

# Job Applications for Review

*For the Vacancy of*

**Geophysicist - Seismologist**

**OSMT**

**ACT**

**Ongoing**

*With Applications included for*

**Arturo Contreras**

**Constanza Manassero**

**Ebrahim Hassan Zadeh**

**Grant Butler**

**Haroon Rasheed**

**Ilya Fomin**

**Lara Weston**

*Requested by Janine Robertson*

*Generated by Aurion*

*Friday, 14 April 2023 11:05*

# Vacancy Summary

Position Number: **18824**

Position Title: **Geophysicist - Seismologist**

Organisation Unit: **OSMT**

Classification: **APS Level 6**

Location: **ACT**

Comments: **2023/932 VN-0721255**

Places Available: **1**

Tenure: **Ongoing**

Package: **\$90,555.00 - \$104,820.00**

Portal Status: **Expired**

Show In Portal From: **27-MAR-2023 00:00**

Show In Portal To: **11-APR-2023 23:59**

Reference: **18824**



## Geophysicist - Seismologist

<b>Salary</b>	(APS6) \$90,555 - \$104,820
<b>Classification level</b>	APS 6
<b>Employment type</b>	Ongoing
<b>Non-ongoing term</b>	
<b>Position number</b>	18824
<b>Division</b>	Minerals, Energy and Groundwater Division
<b>Branch</b>	Mineral Systems
<b>Section</b>	Onshore Seismic and Magenotellurics
<b>APS Jobs Family</b>	Science, Engineering, Technical
<b>Security clearance</b>	Baseline
<b>Location</b>	Symonston, Canberra land of the Ngambri and Ngunawal/Ngunnawal People

Geoscience Australia acknowledges the Traditional Custodians of Country throughout Australia and recognises the continuing connection to lands, waters and communities. We pay our respects to Aboriginal and Torres Strait Islanders Cultures: and to elders past and present.

### About us

Geoscience Australia is Australia's pre-eminent public sector geoscience organisation. We are the nation's trusted advisor on the geology and geography of Australia. We apply science and technology to describe and understand the Earth for the benefit of Australia. We apply our diverse professional expertise, our deep and trusted knowledge, our national-scale Earth observation infrastructure and our strong partnerships, to the opportunities and challenges that face our nation.

### Our culture

Our strength lies in our people, including our diversity in backgrounds, skills and experiences, and the way we work together to respond to the emerging needs of our work. We value diversity in gender, backgrounds, culture, and experiences of our employees and are committed to providing an inclusive workplace culture that ensures everyone has equal opportunity to contribute, participate and progress. Applications from people who reflect this diversity are encouraged.

Our workplace is committed to the health, safety and wellbeing of our employees and offer a variety of flexible working arrangements to enhance flexibility, including remote working arrangements.

### What we can offer you

When you work at Geoscience Australia you will have access to a range of benefits and the opportunity to experience a workplace culture that truly values and promotes diversity, inclusion, equity and belonging. To learn more about our competitive salary, free onsite parking, generous flexible working arrangements and the role you can play in growing our culture [click here](#).

## The role

Geoscience Australia acquires, processes, interprets and delivers geophysical data including active and passive seismic, and magnetotellurics. This work contributes to the organisation's ability to provide high-quality geoscientific information to government, industry and the community, inform decision-making, and builds Australia's resource wealth.

In this role you will support the planning, acquisition, quality control, processing and archiving of large-scale, nationally significant seismic surveys and the management of such activities through geophysical survey contracts. You will work collaboratively with fellow staff, contractors and external stakeholders to achieve work area goals. There will also be opportunities for business and fieldwork related travel

### **In this role you will:**

- Work with a highly specialised team to plan, design, and manage onshore seismic acquisition programs including contract management and stakeholder engagement.
- Provide technical and specialised advice to contractors and stakeholders to ensure data standards are met.
- Undertake QA/QC and signal processing using a variety of techniques.
- Plan, develop and implement software applications to solve complex problems.
- Contribute to documentation and work instructions for key operational activities.
- Contribute advice and technical expertise to geological interpretation of seismic data.
- Promote the work of the organisation to government, industry, academia and the community through publications and at conferences and workshops.
- Manage and archive geophysical data according to best practice and ensure effective and successful delivery to the geoscience community and public.

### **To be successful in the role you will:**

- Have the ability to manage projects and contracts, set priorities display initiative, discretion and sound judgement, communicate technical data to non-technical people, and deliver business goals, often within tight timelines.
- Have the ability and drive to develop specialist skills in acquisition, processing and delivery of seismic data of variable scale, type and vintage using modern applications and software.
- Drive continuous improvement, including work processes and technology.
- Build and sustain positive relationships within a small team, and with project partners, contractors, and other external stakeholders at all levels through effective oral and written communication, and influencing skills.
- Display personal drive and integrity consistent with the APS code of Conduct, including acknowledging and learning from mistakes, and fostering a positive organisational culture.
- Have sound programming experience on high performance computing platforms.

## **Required skills, knowledge, experience and/or qualifications**

- Expertise in geophysics, including some or all of the following - seismic data acquisition, data processing, interpretation, GIS and programming (e.g. Python).

- Highly developed communication, negotiation and collaboration skills.
- Experience in integrating a variety of datasets to understand and develop more accurate geophysical and geological models.
- Ability to undertake field work in remote areas in Australia.
- A commitment to continual learning in the areas of geoscience, stakeholder management, inclusive culture and data management.

### **Are you unsure about applying?**

Did you know that a Hewlett Packard internal report found that men apply for jobs when they meet an average of 60 per cent of the job requirements? Women and other people from diverse backgrounds tend to only apply when they check every box. If you think you have what it takes, but don't necessarily meet every single point on what we are looking for, please still apply or get in touch with the contact officer to learn more about the role.

### **To Apply**

Please visit the [careers page](#) of our website to submit your application via our e-Recruit system. Your application should include:

- Your resume (no more than 3 pages)
- A brief statement (no more than 700 words) outlining your transferable skills, experience and capabilities related to the role and the value you would bring to Geoscience Australia.

If you have any questions regarding the role, please contact Donna Cathro on (02) 6249 9298 or email [Donna.Cathro@gov.au](mailto:Donna.Cathro@gov.au)

To learn more about applying for roles within the Australian Public Services please review, '[Applying for an APS job: cracking the code](#)'.

### **Eligibility**

To be eligible to apply for this position you must meet the below eligibility criteria.

- Be an Australian Citizen at the closing date of application.
- The successful applicant must be able to obtain, hold and maintain a security clearance of an appropriate level relevant to this role.
- Commencement of employment is subject to the successful applicant undergoing and satisfying pre-employment screening, which includes a police history check.

### **Recruitability**

RecruitAbility applies to this vacancy. Under the RecruitAbility scheme you will be invited to participate in further assessment activity for the vacancy if you choose to apply under the scheme; declare you have a disability; and meet the minimum requirements for the position. For more information please visit the [Australian Public Service Commission website](#).

Hearing or speech impaired applicants are invited to use the National Relay Service by contacting 133 677, and requesting to be connected with our Recruitment team on 02 6249 9777 in order to obtain selection documentation.

### **Technical Assistance**

If you require technical assistance, call Human Resources on (02) 6249 9777 or email [hr@gov.au](mailto:hr@gov.au).

A merit list/pool may be created from this process. If you are successful for the merit pool, your details may be shared with other Australian Public Service agencies unless you choose not to have your details disclosed.

# Arturo Contreras - Applicant Summary

Surname: <b>Contreras</b>	Given Names: <b>Arturo</b>
Preferred Name: <b>Arturo</b>	Salutation: <b>Dr</b>
Gender: <b>Male</b>	Age: <b>47.11.25</b>
Phone: <b>0449999169</b>	Mobile: <b>0449999169</b>
Fax:	Email: <b>contrerasaj@msn.com</b>
Address: <b>70 ARCHDALE LOOP</b>	Suburb:
State:	Post Code: <b>6112</b>
Country: <b>Australia</b>	Applicant Type: <b>External</b>
Status: <b>In Progress</b>	Recommendation:
Checklist Stage: <b>Panel Review</b>	Aurion Number:

## Referees:

Title	First Name	Last Name	Job	Employer	Phone
Mrs	Gillian	Harrowfield	Chief Geologist	Woodside	618417093037
Dr	Carlos	Torres-Verdin	Professor	The University of Texas at Austin	+15124713161

## Qualifications/Education:

Completed	Title	Type	Discipline	Institute
03-JAN-2000	Geophysical Engineer	Bachelor Degree	Geophysics- Seismic	
01-MAY-2006	PhD in Geological Sciences	Doctoral Degree	Geology	

# Arturo Contreras References:

Carlos' Profile: [linkedin.com/in/carlos-torres-verdin-9370081a9](https://linkedin.com/in/carlos-torres-verdin-9370081a9)  
Email: [cverdin@gmail.com](mailto:cverdin@gmail.com)



**Carlos Torres-Verdin** · 1st  
Professor at The University of Texas at Austin  
September 14, 2021, Carlos was Arturo's mentor

All LinkedIn members

[cverdin@austin.utexas.edu](mailto:cverdin@austin.utexas.edu)

512-471-3161  
Office Location: CPE 5.182A

On

Dr. Arturo Contreras is an outstanding professional with a very adaptable and flexible mind, always displaying a positive and constructive attitude that allows him to excel in his work projects. I have had the pleasure of working with him on several challenging research projects. He is never deterred by difficulties or hurdles and is willing to run the extra mile to solve them. Arturo communicates very well and is an exceptional team player. He strives to articulate his work with geoscience teams and reservoir/production engineers, adding value wherever is most needed. He has been part of numerous reservoir geophysics projects that maximize the use of pre- and post-stack inversion workflows in the context of rock physics and storage/flow rock properties that are linked to fluid production. Arturo has received several important internal commendations for the impact of his work and is very well appreciated by his peers. He combines intelligence, creativity, and drive to learn, understand, apply, and cooperate in multi-disciplinary teams with excellent communication skills and very high-level work ethics. I strongly and fully endorse his professional, intellectual, and work credentials.

## Fabio's Profile

[linkedin.com/in/fabio-mancini-0bb0066](https://linkedin.com/in/fabio-mancini-0bb0066)

Email

[fabio.mancini@woodside.com.au](mailto:fabio.mancini@woodside.com.au)



**Fabio Mancini** · 1st  
Chief Geophysicist at Woodside Energy  
September 9, 2021, Fabio was senior to Arturo but didn't manage Arturo directly

All LinkedIn members

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I worked with Arturo for almost 10 years at Woodside. Arturo is an extremely skilled Reservoir Geophysicist, his high capability covers a large spectrum, from the underlying rock physics to the details and practice of running 3D pre-stack inversions.

Arturo is one of the fastest and hardest working person I had the pleasure to work with.

His written and oral presentations are always extremely clear and to the point. Hi authored and co-authored several paper published internationally which are a testament to this.

Arturo is a likeable co-worker, always extremely respectful with all his colleagues.

Overall I am confident and happy to recommend Arturo for any position were his skill could help.

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[linkedin.com/in/tony-almond-maicd-8130799](https://linkedin.com/in/tony-almond-maicd-8130799)

Email

[tony.almond@woodside.com.au](mailto:tony.almond@woodside.com.au)



**Tony Almond, MAICD** · 1st  
General Manager Technology at Woodside Energy  
September 21, 2021, Tony managed Arturo directly

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**Gillian Harrowfield** · 1st  
Chief Geologist  
September 9, 2021, Gillian managed Arturo directly  
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**Phone**  
+61 8 41709307 (Mobile)  
**Email**  
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**Paul Spaans** · 1st  
Principal Reservoir Geophysicist ex Woodside Energy  
September 10, 2021, Paul was senior to Arturo but didn't manage Arturo directly  
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**Email**  
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To whom it may concern - This summary relates to the work Arturo Contreras carried out in the period June 2013 to October 2020 when I had the pleasure working with him in Woodside's Seismic Reservoir Characterisation (SRC) team. Arturo worked several Australian and non-Australian marine SRC projects, for both Exploration and Development teams. These projects ranged from linear to non-linear seismic inversion and from 3D post-stack deterministic to 4D geostatistical pre-stack seismic inversion. In these projects Arturo efficiently utilised, next to Petrel (Schlumberger) and RokDoc (Ikon Science), the high end seismic inversion packages Jason Geoscience Workbench (ex-CGG) and Helios (Delft Inversion). In every project Arturo delivered meaningful results to the asset team, impacting drilling decisions. Arturo is a hard-working technical specialist, he goes beyond what is required, he delivers his results within time & budget and he presents his results effectively. Arturo would be an asset to every company where he would be able to do similar technical work. I have no reservations in recommending him. - Paul Spaans, Principal Reservoir Geophysicist ex Woodside



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Geophysics Adviser, retired from Woodside Energy Ltd Feb 2021, now doing occasional consultancy.  
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I have worked with Arturo over several years (up to Feb 2021) in Woodside Energy, as a Geophysics Adviser to his projects, and as both informal reviewer and assurance team member for project work to which he was a major contributor. It was always a pleasure to work with Arturo, and I found that he approached each project with diligence, commitment, an impressive degree of technical ability, plus frequent innovation. He could be relied upon to do quality work even in a tight time frame, and would often give us all a pleasant surprise with the quality of the results he obtained. He communicated his results very clearly, and conveyed a good appreciation of their significance in terms of the project and wider business context. He was a valued member of each study team, collaborating well with colleagues.



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Senior Geophysicist at Woodside Energy  
February 8, 2022, Ben worked with Arturo but on different teams  
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4752



UNIVERSIDAD CENTRAL DE VENEZUELA  
SECRETARIA  
CARACAS



CERTIFICACIÓN

Quien suscribe, OCARINA CASTILLO D'IMPERIO titular de la cédula de identidad No. 3.187.459, Secretaria de la Universidad Central de Venezuela de conformidad con el Artículo 40 ordinal 4o. de la Ley de Universidades vigente certifica que el(a) Ciudadano(a): CONTRERAS S ARTURO J, portador(a) de la cédula de identidad No.11093973; egresó de la Universidad Central de Venezuela en fecha 21/01/2000, con el título de INGENIERO GEOFISICO, Escuela de Geología, Minas y Geofísica y obtuvo un promedio ponderado de calificaciones de 13,0323 puntos; un promedio ponderado de materias aprobadas de 14,8915 puntos; con eficiencia de 0,8548.

Se certifica que el promedio ponderado de calificaciones de la respectiva promoción fue de 12,6133 puntos y el mencionado graduando ocupó el puesto 3 entre 5.

El número total de graduandos INGENIEROS GEOFISICOS egresados el día 21/01/2000 fue de 6, de los cuales 5 cursaron sus estudios ininterrumpidamente en esta institución.

El promedio ponderado y puesto de promoción toma en cuenta únicamente el número de graduandos que cursaron todos sus estudios ininterrumpidamente en esta institución.

Se expide la presente certificación, a petición de parte interesada en Caracas, a los siete días del mes de junio de dos mil.

OLR.

Ocarina Castillo

Secretaria General de la UCV

I certify this to be a true copy of the original document sighted by me today.

Postal Manager Harrisdale WA 6112  
SHARAN GILL

TEL 131318



TRANSLATION

I, Terrell Paul Robinson, the undersigned, holder of Venezuelan Identification Card No. E-695467, a certified Public Translator in and for the Republic of Venezuela in the English language, as evidenced by the License published in Official Gazette of the Republic of Venezuela No. 29763, dated March 21, 1972, subsequently registered at the Hall of Records of the Federal District, under No. 16, folio 8, of the Sole Official Record, and at the First Court of Common Pleas of the Judicial District of the Federal District and the State of Miranda, Caracas, Venezuela, on April 12, 1972, do hereby certify that the following is a verbatim translation into English of the attached document which I have been asked to translate:

CENTRAL UNIVERSITY OF VENEZUELA

OFFICE OF THE SECRETARY

CARACAS

CERTIFICATE

The undersigned, OCARINA CASTILLO D'IMPERIO, bearer of ID No. 3.187.459, Secretary of the Central University of Venezuela, pursuant to Article 40, ordinal 4 of the current Law of Universities, certifies that citizen CONTRERAS S., ARTURO J., bearer of ID No. 11093973, graduated from the Central University of Venezuela on 1-21-2000, with the diploma of GEOPHYSICAL ENGINEER, School of Geology, Mines and Geophysics, and obtained a weighted GPA of 13.0323; a weighted GPA of courses passed of 14.8915; with an efficiency index of 0.8548.

It is certified that the weighted GPA of the respective graduating class was 12.6133, and that the mentioned graduate ranked 3<sup>rd</sup> in a group of 5.

A total of 6 persons graduated as GEOPHYSICAL ENGINEERS on 1-21-2000, of whom 5 were enrolled without interruption in this institution.

The weighted GPA and rank in the graduating class take into account only the number of graduates who were enrolled without interruption in this institution.

This certificate is issued at the request of the interested party in Caracas, on June seventh, Two thousand. (signed) Ocarina Castillo D., Secretary General of the UCV.

I certify this to be a true copy of the original document sighted by me today.

Postal Manager Harrisdale WA 6112  
SHABAN GILL

TEL 13 13 18



Republic of Venezuela. Central University. Office of the Rector. Caracas, June 9, 2000. 190<sup>th</sup> and 141<sup>st</sup> years. Trino Alcides Díaz, Rector of the Central University of Venezuela, certifies that the foregoing signature is that of Ocarina Castillo D'Imperio, who at the current time is Secretary of this Institute. (signed) Trino Alcides Díaz.

PUBLICO  
VENEZUELA  
OBINSON B.  
IDIOMAS

A BOLIVARIAN REPUBLIC OF VENEZUELA. MINISTRY OF EDUCATION, CULTURE AND SPORTS. Caracas, July 13, 2000. 190<sup>th</sup> and 141<sup>st</sup> years. The foregoing signature of Dr. Trino Alcides Díaz, at the time that this document was granted, Rector of the Central University of Venezuela, is legalized without attesting to any other matter of form or substance. (signed) Marcelino Antonio Alcalá, Adjunct Legal Consultant.

#### APOSTILLE

Convention of The Hague of October 5, 1961

1. Country: Venezuela
- This public document
2. has been signed by Marcelino A. Alcalá
3. acting in his capacity as Legal Consultant
4. bears the seal/stamp of Ministry of Education

Certified

5. In Caracas
6. July 21, 2001
7. By DGRC
8. No. 033078
9. Seal/stamp: Ministry of Foreign Affairs
10. Signature: Yumiko Ywazaki de Pereira, Minister Counselor."

This is a faithful translation of the attached original, written in Spanish, which I have made at the request of the interested party, *in witness whereof I hereunto set my hand and affix my seal,* in Caracas, this 3<sup>rd</sup> day of August of 2000.



Terrell Paul Robinson, Certified Public Translator

I certify this to be a true copy of the original document sighted by me today.

