

Dr RANJAN KUMAR DWARI

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Date of Birth: 21.02.1972 Indian Married Twin daughters
Fluent in English, Hindi and Odia



Goal: To achieve professional excellence in minerals R&D and industry in national and international arena through hard work, research, skills and perseverance.

1. Present employment

Presently working as a **scientist** at Mineral Processing Department, CSIR-Institute of Minerals and Materials Technology, Bhubaneswar, Odisha, India since July 2008.

1.1. Previous Employments

- Worked as **Research Scholar** at Division of Mineral Processing, Department of Chemical Engineering and Geosciences, Luleå University of Technology, Sweden from Feb. 2005 to June 2008.
- Worked as **Senior Research Fellow** under SIDA/SAREC Indian Coal Project at the Department of Mineral Processing Technology, CSIR-Institute of Minerals and Materials Technology (CSIR) Bhubaneswar, Odisha, India from 29th September 2003 to January 2005.
- Worked as a **Lecturer** at the Department of Chemical Engineering, Mayurbhanj School of Engineering, Baripada, Odisha from September 1998 to September 2000.

2.0. Educational Qualification

- **Doctoral of Philosophy (Ph. D. Tech.)** in Mineral Processing in the year May 2008 from Division of Mineral Processing, Department of Chemical Engineering and Geosciences, **Luleå University of Technology**, Luleå, Sweden
- **Licentiate of Engineering Tech.** (Mineral Processing) in the year Oct. 2006 from **Luleå University of Technology**, Luleå, Sweden.
- **Master of Technology** (Chemical Engineering) in the year 2003 from **National Institute of Technology**, Rourkela, India.

2.1. Other information

2.1.1. National and International Awards

- **Artemis Biotech Best Master's Thesis** in Chemical Engineering/Technology Award for the year 2004 by Indian Institute of Chemical Engineers (IICChE), India.
- **Best Licentiate Thesis Award** for the year 2006 at Luleå University of Technology by Bergforsk, Sweden.

2.1.2. Workshop Attended

- **Leadership Development programme** at CSIR-HRDC, Ghaziabad, New Delhi from 29th May to 9th June 2013 organized by CSIR HRDC and its training partner Hero mindmine Institute Ltd.
- **AUTOCAD** training programme was attended from 18th Feb 2009 to 20th May 2009 at CSIR-IMMT Conducted by Central Institute of Plastics Engineering & Technology (CIPET-Bhubaneswar)
- Attended an advanced course on “**Comminution**” (ACC-2008) at CSIR-IMMT from 17th-18th Dec 2008 delivered by Prof. Raj K. Rajamani, University of Utah, USA.
- Attended the National Interactive workshop on “Recent Trends in Iron Ore Processing” (IOP-2008) CSIR-IMMT.
- Participated in the Third Orientation course on “**Mineral Characterisation and Beneficiation Practices**” jointly organized by Indian Institute of Mineral Engineers, Bhubaneswar, during 13th-18th December 2004 at CSIR-IMMT, Bhubaneswar.
- Workshop on “**Data Analysis and Modeling**” organized on the occasion of the 1st National Conference of Research Scholars and Young Scientists in Chemical Engineering held during 25th-27th September 2004.

2.1.3. Membership of Academies and the like

- Associate member of Indian Institute of Chemical Engineers (IICChE), Kolkata, India
- Life member of Indian Institute of Mineral Engineers (IIME), Jamshedpur, India
- Professional Member in The Society for Mining, Metallurgy and Exploration (SME), USA. (2008-2009)

2.1.4. Reviewer of following Journals

Chemical Engineering Sciences, Journal of Hazardous Material, Chemical Engineering Journal, Fuel

3. Scientific Achievements

3.1. Past Research and Achievements:

Joined as scientist at Institute of Minerals and Materials Technology (CSIR-IMMT) based on my Master's and PhD thesis work. At CSIR-IMMT, I have been involved as a leader as well as team member in several industry oriented sponsored, consultancy and network projects related to processing of ores/minerals/coal/waste utilization. The brief description of research profile is as follows.

