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RESUME SUMMARY:

- 5 Years of mineral exploration and coal mine planning in both opencast and underground mining
- 27 years of oil and gas G &G experience in LAM-Middle East-Africa-Asia-Pacific regions.
- 5 years of seismic data processing; 17 years of seismic data interpretation; 5 years in supervisory role.
- Prospect generation and evaluation, integrating seismic with production geology; mentoring of G & G staff.
- Shale-gas and fractured reservoir characterizations by integrated exploration & production data analysis.
- Specialized in gravity, magnetic, electrical and electromagnetic methods of exploration and their integration
- Basin analysis and depositional environment mapping; prediction of reservoir, seal and source potential.
- QI expertise; geological and reservoir models prepared for New Well Delivery (NWD).
- Data analyst, multidimensional data modelling, data warehousing and mining design and development
- Design and Development of Digital Ecosystems and Technologies (DEST) and Embedded Ecosystems
- Research supervision experience for postgraduate and PhD geophysics and IT students
- 7 Years of teaching experience in geophysics, oil & gas prospecting and information systems
- Mentoring Curtin Postgraduate NEXT Program, 2013-14, 2014-15 and 2015-16 years
- Supervised more than 20 postgraduate research dissertations and two PhDs
- Technical papers prepared, presented and peer reviewed in oil & gas, geophysics and IT/IS

QUALIFICATIONS

- Doctor Philosophy in Information Systems, Curtin University, Perth, WA, Australia (2015)
- Master of Information Technology, Curtin University, Perth, WA, Australia (1999-2001).
- Master of Science, Technology in Exploration Geophysics, Osmania Univ. Hyderabad, India (1974-77).
- Doctor of Philosophy in Science in Exploration Geophysics, IIT, Kharagpur, India (1977-82).
- Post Graduate Diploma in Exploration Database Management Systems, BVB, Bombay, (1991-92).
- Diploma in Systems Analysis and Data Processing, Annamalai University, Madras, India, (1989-90).

SPECIAL SKILLS

- 2D and 3D seismic data processing skills, QC of processing and acquisition skills
- Data interpretation on Petrel and Geo-frame (SLB), OpenWorks, Seis-Works, ZMAP, Geo-probe (Landmark)
- Seismic sequences and facies analysis; integration with geological data, prospect generation and evaluation
- Development of data mining algorithms using C ++ and Java programming skills
- Design and development of data warehouse; data-mining of oil & gas companies' warehoused data
- Git-Bash, Python (Jupiter), RStudio, SAS programming skills; Driving and Sr. First Aid Skills

PROFESSIONAL

- Certified Petroleum Geophysicist (**AAPG, USA**); **Professional Member, IEEE, USA**
- Active Member, American Association of Petroleum Geologists (**AAPG, USA**)
- Active Member, Society of Exploration Geophysicists (**SEG, USA**); **Member, ASEG, Australia**
- Active Member, Society of Petroleum Engineers (**SPE, USA**) and **EAGE (The Netherlands)**
- Member, Indian Geophysical Union (**IGU, India**) and Association of Exploration Geoscientists (**AEG, India**)
- Member, Professional Petroleum Data Management (PPDM), **Canada**.

SHORT COURSES, MEETINGS, AWARDS, WORKSHOPS, PRESENTATIONS

- 3D seismic data processing, Geo-systems Co., Pasadena, **California, USA, 1985**
- National Certificate Examination in Supervision, NPCL, **New Delhi, India, 1989**
- Practical understanding of Pre- and Post-stack Migrations, Total Depth Pty. Ltd, **Australia, 1998**
- STRATA and AVO Workshops, Hampson and Russell Earth Imaging Solutions, **Australia, 1999**
- The Seismic Velocity Model as an Interpretation Asset, Distinguished Short Course of SEG, **Australia, 1999**.
- GEOExplorer, OpenWorks, SeisWorks, ZMAP and Geoprobe, Landmark Geographic Co, **Kuwait, 2006**
- Kuwait International Petroleum Conference and Exhibition, **Kuwait City, 2005**
- IBIMA International Conference, **Cairo, Egypt 2005**, IEEE Industry Informatics, **Singapore, 2006**
- Regional Geological Congress, **Kampala**, 01 and East-African Petroleum Conference, Nairobi, **Kenya, 2003**.
- IEEE International Conferences held in **Perth, Bangkok, Daejeon, Istanbul, Dubai in 2008, 2009, 2010**