Postal Manager Harrisdale WA 6112  
SHARAN GILL

TEL 13 13 18

15/12/22



## OVERSEAS QUALIFICATION ASSESSMENT ADVICE

Ref: OQU-1222-13204

**Name:** Arturo Javier Contreras Santos  
**Qualification:** Diploma of Geophysical Engineer  
**Years of study:** 8.0  
**Mode of study:** Part Time  
**Institution** Central University of Venezuela  
**Year of issue:** 2000  
**Country:** Venezuela

### ASSESSMENT ADVICE

As referenced by the Australian Government Department of Education, Skills and Employment (DESE) Country Education Profile assessment guidelines for Venezuela, the Diploma of Geophysical Engineer is assessed as ***comparable to the educational level of an Australian Bachelor Degree.***

#### Important Notes:

- This assessment is issued on the basis of certified copies of the originals. This assessment does not constitute an endorsement of the authenticity of the documents presented.*

Travis Cacciola  
Manager  
Overseas Qualifications Unit

19 December 2022

*This assessment is a guide to the comparability of the educational level of the overseas qualifications in Australian terms. Acceptability for employment, membership of a professional body, occupational registration or further study purposes is a matter for the respective authorities in Australia to determine. This assessment advice may assist in this regard.*

**Overseas Qualifications Unit**

1 Prospect Place, West Perth, Western Australia, 6005  
Telephone: +61 8 9224 6540 | Email: [oqu@dtwd.wa.gov.au](mailto:oqu@dtwd.wa.gov.au)  
Web: [migration.wa.gov.au](http://migration.wa.gov.au)



## OVERSEAS QUALIFICATION ASSESSMENT ADVICE

Ref: OQU-1222-13204

**Name:** Arturo Javier Contreras Santos  
**Qualification:** Doctor of Philosophy  
**Years of study:** 5.0  
**Mode of study:** Full Time  
**Institution** The University of Texas at Austin  
**Year of issue:** 2006  
**Country:** United States of America

### ASSESSMENT ADVICE

As referenced by the Australian Government Department of Education, Skills and Employment (DESE) Country Education Profile assessment guidelines for United States of America, the Doctor of Philosophy is assessed as ***comparable to the educational level of an Australian Doctoral Degree.***

### Important Notes:

- This assessment is issued on the basis of certified copies of the originals. This assessment does not constitute an endorsement of the authenticity of the documents presented.*

Travis Cacciola  
Manager  
Overseas Qualifications Unit

19 December 2022

*This assessment is a guide to the comparability of the educational level of the overseas qualifications in Australian terms. Acceptability for employment, membership of a professional body, occupational registration or further study purposes is a matter for the respective authorities in Australia to determine. This assessment advice may assist in this regard.*

**Overseas Qualifications Unit**

1 Prospect Place, West Perth, Western Australia, 6005  
Telephone: +61 8 9224 6540 | Email: [oqu@dtwd.wa.gov.au](mailto:oqu@dtwd.wa.gov.au)  
Web: [migration.wa.gov.au](http://migration.wa.gov.au)



# ARTURO CONTRERAS

Senior Geophysicist | PhD in Geological Sciences | Geophysical Engineer

## CONTACT

- 0449 999 169  
 [gi.geophysics@gmail.com](mailto:gi.geophysics@gmail.com)  
 Perth WA 6000 Australia  
 [linkedin.com/in/arturocontreras](https://linkedin.com/in/arturocontreras)

## EXPERTISE

- Reservoir Geophysics  
AVA/AVO Deterministic and Stochastic Seismic Inversion  
Quantitative Interpretations  
Integrated Reservoir Characterization  
Geoscience Integration  
2D/3D/4D Seismic Interpretation  
Sequence Stratigraphy  
Seismic Well Ties  
AVO Analysis  
WEB-AVO Inversion  
Depth Conversion  
Quality Assurance  
Rock Physics

## SKILLS

- Analytical Thinking  
Influence & Negotiation  
Problem Solving  
Interpersonal Communication  
Written Communication  
Research Design  
Project Management  
Stakeholder Engagement  
Continuous Improvement  
Public Speaking  
Regulatory Compliance

## PROFESSIONAL PROFILE

An accomplished Senior Geophysicist with over 15 years of experience across a diverse range of roles both in Australia and overseas. Demonstrates exceptional technical capability underpinned by strong geophysical fundamentals and professional experience. Has been published in highly regarded academic journals and has even secured a patent for developing a novel research technique. Passionate about extracting Geologic Information and Reservoir properties from Seismic data. Collaborates effectively as part of a team but also works well independently. Develops and maintains strong professional relationships with clients, colleagues, and stakeholders. Thrives in dynamic environments and handles competing priorities with ease. A keen analytical thinker who develops innovative solutions to complex geologic/geophysical problems. Currently open to new opportunities in a Geophysicist - Seismologist role.

## CAREER HIGHLIGHTS & ACHIEVEMENTS

- Led an advanced Quantitative Interpretation (QI) project for **Woodside Energy** on the characterisation of fluvio-deltaic gas reservoirs throughout AVA deterministic, stochastic and wave-equation-based seismic inversion from the Carnarvon Basin in Western Australia that later led to an oral presentation at the 2019 SEG Conference and an extended publication in *The Leading Edge* in February 2020.
- Coordinated the 4D interpretation of the Brunello Field from 4D feasibility studies using iLoop software, detecting water ingress and gas expansion anomalies from wave-equation-based AVO inversion products at **Woodside Energy**.
- Conducted rock physics analysis for 20 wells using RokDoc software, then used RokDoc for Low Frequency Modelling through integrating well-log data and seismic velocities, and performed 1D, 2D, and 3D Wave-Equation based (WEB) AVO seismic inversions at **Delft Inversion**.
- Appointed as a permanent member of the **Woodside Energy** Virtual QI team, as well as the Integrated Reservoir Characterization/Seismic Inversion Subject Matter Advisor (SMA) for three years.
- Developed a technique based on Acoustic Impedance Pseudo logs to improve the stratigraphic correlation between sedimentary basins in a structurally complex setting of deep-water Nigeria whilst at **Chevron**, which was ultimately patented (patent issuer and number US #7925442B2 issued 14/10/2008).
- Held a critical role as a Development Geophysicist for the Gorgon Field at **Chevron**, one of the world's largest LNG projects and the single largest resource project in Australia's history.
- Presented PhD research findings at major international conferences of notable Geophysical Organisations including the Society of Exploration Geophysicists, the European Association of Geophysicists and Engineers and the American Association of Petroleum Geologists whilst studying at the **University of Texas**.
- Received **Woodside Recognition Awards** for "Reward and Recognition of Special Efforts" in 2016, 2017 and 2021.
- Received the **PhD Academic Award: Member of the Honour Society of Phi Kappa Phi** at the University of Texas in April 2002.

## IT SKILLS

Landmark/OpenWorks  
RokDoc  
Jason Geoscience  
Hampson-Russell  
Helios  
Petrel  
DUG-Insight  
iLoop  
Python

## EDUCATION

### DOCTOR OF PHILOSOPHY – GEOLOGICAL SCIENCES

The University of Texas  
2006

#### Geological Courses:

Sequence Stratigraphy,  
Depositional Systems: Terrigen  
Clast, Reservoir Geology an  
Advanced Recovery, Modern  
Geological Sciences,  
Sedimentary Basins Analysis.

#### Geophysical Courses:

Introduction to Geostatistics,  
Seismic Lithology and  
Exploration Geophysics,  
Introduction to Petroleum  
Workstations.

#### Petrophysical Courses:

Fundamentals of Well Logging,  
Advanced Well Logging and  
Correlation, Forward/Inverse  
Problems Well Log.

#### PhD Dissertation:

"Spatial delineation, fluid-lithology characterization, and petrophysical modeling of deepwater Gulf of Mexico reservoirs through joint AVA deterministic and stochastic inversion of 3D partially-stacked seismic amplitude data and well logs"

(Worked as Teaching Assistant  
of Fundamentals of Well-  
Logging)

## PROFESSIONAL EXPERIENCE

### QI GEOPHYSICS CONSULTANT

Delft Inversion / Oct 2021 – May 2022

#### Core Responsibilities:

- Provide expert geophysical advice and modelling as part of a range of high-profile projects.
- Undertake rock physics analysis using techniques such as elastic properties generation, x-plot analysis, facies definition, fluid substitution, AVO synthetic gather modelling and depth trend analysis.
- Conduct low-frequency modelling using the integration of well-log data and seismic velocities in RokDoc.
- Utilize the Helios Platform and DUG Insight to develop visualization as part of seismic modelling and inversion activities.
- Demonstrate an advanced understanding and capability in linear and elastic synthetic gather modelling, deterministic and statistical wavelet extraction and 1D-2D-3D wave extraction-based AVO seismic inversion.
- Generate compressibility and shear compliance volumes for operators and clients, as well as fluid and lithologic discrimination of fluvio-deltaic gas reservoirs.

### SENIOR GEOPHYSICIST

Woodside Energy / Jun 2013 – Jul 2021

#### Core Responsibilities:

- Held a critical role in the development and execution of advanced QI projects for the development of gas fields including Pluto Field, Perseus Field, Wilcox Field, Julimar Field and Brunello Field.
- Completed 4D interpretations of the Brunello field using WEB-AVO inversion projects.
- Detected water ingress and gas expansion anomalies, including 4D feasibility studies of multiple assets using iLoop software.
- Delivered advanced reservoir characterization studies integrating pre-stack and post-stack deterministic, geostatistical, and wave-equation-based seismic inversion.
- Facilitated exploration efforts and prospect generation through the integration of geological and geophysical interpretation techniques using Petrel, Paeleoscan and GeoX.
- Delivered expert advice on seismic inversion and quantitative interpretation as required.

### GEOPHYSICIST

Chevron / Jun 2006 – May 2013

#### Core Responsibilities:

- Developed improved stratigraphic correlation between sedimentary basins through the innovation of a novel technique based on acoustic impedance pseudo-logs.
- Conducted a project on seismic and well data integration through deterministic and stochastic modelling of the Wafra Maastrichtian reservoir in the Partitioned Neutral Zone (PNZ), Saudi Arabia and Kuwait. Presented the results at the OGEP inaugural meeting in Riyadh, Saudi Arabia.
- Collaborated with the Chevron Review Team to support the Australasia Deepwater GAS Business Unit by conducting RPFS and seismic attributes analysis of multiple data sets.
- Prepared forward modelling of synthetic pre-stack seismic data from well-log data for reservoir properties assessment.
- Appointed as the Development Geophysicist for the Gorgon Field.

## EDUCATION (CONT.)

### BACHELOR OF SCIENCE – GEOPHYSICAL ENGINEERING

Universidad Central de  
Venezuela  
**2000**

**Geological Courses:**  
Physical Geology, Structural  
Geology, Petroleum Geology I,  
Mineralogy and Petrology,  
Introduction to Field Geology,  
Stratigraphy and Sedimentation,  
Topics in Petroleum I, Mining  
economics and legislation

**Geophysical Courses:**  
Introduction to Geophysics,  
Electrical Methods, Seismic  
Methods, Gravimetric and  
Magnetic Methods, Field  
Geophysics, Seismic  
Interpretation, Seismic  
Processing, Geoseismic  
Investigation, Seismology,  
Applied Petrophysics

### PROJECT MANAGEMENT CERTIFICATIONS

**Agile Project Leadership**  
Project Management Institute  
**July 2022**

**Scrum: Advanced**  
Project Management Institute  
**July 2022**

**Characteristics of a Great  
Scrum Master**  
LinkedIn Learning  
**July 2022**

**Cert. Prep: Scrum Master**  
Project Management Institute  
**July 2022**

**Cert. Prep: PMI Agile Certified  
Practitioner (PMI-ACP)**  
Project Management Institute  
**July 2022**

### GRADUATE RESEARCH ASSISTANT

University of Texas / Jan 2002 – May 2006

#### **Core Responsibilities:**

- Conducted petrophysical analysis, 3D reservoir modelling 3D post-and-pre-stack deterministic seismic inversion, and 3D post-and-pre-stack stochastic inversion.
- Prepared and presented research findings and major international conferences for highly regarded geophysical organizations.
- Produced high-level written material for publication in scientific geophysical journals.

### SELECTED PUBLICATIONS

- **Contreras A.**, A. Gerhardt, P. Spaans, and M. Docherty, 2020, “Characterization of fluvio-deltaic gas reservoirs through AVA deterministic, stochastic, and wave-equation-based seismic inversion: A case study from the Carnarvon basin, Western Australia”. *The Leading Edge*, vol. 39, p. 92–101.
- **Contreras A.**, and R. Latimer, 2010, “Acoustic impedance as a sequence stratigraphic tool in structurally complex deepwater settings”. *The Leading Edge*, vol. 29, p. 1072-1082.
- **Contreras A.**, R. Latimer, X. Li, S. Griest, and S. Meddaugh, 2008, “Deterministic and geostatistical inversion of 3d seismic data and well-logs: applications to carbonate reservoirs, partitioned neutral zone (PNZ), Saudi Arabia and Kuwait”. OGEP inaugural meeting, Riyadh, Saudi Arabia.
- **Contreras A.**, C. Torres-Verdin, and T. Fasnacht, 2007, “Sensitivity analysis of data-related factors controlling ava simultaneous inversion of partially stacked seismic amplitude data: application to deepwater hydrocarbon reservoirs in the central Gulf of Mexico”. *Geophysics*, vol. 72, no. 1; p. c19–c29.
- **Contreras A.**, C. Torres-Verdin, W. Fisher, and W. Galloway, 2007, “Geomorphologic delineation of deepwater hydrocarbon reservoirs with pre-stack seismic inversion”. AAPG annual meeting, Long Beach, California, USA.
- **Contreras A.**, C. Torres-Verdin, W. Chesters, K. Kvien, and T. Fasnacht, 2006, “Extrapolation of flow units away from wells with 3d pre-stack seismic amplitude data: field example”. *Petrophysics*, vol. 47, no. 3; p. e41–e48.
- **Contreras A.**, C. Torres-Verdin, and T. Fasnacht, 2006, “AVA simultaneous inversion of partially stacked seismic amplitude data for the spatial delineation of lithology and fluid units of deepwater hydrocarbon reservoirs in the central Gulf of Mexico”. *Geophysics*, vol. 71, no. 4; p. e41–e48.
- **Contreras A.**, C. Torres-Verdin, and W. Galloway, 2005, “Amplitude versus angle (ava) simultaneous inversion of 3d partially stacked seismic data for reservoir delineation and lithology/fluid characterization in a deepwater Gulf-of-Mexico hydrocarbon reservoir”. AAPG international meeting, Paris, France.
- **Contreras A.**, C. Torres-Verdin, W. Chesters, K. Kvien, and T. Fasnacht, 2005, “Joint stochastic inversion of petrophysical logs and 3d pre-stack seismic data to assess the spatial continuity of fluid units away from wells: application to a Gulf of Mexico deepwater hydrocarbon reservoir”. SPWLA 46th annual logging symposium, New Orleans, Louisiana, USA.
- **Contreras A.** and C. Torres-Verdin, 2004 “AVA sensitivity analysis and pre-stack seismic inversion to delineate a mixed carbonate-siliciclastic reservoir in the Barinas-Apure basin, Venezuela”. SEG international exposition and 74th annual meeting, Denver, Colorado, USA.

# Constanza Manassero - Applicant Summary

Surname: <b>Manassero</b>	Given Names: <b>Maria Constanza</b>
Preferred Name: <b>Constanza</b>	Salutation: <b>Dr</b>
Gender: <b>Female</b>	Age: <b>34.11.28</b>
Phone:	Mobile: <b>0477300674</b>
Fax:	Email: <b>constanzamanassero@gmail.com</b>
Address: <b>2/1 Brown road</b>	Suburb: <b>Maroubra South</b>
State: <b>NSW</b>	Post Code: <b>2035</b>
Country: <b>Australia</b>	Applicant Type: <b>External</b>
Status: <b>In Progress</b>	Recommendation:
Checklist Stage: <b>Panel Review</b>	Aurion Number:

## Referees:

Title	First Name	Last Name	Job	Employer	Phone
Dr.	Juan Carlos	Afonso	ASSOCIATE PROFESSOR	University of Twente	+31534896424
Dr.	Karol	Czarnota	Senior Science Advisor	Geoscience Australia	0429537769

## Qualifications/Education:

Completed	Title	Type	Discipline	Institute
	see details	Masters Degree	Geophysics- Seismic	
01-APR-2020	See details	Doctoral Degree	Geophysics- Potential Fie	Macquarie University



## Dr. María Constanza Manassero

Geophysicist –

**Expertise: 3D Inversions of  
Magnetotelluric and Seismic Data**

Australian Citizen

Email [constanzamanassero@gmail.com](mailto:constanzamanassero@gmail.com)

Phone (+61) 0477300674

LinkedIn [linkedin.com/in/constanzamanassero/](https://linkedin.com/in/constanzamanassero/)

Address 1 Brown Road, Maroubra  
NSW, 2035, Australia

### CAREER SUMMARY

Dr. Manassero is a highly skilled geophysicist with a PhD in Geophysics from Macquarie University, Australia, awarded in April 2020. Her research project focused on developing novel methodologies to study the deep lithospheric structure and map mineral deposits and energy sources within Australia. Dr. Manassero's expertise lies in computational and theoretical geophysics, and she is also interested in developing skills in geophysical data acquisition, processing, and delivery. Her most prominent work is in joint inversion of MT data with other geophysical observables, such as seismic and gravity data, which provides essential information for imaging the complex lithospheric structure. Dr. Manassero has developed and programmed an innovative methodology for joint probabilistic inversion of 3D MT and seismic data, which has opened up new opportunities for understanding the Earth's interior. This inversion framework was applied for joint probabilistic inversions using the MT data from AusLAMP and seismic data in NSW and VIC as part of an ARC Linkage Grant with UNSW, Geoscience Australia, and several Australian Geological Surveys. The results of her work are a valuable asset for advancing the fields of energy and mining technology. Dr. Manassero is eager to expand her skill set and continue making important contributions to the geophysics field.

### KEY SKILLS

Magnetotellurics, Seismics & Gravity	Geophysical Inversion	Programming (Fortran, Python, Matlab, Octave)	Data interpretation
Lithospheric structure	Numerical approximations	Linux	GIS & GMT

### RELEVANT EXPERIENCE

**Geophysicist– Fender Geophysics** | Jan 2023- present | On a casual basis, assisting with data processing of Induced Polarization, Magnetotellurics, CSAMT, and magnetics.

**Post-Doctoral Research Scientist in Geophysics – Macquarie University (MQ)** | Oct 2019 –Jan 2023 | Sydney, Australia  
Main research area: Joint Probabilistic Inversion of 3D Magnetotelluric (MT) data with other observables (e.g., seismic, gravity).

- Joint probabilistic inversion using seismic data and the MT data from AusLAMP initiative to image the lithosphere beneath Australia and helping to identify potential mineral and energy resources at a national scale.
- Working as part of a multi-disciplinary and international team including geologists from MQ and GNS, petrologists from University of Manchester and geodynamicist from University of Twente.
- Leading the MQ node of an Australian Research Council (ARC) Linkage project (Grant LP170100233) with UNSW, Geoscience Australia and several Australian Geological Surveys.
- Part of collaboration projects with researchers from the Barcelona Supercomputing Center, Universidad Complutense de Madrid, Universidad Politecnica de Cataluña, National University of La Plata, and University of Twente.

