrigation, Govt. of Karnataka*
- *Karnataka Power Corporation Limited, Govt. of Karnataka*
- *Karnataka Urban Infrastructure Development & Finance Corporation Ltd., Govt. of Karnataka*
- *SKANSKA Cementation International, Project Seabird, Karwar*
- *Singareni Collieries Co. Ltd., Govt. of Andhra Pradesh*
- *National Mineral Development Corpn. Ltd., Govt. of India*
- *Kudremukh Iron Ore Company Ltd., Govt. of India*
- **Karwar Port**
- *Dharti Dredging & Infrastructure Ltd, Rock dredging in Tuticorin Port.*
- *Gujarat Ambuja Cements Ltd.*
- *Northern Coalfields Limited*
- *KCP Cement, AP*
- *Satna Cement Works, UP*
- *BALCO, Amarkantak, MP*
- *Dalmia Cement (Bharat) Limited*
- *India Cements Ltd.*
- *Raasi Cement Works & Yerraguntla Cement Works)*
- *Mysore Minerals Limited, Govt. of Karnataka*
- *Madras Cements Limited*
- *The Ramco Cements Limited*
- *UltraTech Cements Limited*

- *Sandur Manganese & Iron Ores Limited, Slope Stability Planning*
- *Jaisu Shipping Co. Pvt Limited, Mumbai Port Trust*
- *JK Cement Works*
- *Kalpataru Power Transmission Ltd.*
- *Parasakti Cement Industries Ltd.*
- *Visakhapatnam Port*
- *Chettinad Cement Corporation Ltd.*
- *My Home Industries Limited*
- *Priya Cements Limited*
- *Sagar Cements Limited*
- *Rock & Reef Dredging (P) Limited*
- *Rain Cements Limited*

Books / Proceedings Edited: 10

Publications: 196 (International: 77; National: 119)

Expert Lectures: More than 65

Achievements / Recognitions:

- **Dr. Rajendra Prasad Gold Medal for Best Paper Published in JI. The Institution of Engineers (India)**, for paper on “Stress Distribution on Blasting Gallery Barrier Pillar due to Goaf Formation during Extraction”, **Award presented in 32nd Indian Engineering Congress held at Chennai, Dec. 20-22, 2017.**
- **Luminary in Mining Education in India Award, CSIR-CIMFR (Dhanbad)**, Presented by Hon’ble Union Minister for S&T, Dr. Harshvardhan, in Vigyan Bhavan, New Delhi, on Feb. 15, 2017.
- **Best Paper Award for paper on “Signal processing computation based seismic energy estimation of blast induced ground vibration waves”, IEEE-Int. Conf. Distributed Computing, VLSI, Electrical Circuits and Robotics (DISCOVER 2016)**, Aug. 13-14, 2016, NITK-Surathkal, India (Co-author: G. Raghu Chandra) [Scopus Indexed] .
- **Hindustan Zinc Limited Gold Medal for Best Paper Publication** in JI. The Institution of Engineers (India during 2008-09,), Award presented on Dec. 11, 2009 at 21st Indian Engineering Congress held at Mangalore, December 2009.
- **Dr. Rajendra Prasad Gold Medal for Best Paper Publication** in JI. The Institution of Engineers (India), 2006-07, Award presented on Dec. 21, 2006 at 19th Indian Engineering Congress held at Guawhati, December 2007.
- **Best Paper Presentation Award** - "Blast design for improved productivity of machines in surface mines" presented in National Convention on Mechanization for Profit in Mining, Organized by **Mining, Geological & Metallurgical Institute of India**, Bangalore, Nov.25-27, 1994.
- **Sponsored by the Ministry of Env. & Forests, Govt. of India, to USA and Canada** as a part of World Bank project on "Environmental Management – Carrying Capacity Building Approach", in 2003.

Countries Visited: USA, Canada, Australia, Singapore, Oman, Hongkong, Thailand, Vietnam, Cambodia (with exposure to Foreign Universities, Govt. Agencies, Industries & Research Organizations)

Memberships of Professional Bodies:

- Fellow of The Institution of Engineers (India)
- Life Member - Indian Society for Rock Mechanics & Tunnelling Technology
- Life Member - Indian Society for Technical Education
- Life Member - Mining Engineers Association of India
- Member, European Federation of Explosives Engineers (EFEE)

Co-curricular and Extra-curricular Activities:

- Very active in organizing and participating in co-curricular and extra-curricular activities.
- Member of various academic bodies at the Institute and out side also.
- Chairman: SPICMACAY, Varanasi Chapter, 1989-91.
- Co-Chairman: IT Gymkhana, BHU, 1981-1991
- Chairman: Music Club, NITK.
- Hostel warden: BHU 1989-1991.
- Actively engaged in participating and organizing cultural programs.
- President, Rotary Club, Surathkal (2007) & actively involved in Social Work.
- **Active in Singing & Dramatics.**

