# Publications of Dr. Rima Chatterjee

***Assistant Professor, Deptt. of Applied Geophysics, ISM University Dhanbad-826004***

## International Journal

Chatterjee, R., Tarafder, G. and Paul, S., 2009, Groundwater Quality Assessment of Dhanbad District, Jharkhand, India, *Bulletin of Engineering Geology and The Environment* (in Press).

Chatterjee, R., 2008, Effect of Normal Faulting on In-Situ Stress: A Case Study from Mandapeta Field, Krishna-Godavari basin, India, *Earth and Planetary Science Letters*, vol. 269/3-4, p. 457 - 466.

Chatterjee, T. K., Chatterjee, R. and Singh, S. K., 2005, Classification of black decorative stones based on geotechnical parameters from Warangal District, Andhra Pradesh, India : *Bulletin of Engineering Geology and the Environment*, vol.64, no.2 p.167-173.

Chatterjee, R. and Mukhopadhyay, M., 2003, Stress modeling for the Oil and Gas fileds of Krishna-Godavari and Cauvery basins, India, using Finite Element Technique, *Petrophysics*, vol.44, no. 5, p. 342- 350.

Chatterjee, R. and Mukhopadhyay, M., 2002, Effects of rock mechanical properties on stress field of the Mahanadi basin, India – Results from finite element modeling, *Geophysical Research Letters*, vol. 29, no. 11, p.28-1 – 28-4.

Chatterjee, R. and Mukhopadhyay, M., 2002, Petrophysical and Geomechanical properties of rocks from the oil fields of the Krishna-Godavari and Cauvery basins, India*: Bulletin of Engineering Geology and the Environment*, vol. 61, p. 169-178.

Chatterjee, R. and Mukhopadhyay, M., 2002, In-situ stress determination using well log data for the oil fields of the Krishna-Godavari basin, India: *Petrophysics*, vol. 43, no. 1, p. 26-37.

Chatterjee, R. and Mukhopadhyay, M., 2000, Stress studies in the Mahanadi offshore basin, India, determined to 4.0 km from wellbore breakout data: *Petrophysics*, vol. 41, no. 6, p.481-491.

## International Conferences/Symposium

Chatterjee, R., Gupta, S. K., Pal, P. K. and Srivastava, V. K., 2009, Relationship of Coal bed Permeability with Vertical Stress from Well Log data: A Case study from Raniganj CoalField, India in *SEG International Exposition and 79$^{th}$ Annual meeting*, Houston, Texas, USA, October 25-30.

Mitra, A. and Chatterjee, R., 2009**,** Application of Back Propagation Neural Network in identifying Oil / Gas sands from Well Logs : A case study from Gulf of Cambay, India, *DEVEX-09*, May 12-13, Aberdeen U.K.

Chatterjee, R., Paul, S and Kundan, A, 2009, Estimation of Pore Pressure and Fracture Gradient from Well logs: A Case Study from an Offshore Basin, Eastern India, *15th Formation Evaluation Symposium of Japan*, October 1-2, Chiba, Japan.

Paul, S., Chatterjee, R. and Kundan, A., 2009, Estimation of Pore Pressure Gradient and Fracture Gradient from Well Logs: A Theoretical Analysis of Techniques in use, *Indian Oil & Gas Review Symposium and International Exhibition* (IORS-2009), September 11-12, Mumbai, India.

Srivastava, V. K., Chatterjee, R. and Pal, P. K., 2009, Estimation of Coal Bed Permeability from a Gondwana Coalfield, India, *Ninth International Mine Ventilation Congress*, November 10-13, New Delhi, India.

Chatterjee, R. and Tarafder, G., 2008, Modeling of Stress Dependent flow in CBM Reservoir, *Indian Oil & Gas Review Symposium and International Exhibition* (IORS-2008), September 1-2, Mumbai, India.

Chatterjee, R. and Mukhopadhyay, M., 2008, In-situ Stress Results from east coast of India in *3rd World Stress Map Conference*, October 15-17, Potsdam, Germany.

Chatterjee, R. and Sarkar, S., 2007, Modeling of a Wellbore under Compressive Stress CDROM in *International Conference and Exhibition PETROTECH-2007***,** January, New Delhi, India.

Chatterjee, R., Mishra, C.K. and Singh, S.K., 2006, Finite element modeling of fracture propagation in CBM well *in International Symposium on Coal Bed Methane*, Tuscaloosa, Alabama, Paper no. 0613.

Chatterjee, R., 2006, Reservoir stress modeling for an oilfield, Cauvery basin, CDROM *in 6thInternational Conference & Exposition on Petroleum Geophysics* organized by Society of Petroleum Geophysicists, January, Kolkata, India.