**PhD in Geophysics– Macquarie University** | Aug 2016 - Aug 2019- Conferral April 2020 | Sydney, Australia

- Thesis title: “A Reduced Order Approach for Probabilistic Inversions of 3D Magnetotelluric Data”
- Awarded with International Macquarie University Research Excellence Scholarship (iMQRES)

### **Key achievements:**

- Developed a novel and efficient RB+MCMC algorithm that combines Reduced Basis methods, finite element solutions and MCMC strategies to reduce computational times and be able to include 3D MT data into joint probabilistic inversions.
- Designed an efficient parallel-in-parallel structure to combine 3D MT forward computations by frequency with our RB+MCMC algorithm.
- Developed an innovative general framework to include 3D MT data into probabilistic joint inversions for imaging the lithospheric structure of the Earth and mapping potential mineral deposits and energy sources.
- Performed the first joint inversion of 3D MT data and surface-wave dispersion data within a fully probabilistic framework.
- Include gravity data into a 1D joint probabilistic framework (LitMod, Afonso et al, 2013)

## **TEACHING EXPERIENCE**

Dr. Manassero has over 10 years of teaching experience in Geophysics, Mathematics and Engineering at University of La Plata, Argentina and Macquarie University, Australia. The most relevant are:

- **Teaching Assistant – Macquarie University** | June 2022- present | Sydney, Australia  
Assistant at 'Engineering Design' class, Macquarie University.
- **Teaching Assistant – National University of La Plata** | Dec 2011-Jun 2016 | La Plata, Argentina  
Teaching assistant Position in 'Geomatics and Geographic Information System (GIS)', awarded on merits.
- **Teaching Assistant – National University of La Plata** | Oct 2012-Jun 2016 | La Plata, Argentina  
Teaching assistant position in 'Mathematical Analysis', Macquarie University.

## **MAIN EDUCATION & COURSES**

**PhD in Geophysics** | Macquarie University | Aug 2016 - April 2020 | Sydney, Australia

- Thesis title: "A Reduced Order Approach for Probabilistic Inversions of 3D Magnetotelluric Data"

**Geophysicist** | National University of La Plata, Argentina - 2015

- Master - Equivalent Degree.
- Thesis title: "Seismic Attenuation around Peteroa Volcano-Central Andes"

**Seismic and Electromagnetic Interferometry for Imaging and Monitoring of the Subsurface** | Sept 2014 | National University of La Plata

- Dr. Deyan Draganov, Delft University of Technology, The Netherlands
- 15 hours postgraduate course attended.

**Borehole Seismic** | Aug 2013-Dec 2013 | National University of La Plata

- Dr. Eduardo Corti. Faculty of Astronomical Sciences and Geophysics La Plata
- 40 hours undergraduate seminar.

**Hydrogeophysical Methods for Environmental Studies** | June 2013 | National University of La Plata

- Dr. Damien Jougnot, University of Lausanne, Switzerland
- 30 hours postgraduate course

**XIV Giambiagi Winter School “Applied and Environmental Geophysics”** | July 2012 | University of Buenos Aires

- 30 hours postgraduate course

**Seismic Waves Propagation. Theory and Numeric Simulation** | May 2012 | University of Buenos Aires

- Dr. Jose Carcione. ONDAS YPF-UNLP, Buenos Aires (Argentina)
- 21 hours course.

## MAIN AWARDS

- **Macquarie University International Research Excellence Scholarship (iMQRES)** | 2016-2019 | Sydney, Australia. Recognition of academic achievement
- **Training fellowship from the Committee for Scientific Research of Buenos Aires Province (CIC)** | 2013-2015 | Argentina National scholarship. Awarded to develop the degree thesis project, due to the excellent academic performance.

## MAIN PUBLICATIONS

- Manassero, M.C., Özaydin S., Afonso J.C., Shea J.J., Kirkby A., Ezad I., Thiel S., Fomin I., and Czarnota K. "Lithospheric structure and melting processes in southeast Australia: new constraints from joint probabilistic inversions of 3D magnetotelluric and seismic data" *Journal of Geophysical Research: Solid Earth* (Accepted- in review).
- Elías, Matías W., Fabio I. Zyserman, Marina Rosas-Carbajal, and María Constanza Manassero. "Three-dimensional modelling of controlled source electro-magnetic surveys using non-conforming finite element methods." *Geophysical Journal International* 229, no. 2 (2022): 1133-1151.
- Manassero, María Constanza, Juan Carlos Afonso, Fabio Zyserman, Alan Jones, Sergio Zlotnik, and Ilya Fomin. "A Reduced Order Approach for Probabilistic Inversions of 3D Magnetotelluric Data II: Joint Inversion of MT and Surface-Wave Data." *Journal of Geophysical Research: Solid Earth* 126, no. 12 (2021): e2021JB021962.
- Manassero, María Constanza, Juan Carlos Afonso, Fabio Zyserman, Sergio Zlotnik, and Ilya Fomin. "A Reduced Order Approach for Probabilistic Inversions of 3D Magnetotelluric Data I: General Formulation." *Geophysical Journal International* 223.3 (2020): 1837-1863.
- Casas, J. A., D. Draganov, G. A. Badi, M.C. Manassero, VH Olivera Craig, L. Franco Marín, M. Gómez, and E. Ruigrok. "Seismic interferometry applied to local fracture seismicity recorded at Planchón-Peteroa Volcanic Complex, Argentina-Chile." *Journal of South American Earth Sciences* 92 (2019): 134-144.
- Manassero, M.C., G.A. Badi, J.A. Casas, M. Gomez, D. Draganov, J. Ruzzante, 2014. Seismic attenuation around Peteroa volcano, Argentina In Proceedings of the "Third Latin-American Congress of Seismology". Bogotá, Colombia. July 23 – 25, 2014. Earth Sciences Research Journal, Earth Sci. Res. J. Vol 18 Special Issue (July 2014), pp 341-342. ISSN 1794-6190
- Manassero, M.C, V. Graffigna, M. Gende, GIS to teach Earth Sciences. CIENCIA HOY (Science magazine). Vol. 20 20- # 118August- September 2010. ISSN 1666 1666-5171.

## MAIN PRESENTATIONS IN CONFERENCES AND INVITED SEMINARS

Dr. Manassero has delivered several seminars at universities and geoscience organizations and given multiple talks in national and international conferences.

- ASEG FedEx webinar: Including 3D Magnetotelluric Data into Joint Probabilistic Inversions for Imaging the Deep Earth | 27<sup>th</sup> September 2022. **Invited speaker/seminar**
- Maria Constanza Manassero, Sinan Özaydin, Juan Carlos Afonso, Joshua Shea, Alison Kirkby, Ilya Fomin, Karol Czarnota, Alan Jones and Stephan Thiel, " Joint Probabilistic Inversion of 3D Magnetotelluric and Seismic Data in Southeast Australia." | Electromagnetic Induction Workshop (EMIW) 2022, Turkey. September 2022. **Oral presentation**.
- Geoscience Australia webinar: Joint Probabilistic Inversion of 3D Magnetotelluric and Seismic Data in Southeast Australia. | 21<sup>st</sup> June 2022. **Invited speaker/seminar**.
- Maria Constanza Manassero, Juan Carlos Afonso, Alison Kirkby, Alan Jones, Ilya Fomin, and Karol Czarnota" Joint Probabilistic Inversion of 3D Magnetotelluric and Seismic Data in Southeast Australia." | EGU 2022, Vienna Austria. May 2022. **Oral presentation**.
- Maria Constanza Manassero, Juan Carlos Afonso, Alison Kirkby, Alan Jones, Karol Czarnota and Ilya Fomin, "Including 3D Magnetotelluric Data into Joint Probabilistic Inversions for Imagining the Deep Earth" International Symposium on Deep Exploration and Practices 2021, Beijing, China. November 2021. **Invited oral presentation**.
- Mtnet webinar: A Reduced Order Approach for Probabilistic Inversions of 3D Magnetotelluric Data | March 2021| **Invited Seminar**.

# Ebrahim Hassan Zadeh - Applicant Summary

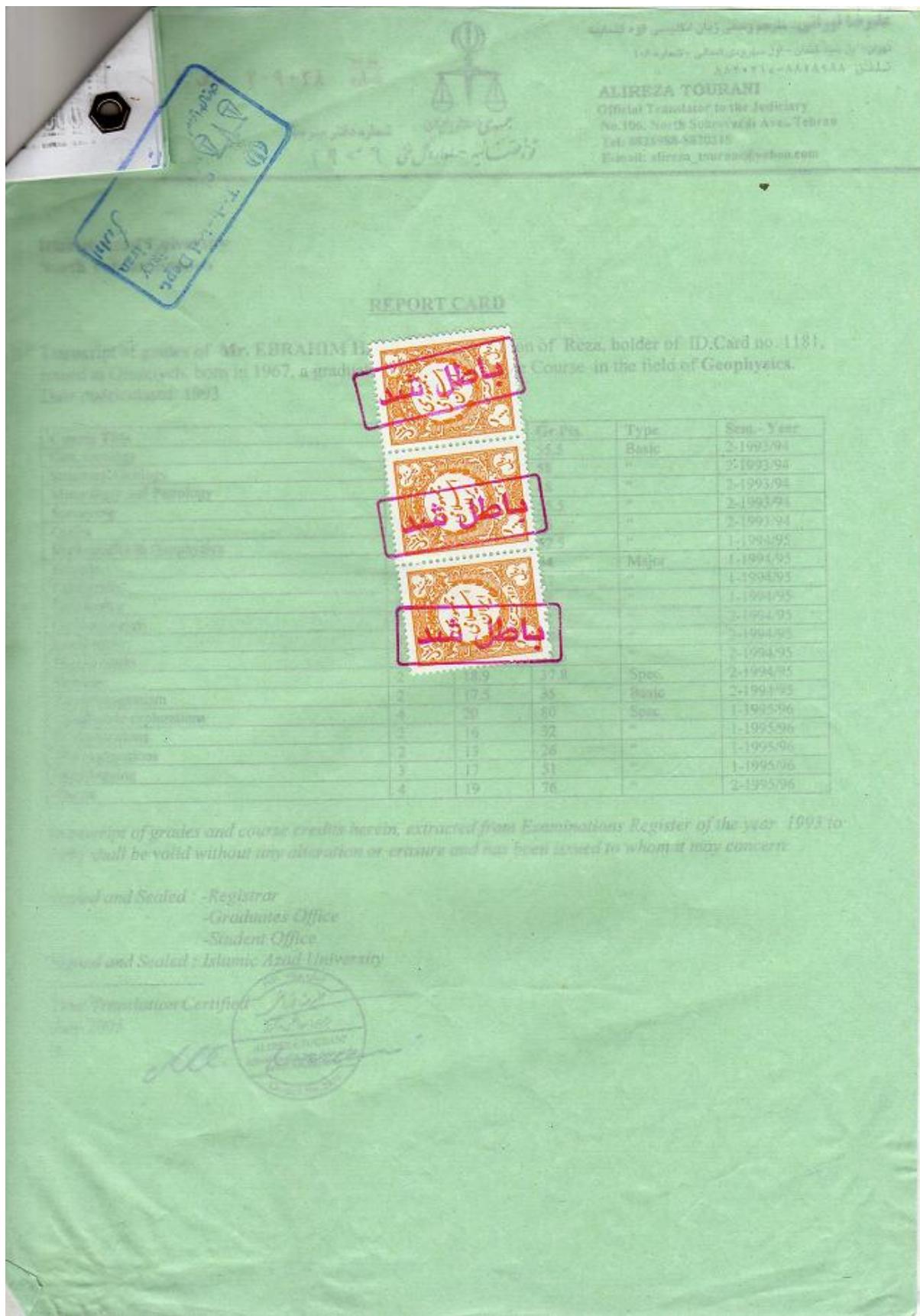
Surname: <b>Hassan Zadeh</b>	Given Names: <b>Ebrahim</b>
Preferred Name: <b>Ebrahim</b>	Salutation: <b>Mr</b>
Gender: <b>Male</b>	Age: <b>56.2.23</b>
Phone: <b>0410890054</b>	Mobile: <b>0410890054</b>
Fax:	Email: <b>ebrahim.h.zadeh@gmail.com</b>
Address: <b>65 Halidon Street</b>	Suburb: <b>Kingsley</b>
State: <b>WA</b>	Post Code: <b>6026</b>
Country: <b>Australia</b>	Applicant Type: <b>External</b>
Status: <b>In Progress</b>	Recommendation:
Checklist Stage: <b>Panel Review</b>	Aurion Number:

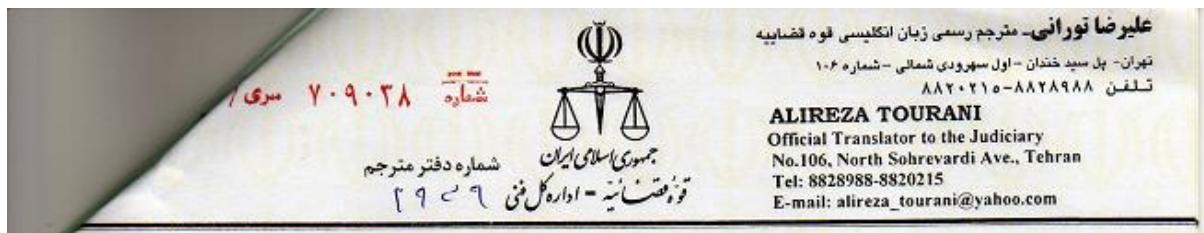
## Referees:

Title	First Name	Last Name	Job	Employer	Phone
Mr	Mark	Sams	Vice President, Services	Ikon Science, UK	+442089431122
Mr	Reza	Rezaee	Professor	Curtin University	0892667980
Mr	Ridwaan	Jadwat	First Assistant Secretary, Southeast Asia Maritime Division	Department of Foreign Affairs and Trade	+61262611111

## Qualifications/Education:

Completed	Title	Type	Discipline	Institute
25-SEP-2024	Hydrogeology	Masters	Geology - Environmental	University of WA
07-MAR-1997	Geophysics	Masters Degree	Geophysics- Seismic	Overseas - Asia





Islamic Azad University  
North Tehran Branch

### REPORT CARD

Transcript of grades of **Mr. EBRAHIM HASSAN ZADEH**, son of Reza, holder of ID.Card no. 1181, issued at Oromiyeh, born in 1967, a graduate of Master's Degree Course in the field of **Geophysics**.  
Date matriculated: 1993

Course Title	Credit	Grade	Gr.Pts.	Type	Sem.- Year
Gen. Geology	3	18.5	55.5	Basic	2-1993/94
Structural Geology	4	14.5	58	"	2-1993/94
Mineralogy and Petrology	4	12	48	"	2-1993/94
Surveying	3	18.5	55.5	"	2-1993/94
Optics	2	13	26	"	2-1993/94
Mathematics in Geophysics	3	17.5	52.5	"	1-1994/95
Seismic 1	3	18	54	Major	1-1994/95
Earthquake	3	19	57	"	1-1994/95
Gravimetry	3	16	48	"	1-1994/95
Geomagnetism	3	17	51	"	2-1994/95
Geoelectric	3	15	45	"	2-1994/95
Digital filters	3	18.5	55.5	"	2-1994/95
Seminar	2	18.9	37.8	Spec.	2-1994/95
Electromagnetism	2	17.5	35	Basic	2-1994/95
Geoelectric explorations	4	20	80	Spec.	1-1995/96
IP explorations	2	16	32	"	1-1995/96
EM explorations	2	13	26	"	1-1995/96
Well logging	3	17	51	"	1-1995/96
Thesis	4	19	76	"	2-1995/96

Transcript of grades and course credits herein, extracted from Examinations Register of the year 1993 to 1996 shall be valid without any alteration or erasure and has been issued to whom it may concern.

Signed and Sealed : -Registrar

-Graduates Office  
-Student Office

Signed and Sealed ; Islamic Azad University

True Translation Certified  
July 2005

A.

*M. [Signature]*

ALIREZA TOURANI  
Official Translator to the Judiciary  
No.106, North Sohrevardi Ave., Tehran  
Tel: 8828988-8820215  
E-mail: alireza\_tourani@yahoo.com

شماره ۷۰۹۰۴۲ سری /

شماره دفتر مترجم

جزوی اسلامی ایران  
تزوییه - اداره کل فن



علیرضا تورانی - مترجم رسمی زبان انگلیسی قوه قضائیه

تهران - پل سید خندان - اول سهروزی شهابی - شماره ۱۰۶

تلفن ۸۸۲۰۲۲۵-۸۸۲۸۹۸۸

ALIREZA TOURANI

Official Translator to the Judiciary

No.106, North Sohrevardi Ave., Tehran

Tel: 8828988-8820215

E-mail: alireza\_tourani@yahoo.com

### Islamic Azad University

Photo of the holder

### UNIVERSITY DIPLOMA OF COMPLETION OF MASTER'S DEGREE COURSE

*By virtue of the Statutes of University approved on Nov.3, 1987 by the Supreme Council of Cultural Revolution and the Single Article approved on May 4, 1988 by the Islamic Consultative Assembly,*

Whereas,

Mr. EBRAHIM HASSAN ZADEH, son of Reza, holder of ID.Card No. 1181, issued at Oromiyeh, born in 1967, has completed the curriculum prescribed for the Master's Degree Course in the field of **Geophysics** having passed 56 credits and a GPA of 17.52 on March 7, 1997 at North Tehran Branch of the Islamic Azad University, this M.Sc. degree is awarded to him.

Signed and Sealed :

- President , University Branch
- Chancellor , Islamic Azad University

Registered under no.261757 dated Jan.22.2000 with the Register of the Islamic Azad University.

True Translation Certified  
July 2005

A.



The authenticity of  
the seal & signature  
of the official translator  
mark [Signature] is certified  
without any consideration  
of the contents

1200x3  
Technical Dept.  
of the Judiciary  
of the I.R. of Iran  
محل ثبت اسناد  
وزارت عدالت  
جمهوری اسلامی ایران

The authenticity of the seal & signature  
marked [Signature] is certified without any consideration  
of the contents

16 AUG 2005



# دانشگاه آزاد اسلامی

واحد تهران شمال



ناترین

شماره

«اطلبوا العلم من الميد الى اللحد»

ریزنمرات تحصیلی آفای ابراهیم حسن زاده فرزند رضا دارنده شناسنامه شماره ۱۱۸۱

صادره از ارومیه متولد سال ۱۳۴۵ درجه کارشناسی ارشد رشته ریوفیزیک درودی سال ۷۲ فارغ التحصیل

نیمسال تحصیلی	نوع درس	امتیاز واحد	نفره امتحانی		تمداد واحد	نام درس	کد درس
			برعو	بعد			
۷۲-۷۳ دوم	دروس پایه	۵۵/۵	هجدہ و نیم	۱۸/۵	۳	زمین شناسی عمومی	
"	"	۵۸	چهارده و نیم	۱۴/۵	۴	زمین شناسی ساختمندی	
"	"	۴۸	دوازده تمام	۱۲	۴	کائی شناسی و ستگ شناسی	
"	"	۵۵/۵	هجدہ و نیم	۱۸/۵	۳	نقشه برداری	
"	"	۲۶	سیزده تمام	۱۳	۲	اپتیک	
۷۳-۷۴ اول	"	۵۲/۵	هدده و نیم	۱۷/۵	۳	ریاضیات در زیو فیزیک	
"	دروس اصلی	۵۴	هجدہ تمام	۱۸	۳	لرزه شناسی یک	
"	"	۵۷	نوزده تمام	۱۹	۳	زلزله شناسی	
"	"	۴۸	شانزده تمام	۱۶	۳	گرانی سنگی	
۷۳-۷۴ دوم	"	۵۱	هدده تمام	۱۷	۳	ژئومغناطیس	
"	"	۴۵	پانزده تمام	۱۵	۳	ریوالکتریک	
"	"	۵۵/۵	هجدہ و نیم	۱۸/۵	۳	فیلترهای دیجیتال	
"	دروس تخصصی	۳۷/۸	هجدہ و نه دهم	۱۸/۹	۲	سمینار	
"	دروس پایه	۳۵	هدده و نیم	۱۷/۵	۴	الکترومغناطیس	
۷۳-۷۵ اول	دروس تخصصی	۸۰	بیست	۲۰	۴	اکتشافات ریوالکتریک	
"	"	۳۲	شانزده تمام	۱۶	۲	اکتشافات IP	
"	"	۲۶	سیزده تمام	۱۳	۲	اکتشافات EM	
"	"	۵۱	هدده تمام	۱۷	۳	چاه پیمایی	
۷۳-۷۵ دوم	"	۷۶	نوزده تمام	۱۹	۴	پایان نامه	

ریزنمرات و تمداد واحدهای درسی مندرج در این برگ که از دفتر امتحانات سال ۷۲-۷۵ استخراج گردیده است

بدون خدمت و فام خود کی معتبر بوده و به منظور ادائه به اداره و ادارگاههای دولتی صادر گردیده است.