SOME OF THE MAJOR INITIATIVES TAKEN UP AS VICE-CHANCELLOR OF TECHNICAL UNIVERSITY OF MAHARASHTRA

in two years – with 206 Affiliated Institutions of Engineering, Pharmacy, Architecture & HMCT (Wit In-charge Registrar, No Dy. Registrar, No Asst. Registrar and 4 Office Superintendents)

- **Made scoring of a Minimum of 25 Marks mandatory in End-Semester Examination conducted by the University** for clearing any subject, even if a student gets 40/40 of internal marks (which was not there earlier).
- **Introduced Minor Degree from 2020-21 AY, as a part of implementing NEP-2019** – e.g. a student of B.Tech Civil earning 20 credits from 5 subjects in Computer Engg. will get B.Tech in Civil Engg. with Minor in Computer Engg.
- **Introduced Honours Degree as a part of implementing NEP-2019** – e.g. a student of B.Tech Civil earning 20 credits from 5 Advanced Master's Level Courses in Civil Engg. gets B.Tech degree in Civil Engg. with Honours.
- Got entire Syllabi Revamped for all the Disciplines with Uniformity of about 160 Credits for all branches of engineering.
- **First VC in the country to have started ATMANIRBHAR BHARAT CELL, on August 15, 2020, Inaugurated by His Highness Governor of Maharashtra - Shri Bhagat Singh Koshiyari in the presence of Honourable Union Minister - Shri Prakash Javadekar. with an aim to promote innovation, incubation and Startup activities, to have collaboration with different organizations and Government to support Startup Projects of students.**
- **Made it mandatory for all the students of University to go for ONLINE LEARNING of 20% courses in every Semester.**
- **Responsible for the sanction of Section-8 Company** for the University for promoting “Innovation, Incubation & Entrepreneurship” activities with a grant of Rs. 5 Crores.

- **Introduced Seminar as a Compulsory Subject at I & II Semester Levels** – to encourage students' expressive abilities and remove stage fear and instill confidence, and **connect to society**.
- Introduced **Minor Project Compulsory from III to VII Semesters of B.Tech, as a part of implementing NEP-2019 to enhance creativity and encouraging to connect to society by taking up small problems related to nearby towns, villages, etc.**
- VIII Semester **dedicated to Internship** / In-house Project work.
- **Introduced the concept of doing projects in association with Governmental agencies** like - Panchayat raj, Irrigation, PWD, Roads & Buildings, Health Centers, Revenue & Statistics Departments, Agriculture Departments, etc., so that students get connected to societal activities and contribute in improving Govt. Departments functioning, and to **Sensitize students towards society**.
- **Introduced Credit Transfer as a part of implementing NEP-2019:** students can take courses from Other designated Universities, IITs, NITs, IISC, and earn credits for a given subject, and University will accept Transfer of those credits against given subject. More than 350 subjects / courses have been identified for this purpose of Credit Transfer.
- **Took decision (by Academic Council) to introduce Multiple Exit – Entry system, as a part of implementing NEP-2019:** Committee was formed to give guidelines, for allowing a student to leave a course in-between due to any reason – for gaining practical experience, health issues etc. and resume it later.
- Turned Around the **TEQIP PERFORMANCE from Slipping Position in March 2019 to HIGH PERFORMANCE ATU in the Country, with the Latest Grading of DBATU as 2nd Best Performer in the Country among ATUs, and with a bonus of additional grant**
- **First University in Maharashtra to have Successfully conducted ONLINE Mode of Examinations** for – Terminal Examinations of students in October 2020 for End-Semester, All Backlog Examinations in December 2020, Winter End- (odd) Semester Examinations for over 50,000 students by ONLINE mode successfully in Feb. 2021, acclaimed by all news channels.
- **First VC to have initiated Workshops on NEP. Conducted 4 Workshops / Seminars on New Education Policy** much ahead of all other Vice-Chancellors in the country at Aurangabad, Solapur, Satara, Kolhapur and Lonere involving Faculty and students.
- **Started HOMI BABHA Lecture Series of University on Every Friday**, calling experts on every Thursday evening from 4.00 to 5.00 pm – to be transmitted by University YouTube account to all institutions under DBATU for the benefit of all students across the state of Maharashtra.
- **Started Atma Nirbhar Bharat Lecture Series** on Every Friday evening from 5.00 to 6.00 for promoting Entrepreneurship / Startup activities among students –m, for the benefit of students spread over entire State of Maharashtra – to make it a Mission.
- Responsible for the clearance (by the Government of Maharashtra) for the filling of 48 long Pending Faculty positions and 52 New faculty positions for promoting PG for University Departments.
- Responsible for Rs. 20 Cores grant under RUSA in June 2020.
- **Took vital decisions of – starting University Extension Centers at Ratnagiri, Solapur, Jalgaon, Akola and Pune for starting PG & Research Programs and Startup activities in specified subject domains – for example in Solapur - Startup activities to concentrate on Rural Agriculture, Rural Water and Rural Power technologies, for Ratnagiri – starting UG courses in Fisheries Engineering and Food Engineering and related Startup activities, etc.,**

for making University self-sustaining by 2035, and promote research activities across state of Maharashtra.