- Successfully organized a Workshop entitled “Seismic Integration - Shale Gas” at WGC, Houston, **USA 2010**
- Best paper presentation award in IEEE-DEST conference held in Daejeon, **South Korea, 2008**
- **Excellence in Execution** DCS Schlumberger Awards for Q1 2008, Q1 2009, **Kuwait, Q3 2011, Bogota**
- **IEEE-ICS recognition** for organizing Special Track on Knowledge Mapping, **Turkey, Dubai, 2009, 2010**
- Couple of papers presented in an International IEEE-DEST Conference held in Lisbon, **Portugal 2011.**
- **HENRY Doll Prize winner** for the Best Technical Innovation in Schlumberger, **Jakarta, Indonesia, 2012.**
- Technical papers in the IPA and IGC, **Jakarta, 2012, Indonesia and Brisbane, Australia 2012.**
- Technical papers presented in **IEEE –INDIN and DEST 2013, Bochum, Germany and Stanford, USA, Porto Alegre, Brazil, 2014** international conferences.
- Technical paper presented on “Big data in Resources Industries” in East African Petroleum Conference (EAPC), Kigali, **Rwanda, 2015.**
- Training on Design Science Methods, NVivo Qualitative Research Software, Pawsey Supercomputing Skills, Linux, C++ and FORTRAN programming skills, **2015, Australia.**
- **Big Data Week, Science on the Swan Conference 2016, Perth, Australia.**
- **IEEE INDIN** Special track organized on “Big Data, Advanced Analytics, and Knowledge Management in Manufacturing Ecosystems, University of Poitiers, **France, 2016.**
- Presented couple of geophysical research papers in the ASEG international conferences held in **Adelaide, Australia, 2016.**
- Presented a talk on Big Data Management in Oil & Gas Industries in the Professional Petroleum Data Management (PPDM), held in Graduate School of Business, **Perth, Australia, 2016.**
- Presented a talk on Big Data Management of the Albertine Graben in the European Association of Geoscientists and Engineers (EAGE), held in **Kampala, Uganda, 2016.**
- Presented couple of papers in the national conference of Science Teachers Association of WA (STAWA) at Curtin University, **2016, Perth, Australia.**
- Attended the Curtin’s NEXT Postgraduate Mentoring Program for **2016, Curtin University, Australia.**
- Presented six papers in the ICCMIT, Warsaw University, **Poland, 2017.**
- Presented three research papers in the KES International Conference held in **Marcelle, France 2017**
- Presented panel session paper in the EAGE in the High Performance Computing (HPC) Forum, held in **Athens, Greece, 2017.**
- Training attended on Hadoop, GitHub, Python using Jupiter and programming with RStudio, organized by CiC, Curtin University, **Perth, Australia, 2017.**
- Attended and presented one oral and two posters in the Australasian Exploration and Geoscience Conference, **Sydney, Australia, February-2018.**

PROFESSIONAL WORK EXPERIENCE

August 2013 – as on today, Curtin Business School, Curtin University, Adj. Research Professor

- Research projects, on designing and developing digital ecosystem technologies using Big Data associated information systems, IT tools and Design Science IS Methodologies. More focused on: Big Data driven-Green, -Energy and -Health IS.
- Mentoring Curtin students in the fields of “Spatial Sciences, Petroleum Engineering and Digital Oil Field Solutions”
- Working with overseas explorers in the areas of “geophysical data integration and analysis in the Egyptian onshore and offshore basins”.