رئیس واحد دانشگاهی مدیر کل دفتر فارغ التخصصیان دانشگاه آزاد اسلامی معاونت انجمنی و اشتغال آزاد اسلامی

دانشگاه آزاد اسلامی مهر و امضاء مهر و امضاء مهر و امضاء مهر و امضاء

میرحسین خسروی

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

وَاللَّهُ أَكْبَرُ

دَانِشْ نَامَهْ بَارَانْ حَصِيلَاتْ دُورَهْ كَارَسَى اَسْتَ

مُؤَذِّنَاتْ

بَرَاسَادَاسَ سَادَهْ كَارَهْ صَحُوبْ ۲۸۸۷هـ ثُورَى عَلَى اِنْتَهَى فَرَيْكَهْ وَاهَهْ دَهْرَهْ صَحُوبْ ۲۸۷۹هـ بَرَاسَادَهْ

تَكْرِيْبْ يَنْكَدَعَى اَهْلَهْ اَبْرَاهِيمْ حَسَنْ اَزْ فَرِيدْ رَفَعَهْ دَارَى شَانَسَهَادَهْ ۱۱۸۱ صَادَهْ اَرَوَسَيْ سَنَدَهْ ۱۳۶۵

وَوَهْ حَصِيلَاتْ كَارَسَى اَشَادَرَسَهْ رُوفِيرِكَتْ بَكَنْدَنَهْ ۶۵ وَاصِرَبَانَهَيْنَهْ ۱۳۷۵هـ

وَرَاسَهْ كَارَهْ دَارَسَى دَهْرَانَهَ شَالَ بَهَامَانَ رَسَيْهَهْ تَسْ، اَيْنَ اَشَنَهْ سَهَيْهَنَهْ عَصَى مَهْرَدَهْ

كَسَسَهْ كَارَهْ دَارَهْ دَارَهْ جَهْرَهْ

جَهْرَهْ

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**Ebrahim Hassan Zadeh**  
65 Halidon Street, Kingsley WA 6026, AU  
+61 410 890 054  
ebrahim.h.zadeh@gmail.com

## PROFESSIONAL SUMMARY

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- Geoscientist with 10+ years of experience in rock and fluid property analysis and modelling.
- Involved in reservoir characterization and full field development studies in diverse geological settings and rock types across the Asia Pacific and Middle East.
- Expert in rock and fluid property analysis and modelling using quantitative techniques.
- Integrating geophysical, geological and wireline well data to generate accurate earth models.
- Hands-on user of industry standard and leading-edge geoscience software packages.
- Joined NIOC as a seismic crew member in 2000 and then moved to reservoir study team (2000-2006). Worked in a number of geoscience / senior geoscience positions at Fugro-Jason (2006-2008), DownUnder GeoSolutions (2008-2010) and Ikon Science (2010-2020).
- Author/co-author of technical papers and registered a patent on “Estimation of core permeability from CT scan data using Artificial Neural Networks.”

## EDUCATION

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**Master of Hydrogeology** - University of Western Australia, Perth, Australia (2023-Current)

**Research Assistant, Shale Gas** - Curtin University, Perth, Australia (2010-2013)

**Master's Degree in Geophysics** - Azad University, North Tehran, Iran (1997)

**Bachelor's Degree in Applied Mathematics** - Iran University of Science and Technology, Tehran, Iran (1993)

## EMPLOYMENT HISTORY

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**Data Analyst, Geophysics Consultant, Self-employed, Perth** (May 2020 – Current)

**Senior Geoscientist - Quantitative Methods, Ikon Science, Asia Pacific** (2010 to April 2020)

Prospect evaluation and de-risking, seismic inversion and reservoir characterization, integrating geophysical, petrophysical, geological and reservoir engineering data to build accurate and detailed descriptions of the reservoir, well to seismic tie, velocity model building and time-depth conversion, geomodel building, rock physics modelling, AVO and attribute analysis, AVAZ anisotropy and fracture analysis, fluid and lithology discrimination analysis, forward modelling, feasibility study, mapping and volumetric, mentoring less experienced geophysicists/geoscientists, liaising with clients, involved in preparing project proposals.

### Projects Highlight:

- Proof of Concept: Joint impedance and Facies inversion (Ji-Fi Evaluation), Caval Ridge Coal, Bowen Basin, Australia (Client: BHP), 2020
- Carbonate Delineation by Joint impedance and Facies inversion (Ji-Fi Evaluation), Greater Burgan Field, Kuwait (Client: KOC), 2019
- Quantitative Interpretation Study, Denver Field, Barrow Sub-Basin, Australia (Client: Quadrant), 2018

- Reservoir Characterization through Roc-Physics and Inversion, Australian assets (Client: Origin Energy), 2017
- Prospect de-risking through Joint Impedance and Facies Inversion (Ji-Fi), Willem (Drop-Bear) 3D, Northern Carnarvon Basin, Offshore Western Australia (Client: Searcher Seismic), 2015.
- Seismic data conditioning, EEI and simultaneous inversions, Permas Field, Offshore Sarawak, Malaysia (Client: Murphy Oil), 2015.
- Multi-Azimuth, anisotropic AVAZ analysis, EEI and pre-stack AVO inversions, Irus 3D, PEL 92, Cooper Basin, Onshore Australia (Client: Beach Energy), 2014.
- Rock physics modelling, seismic data conditioning, AVO and EEI inversions: CRD Field, Block 07/03, Offshore Vietnam (Client: Talisman), 2014.
- Prospect de-risking by AVO modelling and inversion (Phase 2), Block CA2, Deepwater Brunei (Client: Petronas - PCBL), 2013.
- Prospect de-risking by AVO modelling and inversion, Sampaguita, Philippine (Client: Forum Energy), 2012.
- AVO inversion for reservoir property mapping in Tui field, Taranaki Basin, New Zealand (Client: AWE), 2011-2012.
- Elastic impedance inversion and simultaneous inversion feasibility for reservoir property mapping in Tui field, Taranaki Basin, New Zealand (Client: AWE), 2011.
- Rock, fracture, and inversion study to identify zones of better reservoir quality, Marcellus Shale, PA, USA (Client: SouthWestern), 2011.
- AVO forward modelling and feasibility study, South Madura, Indonesia (Client: Cooper Energy), 2010.

#### **Senior Geoscientist, DownUnder GeoSolutions, Australia (2008 to 2010)**

Quantitative seismic interpretation, reservoir characterization, well to seismic tie, velocity model building and time-depth conversion, inversion, AVO analysis, fluid and lithology discrimination analysis, forward modelling and feasibility study, mapping, mentoring less experienced geophysicists/geoscientists, liaising with clients, involved in preparing project proposals.

#### **Projects Highlight:**

- Stochastic forward modelling, Carnarvon Basin, Northwest Australia (Client: OMV), 2010.
- Quantitative interpretation study, Block Z38, Offshore Peru (Client: Karoon Gas Australia), 2009.
- Quantitative interpretation study, Northern Cooper Basin, Onshore Australia, (Client: Stuart Petroleum), 2008-2009.

#### **Geoscientist, Fugro-Jason, Malaysia (2006 to 2008)**

Seismic inversion and reservoir characterization, well to seismic tie, velocity model building and time-depth conversion, geomodel building, integrating petrophysical/geological/reservoir engineering/geophysical data to construct accurate and detailed descriptions of the reservoir, rock physics modelling, AVO analysis, fluid and lithology discrimination analysis, forward modelling and feasibility study, mapping and volumetric, mentoring less experienced geophysicists/geoscientists, liaising with clients, preparing project proposals.

#### **Projects Highlight:**

- Simultaneous Inversion and Reservoir Characterization Study, Blocks 102 & 106, Offshore Vietnam (Client: PCOSB), 2008.
- Well Feasibility Study, Jade and Block E2 Prospects, Offshore Vietnam (Client: PCVL), 2008.

- Rock Physics Modelling and Fluid Substitution Analysis, Lan Do & Lan Tay Fields, Offshore Vietnam (Client: BP Vietnam), 2007.
- Acoustic Impedance Inversion and Analysis, Block A-3, Offshore Myanmar (Client: Daewoo), 2007.
- 3D Reservoir Characterization and Seismic Gridding Services, D35 Field, Offshore Sarawak, Malaysia (Client: Petronas Carigali), 2006-07.
- Acoustic Impedance Inversion and Analysis, Bir Seba Field, Onshore Algeria (Client: Petro Vietnam), 2006.

#### **Geophysicist, NIOC-RUPI (National Iranian Oil Co.), Iran (2000 to 2006)**

Seismic data acquisition, processing, interpretation, depth conversion, inversion, rock physics modelling, reservoir characterization and geomodelling, liaising with universities and research centres, mentoring less experienced geophysicists/geoscientists, preparing project proposals, project management, quality management (ISO 9001), liaising with other disciplines and departments, supervisor of geophysics department.

#### **Projects Highlight:**

- Full Field Study of Bibihakimeh Oil Field, Joint Venture of RIPI and STATOIL, 2002-2006.
- Reservoir Property Estimation: Azadegan Oil Field, Joint Venture of RIPI and JNOC-TRC, 2002.
- Field Development Plan, Azadegan Oil Field, Joint Venture of RIPI and Sintef Petroleum Research, 2001.
- Persian Gulf (PC 2000) Seismic Data Acquisition Project, NIOC, 2000.

#### **REGISTERED PATENT**

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- Method for Estimating Permeability of Core Samples Using CT Scan Data and Artificial Neural Networks. (Iranian Patents Registration Nr: 34769, date: May 6, 2006)

#### **PUBLICATIONS AND CONFERENCES**

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- Mark Sams, Shane Westlake, Josh Thorp and Ebrahim Zadeh (2016): "**Willem 3D: Reprocessed, inverted, revitalized**" The Leading Edge, 35 (1), 22-26.
- Zadeh, E., Sams, M., Rezaee, R.; "**Seismic Forward Modelling for Shale Gas Characterisation in Laurel Formation, North Canning Basin**": APPEA Conference, May 2013, Brisbane, Australia.
- Emsley, S., Zadeh, E., Kemper, M.; "**Integrated workflow for the development of a calibrated coupled geomechanical flow simulator for unconventional reservoirs**": SEG Annual Conference, Sep 2011, San Antonio, USA.
- Hassan Zadeh, E., Rezaee, R., Kemper, M.; "**Quantitative Analysis of Seismic Response to Total-Organic-Content and Thermal Maturity in Shale Gas Plays**": APPEA Conference, April 2011, Perth, Australia.
- Hassanzadeh, E., Kamali, M.R., and Hendi, S.S.; "**Application of soft computing tools for lithology variations modeling in a heterogeneous carbonate oil field**": AAPG European Region Conference, October 2004, Prague, Czech Republic.
- Hassanzadeh, E., Ghadirian, H.A.; "**Estimating permeability of carbonate rocks from CT scan data**": 2004, Journal of Science (Tehran University), Vol. 5 (IV), pp. 65-73.
- Hassanzadeh, E., Hendi, S.S., and Kato, A.; "**A method for estimating permeability of carbonate rocks from CT scan data**": 2003 International Symposium of the Society of Core analysts, September 2003, Pau, France.
- Hassanzadeh, E., Vali, J., and Maddahi, I.; "**Using seismic attributes to estimate formation porosity**": 2002, Research Institute of Petroleum Industry's Tahghigh Magazine, Vol. 12, No. 4, pp. 33-36.

# Grant Butler - Applicant Summary

Surname: <b>Butler</b>	Given Names: <b>Grant</b>
Preferred Name: <b>Grant</b>	Salutation: <b>Mr</b>
Gender: <b>Male</b>	Age: <b>68.8.20</b>
Phone: <b>0403812900</b>	Mobile: <b>0403812900</b>
Fax:	Email: <b>butlerg@bigpond.com</b>
Address: <b>21 Murranji St</b>	Suburb: <b>Hawker</b>
State: <b>ACT</b>	Post Code: <b>2614</b>
Country: <b>Australia</b>	Applicant Type: <b>External</b>
Status: <b>In Progress</b>	Recommendation:
Checklist Stage: <b>Panel Review</b>	Aurion Number: <b>5635</b>

## Referees:

Title	First Name	Last Name	Job	Employer	Phone
Dr	Shibani	Mishra	Geospatial Lead	Department of Infrastructure, Transport, Regional Development, Comms & The Arts	
Mr	Dave	Stegemann	Ex CEO of Terrex Seismic and Managing Director at Geokinetics	NA	07 3621 0300
Dr	David	Lescinsky	Director, Data Policy and Informatics	GA	9048

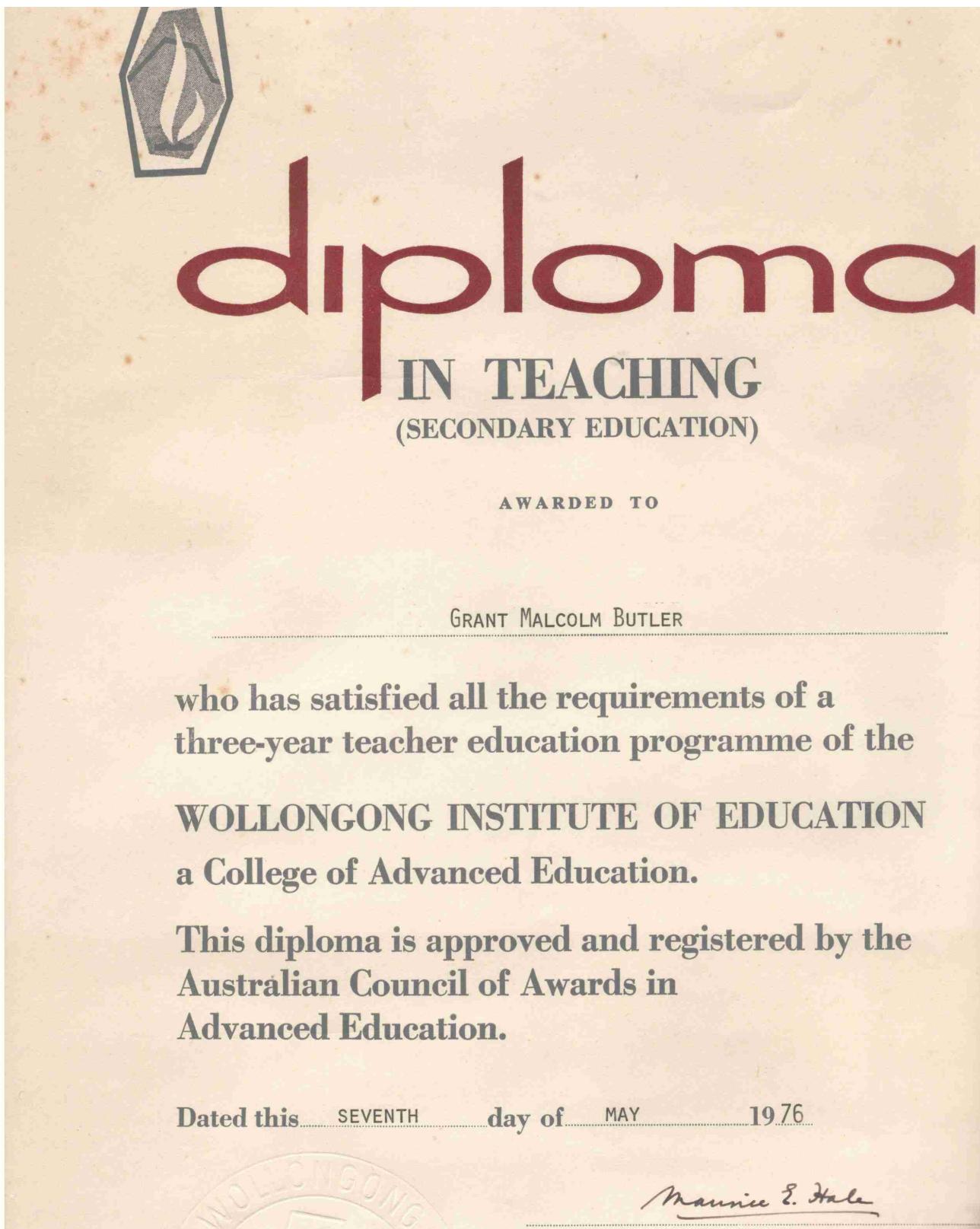
## Qualifications/Education:

Completed	Title	Type	Discipline	Institute
01-DEC-1975		Diploma	Education	University of Wollongong

# Grant Butler - File Attachment

File Attachment for Candidate Education

File Name: *Diploma\_GrantB.jpg*



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## GRANT BUTLER

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**Nationality** : Australian  
**Address** : 21 Murranji St, Hawker, ACT 2614  
**Telephone** : 0403-812900  
**Mobile** : 0403-812900  
**Email** : butlerg@bigpond.com  
**Security Clearance** : Current NV-1 (Sponsored by DITRDCA)

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### Career Profile

*Broad career in private and government sectors encompassing technical, managerial and business roles, largely in domestic and international seismic acquisition, processing and product development.*

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### Highlights

- Extensive project management experience in seismic operations/logistics, ICT and technical areas
  - Expertise in field seismic QA/QC and support
  - Contract management, tender responses
  - Contractor management, land and offshore subcontractors
  - Support and field experience with GA on the EFTF program
  - Excellent written communications, expert reporting skills
  - Interested in continuous improvement, current technologies
- 

### Professional Experience

#### **Department of Infrastructure, Transport, Regional Development, Communications and the Arts**

*Geospatial Analyst (APS 6)*

*February 2022 – Present*

- Maintenance and daily updating of departmental project mapping and reporting service (PRAMS)
- Monitoring of PRAMS logs and databases, Python code.
- Static mapping for various departmental internal sections, for in-house and ministerial use.
- All work undertaken in ESRI platforms; ArcPro (primarily), Arc Desktop, AGOL and web portals
- Revision of internal Geospatial Data Dictionary.

#### **Australian Bureau of Statistics**

*Census Enumeration Data Section*

*Data and Metadata Management Specialist (APS5)*

*Sep 2019 – Jan 2022*

- Area Design in ArcGIS Desktop for Census field manager workloads, placed with the Geospatial Group in Canberra (to December 2022).
- Investigation of mobile phone coverage for Census field operations, identifying geographic areas requiring satellite phones.
- Remote road analysis for field operations to determine preferred vehicle specifications, partly based on my knowledge of remote areas.
- Team Leader on Census Data Processing (also Aug 2016 – Mar 2017).

#### **Geoscience Australia**

*NCI Project Coordinator*

*October 2017 – August 2019*

- Support of GA projects at NCI HPC facility.
- Liaison with GA scientific program leaders and NCI staff.

#### *Operations Support Officer, Exploring For The Future*

*March 2017 – September 2017*

- GIS logistics and survey planning for 2017 EFTF campaigns.
- Assistance with EFTF land access (convinced one recalcitrant landholder to allow seismometer installations on his property despite poor relations with our land access officer).

