

CURRICULUM VITAE

Dr. Ch. S. N. Murthy

Professor - HAG
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PROFESSIONAL SUMMARY

- 35 Years of Teaching & Research Experience at various levels of UG, M. Tech, R & D Projects, Providing guidance to B. Tech and M. Tech Projects as well as for Ph.D.
- 5 Years 6 months of Industrial Experience in **M/s. The Singareni Collieries Co. Ltd.**, A.P State.
- Worked as Head of the Department, Mining Engineering from the Year June 2004 Till June 2008
- Associated with Departmental R & D and Consultancy Projects.
- Responsible for development of Infrastructure areas of Rock Drilling Laboratory, Mine Surveying and Mining Machinery Laboratory.

EDUCATION

Ph. D (Rock Drilling) in **Mining Engineering** from I.I.T, Kharagpur, 1999
M. Tech in **Mine Planning & Design** from Indian School of Mines, Dhanbad, Jharkhand, 1987
B.E in **Mining Engineering** from Osmania University, Hyderabad, 1980
Intermediate from Board of Intermediate Education, A.P State, 1975
SSC from Board of Secondary Education, A.P State, 1973

RESEARCH INTERESTS

- Rock Drilling/ Cutting
- Mine Surveying
- Mine Planning and Design
- Environmental management in mines
- Rock Excavation Engineering
- Tunnel engineering
- Underground Coal Mining
- Ground Control
- Mine Mechanization

RESEARCH GUIDANCE

- Ph.D. Awarded # 15
- Ph.D. (submitted) # 02
- Ph.D.(Ongoing) # 08
- M. Tech Projects # 09
- B. Tech Projects # 93

Patents awarded

Harish Kumar N. S, Ch. S. N. Murthy, and R. P. Choudhary are awarded a patent entitled "Method for evolution of probability distribution function of shovel-dumper combination in open cast coal mine", for 8 years since May 2021, by the **Australian Government (IP Australia)** with **Patent No. 2021102416**.

BOOK PUBLISHED

Studies on Stationary Diesel Engines Operated with Cardanol Biodiesel, Lap Lambert Academic Publishing, International Book Market Services Limited, Member of Omni Scriptum Publishing Group, **ISBN: 978-620-2-19900-1, 2017.**

Rock Indentation: Experimentation and analyses published by **CRC press, Taylor and Francis group**, **ISBN: 978-036-7-03030-8, 30th August 2021.**

BOOK CHAPTER

Springer book series/chapter (No. of chapters 6) has published in "Learning and Analytics in Intelligent Systems", by Springer, Cham during the International conference on Emerging Trend in Engineering, organized by Department of Mining Engineering, Osmania University, Hyderabad during 22nd - 23rd March 2019 (ISBN: 978-3-16148410-0)

PROJECTS

MODERNIZATION SCHEME:

- Co-Ordinator; Rock Mechanics Laboratory (**INR 8 Lakhs**) -Sponsored by **MHRD, Govt. of India**, Year 1990-1992
- Co-Ordinator; Mine Environmental Engineering Laboratory (**INR 8 Lakhs**)-Sponsored by **MHRD, Govt.of India**, Year 1990-1992
- Principal Co-Ordinator; **Mine Machinery Laboratory (INR 12 Lakhs)** -Sponsored by **MHRD, Govt. of India**, Year 1999-2003

R&D PROJECTS (COMPLETED)

- Co-Investigator; **Condition Monitoring and Performance Evaluation of Long wall Powered Supports (INR 10 Lakhs)** - Sponsored by **MHRD, Govt. of India**, 2000-2003.
- Co-Investigator; Evaluation, Design and Cost Analysis of Illumination system in Surface Mine Projects (**INR 6.65 Lakhs**) -Sponsored by MHRD, Govt. of India, 2002-2005.
- Principal Investigator; **Development of Bio-Diesel and its Application in Mining Machinery Working in Surface Mines (INR 1.46 Lakhs)**-Sponsored by **M/s Madras Cements Limited**, 2003-2006.
- Co-Investigator; Dust Modeling in Open-cast Coal Mines (**INR 77.04 Lakhs**) -Sponsored by **Coal S & T, Govt. of India**, 2011-2014.

