



## STAFF PROFILE



**Sarah Shi, Ph.D., P.Geo**  
Resource Geologist / Geophysicist

### EDUCATION

- Institute of Geology and Geophysics, Chinese Academy of Sciences, Beijing, China, 2003
  - Ph.D. in Geophysics
- University of Calgary, Calgary, AB, 2009
  - M.Sc. in Geoscience (Multidisciplinary Program of Petroleum, Geophysics and Geology)
- University of Bergen, Bergen, Norway, 2000
  - M.Sc. in Solid Geophysics
- Taiyuan University of Technology, Taiyuan, China, 1997
  - B.Sc. in Geology

### EXPERIENCE SUMMARY

Sarah has gained extensive professional experience in the field of mining, geology, geophysics, geotechnics, oil & gas, and academic research. She has been worked in the mining sector for more than 10 years with hands-on experience in exploration planning and management, core logging and sampling, geomodelling, coal quality evaluation, resource and reserves evaluation, geophysical log interpretation, hydrogeological and water management, underground geological and geotechnical mapping, reclamation and closure planning, as well as experience with mine permit applications, NI 43-101 technical report preparation, database manipulation and management, and management of tailings dam facilities and water treatment facilities.

### **DEPOSIT TYPES**

- Coal
- Gold

### **LANGUAGES**

- English (fluent)
- Chinese (fluent)

### **SOFTWARE & INSTRUMENTATION**

- Minesight
- ArcGIS
- Leapfrog
- Surfer
- Geosoft
- Strater
- CorelDraw
- Adobe
- AutoCAD
- LaModel
- ARMPS
- Slide
- Kingsoft
- Petrel
- Microsoft Office

### **CERTIFICATES**

- British Columbia Mine Supervisor
- WHIMS

### **PROFESSIONAL ASSOCIATIONS**

- APEGA
- APEGBC



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PROJECTS	DETAILS
<b>Coal Exploration (grassroots, in- fill and advanced)</b> <i>BC and AB, Canada</i> Senior Geologist/Project Manager/Resource Geologist 2010-present	<ul style="list-style-type: none"><li>• Prepare exploration permit application;</li><li>• Plan, budget and manage exploration program;</li><li>• Project drillhole locations, total depth and coring depth from geological model;</li><li>• Drilling locations/sites evaluation;</li><li>• Supervise drilling contractors and personnel;</li><li>• Communicate with land owners and first nations;</li><li>• Core logging, photographing and sampling for both coal and rocks;</li><li>• Reclamation of the drillholes and sites;</li><li>• Arrange sample shipping and lab analysis;</li><li>• Manage and manipulate geology database;</li><li>• Geophysical logs interpretation;</li><li>• Evaluate coal quality;</li><li>• Geological and Geotechnical mapping;</li><li>• Generate coal assessment, coal exploration summary, NI43-101 and JORC reports.</li></ul>
<b>Gold (Epithermal) Exploration</b> <i>Colorado, USA</i> Resource Geologist 2019	<ul style="list-style-type: none"><li>• Direct ground magnetic survey;</li><li>• QA/QC magnetic data;</li><li>• Produce magnetic anomaly maps;</li><li>• Generate summary of magnetic survey data analysis.</li></ul>
<b>Reservoir Characterization of Unconventional Oil and Gas</b> <i>Alberta, Canada</i> M.Sc. Candidate 2007-2010	<ul style="list-style-type: none"><li>• Compiled and interpreted available geology, geophysics and reservoir engineering data;</li><li>• Reservoir characterization modeling using Petrel;</li><li>• Geostatistical analysis of depth data from Greenbrier and Devonian Shale Formations;</li><li>• Seismic interpretation from a survey shot in the Arrowhead River area using Kingsoft.</li></ul>
<b>Enhanced Heavy Oil Recovery</b> <i>Alberta, Canada</i> Senior Research Scientist 2006-2009	<ul style="list-style-type: none"><li>• Enhanced heavy oil recovery using solvent and chemical flooding;</li><li>• Characterize core properties and fluid distribution using petrophysics methods;</li><li>• Prepare technical reports and memorandum.</li></ul>
<b>Environmental Magnetism</b> <i>Ontario, Canada</i> Postdoctoral Fellow 2004-2006	<ul style="list-style-type: none"><li>• Magnetic survey through Windsor County;</li><li>• Process, analyze and interpret geophysical data;</li><li>• Present the magnetic study results in technical journal.</li></ul>
<b>Limestone Exploration (advanced)</b> <i>Ontario, Canada</i> Research Associate 2004	<ul style="list-style-type: none"><li>• Non-destructive geophysical exploration using magnetic and Ground Penetrating Radar;</li><li>• Drilled, orientated and collected samples (diameter of 2.5cm);</li><li>• Samples analysis, data compilation and analysis.</li></ul>
<b>Cretaceous Basalt Exploration (grassroots and advanced)</b> <i>Shanxi, China</i> Research Associate 2000-2003	<ul style="list-style-type: none"><li>• Rock magnetic, chronological dating and geodynamic study;</li><li>• Funding proposal preparation;</li><li>• Geological mapping;</li></ul>



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- Geophysical exploration using nondestructive geophysical methods
- Drilled, orientated and sampling;
- Samples data compilation and management;
- Lab analysis arrangement;
- Data processing and analysis;
- Academic papers publication.

### PROFESSIONAL DEVELOPMENT:

DESCRIPTION	TYPE	YEAR
• Leapfrog	Online Training Course	2019
• LaModel	Training Course	2015
• ARMPS	Professional Training	2015
• Slide	Professional Training	2014
• Minesight Geomodelling and database	Training Courses	2010; 2014
• Minesight Planning and Scheduling	Training Courses	2012