3.1.1. M. Tech. Thesis (Chemical Engineering)

Title: Studies on the Performance Characteristics of Hydro-Cyclone Separator

The objectives achieved were as follows

- Investigations were carried out for sand, sand-fly ash and sand-FCC using designed and fabricated hydro-cyclone. Process parameters like pressure drop, cut size and particle characteristics were studied.
- The **novelty of this hydro-cyclone design** is that the **air core can be adjusted by raising/lowering the apex pipe** to attain better separation efficiency. The work has been adjudged as best M. Tech thesis in Chemical Engineering for the year 2004 by Indian Institute of Chemical Engineers (IICChE), Kolkata.
- A mathematical model for predicting particle separation efficiency has been developed as well as statistically tested. The findings were reported in Dwari et al. 2004, *Chem Eng Sci*, 59, 671-684, 2004.

3.1.2. Ph. D. Thesis (Mineral Processing)

Title: High Ash Non-coking Thermal Coal Preparation by Tribo-electrostatic Dry Process

The objectives achieved during doctoral studies were as follows.

- The detail studies on the tribo-charging characteristics of ash forming minerals were carried out (Dwari and Rao 2006, *Int J Miner Process*, 81, 93-104).
- A **novel laboratory fluidised-bed tribo-electrostatic separator** with internal baffles system has been designed and constructed. This separator proved to be efficient for generating differential charge on the ash-forming minerals and coal particles and their separation in electric field (Dwari and Rao 2008, *Fuel*, 87, 3562-3571; Dwari and Rao 2009, *Miner Eng*, 22, 119-127).
- A **new methodology have been developed to understand and quantify the surface energetic structure** of ash forming minerals in coal in terms of acidity and/or basicity, before and after tribo-electrification with different material through contact angle measurement (Dwari et al. 2008, *Open Miner Process J*, 1, 6-12; Dwari et al. 2009, *Int J Miner Process*, 91, 100-110). Swedish mining research association appreciated this coal work with the best Licentiate thesis award in 2006.

3.1.3. Contribution at CSIR-IMMT

1. Detailed characterization of dolochar waste generated in sponge iron industries for better utilization of unburnt carbon present in the dolochar and process developed for utilization of ash forming mineral as building bricks (Dwari et al. 2012, *International Journal of Minerals, Metallurgy and Materials*, 19, 11, pp. 992-1003).
2. Studies carried out on the effect of anionic and non-ionic polyacrylamide flocculant adsorption on the dewatering of complex iron ore tailing systems (*Das and Dwari et al. 2011, Chem Eng J*, 173, 318-325).
3. Effect of flocculant and pH during flocculation on particulate behavior such as particulate growth kinetic, rate of settling, rate of back scattering, and rate of transmission were studied for various system using novel Multiple Light Scattering Technique. The work will be submitted to *Minerals Engineering Journal*, 2013.
4. Developed process flowsheet for the beneficiation of low grade silicious magnetite iron ore (Dwari et al. *International Journal of Mining Science and Technology*, 23, pp. 1-5, 2013).
5. Contributed immensely to develop process flowsheets for the beneficiation of low grade iron ores (Submitted to *International J of Mining Science and Technology*, 2013) and coal fines for different clients.
6. Design and developed electrostatic separator with novel fluidized bed tribo-charging system for dry fine coal particulate processing. Detail charge characteristics of ash forming minerals and carbon at different humidity and temperature condition (Work to be submitted to *J. of electrostatics*, 2013).
7. Plant audit of non coking coal washery to decipher the moisture balance.

3.1.4. Academic Involvement

Apart from the above research activities, I am also actively involved in teaching to post graduate students at CSIR-IMMT in the area of electrostatic principles and application, surface phenomena and its application in mineral processing. I have supervised B.Tech. and M. Tech. students for their research project. I had also coordinated the academic programme on Post Graduate Diploma in Minerals Engineering (PGDME) for graduate engineers from 2010-2012.