Chatterjee, R. and Chanda, S., 2005, Finite element reservoir models in Kamalapuram Formation, Cauvery basin, CDROM in International Conference and Exhibition *PETROTECH-2005***,** January, New Delhi, India.

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Chatterjee, R. and Mukhopadhyay, M., 2003, Numerical modeling of stress around a wellbore, CDROM *in SPE Asia Pacific Oil & Gas Conference and Exhibition*, April 15-17, Jakarta, Indonesia, paper no. 80489.

Chatterjee, R. and Mukhopadhyay, M., 2001, Stress-induced borehole elongation upto 3.6 km depth in the Cauvery basin, India, *in* 42nd *Annual logging Symposium: Society of Professional Well Log Analysts*, Texas, USA, June 17-20, paper no. AA, p. 1-13.

Chatterjee, R. and Mukhopadhyay, M., 2001, Stress modeling in the wellbores of the Mahanadi Offshore basin, CDROM *in* 4th International Petroleum Conference and Exhibition, Jan. 9-12, New Delhi, India.

Chatterjee, R. and Mitra, A., 2001, Classification of lithology in the volcanic reservoir using Back Propagation Neural Network, CDROM *in* 4th *International Petroleum Conference and Exhibition*, Jan. 9-12, New Delhi, India.

Mitra, D., Chatterjee, R. and Dasgupta, S., 2001, Delineation of hydrocarbon prospects using Geographic Information System: A case study, CDROM *in 4th International Petroleum Conference and Exhibition*, Jan. 9-12, New Delhi, India.

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**National Conferences/Symposium**

Chatterjee, R. and Pal, P. K., 2009, Thermal modeling to assess temperature distribution around underground coalfire *in* Proceedings of 16th convention of Indian Geological Congress, Feb. 2-4, NGRI, Hyderabad p. 53-54.

Chatterjee, R., Srivastava, V. K. and Khan, P. K., 2007, Finite Element Stress Modelling of Rock Block: a Preliminary Approach, *in* Proceedings of 2nd Indian Mineral Congress, April 8-9, ISMU, Dhanbad, p. 184-196.

Varma, A.K., Banerjee, S., and Chatterjee, R., 2006, Carbon Dioxide Sequestration Modeling in Coal Seams of Raniganj Coalbasin, *Frontier areas in Geological and Technological Aspects of Fossil Fuel and Mineral resources* (GTFM), Deptt. of Applied Geology, ISMU, Dhanbad, India. Edited by Varma, A. K., Venkatesh, A. S., Dhar, Y. R. and Saxena, V. K., Allied Publishers Pvt. Ltd., p.85-92.

Chatterjee, R. and Sarkar, S., 2005, Application of finite element technique in reservoir modeling, presented in National Seminar on Recent Advances in Theoretical & Applied Seismology, March 3-4, Indian School of Mines, Dhanbad.

Chatterjee, R. and Mukhopadhyay, M., 2004. In-situ stress and stress modeling results in the oil fields from the east coast basins, presented in, National Symposium on Non-Seismic Methods in Exploration: Potential, Challenges and Road Ahead, Society of Petroleum Geophysicist, Mumbai, India.

Chatterjee, R. and Sinha, S., 2003, Two-dimensional finite element models, Abstract published *in* SAP (UGC) Seminar on Advances in Theoretical and Applied Seismology, Oct. 29-30, Indian School of Mines, Dhanbad, India.

## Research Projects undertaken as Principal Investigator (P.I) and Co-PI

**1. Collaborative R & D project on "Analysis of in-situ stress for CBM Exploration in Jharia Coalfield – CMPDI, Ranchi and ISMU, Dhanbad ------- Principal Investigator (2009-2012) funded by Coal India Limited (R&D Board).**

**Sanctioned Project cost: Rs. 1 crore 68.5 Lakh**

Project status: Ongoing

2. **A Pilot Project on " Modeling for changes CBM Reservoir permeability due to stress" funded by Deptt. of Science and Technology, Govt. of India----Principal Investigator (2008-2009).**

**Sanctioned Project cost: Rs. 3.00 Lakh**

Project Status: Ongoing

**3. Project on "Stress Modelling for the Krishna-Godavari and Cauvery basins using borehole breakouts" funded by Deptt. of Science and Technology, Govt. of India----Principal Investigator (2003-2006).**

**Sanctioned Project cost: Rs. 8.68 Lakh**

Project Status: Completed

**4. Project on "Numerical Modelling for Stress analysis for the Mahanadi offshore basin" funded by CSIR------Co-PI (1999-2002)**

**Sanctioned Project Cost: Rs. 5.00 Lakh**

Project status: Completed

**5. Minor Research Project on "Well breakout analysis using Finite Element modeling" funded by Indian school of Mines------Principal Investigator (1998-2000)**

**Sanctioned Project cost: Rs. 0.2 Lakh**

Project status: Completed