- Created WHS and procedural documentation for Heli-ops, NAGS, AusARRAY, AusLAMP, Groundwater.
- AusARRAY preparations including:
  - Instrumentation testing and setup (Guralp Minimus+ and Nanometrics Trillium seismometers).
  - Field trials of above.
- AusARRAY field deployment in Tennant Creek – Mt Isa corridor.

**Geokinetics (Australasia) Pty Ltd/Geokinetics International Inc**

*International Oilfield Service Company*

*Numerous roles over 13 years*

*Operations Manager/Country Manager*

*2015 – 2016*

Largest land 3D ever conducted in NZ; highly complex gas exploration survey in the Taranaki region of New Zealand for ‘Supermajor’ client (Shell joint venture). Survey was highly successful and timely, extending life of NZ’s primary onshore gas field (Kapuni).

- Leader of bid team; subcontractor selection and negotiations; tender preparation and submission.
- Operations management of project as primary contractor. Survey was a once-only chance to rejuvenate the field and the result exceeded expectations.
- Subcontractor management/liaison (labour, accommodation, 2 x drill contractors, survey, explosives security, helicopter, line security, rehabilitation); also community support role, demonstrating benefits to local economy.

*Regional Technical Quality Manager (Brisbane and Singapore)*

*2008 – 2015:*

- Bid preparation and support: costings, executive summaries, technical proposals and other bid documents.
- Financial/business case preparation, contract management.
- Successfully developed new business for onSeis well logging source unit.
- Undertook quality investigations. Successfully solved recurrent satellite dish damage problem, saving company thousands of dollars.
- Developed and implemented an ISO:9001 Quality Management System in company’s Eastern Hemisphere operations (i.e. Africa, Asia, Australia and Europe).
- Creation, preparation and editing of project final reports and template to assist diverse senior staff in producing high quality reports.
- Software maintenance of technical applications.
- Designed and developed project statistics repository.

*Regional Geophysicist (Singapore based)*

*2003 – 2007:*

- Oversight of geophysics matters within Geokinetics’ Eastern Hemisphere operations.
- 3D Survey design for major projects in Middle East and SE Asia.
- Processing of onshore, transition zone and shallow water 2D and 3D data, mentoring of processors.
- Oversight of dedicated processing centre for local clients in Dhaka (Cairn, Shell, Chevron).
- Geophysical and processing support for up to thirty geophysicists.
- Software and hardware evaluation.
- Departmental personnel management, multiple crews.
- Software development/maintenance (including 2D seismic information management suite).

**Schlumberger (Geco-Prakla and WesternGeco) Australia, UK, USA, Norway, UAE**

*2001 – 2002: Technical Consultant/Technical Writer*

- Lead consultant on complete revision of WesternGeco’s online training system for seismic operations, all aspects and environments.

**Various Government Departments (contracting)**

*1999 – 2001: Database development roles.*

*1998 -1999: Project Geophysicist*

- Product owner of 3D seismic operations simulation project. Successfully pushed project to functionality under financial constraints.

1995 – 1997: *Seismic Operations Manager*

- Cooper Basin Vibroseis operations.
- In-house seismic processing for tests and special cases, including a deep crustal Vibroseis test line for GA (AGSO) at North Parkes.
- Designed and built seismic processing and tape-copy systems for Australian operations.

#### **Grant-Norpac Inc (and predecessors) Australia and International**

1981 to 1995 *Party Manager, Seismic Data Processor (from 1983), Field Seismologist*

- Streamlined processing methodology for field processing operations in Indonesia, Malaysia, PNG, Myanmar and Bolivia, including the development of a supporting utility suite to decrease turnaround time and improve quality assurance (e.g. floating datum, geometry from SEG-D headers, missing trace reconstruction).
- Created geometry front-end for 2D ProMAX operations (none existed at the time).
- Trainer for field processing on various systems in Australia, Yemen, Indonesia, USA, Bolivia.
- Processing geophysicist with Digicon Disco and Sprint, VAX system manager.
- Familiar with tape and disk formats, data delivery and storage options (e.g. tape, disk, FTP, download, cloud, data repository).
- Pioneered data recording to NAS disk within our organisation.
- Knowledgeable with hardware, tape drives (IBM 35xx, LTO), plotters and other hardware.

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#### **Current Software Skills (Selection):**

<u>ESRI:</u>	<u>Microsoft:</u>
<ul style="list-style-type: none"><li>➤ ArcPro to 2.9.5</li><li>➤ ArcGIS to 10.8</li><li>➤ ArcGIS Online</li><li>➤ Arc Portals</li></ul>	<ul style="list-style-type: none"><li>➤ Office (All versions):</li><li>➤ Access, Excel (Advanced and developer)</li><li>➤ Word, Powerpoint, Project, Outlook, Skype for Business</li><li>➤ Visio</li><li>➤ SQL Server</li></ul>

#### **Education**

1973-1975 University of Wollongong NSW, Australia  
*Diploma of Education (Secondary)*

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#### **Training/Certification**

Multiple industry and external training courses including Geophysics, GIS, Software, Networking, System Administration, Instrumentation, Management, Sales, ISO Quality Management, HSE/WHS, 4WD and First Aid. Can provide certificates and details if required.

Drivers Licence : HC (semi-trailer)

#### **Recent Training:**

- 2022 - ESRI - Migrating from ArcMap to ArcGIS Pro
- 2022 - Geoscience Australia - Introduction to the Digital Earth Australia Sandbox

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#### **Affiliations:**

Australian Society of Exploration Geophysicists (Since 1995)  
ACT committee member, branch president 2019

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#### **Publications:**

"Schlumberger Uses Simulation in Bidding and Executing Land Seismic Surveys"

*Peter Mullarkey, Grant Butler, Srinagesh Gavirneni, Douglas Morrice*

Paper published in the journal 'Interfaces', March/April 2007 37:120-132;

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**References:** Entered in online application, can supply others if required

# Haroon Rasheed - Applicant Summary

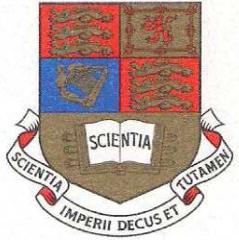
Surname: <b>Rasheed</b>	Given Names: <b>Haroon</b>
Preferred Name: <b>Haroon</b>	Salutation: <b>Mr.</b>
Gender: <b>Male</b>	Age: <b>42.2.14</b>
Phone:	Mobile: <b>0452541981</b>
Fax:	Email: <b>haroonrasheed30@gmail.com</b>
Address: <b>Unit 2/17-21 Third Ave</b>	Suburb: <b>Kelmscott</b>
State: <b>WA</b>	Post Code: <b>6111</b>
Country: <b>Australia</b>	Applicant Type: <b>External</b>
Status: <b>In Progress</b>	Recommendation:
Checklist Stage: <b>Panel Review</b>	Aurion Number:

## Referees:

Title	First Name	Last Name	Job	Employer	Phone
	Sara	Jakica	Senior Geologist	GSWA - Geological survey of Western Australia	
Mr.	Andrew	Grace	Senior Geophysicist	Terrex Seismic	

## Qualifications/Education:

Completed	Title	Type	Discipline	Institute
31-DEC-2004	Bachelors in Electronic Engineering	Bachelor Degree	Electronic Engineering	Overseas - Other
01-NOV-2012		Masters Degree	Geophysics- Seismic	Overseas - UK



The Council of the Imperial College of Science, Technology and Medicine has conferred on

**Haroon Rasheed**

the degree of

**Master of Science** with Merit

in Petroleum Geophysics

on 1 November 2012

*Keith O'Connor*

President & Rector

*Lubecay*

Academic Registrar

Sealed by authority of the Council



# HAROON RASHEED

Mob: +61452541981 (Perth, Australia)  
haroonrasheed30@gmail.com

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## Professional Experience:

### **Terrex Seismic Pty Ltd. Australia            QC Geophysicist        2018 – 2023**

- Involved in survey designing, recording instruments parameterisation, QC and pre-processing of 2D / 3D seismic datasets acquired by the company.
- Controlling quality of service during all phases of the operation and ensure that all products delivered to the client are of the highest quality.
- Technical liaison with Clients, Subcontractors and Vendors
- Reviewing and updating of departmental and project procedures
- Some of the projects completed during this tenure are as under:
  - Geoscience Australia - South Australia, Victoria, DCD-UDF2D
  - Mineral Resources, Western Australia - Ringneck 2D, Charger 2D, Romanesque 3D
  - BHP / BMA – Coal Mines, Queensland – Blackwater, Cavalridge, Daunia
  - Kestrel Coal Mine, Queensland – Kestrel South 3D
  - Triangle Energy, Western Australia – Bokaro 3D
  - UIL Energy Ltd – Perth Basin, Western Australia - Walyering 3D
  - Buru Energy, Western Australia - Celestine 2D, Willare 2D, Paradise 2D
  - DBP Development Group – Carnarvon Basin, Western Australia - Tubridgi 3D
  - Macallum Group Ltd – Perth Basin, Western Australia - Mogumber 2D
  - Santos, Cooper Basin, Queensland – Bearcat 3D, Kanook East 3D, Hector 3D

### **HiSeis Pty Ltd. Australia            QC Geophysicist        2014-2016**

- Major part of the job involves acquisition/processing of surface and borehole seismic data in Hard Rock geological environments.
- Work together with acquisition team to design and plan 2D/3D surface and 2D borehole seismic datasets for mining industry using vibrioses and impulsive Sources.
- Involved in various aspects of processing and quality control of land seismic data such as:
  - Geometry QC, First Break Picking, Statics Calculation, Noise removal, Filtering, Deconvolution, Velocity Analysis, Brute and Migrated Stack generation
- Fully responsible for processing VSP (Vertical Seismic Profile) datasets.
- Some of the companies for which we did seismic survey includes:
  - BHP Billiton, Rio Tinto, AngloGold Ashanti, Fortescue Metals Group, Northern Star Resources, Sandfire Resources, Lundin Mining.

### **Weatherford Oil Tools Middle East Ltd. 2013 Geophysicist (Petroleum Consulting)**

- Planning, execution, processing, and interpretation of Vertical Seismic Profile (VSP).
- Trained professionally to process VSP data using Zebraseis and microseismic data.
- As part of a Reservoir Evaluation team also actively involved in processing and interpretation of data acquired by wireline logging tools using various Weatherford software packages like Petrolog v.10.7, P11, WLS Manager.

## **WesternGeco (Schlumberger)**

### **Chief Observer (International Commuter) 2006 - 2011**

- Worked on 2D / 3D Geophysical Seismic Surveys as a Chief Observer in recording department in Abu Dhabi, Dubai, Oman and Yemen.
- Some of the clients for which we did seismic survey includes:
  - Abu Dhabi National Oil Company (ADNOC), Abu Dhabi Company for Onshore Petroleum Ltd. (ADCO), Dubai Petroleum, Occidental of Oman, SAFER Yemen

### **Research & Development (Part Time) Curtin University, Australia 2016 – 2017**

- Worked on 3D seismic survey project for Carbon Capture and Storage (CCS) in Southwest Hub Western Australia.
- Research involved testing interpolation / infilling methodologies (4D/5D interpolation) to better illuminate subsurface geology in cases of sparse seismic surveys.

## **Education:**

### **Imperial College London MSc Petroleum Geophysics 2011-2012**

- The program included advanced level seismic acquisition, processing, and interpretation subjects plus integrated topics of Petroleum Engineering and Geosciences.
- Geophysical Field Acquisition camp with Colorado School of Mines in Pagosa Springs, Denver USA. Techniques used were 2D Vibroses Deep seismic, Hammer seismic, Gravity, Magnetics, Electromagnetics and GPR. Processed 2D seismic line using Promax.
- Integrated Group project for evaluation and development of an oil field (Wytch Farm field in UKCS). Did Horizon pickings, Fault interpretations, Depth conversion, Well Ties (SMT Kingdom), Logs Conditioning and Synthetic Generation (RokDoc)

## **Skills & Certificates:**

- Processing Software: Globe Claritas, SeiSpace/ProMAX, RadExPro, VSProwess, ZebraSeis, MATLAB
- Geophysical Software: Omni3D, Global Mapper, Tesseral Pro, WellCAD, Hampson-Russell, SMT Kingdom, Petrel, Testif-i, Petrolog.
- Acquisition System: SmartSolo, Sercel, ION Scorpion, ARIES, Q-MAS
- Quality Health and Safety Certifications for Mining, Oil and Gas industry
- Standard 11 (S11) Generic Coal Induction Certificate.
- First AID Certificate from Surf Life Saving Australia
- 4WD Training certificate

# Ilya Fomin - Applicant Summary

Surname: <b>Fomin</b>	Given Names: <b>Ilya</b>
Preferred Name: <b>Ilya</b>	Salutation: <b>Mr</b>
Gender: <b>Male</b>	Age: <b>32.9.18</b>
Phone:	Mobile: <b>0422645370</b>
Fax:	Email: <b>ilya.fomin@protonmail.ch</b>
Address: <b>23 Abuklea Rd</b>	Suburb: <b>Marsfield</b>
State: <b>NSW</b>	Post Code: <b>2122</b>
Country: <b>Australia</b>	Applicant Type: <b>External</b>
Status: <b>In Progress</b>	Recommendation:
Checklist Stage: <b>Panel Review</b>	Aurion Number:

## Referees:

Title	First Name	Last Name	Job	Employer	Phone
	Juan Carlos	Afonso			
	Alexei	Gorbatov			

## Qualifications/Education:

Completed	Title	Type	Discipline	Institute
02-JUL-2018	Not Recorded	Doctoral Degree	Numerical Modelling	Overseas - Europe
25-JUN-2013	Not Recorded	Masters Degree	Geochemistry - Inorganic	Overseas - Europe
25-JUN-2011	Not Recorded	Bachelor with Honours	Geochemistry - Inorganic	Overseas - Europe

DIE  
EIDGENÖSSISCHE  
TECHNISCHE  
HOCHSCHULE  
ZÜRICH

verleiht Herrn

**Ilya Fomin**

MSc in Geology, Lomonosov Moscow State University  
geboren am 26. Juni 1990, aus Russland

den Titel

**DOKTOR DER WISSENSCHAFTEN**

aufgrund seiner Doktorarbeit

NUMERICAL SIMULATION OF MELTING AND MELT MIGRATION IN THE EARTH'S MANTLE

Referent: Prof. Dr. Paul Tackley

und der mündlichen Prüfung vom 27. Oktober 2017

Zürich, 2. Juli 2018

Die Rektorin

*Sarah Springman*

Prof. Dr. Sarah M. Springman

Der Vorsteher des Departements Erdwissenschaften

*T. Egli*

Prof. Dr. Timothy Ian Eglinton

**ETH**

Eidgenössische Technische Hochschule Zürich  
Swiss Federal Institute of Technology Zurich

RUSSIAN FEDERATION



LOMONOSOV MOSCOW STATE UNIVERSITY

# DIPLOMA

with Honours

**AAA 2202980**

The present diploma is to certify that

**FOMIN  
ILYA**

has successfully completed  
the programme of higher education

(Master's programme)  
and is awarded the degree of  
**MASTER**  
in the field of study  
020700.68 Geology

Decision of the State Attestation Commission

25 June 2013

*Chairperson of the State  
Attestation Commission*

S.P.Korikovsky

*Registration Number*

07h-0315-31w

*Rector of Lomonosov  
Moscow State University*

V.A.Sadovnichiy

*Issued on*

29 June 2013

Moscow



РОССИЙСКАЯ ФЕДЕРАЦИЯ  
RUSSIAN FEDERATION



МОСКОВСКИЙ  
ГОСУДАРСТВЕННЫЙ  
УНИВЕРСИТЕТ  
имени М.В.ЛОМОНОСОВА

LOMONOSOV MOSCOW  
STATE UNIVERSITY



ПРИЛОЖЕНИЕ  
к ДИПЛОМУ  
AAA 2202980

DIPLOMA  
SUPPLEMENT



Российская Федерация,  
119991, г. Москва,  
Ленинские горы, д. 1

1 Leninskie Gory  
Moscow 119991  
Russian Federation

<http://www.msu.ru>

НАСТОЯЩЕЕ ПРИЛОЖЕНИЕ К ДИПЛОМУ СООТВЕТСТВУЕТ МОДЕЛИ, РАЗРАБОТАННОЙ ЕВРОПЕЙСКОЙ КОМИССИЕЙ,  
СОВЕТОМ ЕВРОПЫ И ЕВРОПЕЙСКИМ ЦЕНТРОМ ВЫСШЕГО ОБРАЗОВАНИЯ ЮНЕСКО  
THIS DIPLOMA SUPPLEMENT FOLLOWS THE MODEL DEVELOPED BY THE EUROPEAN COMMISSION,  
COUNCIL OF EUROPE AND UNESCO/CEPES

1. СВЕДЕНИЯ ОБ ОБЛАДАТЕЛЕ ДИПЛОМА /  
INFORMATION IDENTIFYING THE HOLDER OF THE DIPLOMA

1.1. Фамилия / Family name

Фомин  
Fomin

1.2. Имя, отчество / Given name(s)

Илья Сергеевич  
Ilya Sergeevich

1.3. Дата рождения / Date of birth

26 июня 1990 года  
26 June 1990

1.4. Идентификационный номер или код студента /  
Student identification number or code

07110367

1.5. Предыдущий документ об образовании / Document confirming previous education

Диплом бакалавра по направлению "Геология", выданный 30 июня 2011 года, серия  
AAA N 2100031, Российская Федерация  
Bachelor's Diploma in the field of Geology, issued on 30 June 2011, AAA N 2100031,  
Russian Federation

2. СВЕДЕНИЯ О КВАЛИФИКАЦИИ / INFORMATION IDENTIFYING THE QUALIFICATION

2.1. Наименование квалификации (степени), дата присуждения / Name of qualification (degree) conferred, date of awarding

МАГИСТР  
MASTER

Решение Государственной аттестационной комиссии /  
Decision of the State Attestation Commission      25 июня 2013 года / 25 June 2013

2.2. Направление подготовки (специальность); профиль подготовки, наименование программы (специализация) /  
Main field of study for the qualification; specialization

Направление подготовки: 020700.68 Геология  
Main field of study for the qualification: 020700.68 Geology  
Наименование программы: Петрология  
Specialization: Petrology

2.3. Наименование и статус учебного заведения, выдавшего диплом / Name and status of awarding institution

Московский государственный университет имени М.В.Ломоносова, федеральное го-  
сударственное бюджетное образовательное учреждение высшего профессионально-  
го образования  
Lomonosov Moscow State University, Federal State Budgetary Educational Institution  
of Higher Professional Education

2.4. Наименование и статус учебного заведения, осуществлявшего обучение; период обучения /  
Name and status of institution administering studies; period of instruction

Московский государственный университет имени М.В.Ломоносова, федеральное го-  
сударственное бюджетное образовательное учреждение высшего профессионально-  
го образования, 2011-2013  
Lomonosov Moscow State University, Federal State Budgetary Educational Institution  
of Higher Professional Education, 2011-2013

2.5. Язык(и) обучения (экзаменов) / Language(s) of instruction (examination)  
Русский / Russian

**3. СВЕДЕНИЯ О УРОВНЕ ОБРАЗОВАНИЯ / INFORMATION ON THE LEVEL OF EDUCATION**

3.1. Уровень образования / Level of education Магистратура / Master's programme

3.2. Нормативный срок освоения программы по очной форме обучения / 2 года / 2 years  
Official length of full-time programme

3.3. Требования к поступающим / Access requirement(s)

Документ государственного образца о высшем профессиональном образовании и успешное прохождение конкурсных вступительных испытаний  
State recognized document confirming higher education and successful passage of competitive entrance examinations

**4. СВЕДЕНИЯ О СОДЕРЖАНИИ ОБРАЗОВАНИЯ И ПОЛУЧЕННЫХ РЕЗУЛЬТАТАХ /  
INFORMATION ON THE CONTENTS OF EDUCATION AND RESULTS GAINED**

4.1. Форма обучения / Mode of study

Очная / Full-time

4.2. Описание образовательной программы / Programme description

Основная образовательная программа подготовки магистра по направлению "Геология" реализована на геологическом факультете. Программа разработана на основании образовательного стандарта МГУ магистра по направлению "Геология". Магистр геологии подготовлен к деятельности, требующей углубленных фундаментальных и профессиональных знаний и умений, связанных с решением научных и прикладных геологических задач в соответствии со специализированной подготовкой по конкретной магистерской программе. Объектами профессиональной деятельности магистра геологии являются: Земля, ее оболочки; геологическое и geoхимическое строение земной коры; экологические функции литосферы; геологические процессы; геофизические поля; горные породы, минералы, кристаллы; минеральные ресурсы, включая подземные воды; криолитозона; грунты и массивы грунтов.