3.1.5. Projects Handled at CSIR-IMMT as Project Leader

- **Minerals to Materials for Sustainable Planet (2012-Present).**
Sponsored by CSIR
Activity leader: Bauxite Beneficiation
- **Tribo-electrostatic Beneficiation of High ash Indian coal (Sept 2011- present)**
Sponsored by M/s. CMPDI Ltd., Ranchi
- **Development of Zero Waste Technology for Processing and Utilization of Thermal Coal (ZWT-CUP) (Oct 2012- present)**
Sponsored by CSIR, New Delhi
- **Feasibility Studies on Beneficiation of Low Grade Iron Ore to Prepare Suitable Flowsheet (Jan 2012-March 2012)**
Sponsored by M/s. Panduranga Timblo Industries Ltd., Goa
- **Plant Audit of Non Coking Coal Washery to Decipher the Moisture Balance (Dec 2011-Feb 2012)**
Sponsored by M/s. Global coal & Mining Pvt. Ltd., Talcher, Odisha
- **Studies to Establish Amenability For Beneficiation of Low Grade Siliceous Iron Ore (Mar 2011-May 2011)**
Sponsored by M/s. Rawmet Commodities Pvt. Ltd., Odisha
- **HRD Programme for JSW Steel Ltd. Trainee (Aug 2010)**
Sponsored by M/s. JSW Steel Ltd, Karnataka
- **Laboratory Investigation on the Characterisation of Dolochar Waste Generated in Sponge Iron Industries (Feb 2009-May 2009)**
Sponsored by State Pollution Control Board, Odisha

3.1.6. Involved as a Team Member at CSIR-IMMT

- **Development of Advanced Eco-friendly Energy Efficient Processes for Utilization of Iron Ore Resources of India (2007-2011).**
Sponsored by CSIR
- **Development of Commercial Flowsheet for Beneficiation of Low Grade Iron Ore (2008-2009).**
Sponsored by M/s. Shyam Steel Ltd., Kolkata
- **Development of Commercial Flowsheet for Beneficiation of Low Grade Iron Ore (2009).**
Sponsored by M/s. GM Iron & Steel Company Ltd., Rairangpur, Orissa
- **Development of Commercial Flowsheet for Beneficiation of Low Grade Iron Ore (2009-2010).**
Sponsored by M/s. Bhusan Steel Ltd.
- **Reduction of Iron & Reactive Silica from Bauxite Ore (2009-2010)**
Sponsored by M/s. Vedanta Alumina Pvt. Ltd.
- **Development of commercial flowsheet for beneficiation of low grade iron ore (2009-2010)**
Sponsored by S Pradhan Ltd., Bhubaneswar
- **Alternative Complimentary route of Direct Steel Making with Reference to Indian Raw Materials (2011-Present)**
Sponsored by Ministry of Steel, Govt of India
- **Improvement in Sintered Productivity through Deep Beneficiation (2011-Present)**
Sponsored by Ministry of Steel, Govt of India
- **Studies on low grade iron ore, mine drops and iron containing rocks to find out their response to physical up-gradation (2012)**
Sponsored by M/s. Tungabhadra Minerals Pvt.. Ltd., Karnataka.
- **Development of Technology to produce clean coal from high ash and high sulphur of Indian coal (2011-Present)**
Sponsored by Ministry of Steel, Govt. of India
- **Characterization and dry beneficiation studies on dolomite fines (2013-Present)**
Sponsored by TATA Steel Ltd., Jamshedpur

3.1.6. Supervision of B. Tech summer intern, PGDME student:

Sl. No.	Name of the Student	Project Title
1	Mr. Rachit Tiwari, ISM Dhanbad Mr. Piyush Jha, ISM Dhanbad Summer Inetran	Influence of slurry properties on hydrocyclone (2009)
2	Mr Subrajit Dash PGDME	Development of tribo-electrostatic separator for coal beneficiation (2010)
3	Mr. Prasanta Kumar Bhunya NIT Rourkela, Summer Intern	Multiple light scattering measurement-a novel approach to study dewatering behavior of hematite and kaolinite mineral dispersions (2010-11)
4	Mr. Ayan Majhi PGDME	Studies on the dewatering of kaolinite dispersions using guar gum and anionic polyacrylamide flocculant (2011-12)