SUMMARY OF RECENT EXPLORATION AND FIELD DEVELOPMENT PROJECTS DONE:

- 2012-2013: Romanian offshore and Taylakovskoye onshore prospectivity Western Siberian project (Russia); Tertiary and Cretaceous objectives; field development and matured field analysis including pore prediction and abnormal pressure analysis; multi-stacked reservoirs’ characterization; seismic sequence and facies analysis; structural and stratigraphic interpretation; seismic inversion; integrated interpretation workflows; interval velocity analysis; spectral decomposition through Petrel.
- 2010-2011: Putumayo, Katatumbo and Llanos basins in Colombia (onshore); 2010-2011; Tertiary and Cretaceous objectives; deltaic and shallow marine; mapping of structures, stratigraphic features and identification of new opportunities, leads and prospects; projects done using several integrated workflows

that comprise of fracture orientation and fluids mapping, specialized seismic attributes; petrel and Landmark products used; Petrel and Hampson & Russell for seismic inversion.

- 2009-2010: Dorra project in Kuwait offshore, interpretation and geological objectives: Tertiary, Cretaceous and Jurassic objectives; shallow and deep water marine; challenging data qualities; integrated data interpretation workflows; both seismic inversion (by MMRD) and rock physics analysis are parts of this project; Petrel and Geoframe; appraisal and field development; deliverables: conditioned seismic and well logs, time-depth structures, attribute maps that include acoustic impedance and AVO, prospect risk evaluation.
- 2007-2008: Abu Sennen (exploration) and BEA (Burg El Arab, field development) fields of Western Desert (onshore), Egypt, focused on Tertiary and Cretaceous objectives, deltaic and shallow marine, seismic and well log data qualities and conditioning issues; calibrated seismic and well data attributes through cross-plots to generate regression models; time and depth structures; volume and surface attributes generated; Petrel used; identified geo-bodies from inverted seismic (AI) volumes; deliverables: conditioned data volumes and AI volumes; based on integrated interpretation several new opportunities, plays and leads identified and risk evaluated.
- Onshore Gandhar Field Development (South Cambay basin, India); Explore and exploit multi-stacked reservoirs; Objectives: Tertiary; deltaic; data qualities and integration are challenging; Integrated workflows comprising of GM and seismic, including integrated interpretation with seismic inversion and rock physics attributes; development of Gandhar field in South Cambay basin; Landmark and Hampson & Russell products used for interpretation and seismic inversion.
- Surat Bowen Basin, Eastern Australia, 2D/3D Exploration Work, Kingdom Suite, New Opportunities, leads and prospects; Shale oil opportunities; Perth and Canning basins in Western Australia.
- 2005-2007: South Umm Gudair, South Fuwaris and Humma Fields, field development projects (onshore) in the partitioned neutral zone (PNZ) in Kuwait and Saudi Arabia; Cretaceous and Jurassic geological objectives; Carbonate Reefs; Good quality seismic datasets; Integrated interpretation workflows with GM and seismic; reservoir characterization using seismic inversion (acoustic impedance) attributes integrated with other special attributes structure cube, image enhancement, spectral decomposition and several geological events; deliverables: new plays, successful drillable targets; Landmark products used.
- Albertine Graben, Lake Albert and Semliki basins (Western Uganda) 2002-2004, exploration work, includes procurement of software for the PEPD, 2D/3D integrated interpretation of Tertiary objectives, training & development of G & G staff, preparation of brochures for promotion and investment purposes.

March 2008 – July 2013, Schlumberger, Senior Geophysicist and Expert

Seconded into various different operating companies in various global locations. Worked with the clients in the areas of exploration and field development projects, assignments are with:

- Lukoil, Moscow
- Medco Energy, Jakarta
- Centre for Incremental Reservoir Optimization and Production (CIROP), Columbia
- Ecopetrol, Colombia
- Al Khafji and Wafra Joint operations (KJO) with Chevron/Saudi ARAMCO, Kuwait
- Kuwait Energy, Egypt
- Petronas, Malaysia and
- ONGC, India

Responsibilities included;

- QC of seismic data; data acquisition, processing & reprocessing expertise
- Data integration, seismic and GM Data; 2D/3D seismic data interpretation
- QI of 2D/3D seismic and integration with drilled well datasets
- Identification of new opportunities, leads and prospects and risk evaluation

- Field development projects
- Shale gas and fractured reservoirs
- Specialized in Clastics, Carbonates and Turbidities environments