Подготовка по магистерской программе "Петрология" обеспечивает приобретение научных представлений о вещественном составе, структуре и происхождении горных пород; закономерностях кристаллизации магматических расплавов в приповерхностных и глубинных условиях; процессах преобразования пород в условиях регионального и локального метаморфизма; разработке научно обоснованных методов поисков месторождений полезных ископаемых.

The basic educational Master of Geology programme has been developed by the Faculty of Geology and is based on the MSU Educational Standard for Master of Geology. Master of Geology is trained to carry out various activities that require profound and professional knowledge and skills necessary for handling scientific and applied geological problems within the framework of a specific master's programme. The objects of professional activity for a Master of Geology are: the Earth and its envelopes; geological and geochemical structure of the crust; ecological functions of the lithosphere; geological processes; geophysical fields; rocks, minerals, crystals; mineral resources, including ground waters, permafrost zone, soils and soil massifs.

The master's programme "Petrology" provides graduating students with scientific knowledge and skills in the field of rock composition, structure and origin; processes of crystallization of magmatic melts under near-surface conditions and at depths; processes of rocks transformations under conditions of regional and local metamorphism; elaboration of scientifically substantiated methods of prospecting and exploration of mineral resources.

Фомин Илья Сергеевич / Fomin Ilya

4.3 Сведения о результатах освоения образовательной программы / Programme details and results gained

N	Наименование дисциплины / Course title	Зачетные единицы / Общее количество часов (в том числе аудиторных) / Credits / Academic hours (including in-class hours)	Оценка / Mark
1	Английский язык / English language	7 / 252 (109)	отлично / excellent
2	Философия естествознания / Philosophy of natural sciences	4 / 144 (42)	отлично / excellent
3	История и методология геологических наук / History and methodology of geological sciences	3 / 108 (26)	отлично / excellent
4	Современные проблемы геологии / Current issues of geology	2 / 72 (28)	зачтено / passed
5	Правовые основы недропользования / Legal aspects of subsurface resources management	2 / 72 (28)	зачтено / passed
6	Экономика природопользования / Natural resource economics	2 / 72 (26)	зачтено / passed
7	Постсоветское пространство: диалоги и конфликты / Post-soviet area: dialogues and conflicts	2 / 72 (28)	зачтено / passed
8	Тектоническая интерпретация сейсмических данных / Tectonic interpretation of seismic data	2 / 72 (26)	зачтено / passed
9	Формации магматических пород / Formations of igneous rocks	5 / 180 (70)	отлично / excellent
10	Петрология метасоматических пород / Petrology of metasomatic rocks	4 / 144 (42)	отлично / excellent
11	Теория фазового соответствия / Theory of phase correspondence	5 / 180 (56)	отлично / excellent
12	Формации метаморфических пород / Formations of metamorphic rocks	4 / 144 (42)	отлично / excellent
13	Алмазоносные породы / Diamondiferous rocks	1 / 36 (14)	зачтено / passed
14	Геодинамическое моделирование / Geodynamic modelling	2 / 72 (26)	зачтено / passed
15	Петрология зон субдукции / Petrology of subduction zones	3 / 108 (26)	отлично / excellent
16	Петрология зон субдукции: породы высокого давления и магматизм / Petrology of subduction zones: high-pressure rocks and magmatism	2 / 72 (28)	отлично / excellent
17	Петрология мантии / Mantle petrology	3 / 108 (26)	отлично / excellent
18	Петрология мантии: фазовые равновесия, плавление и флюидный режим / Petrology of mantle: phase balances, melting and fluid regime	2 / 72 (28)	зачтено / passed
19	Современные главы петрологии / Modern chapters of petrology	2 / 72 (28)	зачтено / passed
20	Электроннозондовый микроанализ / Electron probe microanalysis	3 / 108 (39)	отлично / excellent
21	Научно-исследовательская работа / Research work	12 / 432 (0)	зачтено / passed
Курсовые работы / Course papers: не предусмотрены / not required			
Практики / Practical training:			
22	Научно-учебная / Research and training	3 / 108 (0)	зачтено / passed
23	Научно-педагогическая / Teaching and research	3 / 108 (0)	зачтено / passed
24	Научно-исследовательская / Research	12 / 432 (0)	отлично / excellent
25	Итоговые государственные экзамены / Final State Examinations: Государственный экзамен по направлению "Геология" / State examination in geology	3 / 108 (0)	отлично / excellent
26	Выполнение и защита итоговой квалификационной работы / Accomplishment and defence of final qualifying paper: Тема: "Окислительно-восстановительные условия и вариации изотопного состава кислорода при формировании Йоко-Довыренского расслоенного массива в Северном Прибайкалье" / Subject: "Redox conditions and oxygen isotope variations during the Ioko-Dovyren layered massif formation in Northern Transbaikalia" ИТОГО / TOTAL	27 / 972 (0)  120 / 4320(738)	отлично / excellent
1	Изучено студентом сверх учебного плана / Extracurricular courses: Генетическая минералогия (часть 1) / Genetic mineralogy (part 1)	0 / 157 (98)	отлично / excellent
2	Генетическая минералогия (часть 2) / Genetic mineralogy (part 2)	0 / 184 (84)	отлично / excellent

N	Наименование дисциплины / Course title	Зачетные единицы / Общее количество часов (в том числе аудиторных) / Credits / Academic hours (including in-class hours)	Оценка / Mark
3	Генетическая минералогия (часть 3) / Genetic mineralogy (part 3)	3 / 118 (98)	отлично / excellent
4	Генетическая минералогия золота / Genetic mineralogy of gold	3 / 108 (26)	отлично / excellent
5	Современные проблемы петрологии / Current issues in petrology	2 / 72 (28)	зачтено / passed
КОНЕЦ ТАБЛИЦЫ / END OF TABLE			

N	Наименование дисциплины / Course title	Зачетные единицы / Общее количество часов (в том числе аудиторных) / Credits / Academic hours (including in-class hours)	Оценка / Mark

N	Наименование дисциплины / Course title	Зачетные единицы / Общее количество часов (в том числе аудиторных) / Credits / Academic hours (including in-class hours)	Оценка / Mark

4.4. Система оценок в Московском государственном университете имени М.В.Ломоносова / Grading scheme at Lomonosov Moscow State University  
Приименяется следующая система оценок: «отлично», «хорошо», «удовлетворительно», «неудовлетворительно», а также «зачтено», «не зачтено»

The following grading scheme is adopted: "excellent" is the highest possible mark, "good" is the second passing mark, "satisfactory" is the lowest passing mark, "unsatisfactory" is a failure; for pass-or-fail examination "passed" or "failed" are the possible marks

Диплом с отличием выдается полностью выполнившим учебный план с оценками не менее 75% "отлично" при остальных "хорошо" при прохождении итоговой аттестации на "отлично"

Diploma with Honours is awarded to those having completed the programme with no less than 75 percent "excellent" marks and all the remaining "good" marks and having passed Final State Attestation with "excellent" marks

4.5. Дополнительные сведения о дипломе / Overall classification of the diploma      Диплом с отличием / Diploma with Honours

ПОДПИСИ И ПЕЧАТИ / CERTIFICATION OF THE SUPPLEMENT

Ректор / Rector

В.А.Садовничий / V.A.Sadovnichiy

Декан / Dean

Д.Ю.Пущаровский / D.Y.Pushcharovskiy

Секретарь / Secretary

С.Ю.Шиндина / S.Y.Shindina

ПРИЛОЖЕНИЕ  
к ДИПЛОМУ

AAA 2202980

DIPLOMA  
SUPPLEMENT

07h-0315-31w

Регистрационный номер /  
Registration number

29 июня 2013 года / 29 June 2013

Дата выдачи / Issued on

## **5. ПРАВА, ПРЕДОСТАВЛЯЕМЫЕ ДИПЛОМОМ / RIGHTS AND PRIVILEGES GIVEN BY THE DIPLOMA**

### **5.1. Возможность дальнейшего обучения / Access to further study**

Присвоенная квалификация дает возможность продолжить обучение в аспирантуре  
Qualification conferred gives the right to continue education at doctoral programmes

### **5.2. Профессиональный статус / Professional status**

Присвоенная квалификация дает право профессиональной деятельности в соответствии с уровнем образования и квалификацией  
Qualification conferred gives the right to be employed at positions according to the level of education and qualification

## **6. ДОПОЛНИТЕЛЬНЫЕ СВЕДЕНИЯ / ADDITIONAL INFORMATION**

В соответствии с Федеральным законом «О Московском государственном университете имени М.В. Ломоносова и Санкт-Петербургском государственном университете» Московский государственный университет имени М.В.Ломоносова выдает лицам, завершившим обучение по реализуемым им образовательным программам и пропедевтическим итоговую аттестацию, документы о соответствующем уровне образования и (или) квалификации с официальной символикой Российской Федерации, которые заверяются печатью Московского государственного университета имени М.В.Ломоносова и формы которых утверждаются Университетом. Документы о соответствующем уровне образования и (или) квалификации, выдаваемые Московским государственным университетом имени М.В.Ломоносова, дают их обладателям права, аналогичные правам, предусмотренным для обладателей документов государственного образца о соответствующем уровне образования и (или) квалификации.

According to the Federal Law "On Lomonosov Moscow State University and Saint Petersburg State University" Lomonosov Moscow State University issues documents confirming the respective level of education and/or qualification to the persons who have completed the programme implemented by the University and have successfully passed final attestation. Documents whose forms are endorsed by the University have the official State symbols of the Russian Federation and are certified by the seal of Lomonosov Moscow State University. Documents confirming the respective level of education and/or qualification issued by Lomonosov Moscow State University entitle their holders to the rights and privileges that are given to the holders of the State approved documents confirming the level of education and/or qualification.

Свидетельство о государственной аккредитации Московского государственного университета имени М.В.Ломоносова от 25 февраля 2011 года, серия ВВ N 000843.

Certificate of State Accreditation for Lomonosov Moscow State University of 25 February 2011, series BB N 000843.

## **7. СВЕДЕНИЯ О СИСТЕМЕ ОБРАЗОВАНИЯ В РОССИЙСКОЙ ФЕДЕРАЦИИ /**

### **INFORMATION ON THE SYSTEM OF EDUCATION IN THE RUSSIAN FEDERATION**

*Выдержка из Конституции Российской Федерации*

**Статья 43**

1. Каждый имеет право на образование.
2. Гарантируются общедоступность и бесплатность дошкольного, основного общего и среднего профессионального образования в государственных или муниципальных образовательных учреждениях и на предприятиях.
3. Каждый вправе на конкурсной основе бесплатно получить высшее образование в государственном или муниципальном образовательном учреждении и на предприятии.
4. Основное общее образование обязательно. Родители или лица, их заменяющие, обеспечивают получение детьми основного общего образования.
5. Российская Федерация устанавливает федеральные государственные образовательные стандарты, поддерживает различные формы образования и самообразования.

*Выдержка из Федерального закона «О высшем и послевузовском профессиональном образовании» от 22 августа 1996 года N 125-ФЗ*

**Статья 6. Уровни высшего профессионального образования, сроки и формы его получения**

1. Основные образовательные программы высшего профессионального образования реализуются по уровням.
2. В Российской Федерации устанавливаются следующие уровни высшего профессионального образования:  
высшее профессиональное образование, подтверждаемое присвоением лицу, успешно прошедшему итоговую аттестацию, квалификации (степени) «бакалавр» – бакалавриат;
- высшее профессиональное образование, подтверждаемое присвоением лицу, успешно провшему итоговую аттестацию, квалификации (степени) «специалист» или квалификации (степени) «магистр» – подготовка специалиста или магистратура.

*Excerpt from the Constitution of the Russian Federation*

**Article 43**

1. Everyone shall have the right to education.
2. General access and free pre-school, secondary and secondary vocational education in State and municipal educational institutions and at enterprises shall be guaranteed.
3. Everyone shall have the right to receive on a competitive basis free higher education in State and municipal educational institutions and at enterprises.
4. Basic general education shall be compulsory. Parents or guardians shall ensure that children receive a basic general education.
5. The Russian Federation shall establish federal State educational standards and shall support various forms of education and self-education.

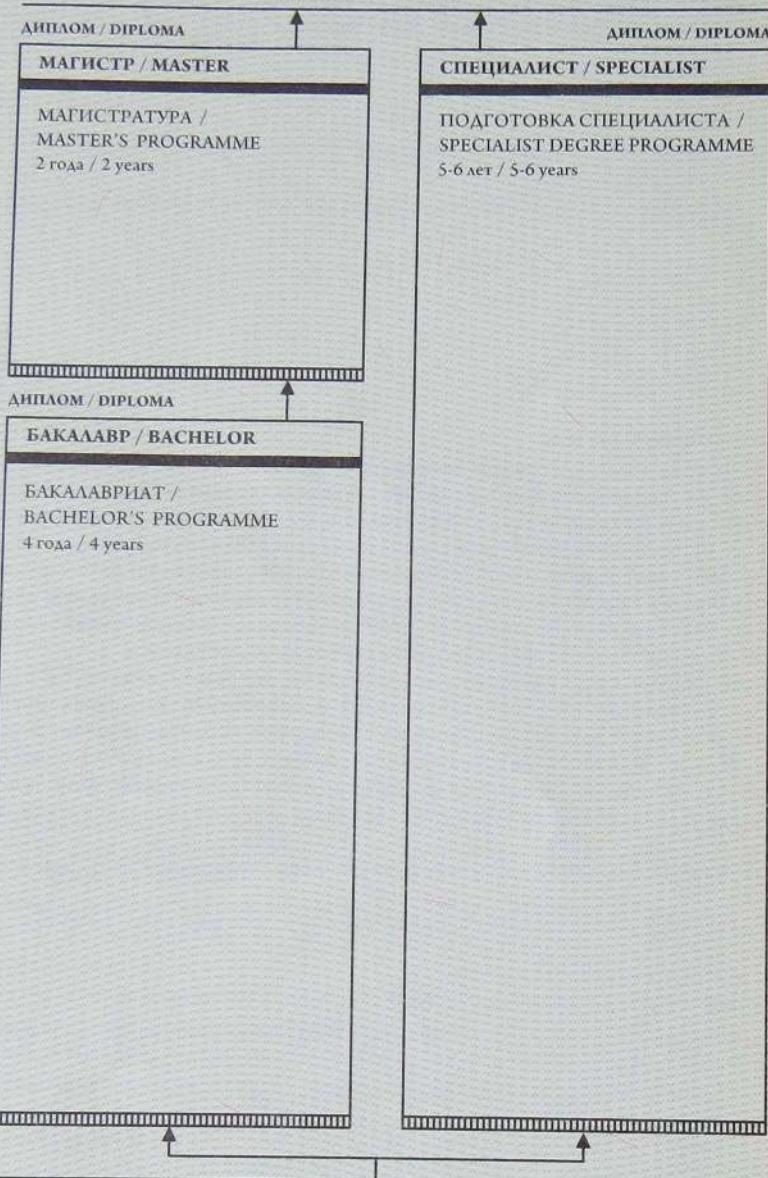
*Excerpt from the Federal Law "On Higher and Postgraduate Education" of 22 August 1996 N 125-FZ*

**Article 6. Levels of higher education, length of study, forms of acquiring education**

1. Educational programmes of higher education are implemented by levels.
2. In the Russian Federation the following levels of higher education are established:  
Bachelor's Programme – higher education confirmed by awarding qualification (degree) of Bachelor to the person who has successfully passed final attestation;  
Specialist Degree Programme or Master's Programme – higher education confirmed by awarding qualification (degree) of Specialist or qualification (degree) of Master to the person who has successfully passed final attestation.