3.1.7. Project Assistant Supervised under Different Projects

- Ms. Madhusmita Das (2009-11), PA II, Presently pursuing Ph.D. at IIT Guwahati
- Mr. Santosh Kumar Mohanta, M. Sc. Chemistry (Feb. 2012-Continuing), PA II.
- Mr. Biswayoti Rout, B. Tech. Chemical Engg. (Nov. 2012- Continuing), PAII.
- Ms. Susmita Mohant, M.Sc., Chemistry (Aug. 2012-Continuing), PAII.
- Ms. Priyanka Dhar, B. Tech., Chemical Engineering (Feb. 2013-Continuing), PAII.

3.1.8. HRD Training Programmes on Fundamentals of Mineral Processing:

- 1) Two weeks training programme in Mineral processing was organized for graduate engineers of M/s. JSW Steel Limited, Karnataka as PL/Coordinator/faculty
- 2) Two weeks training programme in Mineral processing was organized for graduate engineers of M/s. Essar Steel Limited, Bhubaneswar as faculty.
- 3) Two weeks training programme in Mineral processing was organized for graduate engineers of M/s. BRPL, Bhubaneswar as faculty.
- 4) One week training programme in mineral processing jointly organized by CSIR IMMT and IIME as faculty.

3.1.9. Acquisition, Operation and Maintenance of “Facilities” of the Laboratory

Sl. No	Title of the Facility	Your role in brief
1	Turbiscan Lab expert	Indenting, procuring, installation, operation
2	Zeta probe	Maintenance and operation
3	Research centrifuge	Indenting, procuring and installation
4	Tribo-electrostatic Separator	Designed, fabricated locally
5	Gridability Index ball mill	Indenting, procuring and installation
6	Malvern particle size analyzer	Indenting, procuring, installation, operation
7	Dehumidifier to maintain humidity %RH from 100-5.	Indenting, procuring, installation
8	Climatic room Unique facility to carry our tribo-electrostatic charge characterization of mineral at differmt humidity condition	Initiated the construction of room with the help of ES.
9	Keithley electrometer	Indenting, procuring, installation, operation

4. List of Publications

4.1. Referee reviewed publications in international reputed periodicals

- **R. K. Dwari**, D. S. Rao, P. S. R. Reddy, Magnetic separation studies on a low grade siliceous iron ore sample, *International Journal of Mining Science and Technology*, 23, pp. 1-5, 2013.
- **R. K. Dwari**, D. S. Rao, A.K. Swar, P. S. R. Reddy, B. K. Mishra, Characterization of dolochar wastes generated by the sponge iron industry, *International Journal of Minerals, Metallurgy and Materials*, 19, 11, pp. 992-1003, November, 2012. **IF: 0.691**.
- M. Das, **R. K. Dwari**, S. K. Biswal, P. S. R. Reddy and B. K. Mishra, Studies on the effect of flocculant adsorption on the dewatering of iron ore tailings, *Chemical Engineering Journal*, 173, 2, pp. 318-325, September, 2011. **IF: 3.461, Citation: 03**.
- K. Hanumantha Rao, **R. K. Dwari**, S. Lu, A. Vilinska and P. Somasundaran, Mixed anionic/non-ionic collectors in phosphate gangue flotation from magnetite fines, *The Open Mineral Processing Journal*, 4, pp.14-24, 2011. **Citation: 04**.
- **R. K. Dwari** and K. Hanumantha Rao and P. Somasundaran, Characterisation of particle tribo-charging and electron transfer with reference to electrostatic dry coal cleaning, *International Journal of Mineral Processing*, 91, 3-4, pp. 100-110, May, 2009. **IF: 1.304, Citation: 03**.
- **R. K. Dwari** and K. Hanumantha Rao, Fine coal preparation using novel tribo-electrostatic separator, *Minerals Engineering*, 22, 2, pp. 119–127, January, 2009. **IF: 1.352, Citation: 11**.
- **R. K. Dwari** and K. Hanumantha Rao, Non-coking coal preparation by novel tribo-electrostatic method, *Fuel*, 87, 17-18, pp. 3562–3571, December, 2008. **IF: 3.248, Citation: 04**.
- **R. K. Dwari** and K. Hanumantha Rao, Characterising electron transfer mechanism in tribo-electrification of pyrite through contact angle measurements, *The Open Mineral Processing Journal*, 1, pp. 6-12, 2008. **Citation: 02**.
- **R. K. Dwari** and K. Hanumantha Rao, Dry Beneficiation of coal-a review, *Mineral Processing & Extractive Metallurgy Review*, 28, pp. 177-234, July, 2007. **IF: 0.667, Citation: 33**.
- **R. K. Dwari** and K. Hanumantha Rao, Tribo-electrostatic behaviour of high ash non-coking Indian thermal coal, *International Journal of Mineral Processing*, 81, 2, pp. 93-104, November, 2006. **IF: 1.304, Citation: 13**.
- **R. K. Dwari**, M. N. Biswas, B. C. Meikap, Performance characteristics for particles of sand- FCC and fly-ash in a novel hydro-cyclone, *Chemical Engineering Science*, 59, 3, pp. 671-684, February, 2004. **IF: 2.431, Citation: 20**.