R&D PROJECTS (ONGOING)

- Principal Investigator: **Development and Characterizations of Advanced Solar Cell(INR 30 Lakhs)**-Sponsored by **VGST, Govt. of Karnataka, Department of Information Technology, Biotechnology and Science &Technology**, 2017-2020(Co-Investigator: Dr. M. Aruna, Associate Professor, Department of Mining Engineering, NITK, Surathkal and Dr. Kartick Tarafder, Assistant Professor, Department of Physics, NITK, Surathkal).
- Co-Investigator: **Application of Nano Membrane Technologies to purify Mine Waste Water (INR 5 Lakhs)**- Sponsored by **Ministry of Mines, Govt. of India**, 2019 (Principal Investigator: Dr. Arun M Isloor, Professor and HOD, Department of Chemistry, NITK, Surathkal).

ADMINISTRATIVE RESPONSIBILITIES

DEPARTMENT LEVEL:

- H.O.D
 - Chairman of DRPC
 - Chairman of DPGC
 - Chairman of DUGC
- During 2004-08
- Chairman of BOE(2000 Scheme)
 - President of Society of Mining Engineers
 - Coordinated the activities of Procurement of Equipment's under TEQIP-I
 - Established New laboratory i.e., **Mine Design under TEQIP-I**
 - Established & Developed New laboratory i.e., **Mining Machinery under MHRD's Modernization Scheme**

INSTITUTE LEVEL:

- Member of Senate
- Member of Health Care Committee
- Faculty Advisor

OUTSIDE INSTITUTE LEVEL:

- Examiner for Mining Engineering in Visvesvaraya Technological University, Belgaum
- Member of Board of Studies for Mining Engineering, Kakatiya University
- Member of Board Of Studies for Mining Engineering, GIET (Autonomous), JNTUK

- Examiner for Mining Engineering in JNTUH
- Examiner for Mining Engineering in JNTUK
- Examiner for Mining Engineering in GIET (Autonomous), Rajahmundry.
- Examiner for Mining Engineering in JBIT (Autonomous), Hyderabad.
- Member of National Organizing Committee of National Symposium -Organized by Orissa School of Mines, 29th to 30th Oct 2005.
- Member of National Organizing Committee of National Symposium on "Bio-fuels"-Organized by Department of Mechanical Engineering, March 2006.
- Member of BOE (Mining Engineering) of V.T.U., Belgaum for year 2017-2018.
- Member of BOS (Mining Engineering) of College of Technology & Engineering, Maharana Pratap University of Agriculture and Technology, Udaipur for year 2017-2020.
- Technical committee member for the International Conference on Mining – Present and Future – Investments, Issues and Challenges [On the occasion of Centenary Celebration of IEI (1920-2020)] organized by The Institution of Engineers (India) held on 23-25 October 2019 at Hyderabad.
- Member of Academic Advisory Committee, Dr. T. T. I. T, KGF, Karnataka.
- BOS Member, Department of Mining Engineering, Maharana Pratap University of Agriculture and Technology, Udaipur from 2018-20.
- Member of Steering Committee, National Conference on Advance in Mining (AIM-2020), organized by CIMFR, Dhanbad held on 14-15, February 2020.
- Attended workshop on "curriculum development for the year 2019" organized by Department of Mining Engineering, Dr. Babasaheb Ambedkar Technological University Lonere, Govt. of Maharashtra on 16th April 2019.
- BOS Member, Department of Mining Engineering, Dr. Babasaheb Ambedkar Technological University Lonere, Govt. of Maharashtra from 2020-23.
- BOS Member, Department of Mining Engineering, **Malla Reddy Engineering College** (Autonomous Institution), **JNTU Hyderabad, Telangana (2019-2022)**.
- BOS Member, Department of Mining Engineering, **Bikaner Technical University, Bikaner, Rajasthan (2021-2024)**.
- BOS Member, Department of Mining Engineering, JNTU Hyderabad, Telangana from 2022- 2024.
- Advisory committee member, International conference Date: 09-07-2021 & 10-07-2021 , International Conference on Recent Trends in Technology, Engineering and Applied Science -2021 (ICRTTERS-2021), Dr. TTIT,KG.
- International conference Date: 24-07-2020 & 25-07-2020 , International Conference on Recent Trends in Technology, Engineering and Applied Science -2020 (ICRTTERS-2020), Dr. TTIT,KG.
- International conference Date: 12-04-2019 & 13-04-2019 , International Conference on Recent Trends in Technology, Engineering and Applied Science -2019 (ICRTTERS-2019), Dr. TTIT,KG.