**ВЫСШЕЕ ПРОФЕССИОНАЛЬНОЕ ОБРАЗОВАНИЕ / HIGHER EDUCATION**

Послевузовское профессиональное образование – аспирантура (адъюнктура), ординатура /  
Postgraduate education – doctoral programme, clinical residence



Аттестат о среднем (полном) общем образовании или диплом о среднем профессиональном образовании /  
Certificate of secondary (complete) general education or diploma of secondary professional education

**ПОДПИСИ И ПЕЧАТИ / CERTIFICATION OF THE SUPPLEMENT**

Ректор / Rector

В.А.Садовничий / V.A.Sadovnichiy

**ПРИЛОЖЕНИЕ  
к ДИПЛОМУ**

AAA 2202980

**DIPLOMA  
SUPPLEMENT**

07h-0315-31w

Регистрационный номер /  
Registration number

29 июня 2013 года / 29 June 2013

Дата выдачи / Issued on

Секретарь / Secretary

С.Ю.Шиндина / S.Y.Shindina



Документ содержит 8 страниц / document consists of 8 pages

RUSSIAN FEDERATION



LOMONOSOV MOSCOW STATE UNIVERSITY

# DIPLOMA

with Honours

**AAA 2100031**

The present diploma is to certify that

FOMIN

ILYA

has successfully completed  
the programme of higher education

(Bachelor's programme)

in Geology

and is awarded the degree of  
**BACHELOR OF GEOLOGY**

Decision of the State Attestation Commission

25 June 2011

*Chairperson of the State  
Attestation Commission*

*Registration Number*

071-0307-21w

*Rector of Lomonosov  
Moscow State University*



*Issued on*

30 June 2011

Moscow



МОСКОВСКИЙ  
ГОСУДАРСТВЕННЫЙ  
УНИВЕРСИТЕТ  
имени М.В.ЛОМОНОСОВА

LOMONOSOV MOSCOW  
STATE UNIVERSITY



ПРИЛОЖЕНИЕ  
к ДИПЛОМУ

AAA 2100031

DIPLOMA  
SUPPLEMENT



Российская Федерация,  
119991, г. Москва,  
Ленинские горы, д. 1

1 Leninskie Gory  
Moscow 119991  
Russian Federation

<http://www.msu.ru>

НАСТОЯЩЕЕ ПРИЛОЖЕНИЕ К ДИПЛОМУ СООТВЕТСТВУЕТ МОДЕЛИ, РАЗРАБОТАННОЙ ЕВРОПЕЙСКОЙ КОМИССИЕЙ,  
СОВЕТОМ ЕВРОПЫ И ЕВРОПЕЙСКИМ ЦЕНТРОМ ВЫШЕГО ОБРАЗОВАНИЯ ЮНЕСКО  
THIS DIPLOMA SUPPLEMENT FOLLOWS THE MODEL DEVELOPED BY THE EUROPEAN COMMISSION,  
COUNCIL OF EUROPE AND UNESCO/CEPES

1. СВЕДЕНИЯ ОБ ОБЛАДАТЕЛЕ ДИПЛОМА /  
INFORMATION IDENTIFYING THE HOLDER OF THE DIPLOMA

1.1. Фамилия / Family name

Фомин  
Fomin

1.2. Имя, отчество / Given name(s)

Илья Сергеевич  
Ilya

1.3. Дата рождения / Date of birth

26 июня 1990 года  
26 June 1990

1.4. Идентификационный номер или код студента /  
Student identification number or code

07060165

1.5. Предыдущий документ об образовании / Document confirming previous education

Аттестат о среднем (полном) общем образовании, выданный 23 июня 2006 года,  
серия А3 N 0227683, Российская Федерация  
Certificate of secondary (complete) general education, issued on 23 June 2006, series  
A3 N 0227683, Russian Federation

2. СВЕДЕНИЯ О КВАЛИФИКАЦИИ / INFORMATION IDENTIFYING THE QUALIFICATION

2.1. Наименование квалификации (степени), дата присуждения / Name of qualification (degree) conferred, date of awarding

Бакалавр геологии  
Bachelor of Geology

Решение Государственной аттестационной комиссии /  
Decision of the State Attestation Commission

25 июня 2011 года / 25 June 2011

2.2. Направление подготовки (специальность); профиль подготовки, наименование программы (специализация) /  
Main field of study for the qualification; specialization

Направление подготовки: Геология  
Main field of study for the qualification: Geology  
Профиль подготовки: Геохимия  
Specialization: Geochemistry

2.3. Наименование и статус учебного заведения, выдавшего диплом / Name and status of awarding institution

Московский государственный университет имени М.В.Ломоносова, федеральное  
государственное бюджетное образовательное учреждение высшего  
профессионального образования  
Lomonosov Moscow State University, Federal State Budgetary Educational Institution  
of Higher Professional Education

2.4. Наименование и статус учебного заведения, осуществлявшего обучение; период обучения /  
Name and status of institution administering studies; period of instruction

Московский государственный университет имени М.В.Ломоносова, федеральное  
государственное бюджетное образовательное учреждение высшего профессионального  
образования, 2006-2011  
Lomonosov Moscow State University, Federal State Budgetary Educational Institution of  
Higher Professional Education, 2006-2011

2.5. Язык(и) обучения (экзаменов) / Language(s) of instruction (examination)

Русский / Russian

**3. СВЕДЕНИЯ О УРОВНЕ ОБРАЗОВАНИЯ / INFORMATION ON THE LEVEL OF EDUCATION**

3.1. Уровень образования / Level of education      Бакалавриат / Bachelor's programme

3.2. Нормативный срок освоения программы по очной форме обучения /  
Official length of full-time programme      4 года / 4 years

3.3. Требования к поступающим / Access requirement(s)

Документ государственного образца о среднем (полном) общем образовании или среднем  
профессиональном образовании и успешное прохождение конкурсных вступительных испытаний  
State recognized document confirming secondary (complete) general education or secondary professional  
education and successful passage of competitive entrance examinations

**4. СВЕДЕНИЯ О СОДЕРЖАНИИ ОБРАЗОВАНИЯ И ПОЛУЧЕННЫХ РЕЗУЛЬТАТАХ /  
INFORMATION ON THE CONTENTS OF EDUCATION AND RESULTS GAINED**

4.1. Форма обучения / Mode of study      Очная / Full-time

4.2. Описание образовательной программы / Programme description

Основная образовательная программа подготовки бакалавра по направлению «Геология» реализована на геологическом факультете по профилям подготовки. Программа разработана на основании государственного образовательного стандарта бакалавра по направлению «Геология». Бакалавр геологии ориентирован на изучение строения земной коры, поиски и разведку месторождений полезных ископаемых, решение конкретных геологических, геофизических, геохимических, гидрогеологических и инженерно-геологических, нефтегазовых и эколого-геологических задач.

The Bachelor of Geology educational programme is implemented by the Faculty of Geology and comprises a number of specialities. The programme is based on the state educational standard for the Bachelor of Geology. The Bachelor of Geology aims at studying the structure of the Earth's crust, carrying out exploration and prospecting of mineral deposits and solving specific geological, geophysical, geochemical, hydrogeological, geotechnical, oil-and-gas and ecological problems.

**Фомин Илья Сергеевич / Fomin Ilya**

4.3 Сведения о результатах освоения образовательной программы / Programme details and results gained

N	Наименование дисциплины / Course title	Зачетные единицы / Общее количество часов (в том числе аудиторных) / Credits / Academic hours (including in-class hours)	Оценка / Mark
1	Английский язык / English language	- / 320 (180)	отлично / excellent
2	Физическая культура / Physical training	- / 408 (240)	зачтено / passed
3	Отечественная история / History of Russia	- / 170 (72)	отлично / excellent
4	Философия / Philosophy	- / 168 (54)	отлично / excellent
5	Экономика / Economics	- / 164 (48)	отлично / excellent
6	Высшая математика /линейная алгебра, аналитическая геометрия, математический анализ/ / Higher mathematics /linear algebra, analytical geometry and mathematical analysis/	- / 400 (186)	отлично / excellent
7	Информатика и математическая обработка данных / Computer science and mathematical processing of data	- / 200 (84)	отлично / excellent
8	Физика / Physics	- / 320 (180)	отлично / excellent
9	Общая и неорганическая химия / General and inorganic chemistry	- / 200 (186)	отлично / excellent
10	Физическая химия / Physical chemistry	- / 108 (72)	зачтено / passed
11	Аналитическая химия / Analytical chemistry	- / 146 (108)	зачтено / passed
12	Экология / Ecology	- / 106 (24)	зачтено / passed
13	Общая геология / General geology	- / 130 (102)	отлично / excellent
14	Кристаллография / Crystallography	- / 112 (102)	отлично / excellent
15	Геодезия с основами космоаэросъемки / Geodesy and fundamentals of space and aerial mapping	- / 41 (36)	зачтено / passed
16	Кристаллохимия / Crystal chemistry	- / 70 (60)	отлично / excellent
17	Рентгенография минералов / X-Ray crystallography of minerals	- / 82 (72)	зачтено / passed
18	Палеонтология / Paleontology	- / 41 (36)	зачтено / passed
19	Структурная геология и геокартрирование / Structural geology and geological mapping	- / 100 (90)	отлично / excellent
20	Минералогия / Mineralogy	- / 253 (228)	отлично / excellent
21	Безопасность жизнедеятельности / Life safety	- / 29 (24)	зачтено / passed
22	Историческая геология / Historical geology	- / 82 (72)	отлично / excellent
23	Петрография с кристаллооптикой / Petrography and crystal optics	- / 253 (228)	отлично / excellent
24	Основы физической геохимии / Fundamentals of physical geochemistry	- / 90 (80)	отлично / excellent
25	Геохимические методы поисков месторождений полезных ископаемых / Geochemical methods of prospecting for mineral deposits	- / 90 (64)	отлично / excellent
26	Литология / Lithology	- / 53 (48)	зачтено / passed
27	Разведка месторождений полезных ископаемых / Exploration for mineral deposits	- / 41 (36)	зачтено / passed
28	Гидрогеология, инженерная геология и геокриология / Hydrogeology, engineering geology and geocryology	- / 41 (36)	зачтено / passed
29	Геология полезных ископаемых / Geology of mineral resources	- / 143 (128)	отлично / excellent
30	Геология России / Geology of Russia	- / 94 (84)	отлично / excellent
31	Геология и геохимия горючих ископаемых / Geology and geochemistry of fossil fuels	- / 47 (42)	зачтено / passed
32	Геохимия / Geochemistry	- / 133 (118)	зачтено / passed
33	Геотектоника / Geotectonics	- / 70 (60)	зачтено / passed
34	Основы геофизики / Fundamentals of geophysics	- / 53 (48)	зачтено / passed
35	Правовые основы, экономика и организация геологоразведочных работ / Legal foundations, economics and organization of geological survey	- / 41 (36)	зачтено / passed
36	Профессионально-прикладная подготовка / Professional applied training	- / 58 (48)	зачтено / passed
37	Геоинформационные системы в геологии / Geoinformation systems in geology	- / 100 (32)	зачтено / passed
38	История религий / History of religions	- / 97 (42)	зачтено / passed
39	Основы экономической теории /макроэкономика/ / Fundamentals of economic theory /macroeconomics/	- / 78 (36)	зачтено / passed

N	Наименование дисциплины / Course title	Зачетные единицы / Общее количество часов (в том числе аудиторных) / Credits / Academic hours (including in-class hours)	Оценка / Mark
40	Проблемы геоглобализма и судьбы России в XXI веке / Problems of geoglobalism and destiny of Russia in the 21st century	- / 88 (36)	зачтено / passed
41	Рынок ценных бумаг / Securities market	- / 22 (12)	зачтено / passed
42	Социальная философия / Social philosophy	- / 105 (48)	зачтено / passed
43	Геоинформационные системы в петрологии / Geoinformation systems in petrology	- / 148 (16)	зачтено / passed
44	Специальные методы петрографических исследований / Special methods of petrographic research	- / 96 (48)	зачтено / passed
45	Геологические методы изучения петрографических объектов / Geological methods of petrographic object study	- / 78 (56)	зачтено / passed
46	Экспериментальная и техническая петрология / Experimental and technical petrology	- / 118 (96)	отлично / excellent
47	Петрография метеоритов и импактитов / Petrography of meteorites and impactites	- / 48 (36)	отлично / excellent
48	Петрохимия / Petrochemistry	- / 60 (36)	зачтено / passed
49	Экологическая геология и петрология / Ecological geology and petrology	- / 47 (42)	зачтено / passed
50	Аксессорные минералы / Accessory minerals	- / 35 (28)	зачтено / passed
51	Флюидные и расплавные включения / Fluid and melt inclusions	- / 54 (42)	зачтено / passed
52	Термодинамика породообразующих минералов / Thermodynamics of rock-forming minerals	- / 126 (90)	отлично / excellent
53	Вулканология / Volcanology	- / 50 (24)	зачтено / passed
	Курсовые работы / Course papers:		
54	Смешение магм / Magma mixing	- / 60 (0)	отлично / excellent
55	Динамика взаимодействия магм с контрастными физико-химическими свойствами на примере вулкана Унзен / Dynamics of interaction between magmas with different physical and chemical properties (Unzen volcano).	- / 60 (0)	отлично / excellent
	Практики / Practical training:		
56	По петрографии кристаллических пород / On petrography of crystalline rocks	- / 216 (0)	отлично / excellent
57	Геологическая / Geological	- / 540 (0)	отлично / excellent
58	По экспериментальной петрографии / On experimental petrography	- / 216 (0)	отлично / excellent
59	По специальности / Speciality	- / 486 (0)	отлично / excellent
	Итоговые государственные экзамены / Final State Examinations:		
60	По geoхимии / Geochemistry	- / 100 (0)	отлично / excellent
	Выполнение и защита итоговой квалификационной работы / Accomplishment and defence of final qualifying paper:		
61	Тема: "Ассимиляция ксенолитов оливиновыми трахибазальтами вулкана Этна на примере извержения 2001 года" / Subject: "Xenoliths assimilation by olivine trachybasalts of Etna volcano (eruption of 2001)" ИТОГО / TOTAL	- / 648 (0)  - / 8533(4032)	отлично / excellent
	Изучено студентом сверх учебного плана / Extracurricular courses:		
1	Вулканология / Volcanology	- / 54 (24)	отлично / excellent
2	Геохимия ландшафтов / Landscape geochemistry	- / 36 (24)	отлично / excellent
3	Минерография / Mineralography	- / 80 (48)	зачтено / passed
4	Палеомагнитология / Palaeomagnetology	- / 33 (24)	зачтено / passed
	КОНЕЦ ТАБЛИЦЫ / END OF TABLE		

N	Наименование дисциплины / Course title	Зачетные единицы / Общее количество часов (в том числе аудиторных) / Credits / Academic hours (including in-class hours)	Оценка / Mark

N	Наименование дисциплины / Course title	Зачетные единицы / Общее количество часов (в том числе аудиторных) / Credits / Academic hours (including in-class hours)	Оценка / Mark

4.4. Система оценок в Московском государственном университете имени М.В.Ломоносова / Grading scheme at Lomonosov Moscow State University

Применяется следующая система оценок: «отлично», «хорошо», «удовлетворительно», «неудовлетворительно», а также «зачтено», «не зачтено»

The following grading scheme is adopted: "excellent" is the highest possible mark, "good" is the second passing mark, "satisfactory" is the lowest passing mark, "unsatisfactory" is a failure; for pass-or-fail examination "passed" or "failed" are the possible marks

Диплом с отличием выдается полностью выполнившим учебный план с оценками не менее 75% "отлично" при остальных "хорошо" при прохождении итоговой аттестации на "отлично"

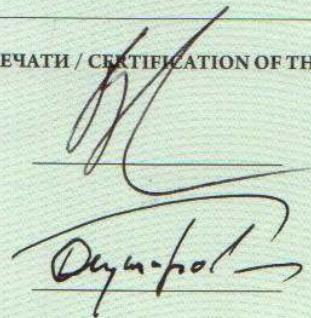
Diploma with Honours is awarded to those having completed the programme with no less than 75 percent "excellent" marks and all the remaining "good" marks and having passed Final State Attestation with "excellent" marks

4.5. Дополнительные сведения о дипломе / Overall classification of the diploma

Диплом с отличием / Diploma with Honours

ПОДПИСИ И ПЕЧАТИ / CERTIFICATION OF THE SUPPLEMENT

Ректор / Rector



Декан / Dean



Секретарь / Secretary



ПРИЛОЖЕНИЕ  
к ДИПЛОМУ

AAA 2100031

**DIPLOMA**  
SUPPLEMENT

071-0307-21w

Регистрационный номер /  
Registration number



30 июня 2011 года / 30 June 2011

Дата выдачи / Issued on

## **5. ПРАВА, ПРЕДОСТАВЛЯЕМЫЕ ДИПЛОМОМ / RIGHTS AND PRIVILEGES GIVEN BY THE DIPLOMA**

### **5.1. Возможность дальнейшего обучения / Access to further study**

Присвоенная квалификация дает возможность продолжить обучение в магистратуре  
Qualification conferred gives the right to continue education in Master's programme

### **5.2. Профессиональный статус / Professional status**

Присвоенная квалификация дает право профессиональной деятельности в соответствии с уровнем образования и квалификацией  
Qualification conferred gives the right to be employed at positions according to the level of education and qualification

## **6. ДОПОЛНИТЕЛЬНЫЕ СВЕДЕНИЯ / ADDITIONAL INFORMATION**

В соответствии с Федеральным законом «О Московском государственном университете имени М.В. Ломоносова и Санкт-Петербургском государственном университете» Московский государственный университет имени М.В.Ломоносова выдает лицам, завершившим обучение по реализуемым им образовательным программам и прошедшим итоговую аттестацию, документы о соответствующем уровне образования и (или) квалификации с официальной символикой Российской Федерации, которые заверяются печатью Московского государственного университета имени М.В.Ломоносова и формы которых утверждаются Университетом. Документы о соответствующем уровне образования и (или) квалификации, выдаваемые Московским государственным университетом имени М.В.Ломоносова, дают их обладателям права, аналогичные правам, предусмотренным для обладателей документов государственного образца о соответствующем уровне образования и (или) квалификации.

According to the Federal Law "On Lomonosov Moscow State University and Saint Petersburg State University" Lomonosov Moscow State University issues documents confirming the respective level of education and/or qualification to the persons who have completed the programme implemented by the University and have successfully passed final attestation. Documents whose forms are endorsed by the University have the official State symbols of the Russian Federation and are certified by the seal of Lomonosov Moscow State University. Documents confirming the respective level of education and/or qualification issued by Lomonosov Moscow State University entitle their holders to the rights and privileges that are given to the holders of the State approved documents confirming the level of education and/or qualification.

Свидетельство о государственной аккредитации Московского государственного университета имени М.В.Ломоносова от 25 февраля 2011 года, серия ВВ N 000843.

Certificate of State Accreditation for Lomonosov Moscow State University of 25 February 2011, series BB N 000843.

## **7. СВЕДЕНИЯ О СИСТЕМЕ ОБРАЗОВАНИЯ В РОССИЙСКОЙ ФЕДЕРАЦИИ / INFORMATION ON THE SYSTEM OF EDUCATION IN THE RUSSIAN FEDERATION**

### *Выдержка из Конституции Российской Федерации*

#### *Статья 43*

1. Каждый имеет право на образование.
2. Гарантируются общедоступность и бесплатность дошкольного, основного общего и среднего профессионального образования в государственных или муниципальных образовательных учреждениях и на предприятиях.
3. Каждый вправе на конкурсной основе бесплатно получить высшее образование в государственном или муниципальном образовательном учреждении и на предприятии.
4. Основное общее образование обязательно. Родители или лица, их заменяющие, обеспечивают получение детьми основного общего образования.
5. Российская Федерация устанавливает федеральные государственные образовательные стандарты, поддерживает различные формы образования и самообразования.

### *Выдержка из Федерального закона «О высшем и послевузовском профессиональном образовании» от 22 августа 1996 года N 125-ФЗ*

#### *Статья 6. Уровни высшего профессионального образования, сроки и формы его получения*

1. Основные образовательные программы высшего профессионального образования реализуются по уровням.
2. В Российской Федерации устанавливаются следующие уровни высшего профессионального образования:  
высшее профессиональное образование, подтверждаемое присвоением лицу, успешно прошедшему итоговую аттестацию, квалификации (степени) «бакалавр» – бакалавриат;
- высшее профессиональное образование, подтверждаемое присвоением лицу, успешно прошедшему итоговую аттестацию, квалификации (степени) «специалист» или квалификации (степени) «магистр» – подготовка специалиста или магистратура.

### *Excerpt from the Constitution of the Russian Federation*

#### *Article 43*

1. Everyone shall have the right to education.
2. General access and free pre-school, secondary and secondary vocational education in State and municipal educational institutions and at enterprises shall be guaranteed.
3. Everyone shall have the right to receive on a competitive basis free higher education in State and municipal educational institutions and at enterprises.
4. Basic general education shall be compulsory. Parents or guardians shall ensure that children receive a basic general education.
5. The Russian Federation shall establish federal State educational standards and shall support various forms of education and self-education.