Workstations used and supported:

- Open Works, Petrel, Geoframe and Hampson & Russell for seismic inversion
- Oracle DB management with SQLs for data mining
- Data Modelling, data warehousing, mining, visualization and interpretation

Nov 2007 – Feb 2008, Mosaic Oil/Santos JO, Sydney, Senior Geophysicist

- Involved in exploration projects of 2D/3D seismic data interpretation, QI and modeling of Jurassic, Triassic and Permian reservoirs in the Surat-Bowen basins, Queensland, Australia using GEOFRAME and PetroSys workstations. Also worked in North West Shelf in WA, especially in Carnarvon and Canning basins including Perth basins.
- Prospect generation, evaluation and risk assessment by integrated interpretation of exploration data, QC of seismic data processing and data acquisition proposals.

Jul 2005 – Oct 2007, Wafra Joint Operating Company/Chevron JO, Kuwait, Senior Geophysicist

- Led G & G staff and worked in field development projects on “2D and 3D Seismic data interpretation and QI using Geo-Frame (IESX) and Landmark (SeisWorks, ZMAP and Geo-probe utilities) workstations for prospect generation and evaluation”; integrated interpretation of Q Land 3D seismic data for exploration and development; QC of Q Land 3D seismic data acquisition and processing work done in Gulf basins. Mentoring of young geologists and geophysicists in petroleum companies. Integrated data interpretation using GEOGRAPHIX tools.
- Using Q-Land 3D seismic, generated prospects and their risk evaluation carried out using interactive interpretative workstations. Successfully completed projects in 3D Seismic South Fuwaris, South Umm Gudair and Humma field development projects.
- Al-Khafji and Wafra oil & gas field exploration; regional interpretation

Jan 2004 – Jun 2005, Consultant Geoscientist, Perth

Roles completed for the Department of Industry & Resources, Petroleum Resources Branch and Curtin Business School.

Aug 2001 – 2003, Petroleum Exploration and Production Department, Ministry of Energy and Mineral Development (Uganda), Technical Advisor and Team Leader

- Prepared geological models in the Semliki and Lake Albert basins of the Albertine Graben for exploration and prospecting
- Monitored exploration activities of this department with special reference to the geophysical exploration strategies applied to various oil and gas provinces and prospects in the western part of Uganda.
- Provided the technical advisory support to the department
- Based on integrated interpretation and QI of exploration data, submitted well locations proposal document for exploratory drilling in the Albertine Graben in Western Uganda
- Promoted exploration investment opportunities in Uganda
- Prepared brochures (for investment) and exploration-bids for PEPD

1998 – 2001, Total Depth (Exploration Services) Pty, Perth, Seismic Interpreter

- Integrated seismic and well-log data interpretation on UNIX based workstations using STRATA and AVO software and also UNIX based seismic data processing software.

1983 – 1997, Oil and Natural Gas Corporation Ltd (ONGC), India, Senior Geophysicist and Superintendent Geophysicist

- **Led geo-scientists' team** and also worked with teams of geophysicists in the Regional Exploratory Data Interpretation Group (REDIG). I was responsible for exploring, proposing and evaluating drillable exploratory locations in North and South Cambay basins, based on 2D and 3D seismic data interpretation on SIDIS, LANDMARK, GEOQUEST and CRYSTAL workstations. My responsibilities, as a team leader included extensive day-to-day planning, field surveys, data QC and field monitoring with updated seismic and well-log data, development of databases and consultancy services with projects, drill sites and field parties. We generated 3D Coordinate Information System for 3D seismic surveys in India. I was also responsible for presenting proposals for exploratory drilling locations in the Board Meetings.
- **Successful QI project with analysis of seismic sequences and para-sequences** for interpreting depositional environments of sedimentary clastic sequences of Cambay basin. Seismic facies, log-motiffs, core samples along with dip meter data used for preparing geological models. Structural and strati-structural analysis of 2D and 3D seismic data has been integrated with geological data. Developed field strategies and ensured optimum investment of available resources for commercial exploration and thereby minimizing drilling of dry locations. Applied 3D seismic modeling, depth imaging, cross-hole tomography, amplitude versus offset, seismic inversion, seismic signature analysis tools during interpretation of seismic data for reservoir model development. Wave-let processing used for modeling purposes. Velocity models also prepared and interpreted the anomalous zones.
- During 1983-86, carried out seismic processing work of onshore and offshore data. Processed gravity and magnetic data acquired from Bombay and Andaman offshore fields in the west coast of India. Extensive processing of 2D seismic data carried out in Krishna-Godavari and Cauvery onshore basins in the east coast of India on mainframe computer systems. Completed successfully projects of seismic data acquisition on DFS-5 and GEOCOR-4 with field processing work in the Cambay basin for six field seasons.
- I mentored young geophysicists in the seismic data processing and interpretation techniques in the WRBC asset of ONGC, India.