4.2. List of Publications in National and International Conference Proceedings:

- M. Das, **R. K. Dwari**, S. K. Biswal, P.S. R. Reddy, B. K. Mishra, 2011, Multiple Light scattering Measurement- A novel approach to study the dewatering behaviour of hematite and kaolinite mineral dispersions, In: *Proceedings of Research Scholar's Day-2011*, January 25, Bhubaneswar, India, pp. 8-11.
- K. Hanumantha Rao, **R. K. Dwari**, S. Lu, A. Viliniska and P. Somasundaran, 2010, Flotation of phosphate gangue from magnetic fines- Non-ionic surfactant as atrac collector modifier, In: *Proceedings of XXV International Mineral Processing Congress Brisbane (IMPC) 2010*, Brisbane, QLD, 6-10 September 2010, Australia, ISBN:978-1-92152-22-84, pp. 1933-1943.
- M. Dash, **R. K. Dwari**, S. K. Biswal and P.S.R. Reddy. Dewatering of Iron Ore Process Tailings, In: *Proceedings of National Symposium on Water Resource Management for Sustainable Development (WRMSD 2010)*, EDS Institute of Advance Technology & Environmental Studies, Bhubaneswar 19th-21st May 2010, ISBN: 978-93-80475-01-01, pp. 152-158.
- N. Suresh, R. Tiwari, P. K. Raghav, **R. K. Dwari** and S. I. Angadi. Hydro-cyclone performance comparison using different models, In: *Proceedings of the International Seminar on Mineral Processing Technology - 2009*, Oct 2009, Bhubaneswar, India.
- M. Das, **R. K. Dwari**, S. K. Biswal, P. S. R. Reddy. Dewatering of Iron ore process tailings, In: *Proceedings of the International Seminar on Mineral Processing Technology - 2009*, Oct 2009, Bhubaneswar, India.