AS EXPERT MEMBER OF NBA (Visits to Colleges):

- Arunai Engineering College, Velunagar, Thiruvannamalai, Tamilnadu from 21st to 22nd April, 2011.
- Maharshi Karve Stree Shikshan Samstha's Cummins College of Engg. For Women, Pune from 2nd to 24th July, 2011.
- Thiruvalluvar College of Engg. Kanchipuram, Tamilnadu from 19th to 21st Aug, 2011.
- Bharathi Vidhyapeth College of Engg. Navi Mumbai from 30th Sep to 2nd Oct 2011.
- College of Engineering, Andhra University, Visakhapatnam from 28th to 30th November, 2014.
- College of Technology & Engineering, Maharana Pratap University of Agriculture and Technology, Udaipur, from 28th to 30th April, 2016.
- B. I. T, Sindri, Dhanbad, Jharkhand, from 8th to 10th February, 2019.
- NIT. Rourkela, PG Program from 21st -22nd April 2022

INTERNATIONAL/NATIONAL SEMINARS/CONFERENCES/WORKSHOPS/PROGRAMS ORGANIZED:

- Principal Co-Coordinator; Organized AICTE/ ISTE STTP on "**Recent Trend in Safety Analysis and Risk Assessment in Mineral Based Industries**" from 10th to 22nd Jan,2000
- Co-Ordinator; Organized a workshop on "**Effects of Noise on Human Health**" sponsored by TEQIP(2004)
- Co-Ordinator; Organized a workshop on "**Road Safety**" sponsored by TEQIP(2005)
- Co-Ordinator; Organized a workshop on "**UG curriculum Development**" sponsored by TEQIP(2005)
- Co-Ordinator; Organized a workshop on "**PG curriculum Development**" sponsored by TEQIP(2005)
- Co-Ordinator; Organized a training Programme on "**Development of Skills in Leveling and Earth Work Calculations**" -Sponsored by TEQIP (2006)
- Convener; Organized a National Seminar on "**Synergy in Mineral Sector for Sustainable Development- Vision 2020**" from 4th and 5th October, 2008.
- Co-Ordinator; Organized a Winter School on "**Clean Coal Technology**" during Jan 2009 -Sponsored by MHRD/AICTE, Govt. of India.
- Co-Ordinator; Organized a Summer School on "**Recent Development in Rock Excavation Technology and Management**" during July 2009 -Sponsored by MHRD/AICTE, Govt. of India.
- Co-Ordinator; Organized a "**Certificate Course in Mine Surveying**" in June/July 2009
- Co-Ordinator; Organized a "**Certificate Course in Mine Surveying**" in October, 2009
- Convener; Organized an International Symposium on "**Emerging trends in Environment, Health and Safety Management in Mining and Mineral based industries**" on 21st and 22nd Aug, 2010
- Co-Ordinator; Organized a "**Certificate Course in Mine Surveying**" on 20th October to 12th Nov, 2010
- Co-Ordinator; Organized an Awareness Programme on "**Zero Tolerance to Ragging**" on 11th Feb, 2011
- Co-Ordinator; Organized a "**Certificate Course in Mine Surveying**" on 4th June to 3rd July, 2011
- Co-Ordinator; Organized MHRD/AICTE sponsored Summer School on "**Recent Developments in Environmental Management in Mining and other Core Industries (EMMCI-2011)**" during 27th June to 1st July, 2011
- Co-Ordinator; Organized a "**Certificate Course in Mine Surveying**" on 28th May to 23rd June, 2012
- Co-Ordinator; Organized a "**Certificate Course in Mine Surveying**" on 1st- 27th October, 2012
- Co-Ordinator; Organized a National Workshop on "**Recent Developments in Rock Mechanics and Ground Control**" during 1st to 3rd October,2013 sponsored by TEQIP- II
- Co-Ordinator; Organized a "**Certificate Course in Mine Surveying**" during 23rd October to 16th November, 2013
- Co-Ordinator; Organized a Short Term Course on "**Advances and Latest Developments in Mining Geology and Rock Mechanics**" during 2nd to 4th April,2014
- Co-Ordinator; Organized a "**Certificate Course in Mine Surveying**" during 30th June to 16th July, 2014.
- Principal Coordinator; Organized a workshop on "**Recent Trends in Environment, Health and Safety Management in Mining and Other Core Industries**" sponsored by TEQIP-II during January 27th -28th, 2017.
- Principal Coordinator: Organized a workshop on "**Recent Advances in Reliability Engineering and Maintenance Management**" sponsored TEQIP-III during November 1st to 3rd, 2018.