APRIL - AUGUST 1983: SCIENTIST, Center for Earth Science Studies, Trivandrum INDIA

As a scientist, under UNDP project, I, as part to team of geophysicists, carried out geophysical surveys like induced polarization, electrical resistivity, gravity and magnetic surveys for estimating the depth to the basement, weathered zones and associated problems with placer deposits of gold in the Kerala State of India. Analysis and interpretation of gravity and magnetic survey data, fairly provided the depth to basement and its structural relief. Qualitative data interpretation of I.P and electrical resistivity surveys identified areas of weathered zones of placer gold deposits.

JULY 1982 - MARCH 1983: GEOPHYSICIST, CMPDIL, COAL INDIA LIMITED, INDIA

As a geophysicist, I assisted in processing of CDP reflection and refraction sounding data acquired from coal basins in northern India. During this period, I assisted the Department of Central Mine Planning and Design Institute Limited and carried out gravity, magnetic and electrical resistivity surveys for exploring coal seams and their thickness. Seismic refraction also conducted for estimating coal and sand columns in open cast mines. Mining geophysical methods have been recommended for delineating coal extensions and qualities. Interpreted basement structural relief and its depth by analysis of gravity and magnetic survey data. Calculated sand columns and coal seam thickness by analysis of seismic refraction and electrical resistivity sounding data. Interpreted quality of coal seams by high resolution seismic data acquired by MDS-10 field system.

1977 – 1981: SENIOR RESEARCH ASSISTANT, IIT, Kharagpur, WB, India.

As a senior research assistant, I worked in projects for development of groundwater resources in hard rock areas of West Bengal, India. I, along with other research students, conducted electrical and electromagnetic depth sounding surveys in hard rock areas to establish feasibility and applicability of these techniques in these terrains. Developed relevant computer software in FORTRAN for different layered earth media and computed their responses by simulating various layer conditions. We carried out integrated geophysical surveys in India for exploring Cu, Pb, Zn, coal and gold deposits.

Computed response curves of Dipole Frequency Sounding and Central Frequency Sounding systems used for interpreting field situations quantitatively in West Bengal and Orissa states in India. Interpreted integrated geophysical anomalies and their trends for drillable prospective locales for barites, disseminated sulphides and mica deposits in parts of Andhra Pradesh and Madhya Pradesh States (India). Used mathematical, statistical and numerical techniques for 2D ore modeling studies.

TECHNICAL PUBLICATIONS

Besides, oil & gas exploration & field development work experience in upstream, I have been involved in several research projects and based on this work, the following papers prepared and presented in the national, international conferences and journals:

RECORD OF RESEARCH AND TECHNICAL PUBLICATIONS

1. N.L.Shastrri and H.P.Patra, Computation of type curves for central frequency sounding by means of digital linear filters, *International Journal of Bullittino Geofisica Teorica E Applicata*, Vol.25 (98), 1983, pp.119-130.
2. H. P. Patra and N. L. Shastrri, Some recent observations on the performance of VES data interpretations procedures (*in Association of Exploration Geophysicists Souvenir; Ninth annual convention and seminar on Exploration geophysics*), *Annual Convention and Seminar on Exploration Geophysics*(1983), 9:A5-A6.
3. N.L.Shastrri and H.P.Patra, Relative performances of CFS and DFS over a layered earth, *Journal of PAGEOPH*, Vol.120, 1982, pp.527-537.
4. N.L.Shastrri and H.P.Patra, Theoretical CFS response curves over a generalized three-layer earth, *Journal of PAGEOPH*, Vol.121 Issue: 2, pp. 317-325, 1983.
5. H.P.Patra and N.L.Shastrri, Electromagnetic sensing for groundwater at shallow depths in hard formations, published in the proceedings of international seminar on MIGS, held at Hague, The Netherlands.
6. H.P.Patra and N.L.Shastrri, Electromagnetic depth sounding as an investigating method for groundwater, published in the proceedings of the seminar on 'Hydrological investigations during the last 25 years in India, May 23-24, 1982.
7. H.P.Patra and N.L.Shastrri, Response characteristics of Central Frequency Sounding, *Journal of Bulletin Di Geofisica*, Italy, 1984.
8. H.P.Patra and N.L.Shastrri, Multi-frequency sounding results of laboratory simulated homogeneous and two-layer earth models, *Journal of IEEE Transactions on Geo-science and Remote Sensing*, Vol.26(6) pp.749-752,1988.
9. H.P. Patra, B. Roy, N.L. Shastrri and S.K. Nath, Transient CFS response over a two-layer Earth, *International Journal of Bullittino Geofisica Teorica E Applicata*, an International Journal of Earth Sciences Vol. 37, n.147, September 1995, pp. 207 -218.
10. H.P. Patra and N. L. Shastrri, Transient CFS response over a multilayer earth, A book Chapter Published, in *DEEP ELECTROMEGNETIC EXPLORATION*, Volume 83/1999, 575-584, DOI: 10.1007/BFb0011933; ISBN: 3-540-63503-3TITLE: Deep Electromagnetic Exploration; AUTHOR: Roy, K.K.; Verma, S.K.; Mallick, K. (Eds.).

The following papers have been presented in the national, international conferences, technical forums and journals.

1. N.L.Shastrri and H.P.Patra, Some recent investigations on exploration of groundwater in hard rock and drought prone, 71st Indian science congress held in Ranchi, **India**, January, 1984.
2. N.L.Shastrri and H.P.Patra, Geoexploration strategy applied to coastal hydrology, 72nd Indian science congress held in Lucknow, **India**, January, 1985.
3. N.L.Shastrri, On some merits of high resolution 3D seismic multiplicity by 1024 channel data acquisition and processing systems, Annual convention of AEG and seminar on exploration geophysics, held in Hyderabad, **India**, 1987.
4. N.L.Shastrri, Some studies on 3D field layouts for high resolution seismic data, 13th Annual convention and seminar in Exploration Geophysics of AEG, **India**, 1987.
5. N.L.Shastrri, On high resolution 3D seismic survey for mapping coal for Underground Coal Gasification, 72nd Engineering Br., *ISC*, **India**, January, 1988.

