Woong Mo Koo

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Education

2013 - Present **M.S. in Geological Sciences, Sedimentology and Stratigraphy,** The University of Texas at Austin, Jackson School of Geosciences, Austin, Texas, USA
• Advisor: Ronald Steel and Wonsuck Kim

2005 **M.S. in Geophysics**, Korea University, Seoul, Korea
• Dissertation title:
"Paleomagnetic Study for the Cretaceous Laiyang Basin in the Shandong Province, Northeast China: Tectonic Implications for East Asia"
• Advisor: Seong-Jae Doh

2003 **B.S. in Earth and Environmental Science**, Korea University, Seoul, Korea
Minor in Physics

Work Experience

Korea National Oil Corporation

Exploration Geologist Anyang, Korea, Jan 2011-Jul 2013

- Discovered oil in the offshore block in Caspian Sea, Kazakhstan
- Interpreted 2D and 3D seismic and well logs data of blocks in Abu-Dhabi, Iraq, Kazakhstan, Kenya, Korea and Uzbekistan for exploring oil and gas
- Prepared the technical proposal for bidding oil and gas exploration in Abu-Dhabi

Operation Geologist Almaty, Kazakhstan, Apr 2006-Jan 2011

- Discovered oil in the onshore block in Pre-Caspian Basin
- Explored onshore and offshore blocks in Pre-Caspian Basin
- Worked as a geologist in exploration wells drilling sites

Geologist Anyang, Korea, Jan 2004- Apr 2006

- Interpreted 2D seismic and well logs data of blocks in Indonesia, Kazakhstan and Vietnam for exploring oil and gas
- Assisted R&D project in fault seal analysis

Areas of Expertise

A. Operation Geology
Supervising as wellsite geologist of geological work during drilling such as mud logging, wireline logging, VSP, and coring etc

B. Petrophysics
Interpretation of wireline logging data for identifying oil and gas intervals

C. Petroleum Geology
Evaluation of petroleum systems of basins, and estimation of reserves and risks of prospects

D. Seismic Interpretation
Interpretation of potential prospects and leads with seismic and well data

Summary of Work

2012-2013 **Domestic Exploration Team, Korea National Oil Corporation**
- Technical evaluation of blocks for exploring hydrocarbons in the offshore Korea

2011-2012 **E&P Technology Institute, Korea National Oil Corporation**
- Technical evaluation of blocks for exploring hydrocarbons
  - Blocks Aral Sea, Namangan-Tergachi and Chust-Pap (in Uzbekistan)
  - Blocks Zhambyl (Caspian Sea), Alimbai and ADA (in Kazakhstan)
  - Block Sangaw North (in Iraq)
  - Blocks in Kenya and Ethiopia (Rifting basins in East Africa)
- R&D projects on Kurdistan Area
  - Basin Architecture Interpretation of Zagros Basin in Iraq
  - Structural Interpretation and Restoration for Complex Structural Systems

2011-2012 **Project Abu-Dhabi Task force Team, Korea National Oil Corporation**
- Evaluation of discovered structures and upside potential in Abu-Dhabi
- Preparation of a technical proposal for bids to Abu-Dhabi government
- Conclude Exploration Contract with Abu-Dhabi government

2008-2011 **Kazakhstan Branch, Korea National Oil Corporation**
- Quality control acquisition of seismic and gravimagnetometric data, Caspian Sea
- Preparation of G&G services for exploration drilling in Block Zhambyl
- Structural interpretation of structures with seismic data in Block Zhambyl

2006-2008 **Kazakhstan Branch, Korea National Oil Corporation**
- **Oil discovery** in Bashenkol Structure, Block ADA, Kazakhstan
- Evaluation of hydrocarbon potential in Blocks ADA and Egizkara
- Quality control acquisition and processing of seismic data in Block ADA
- Preparation and controlling of G&G services for exploration in Block ADA

• Structural modeling of Bashenkol oil field in Block ADA
• Technical evaluation for hydrocarbon potential in new venture projects
  - Blocks East Zharkamys, Borankol, Tolkyn, Airankol, East Akzhar, Karatube

2004-2006 **E&P Technology Institute, Korea National Oil Corporation**
• Technical evaluation of blocks for exploring hydrocarbons
  - Blocks BM-C-8, BM-C-30, BM-C-32 (Brazil)
  - Block Karamandybas (Kazakhstan)
  - Phukhan Basin (Vietnam)
  - Areas East Java, Kalimantan (Indonesia)
• R&D project on fault seal analysis of Vietnam 11-2

Publication

2003 **Koo, W.**, Doh, S., Park, Y., Kim, W., Oh, C., Zhai, M., Guo, J., Ni, Z., 2003, Paleomagnetic Study for the Cretaceous Laiyang Basin in the Shandong Province, Northeast China: Tectonic Implications for East Asia, *American Geophysical Union*, Abstract #GP41C-0052.

Awards and Scholarships

2013-2015 Korea National Oil Corporation Overseas Study Scholarship
2010 CEO of Korea National Oil Corporation Award for developing Kazakhstan oil field
2003-2004 Government of Korea Scholarship for Master Degree
1997 Republic of Korea Army Field of Expert Prize

Selected Training

2012 Seismic Processing, *Hansung University*
2011 Sequence stratigraphy, *George T Bertram*
2008 Seismic stratigraphy workshop, *John D. Pigott*
2007 Basin analysis workshop, *John D. Pigott*
2005 Integrated petrophysics for reservoir characterization, *Petrophysic LTD*

Software Skill

A. Seismic interpretation software

I have used seismic interpretation software such as Petrel and Kingdom actively since 2004. I can

operate both systems independently for seismic interpretation and geological modeling without major assistance and manuals from producers. I was introduced to UNIX or Linux based systems such as SeisWorks and GeoFrame in early beginning of my job in Korea National Oil Corporation. However, due to not much experience on these systems, I can use them in basic level with manuals.

B. Well logs interpretation software

Interactive Petrophysics is my main well logs interpretation software. I even interpreted daily hydrocarbon saturated intervals with well logs frequently in drilling sites. I can also use PowerLog to interpret well logs in intermediate level with some help from manuals and / or producers.

Language Proficiency

A. Korean

Native proficiency in Korean

B. English

Professional working proficiency in English. I had to work in English at the various sites for exploring hydrocarbons in overseas since 2004. Through these experiences, there are no significant difficulties on communication and discussion by English.

C. Russian

I can speak very basic Russian for surviving in Russian speaking countries.