- K. Hanumantha Rao, **R. K. Dwari**, A. Viliniska. Beneficiation of non-ionic surfactant in fatty acid flotation of phosphate gangue from magnetite fines, *In: Proceedings of the International Seminar on Mineral Processing Technology - 2009*, Oct 2009, Bhubaneswar, India.
- **R. K. Dwari** and K. Hanumantha Rao and P. Somasundaran. 2008, “Characterisation of particle tribo-charging and electron transfer with reference to electrostatic dry coal cleaning” *In: SME Annual Meetings and Exhibit*, 24th-27th Feb. 2008, Salt Lake City, Utah, USA.
- **R. K. Dwari** and K. Hanumantha Rao. Contact electrification and electrostatic separation of ash-forming minerals from high ash non-coking coal using novel fluidised bed tribo-charging system, *In: Proceedings of XXIV International Mineral Processing Congress Beijing*, 3, pp. 3540-2550, 2008, Beijing, China.
- **R.K. Dwari** and K. Hanumantha Rao. “Novel fluidised-bed tribo-electrostatic separator for dry coal preparation” *In: Proceedings of Konferencje i Mineralteknik, Luleå*, pp. 15-29, Feb. 2008, MinFo, Stockholm, Sweden.
- **R. K. Dwari** and K. Hanumantha Rao. “Fine coal preparation using novel tribo-electrostatic separator,” *In: Proceedings of International Conference on Beneficiation of Fines and its Technologies*, A. K. Mukherjee and D. Bhattacharjee Eds, pp. 81-100, Tata steel, Jamshedpur 10-11th Dec. 2007, India.
- **R. K. Dwari** and K. Hanumantha Rao and P. Somasundaran. “A method for determining the electron transfer and charge characteristics between two contacting surfaces in tribo-electrostatic coal beneficiation,” *In: Proceedings of the International Seminar on Mineral Processing Technology - 2007*, N. K. Khosla and G. N. Jadhav Eds., pp. 55-59, Feb. 2007, Mumbai, India.
- **R. K. Dwari** and K. Hanumantha Rao. “An exploration on tribo-charging and electron transfer of ash forming minerals in coal by contact angle goniometry”. *In: Proceedings of Konferencje i Mineralteknik, Luleå*, pp. 41-54, Feb. 2007, MinFo, Stockholm, Sweden.
- **R. K. Dwari** and K. Hanumantha Rao. “High Ash Non Coking Coal Preparation by- Electrostatic Technique”. *In: Proceedings of the International Seminar on Mineral Processing Technology-2006*, G. Bhaskar Raju et al. Eds, pp. 30-41, Feb. 2006, Chennai, India.
- **R. K. Dwari**, S. K. Biswal, P. S. R. Reddy & V. N. Misra. “Characterisation of High Ash Non-Coking Coals for Electrostatic Separation”. *In: Proceedings of CRSYS 2004*, pp. 175-181, 25-27th Sept. 2004, IIT Kharagpur, Kharagpur, West Bengal, India.
- A. K. Sahoo, S. S. Maharana, **R. K. Dwari** and S. K. Biswal. “Evaluation the Performance of Mineral Jig for Beneficiation of Fine Non-Coking Coal”. *In: Proceedings of CRSYS 2004*, pp. 157-161, 25-27th Sept. 2004, West Bengal, IIT Kharagpur, Kharagpur, India.
- **R. K. Dwari**, M. N. Biswas, B. C. Meikap. “Performance of a Hydro-cyclone Separator for Removal of Sand-Fcc-Fly-Ash from Slurry”. *In: Proceedings of CHMCON 2003*, Dec. 2003, RRL Bhubaneswar, Bhubaneswar, Orissa, India.
- **R. K. Dwari**, M. N. Biswas, B.C. Meikap. “Separation of Sand and Grit from Waste Water by a Hydro-cyclone Separator”. *In: Proceedings of National Seminar on Pollution and Waste Management in Ceramic and Allied Industries*, pp. 39, Feb. 2003, NIT Rourkela, Rourkela, Orissa, India.

4.3. List of Technical Report

1. Laboratory Investigations on the characterisation of dolochar waste generated in sponge iron industries, Submitted to State Pollution Control Board, Odisha, T/MP/719/Aug/2009.
2. Influence of slurry properties on hydro-cyclone classification, submitted to CSIR IMMT, Summer internship report/2009.
3. Multiple light scattering measurement-A novel approach to study dewatering behavior of hematite and kaolinite mineral dispersions, Submitted to CSIR-IMMT, Summer internship report/2010.
4. Studies to establish amenability for beneficiation of low grade silicious iron ore, Submitted to, M/s. Rawmet Commodities Pvt. Ltd., Bhubaneswar, T/MP/830/Aug/2011.
5. Development of commercial process flowsheet for beneficiation of low grade iron ore fines for pelletisation, Submitted to M/s. Altrade Minerals Pvt. Ltd., Bhubaneswar, T/MP/812/May/2011.