6. N. L. Shastri, New method of analyzing seismic refractions for residual statics by 1024 channel seismic data acquisition system, NGRI Conference, **India**, 1988.
7. N. L. Shastri, Field data processing, an essential quality control approach for expensive 3D seismic data acquisition, NGRI, **India**, 1988.
8. N. L. Shastri, Geo-exploration strategies for converting underground coal into oil, gas and electricity, NGRI Conference, Hyderabad, **India**, 1989.
9. H.P. Patra, and N. L. Shastri, Long Offset Transient Electromagnetic Depth Sounding in the Saurashtra peninsula, Western India, Indo-US Workshop on Deep Electromagnetic Methods, IIT, Kharagpur, 1991, **India**.
10. H. P. Patra, and N.L. Shastri, Transient CFS response over a two-layer earth, 16th General Assembly of European Geophysical Society, Wiesbaden, FRG, **Germany**, 1991.
11. Chakraborty, K. Mubarak, Al. H, Nimmagadda, S.L. and Ray, J. (2006) Exploration Data Integration, an effective reengineering process for new petroleum plays in Gulf Offshore Basins, presented and published in an International Conference of AAPG, held in Perth, **Australia**.
12. Nimmagadda, S.L. Kashambuzi, R. Rubondo, E. and Kasande, R. (2006) Application of Integrated Geophysical Strategies in the Albertine Graben and its Petroleum Potentiality, a poster presented and published in an International Conference of AAPG, held in Perth, **Australia**.
13. Nimmagadda, S. L. Dreher, H. and Chakraborty, K. (2007) Detectability by Electromagnetic Depth Sounding - a data mining tool aiding interpretation of shallow sediments, altered by oil and gas seeps, a paper accepted for oral presentation in the ASEG Meeting, held in Perth, WA, **Australia**, November 2007
14. Chakraborty, K. Al-Hajeri, M and Nimmagadda, S.L, (2007) 3D Seismic Data Attributes Analysis for Predicting Wara reservoir qualities in the Al-Khafji Field, Middle East, a paper presented and published in the proceedings of 3rd North African/Mediterranean Petroleum & Geo-science Conference & Exhibition, Tripoli, **Libya**, February.
15. An integrated project workflow– from conceptual modeling to prospect generation, a paper presented in the Reservoir Symposium 2009 (*Schlumberger, internal*) held in Al-Khobar, **Saudi Arabia**.
16. Exploration of deep gas plays – Awali, Bahrain, a technical paper presented in the Reservoir Symposium, 2009 (*Schlumberger, internal*) held in Al-Khobar, **Saudi Arabia**.
17. Seismic Sequence Mapping Approaches for interpreting and analyzing combinational trapping mechanisms in the Middle-East and North Africa, a technical paper prepared (internal, for in-touch submission)
18. Muhammad Nawaz Bugti, SPE, Schlumberger, Abdul Nabi Mukhtar, SPE, BAPCO Bahrain; William Gaviria, SPE, and Shastri Nimmagadda, SPE, Schlumberger, “Deep Gas Potential of Onshore Bahrain Field”, a Technical Paper, submitted and presented in a SPE conference in Deep Gas Exploration, **Bahrain**.
19. An Integrated Approach to Quantitative Seismic Interpretation of Sucumbio Field, Putumayo Basin, Southern Colombia, *Reservoir Symposium 2011*, LAM, PCE Building, Bogota, **Colombia**
20. Shale gas Opportunities and Fractured Reservoir Characterizations' with a Colombian Case Study, a technical presentation is made in the WGC, Richmond, Houston, **USA** as a part of Lunch & Learn session, July 2011.
21. Colombian Fractured Reservoir Systems, a case study presented as knowledge sharing to the staff of MEDCO Energy, Jakarta, **Indonesia**, 2011.
22. Ontology based data-mining, a technical presentation made to the staff of MEDCO Energy, as knowledge sharing, in MEDCO Energy Building, Jakarta, **Indonesia**, 2011.
23. On Integrated workflows for risk minimizing the exploratory and field development plans and Enhancement of knowledge discovery process from integrated geophysical databases using geo-ontologies – presented in a knowledge sharing session to the staff of MEDCO energy, Jakarta, **Indonesia**, June 2012.
24. A paper presented in a Reservoir Symposium 2012 at ING Geomarket, held in Jakarta, 9th May 2012; an award winner for technical innovation done in the Tarakan basin, **Indonesia**
25. Eladio, L. Nimmagadda, S.L, Rincon Claudio, and Cardona Mora, A. P, A paper entitled “on new insights in the interpretation of complex geological structures in the Colombian onshore basins” presented and published in the *proceedings of EAGE* international conference held in Cartagena, **Colombia** in March 2012.
26. Nimmagadda, S.L, Cardona Mora, A. P, Orlando, J. and Darke, K (2012) On Integrated Quantitative Interpretative Workflows for interpreting structural and combinational traps for risk minimizing the exploratory and field development plans, presented and published in the *Bolivarian Geophysical Symposium*, proceedings, held in Cartagena, **Colombia**, July 2012.