OVERSEAS EXPERIENCE

- Presented a Technical paper entitled "**Operational characteristics of 120T Dumpers in a large Surface Iron Ore Mines in India**" in Second International symposium on "Mine Planning and Equipment selection in Surface Mines" held at University Calgary, CANADA during **7th -9th Nov, 1990**.
- Presented a Research paper entitled "**Micro Seismic Monitoring of Long wall Strata to provide Real Time Instability Indications to Mine management at Rajendra Coal mine in India**" during 42nd ARMA Symposium held from **29th June to 2nd July, 2008** at **San Francisco, USA**.
- Visited Department of Mining Engineering, **South Dakota School Of Mines, USA** during **July, 2008**.

- Visited **UTM, Malaysia** and **National University of Singapore**, during **March, 2012**.
- Visited **Queensland University, Brisbane** and **University of Sydney** during **2nd to 14th October, 2014**.
- Presented a Technical paper entitled "**Reliability Analysis of Dumper in Lime Stone Mine Based on Weibull Distribution**" 91st The IRES International Conference, Chicago, USA, 24th-25th November, 2017.
- Presented a Technical paper entitled "**Prediction of Load-Haul-Dumper (LHD) Machine Performance Characteristics using Feed-Forward-Back-Propagation ANN Model**" 27th International Conference on Electronics, Artificial Intelligence & Robotics (ICEAIR), New York, USA, 17th-18th December, 2019.

AWARDS

- SRG Information Technology Award for 2015-16 given by MEAI, India.
- Best content award for the paper "Reliability Analysis of Dumper in Lime Stone Mine Based on Weibull Distribution" 91st The IRES International Conference, Chicago, USA, 24th -25th November, 2017.
- Best paper award for the paper "Experimental Investigation on the Influence of Humidity on PV Panel Performance in 2nd International Conference on Paradigms in Engineering and technology organized by Methodist College of Engineering and Technology, Hyderabad, 12th – 13th, 2018.
- Excellence Award during 21st Annual GEOMINETECH International Symposium on New Equipment Technology Management and Safety in Mines and Mineral based Industry, Organized on 11-12 May, 2022.

PUBLICATIONS (#202)

- National Journals # 31
- International Journals # 79
- International Seminars # 29
- National Seminars # 63

PROFESSIONAL QUALIFICATION

- Second Class Mine Manager's Competency Certificate (Coal).

PROFESSIONAL MEMBERSHIP

- Life Member, Indian Society for Technical Education.
- Life member, Mining, Geology and Metallurgical Society of India.
- Life member, Mining Engineers' Association of India
- Member, The Institution of Engineers (India)
- Life member, Indian Mining Engineers Association (IMEA), Bhubaneshwar.

Certified reviewer for SCI/SCOPUS indexed journals

- Tunneling and Underground Space Technology
- International Journal of Mining and Mineral Engineering