6. To carry out the washability and flotation studies of coking coal samples to develop the commercial process flowsheet to set up the coal washery, Submitted to M/s. Jindal Steel & Power Ltd., T/MP/827/AUG/2011
7. Feasibility studies on beneficiation of low grade iron ore to prepare suitable flowsheet, Submitted to M/s. Panduranga Timblo Industries, Goa, 873/MP/SSP-235/JUL/2012.
8. Plant audit of non coking coal washery to decipher the moisture balance, Submitted to M/s. Global coal & mining Pvt. Ltd., South Bolanda, Talcher, 875/MP/CNP-140/JUL/2012.
9. Studies on the dewatering of kaolinite dispersions using guar gum and anionic polyacrylamide flocculant, Submitted to CSIR IMMT, PGDME student project report/2012
10. Characterization and beneficiation studies of bauxite ores for reduction of reactive silica and iron, M/s. Vedanta Aluminium Ltd., lanjigarh, Odisha, 861/MP/SSP 188/MAY/2012.
11. Development of commercial process flowsheet for beneficiation of low grade iron ore fines for pelletisation, M/s. Dr. Sarojini Pradhan, Bhubaneswar, 871/MP/SSP-157/June/2012.

5. Other Scientific Achievements

- Members of organising committee of IMPC 2012, New Delhi, India
- Organized International Seminar on Mineral Processing Technology (MPT-2009) held at CSIR-IMMT, Bhubaneswar from 28-30th October 2009 as Treasurer
- Member of organising committee of International Conference in Chemical Engineering Congress (CHEMCON 2004), CSIR-IMMT Bhubaneswar, India.
- Elected as Honorary Regional Secretary of Indian Institute of Chemical Engineers (IChE) Bhubaneswar chapter, Bhubaneswar, India for the year 2010-2011.
- Member Publication Committee Institute Hindi Magazine, 2009
- Member Foundation day celebration on 13th April 2009
- Member Earth day celebration on 22nd April 2009
- Member IMMT 100% physical verification committee 2010, 2011
- Member CPYLS-2008, 2009, 2010, 2011, organizing committee
- Member "Research Scholar Day-2011, Poster Presentation on 25th January, 2011.
- Member Investigation committee, Sept. 2012.
- Member Creche/Day care centre, Oct. 2012
- Member organizing committee on HRD programme on the fundamentals of Mineral Processing for the industry executives, April, 2013.

6. Important Administrative Responsibilities Taken and Success Achieved

1) Programme Coordinator of the One Year Post Graduate Diploma in Minerals Engineering from April 2010 to September 2012.

Following are the responsibilities performed and success achieved as programme coordinator

- ✓ Admission advertisement, coordination with admission cell for candidate sort list for interview followed by admission procedure. With the action of advertisement through news paper, journal and communications with industries and academia good number of applications were received. This helped to select bright students to the programme.
- ✓ Coordination with course coordinators and faculty member for smooth functioning of classes.
- ✓ Coordination with examination cell convener for smooth and timely conduction of examination, tabulation of result, declaration of results and preparation of certificates and student placement.
- ✓ Preparation of approvals for the day to day function of PGDME programme.
- ✓ Communication with industry for the placement of the industry

- ✓ Handle of PGDME accounts
- ✓ With the administrative initiatives the course, examinations were completed according to the academic calendar and the result published in time.
- ✓ All the students were selected in campus interview and joined the industries. 100% placement achieved during this period.
- ✓ The programme is unique of its kind to cater the demand of Minerals Engineer in the mineral industry.

2) Assistant warden of PGDME hostel since August 2009-present

Declaration: I hereby declare that the information furnished above is true to the best of my knowledge and belief.

Date: 19.06.2013
Place: Bhubaneswar,
Orissa, India

(Dr. Ranjan Kumar Dwari)