- Initiated Research Culture in the University by giving recognition to about 120 faculty across the state, based on AICTE guidelines, and giving recognitions to some of the Affiliated Institutions as Research Centers – based on an Independent Committee evaluation complying with AICTE/UGC norms.
- **First Time in the State of Maharashtra - The Academic Council Meetings were transmitted ONLINE** through YouTube and Facebook, Truly making the Decision Making Process for the students Open and Transparent.
- **Declared all Regular Examinations Results within 40 Days by revamping of entire examination & evaluation system** – for the First Time after becoming Affiliating University.

LIST OF R&D PROJECTS HANDLED

1. Co-Investigator: Research Project ***“Influence of Burden, Spacing and Bench Height on Rock Fragmentation”***, sponsored by the IDL Industries Ltd., at BHU, Varanasi, 1985 (Principal Investigator: Prof. D.P. Singh) (Rs.1.25 Lakhs).
2. Co-Investigator: Research Project ***“Influence of Geological Discontinuities on Rock Fragmentation”***, sponsored by The IDL Industries Ltd., at BHU, Varanasi, 1987 (Principal Investigator: Prof. D.P. Singh) (Rs. 1.5 Lakhs)
3. Co-Investigator: Research Project ***“Slope Stability Studies in Opencast Mines”*** sponsored by CSIR, at BHU, Varanasi, 1989 (Principal Investigator : Prof. D.P. Singh) (Rs. 8.5 Lakhs).
4. Co-Investigator: Research Project ***“Workability Parameters of Drilling and Auguring Machines (including Road Headers & Raise Borers) in Mines***, sponsored by the Dept. of Coal., Govt.of India, at BHU, Varanasi, 1990 (Principal Investigator: Prof. D.P. Singh) (Rs. 6.5 Lakhs).
5. Coordinator: ***Modernization of Mine Environment Laboratory***, NITK, (KREC), Sponsored by Min.of Human Resources Development, Govt. of India, 1992-94 (Rs. 8.0 Lakhs)
6. Principal-Investigator: Research Project ***“Design of Blasts based on Drillability and Explosive Parameters”***, sponsored by Central Mining Research Institute (CSIR), Dhanbad (Rs.1.2 Lakhs).
7. Principal-Investigator: Research Project ***“Design of Slopes over Old Underground Workings and in Geologically Disturbed Strata”***, sponsored by Central Soil & Materials Research Station, Min. of Water Resources, Govt. of India (Rs.4.0 Lakhs).
8. Coordinator: ***Modernization of Rock Fragmentation Laboratory***, sponsored By AICTE., Ministry of HRD, Govt.of India (1994-96) (Rs.(10.0 Lakhs).
9. Coordinator: ***Thrust Area Project on Mine Pollution***, sponsored by AICTE, Govt. of India (1996-98) (Rs. 5.0 Lakhs).
10. Coordinator: Research Project on ***“Environmental Effects of Blasting Operations and their Control”***, Sponsored by The Ministry of HRD, Govt. of India (2000-2002) (Rs. 2.0 Lakhs).
11. Coordinator: Research Project on ***“Influence of NONELs on Rock Fragmentation in Bench Blasting”***, Sponsored by IDL Industries Limited (2000-2002) (Rs. 1.0 Lakh).
12. Coordinator: Research Project on ***“Condition Monitoring and Performance Evaluation of Longwall Powered Supports”***, sponsored by Ministry of HRD, Govt. of India, Rs. 10.0 lakhs (2003-06) (Co-Investigator: K. Ram Chandar).
13. Coordinator: Modernization of ***Model Mine Project***, Sponsored by Ministry of HRD (9.8 Lakhs) (2003-04).
14. Coordinator: ***Modernisation of Rock Blasting Laboratory***, sponsored by The Ministry of HRD (Rs. 20.0 Lakhs) (2004-05) (Co-Investigator: K. Ram Chandar).
15. Coordinator: ***Assessment of the Performance of Explosives / Blasts based on Explosive Energy, Coal India Limited***, (Rs. 1.247 Crores) (2010-14).
16. Coordinator: ***Modelling of Airborne Dust in Opencast Coal Mines, Coal S&T Project, Min. of Coal, Govt. of India*** (Rs.77 Lakhs) (2011-15).