27. Nimmagadda, S.L, Dreher, H, Noventianto. A, Mustofa. A and Fiume. G. (2012) Enhancing the process of knowledge discovery from integrated geophysical databases using geo-ontologies, a paper presented and published in the Indonesian Petroleum Association (IPA) conference, held in Jakarta, **Indonesia**.
28. Nimmagadda, S.L, Dreher, H, Noventianto. A, Mustofa. A and Fiume. G. (2012) On new emerging concepts of Tarakan Sedimentary Basin – a Petroleum Digital Ecosystem (PDE), a paper published in the proceedings of an *International Geological Congress (IGC)* held in Brisbane, **Australia**, August 2012.
29. Nimmagadda, S.L. and Dreher, H. (2006) Ontology-Base Data warehousing and Mining Approaches in Petroleum Industries: in Negro, H.O., Cisaró, S.G., and Xodo, D., (Eds.), *Data Mining with Ontologies: Implementation, Findings and Framework*, a book chapter published in 2007 by Idea Group Inc. <http://www.exa.unicen.edu.au/dmontolo/>
30. Nimmagadda, S. L., and H. V. Dreher. 2008. "Ontology-based data warehousing and mining approaches in petroleum industries." In *Data warehousing and mining: concepts, methodologies, tools and applications*, ed. John Wang, 1901-1925. Hershey, New York and London, UK: Information Science Reference.
31. Shastri L Nimmagadda and Heinz Dreher, (2011) Data warehousing and mining technologies for adaptability in turbulent resources business environments, *Int. J. Business Intelligence and Data Mining*, Vol. 6, No. 2, 2011, p 113-153, **USA**.
32. Nimmagadda, S. L. and Dreher, H (2011) "On new emerging concepts of Petroleum Digital Ecosystem (PDE)", *Journal WIREs Data Mining Knowledge Discovery*, 2012, 2: 457–475 doi: 10.1002/widm.1070.
33. Nimmagadda, S.L and Dreher, H., (2014), Ontology based Multidimensional Data Warehousing and Mining of Heterogeneous Data Sources for managing Carbon Ecosystems, accepted for publication in the international journal of business analytics (*IJBAN*), **USA**, 1(2), Apr. 2014.
34. Nimmagadda, S.L. Rudra, A. and Dreher, H.V. (2014), Integration and Effective Management of Heterogeneous Petroleum Digital Ecosystems Using Big Data Paradigm, presented in a symposium of Professional Petroleum Data Management (PPDM) held in Perth, **Australia** <http://www.pppdm.org/event/view/archived/144>.
35. Nimmagadda S.L. and Dreher, V.H. (2014), Multidimensional Ontology Modelling – a Robust Methodology for Managing Complex and Heterogeneous Petroleum Digital Ecosystems, presented and published in the proceedings of an international conference of IEEE and IEEE Explore, held in Porto Alegre, **Brazil**.
36. Nimmagadda, S L. Rudra, A. and Dreher, H. V. (2014), Managing petroleum digital ecosystems using big-data paradigm, an invited lecture, School of Information Systems, Curtin Business School, Curtin University, WA, Perth, **Australia**.
37. Hanafy, S., Nimmagadda, S., S. Mahmoud, S.E. Hemdan, K. (2014), New insights on interpretation of seismic attributes in the Nile Delta basin for analysing Pliocene Geological Characteristics, Mediterranean Offshore Conference (MOC 2014), **Cairo, Egypt**.
38. Nimmagadda, S. Hanafy, S. Mahmoud, S.E. Hemdan, K. (2015), Multidimensional Petroleum Geontologies for Managing Domain Knowledge of the Nile Delta Sedimentary Basin, East African Petroleum Conference (EAPC 2015), **Kigali, Rwanda**.
39. Nimmagadda, S. and Rudra, A. (2015), New insights on management of unconventional energy resources using Big-data paradigm, East African Petroleum Conference (EAPC 2015), **Kigali, Rwanda**.
40. Nimmagadda, S.L. Rudra, A. and Dreher, H.V. (2015), Big data paradigm in the Petroleum Industries, PPDM Workshop, Perth, **Australia**.
41. Said, H. Nimmagadda, S.L. and Mahmoud, S.E. (2016), Potential Field Data Guided Seismic Forward Modelling of Basement Structures: a Case Study from Offshore Nile Delta Basin, Submitted to ASEG-PESA-AIG, Adelaide, **Australia**.
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