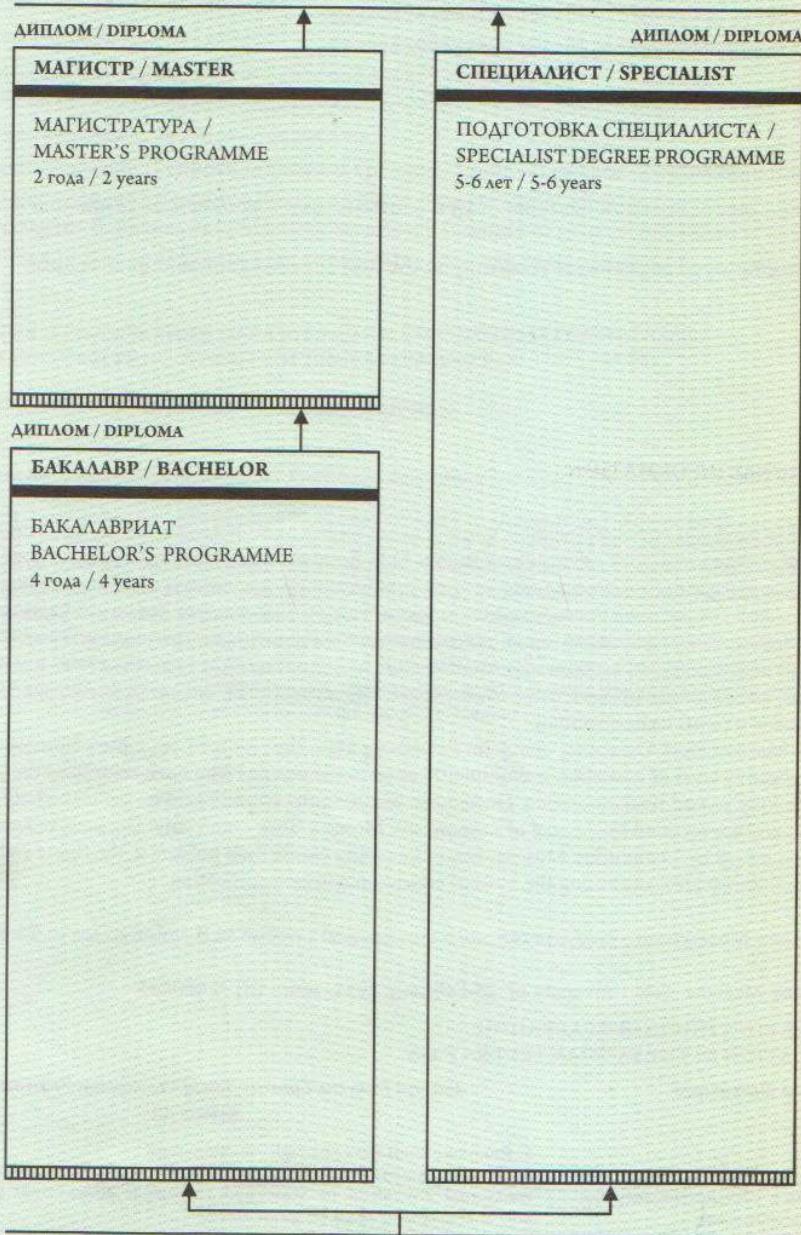
### *Excerpt from the Federal Law "On Higher and Postgraduate Education" of 22 August 1996 N 125-FZ*

#### *Article 6. Levels of higher education, length of study, forms of acquiring education*

1. Educational programmes of higher education are implemented by levels.
2. In the Russian Federation the following levels of higher education are established:  
Bachelor's Programme – higher education confirmed by awarding qualification (degree) of Bachelor to the person who has successfully passed final attestation;  
Specialist Degree Programme or Master's Programme – higher education confirmed by awarding qualification (degree) of Specialist or qualification (degree) of Master to the person who has successfully passed final attestation.

**ВЫСШЕЕ ПРОФЕССИОНАЛЬНОЕ ОБРАЗОВАНИЕ / HIGHER EDUCATION**

Послевузовское профессиональное образование – аспирантура (адъюнктура), ординатура /  
Postgraduate education – doctoral programme, clinical residence



Аттестат о среднем (полном) общем образовании или диплом о среднем профессиональном образовании /  
Certificate of secondary (complete) general education or diploma of secondary professional education

**ПОДПИСИ И ПЕЧАТИ / CERTIFICATION OF THE SUPPLEMENT**

Ректор / Rector

Декан / Dean

Секретарь / Secretary

**ПРИЛОЖЕНИЕ  
к ДИПЛОМУ**

AAA 2100031

**DIPLOMA  
SUPPLEMENT**

071-0307-21w

Регистрационный номер /  
Registration number

30 июня 2011 года / 30 June 2011

Дата выдачи / Issued on

# Dr Ilya Fomin

23 Abuklea Rd, 2122 Marsfield, NSW, Australia

ilya.fomin@mq.edu.au; 0422645370

Citizenship: Australia. Languages: En, Ru, De, Ua

## Professional profile

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- ▶ **Hard Skills:** *Big Data analysis. GIS. Python, linux shell, fortran, C, MPI/OpenMP for HPC.*
- ▶ Numerical simulations (code development). *Heat exchange and crystallisation during magma mixing. Modelling of deep mantle melting in a global scale mantle convection code. Geophysical inversions in 3D within MCMC framework combining different observations (seismics, gravimetry, MT)*
- ▶ Seismology: *recovery of geological structures with receiver functions, body waves, dispersion curves.*
- ▶ Petrology: *magma mixing, assimilation of crustal materials. Studies of crystal size distribution (X-ray  $\mu$ CT). Thermodynamic computations of rock properties*
- ▶ Geochemistry: *major elements geochemistry, oxygen isotopy, redox conditions.*
- ▶ **Soft Skills:** *the president of a non-for-profit charitable community organisation*

## Work experience

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- ▶ Post-Doctoral Fellow in Geophysics (multi-observable probabilistic inversion), Macquarie University (from Mar 2018, supervisor Prof. Juan Carlos Afonso).
- ▶ Research Assistant, ETH Zürich (Sep 2013 - Oct 2017, Paul Tackley (ptackley@googlemail.com)). *Scientific research work. Writing PhD thesis: systematization of literature data, developing of program code, obtaining and analysing results from it. Defended on 27th of October 2017.*
- ▶ Technician, GEOKHI RAS (Jan 2012 - May 2013, Alexey Ariskin (ariskin@rambler.ru), Elena Dubinina (elenadelta@gmail.com)). *Scientific research work.*
- ▶ Geologist, Rock Flow Dynamics (Jan 2010 - Dec 2010, Kirill Bogachev (tnavigator@rfdyn.ru)). *Company develops software for oil industry. My duties were to test the software and write reports for oil exploration companies.*
- ▶ Engineer, petrology department, Lomonosov MSU (Oct 2009 - Oct 2011, Pavel Plechov (pavel@web.ru)). *Research work on X-ray  $\mu$ CT and xenoliths assimilation processes. Maintaining 2 university websites (Slackware linux, CMS written on perl). Teaching a half-year course "Software for petrological studies".*
- ▶ Technician, petrology department, Lomonosov MSU (Sep 2007 - Sep 2009, Pavel Plechov (pavel@web.ru)). *Research on numerical modeling of magma crystallization processes.*

## Education and qualifications

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- ▶ PhD in numerical geodynamics at ETH Zürich (2018)
- ▶ MSc with honours in petrology (Lomonosov MSU, Russia, 2013)
- ▶ BSc with honours in petrology (Lomonosov MSU, Russia, 2011)
- ▶ Certificate "Intel Parallel Programming Professional" (2011)
- ▶ Comprehensive school with honours (Russia, 2006)

## Most relevant publications

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- Manassero M.C., Sinan O., Afonso J.C., Shea J., Ezad I., Thiel S., Fomin I., Czarnota K. (2023) Lithospheric structure and melting processes in southeast Australia: new constraints from joint probabilistic inversions of 3D magnetotelluric and seismic data // submitted to JGR: Solid Earth
- Afonso J.C., Ben-Mansour W., O'Reilly S.Y., Griffin W.L., Salajegheh F., Foley S., Begg G., Selway K., Macdonald A., Januszczak N., Fomin I., Nyblade A.A., Yang Y. (2022) Thermochemical structure and evolution of cratonic lithosphere in central and southern Africa // Nature Geoscience, 15, 405-410
- Manassero M.C., Afonso J.C., Zyserman F., Jones A.G., Zlotnik S., Fomin I. (2021) A Reduced Order Approach for Probabilistic Inversions of 3D Magnetotelluric Data II: Joint inversion of 3D MT and Surface-Wave Data // Journal of Geophysical Research: Solid Earth, 126, e2021JB021962
- Haynes M.W., Fomin I., Afonso J.C., Gorbatov A., Salajegheh F. (2021) Developing thermochemical models of Australia's lithosphere. In: Czarnota, K., Roach, I., Abbott, S., Haynes, M., Kositcin, N., Ray, A. and Slatter, E. (eds.) Exploring for the Future
- Haynes M.W., Fomin I., Afonso J.C., Gorbatov A., Salajegheh F. (2021) Developing thermochemical models of Australia's lithosphere. In: Czarnota, K., Roach, I., Abbott, S., Haynes, M., Kositcin, N., Ray, A. and Slatter, E. (eds.) Exploring for the Future
- Manassero C., Afonso J.C., Zyserman F., Zlotnik S., Fomin I.S. (2020) A Reduced Order Approach for Probabilistic Inversions of 3D Magnetotelluric Data I: General Formulation. Geophysical Journal International. 10.1093/gji/ggaa415.
- Fomin I.S., Schiffer C. (2019) Water, hydrous melting, and teleseismic signature of the mantle transition zone // Geosciences, 505, 1-20.
- Ariskin A.A., Fomin I.S., Zharkova E.V., Kadik A.A., Nikolaev G.S. (2017) RedOx conditions of Ioko-Dovyren intrusion mafic and ultramafic rocks (based on intrinsic oxygen fugacity measurements in olivine) // Geochemistry International, 7, 1-14.
- Fomin I., Tackley P. (2016) Melting-induced chemical differentiation at the base of the Earth's Lower Mantle // AGU Fall Meeting, San-Francisco, DI41B-2626
- Fomin I., Saukko A., Paul E., Schiffer C. (2016) Using thermodynamic data to reproduce main seismic features of transition zone // EGU General Assembly, Vienna, p.14376
- Fomin I., Dubinina E., Avdeenko A., Ariskin A. (2013) Oxygen isotopes in Ioko-Dovyren layered intrusion rocks // Proceedings of 11th Swiss Geoscience Meeting, Lausanne
- Fomin I., Plechov P. (2012) Exchange between Mafic Enclaves and Host Magma: Case of 1991-1995 Mount Unzen Eruption // Journal of Earth Science and Engineering, 2, 631-635
- Fomin I., Plechov P. (2011) Timescale of quartzarenite xenoliths assimilation by trachybasaltic melt: Case of 2001 Etna eruption // Proceedings of Goldschmidt conference, Prague, August 14-19
- Plechov P., Fomin I., Melnik O., Gorokhova N. (2008) Evolution of Melt Composition during Intrusion of Basalts into a Silicic Magma Chamber // Moscow University Geology Bulletin, 2008, Vol. 63, No. 4, pp. 247-257

## Fieldworks

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- Invited lecturer to a ETH Zürich fieldtrip to Colombia, South America, 2018.
- Sampling and sample processing during a field trip and survey in mines near Norilsk, Russia (2013)
- Siberian Federal University and Leibniz Universitat Hannover Collaboration (Germany, 2012)
- North-Baikal fieldgroup GEOKHI RAS (northern Transbaikalia, Russia, 2012)
- Siberian Federal University and Leibniz Universitat Hannover Collaboration (Southern Siberia, 2011)
- Fieldwork on Etna volcano (Sicily, Italy, 2010)
- Tephrochronological fieldwork (Kamchatka, Russia, 2009)

- ▶ PIRE (Partnership for Volcanological Research and Education, Kamchatka, Russia, 2009)
- ▶ Practical training on experimental petrology (IEM RAS, Russia, 2009)
- ▶ Fieldwork on igneous and metamorphic petrology (Southern Urals, Russia, 2008 and 2005)
- ▶ Fieldwork on geological mapping (Crimea, Ukraine, 2008)
- ▶ Fieldwork on general geology (Crimea, Ukraine, 2007)

# Lara Weston - Applicant Summary

Surname: <b>Weston</b>	Given Names: <b>Lara</b>
Preferred Name: <b>Lara</b>	Salutation: <b>Mrs</b>
Gender: <b>Female</b>	Age: <b>48.2.10</b>
Phone: <b>0262820799</b>	Mobile: <b>0403707664</b>
Fax:	Email: <b>lara.weston@hotmail.com</b>
Address: <b>4 Scottsdale St Lyons ACT</b>	Suburb:
State:	Post Code: <b>2606</b>
Country: <b>Australia</b>	Applicant Type: <b>External</b>
Status: <b>In Progress</b>	Recommendation:
Checklist Stage: <b>Panel Review</b>	Aurion Number: <b>6537</b>

## Equity and Diversity:

Place of Birth: <b>Australia</b>	First Language: <b>English Only</b>
ATSI: <b>Non-Indigenous</b>	Year of Arrival:
Main Non English Language:	Mother's First Language: <b>Lang other than English</b>
Father's First Language: <b>English only</b>	1st Disability: <b>No Disability</b>
Joined APS From: <b>State &amp; Local Gov PS</b>	

## Referees:

Title	First Name	Last Name	Job	Employer	Phone
Dr	Junhong	Chen	Team Leader - Organic and Isotope Geochemistry	Geoscience Australia	
Professor	Ian	Jackson	Petrophysics Research School of Earth Sciences	Australian National University	
Mrs	Jatinder	Sarowa	Executive Teacher Science	Harrison School	(02) 6142 2200

## Licences:

<b>Licence</b>	<b>Licence Number</b>	<b>Acquired</b>	<b>Expiry</b>	<b>Issuing Authority</b>
Working with Vulnerable People Card	87099	03-APR-2022	03-APR-2027	Australian Capital Territory

**Qualifications/Education:**

<b>Completed</b>	<b>Title</b>	<b>Type</b>	<b>Discipline</b>	<b>Institute</b>
21-MAR-2023	Statement of Attainment	Skilled Vocational Quals	Other	
31-DEC-1997	BSc(Hons)	Bachelor with Honours	Geophysics- Potential Fie	Macquarie University
23-DEC-2020	Certificate IV Education Support	Certificate I-IV	Education	TAFE/Technical College
27-JUN-2014	Certificate IV Spatial Information Services	Certificate I-IV	GIS	TAFE/Technical College
31-DEC-1996	Bachelor of Science	Bachelor Degree	Physics & Astronomy	Macquarie University

**Current Employment:**

<b>Employee No</b>	<b>Job Title</b>	<b>Org Unit</b>	<b>Supervisor</b>	<b>Supervisor Job</b>	<b>Supervisor Phone</b>
877-46584	Science Technician	Laboratory			

# **Lara Weston**

4 Scottsdale St, Lyons ACT 2606

Mobile: 0403 707 664 Email: [lara.weston@hotmail.com](mailto:lara.weston@hotmail.com)

Australian Citizen

## **Career Summary**

My career has included 13 years in Geophysics and broader Science and Communication, in the Petroleum Exploration industry, Academic Research, the Education sector and Government. I have experience in Seismic Geophysics, both in Seismic Data processing and experimental testing in the laboratory. I have qualifications in GIS and spatial data management.

I have a proven track record in project management, I thrive on complex challenges, both scientific and administrative, and the fast development of new skills. My passion is to develop and maintain collaborations, both internal and external to my organisation, to help get the best from my team.

## **Key skills and training**

- Seismic processing education and experience
- Project management and collaboration
- Contract management training
- Risk Assessments and SOP development
- Ability to undertake fieldwork in remote areas
- Commitment to continual learning through retraining, attendance at ASEG and Science education conferences
- GIS qualifications – ESRI and FME
- Data management – Oracle
- Chemical management – Chemwatch
- Education Support – Science communication

## **Employment History**

### **2022 – Present - Geoscience Australia**

I am a Science Technician in the Organic and Isotope Geochemistry laboratory. My role involves the preparation and analysis of samples such as rocks, sediments, oil and gas using Gas Chromatography, Rockeval, physical processing, wet chemistry techniques and archiving samples into Geoscience Australia's database. I purchase consumables, edit Standard Operating Procedures and manage chemicals, ensuring safe storage, auditing and proper disposal practices. I liaise with team members and clients to ensure that project goals are completed within set timeframes.

### **2019 – 2022 - Alfred Deakin High School**

I was the Laboratory Technician at Alfred Deakin High School. My role involved consulting with teachers on their curriculum aligned needs, designing and/or testing the suitability of experiments and development of resources to meet educational needs, scheduling practicals and allocation of equipment, and assisting with the instruction of students during practical and theoretical lessons. I was also responsible for the maintenance of the laboratories and a large variety of equipment, chemical preparation and management, record keeping, writing Standard Operating Procedures, Risk and OHS assessments and substitutions where needed, purchasing, acquisitions, sterilisation and disposals, and liaising with other administrative and building staff and visiting contractors.

### **2018 - Birrigai Outdoor School**

I was employed as an Outdoor Education Assistant and was responsible for leading and assisting with a range of outdoor, environmental and historical activities, demonstrating them to school age students.

My main responsibilities included the development, set-up and storage of educational resources, demonstration of team building activities and assisting teaching staff in their delivery of educational programs. I also transported students by 4wd on site and was responsible for a range of administrative activities which helped ensure the Centre ran smoothly.

### **2007-2018 - Community work / Voluntary work at Curtin Primary and Preschool**

I have been actively involved with my children's education, regularly volunteering at their school. This has focussed on assisting with STEM education through the development and delivery of a range of experiments and activities to foster a love for scientific enquiry.

### **2006-2010 - Online toy retailing – micro home business**

I created a small home business selling unique and hard to find toys through a range of online channels. In this business I regularly dealt with customers around the world regarding their toy purchases, ensuring that they got what they had purchased in a timely manner and were satisfied with their item.

### **1999 – 2006 - Australian National University - Research School of Earth Sciences, Earth Materials – Research Assistant**

I was responsible for performing laboratory studies of natural and synthetic analogue rocks and minerals at high temperatures and pressures, simulating those found deep within the earth, to determine their physical properties and inform the interpretation of Earth structure and processes.

The main duties of this position involved sample preparation, testing elastic wave speeds and pore fluid filled fault strengths, data acquisition and analysis of specimens and assistance in the reporting and publication of results.

My workflow involved collaboration with both ANU and visiting academics, students, technicians and members of the mechanical and electronics workshops.

### **1998-1999 - Veritas – Brisbane - Geophysicist – Seismic**

I was responsible for ensuring that seismic data was accurately processed to meet the needs of multi-national petroleum companies within tight deadlines. This data was used to inform the location of exploratory drilling for oil and gas.

### **1990-1998 - Australia Post Offices, Dural and Carlingford North, New South Wales**

I was responsible for providing customer service, working with a wide variety of people from the local community. This involved anything from the one-off purchase of a single item to the handling, processing and billing of multiple items for repeat customers over extended duration.

### **Publications**

Kung, Jennifer & Jackson, Ian & Weston, L. & Liebermann, Robert. (2005). Elasticity of polycrystalline MgSiO<sub>3</sub>orthoenstatite to 1373K. AGU Fall Meeting Abstracts.

Antao, Sytle & Jackson, Ian & Weston, L. & Kung, Jennifer & Li, Binglian & Chen, Jiaomei & Hassan, I. & Liebermann, Robert & Parise, J.. (2005). Acoustic Anomalies in Magnesioferrite up to 700 °C. AGU Fall Meeting Abstracts.

Jackson, Ian & Webb, Sharon & Weston, Lara & Boness, David. (2005). Frequency dependence of elastic wave speeds at high temperature: A direct experimental demonstration. Physics of the Earth and Planetary Interiors. 148. 85-96. <https://doi.org/10.1016/j.pepi.2004.08.004>

Macnae J. , Lay L. Weston L. (1998) Measurement of static shift in MT and CSAMT surveys. *Exploration Geophysics* 29, 494-498. <https://doi.org/10.1071/EG998494>

### **Education**

#### **2023 - Chemwatch**

Statement of Attainment Chemicals Management

#### **2019-2020 – Canberra Institute of Technology**

Certificate IV Education Support

#### **2014 – Canberra Institute of Technology**

Certificate IV Spatial Information Services

#### **1993-1997 – Macquarie University**

Bachelor of Science (Honours 1<sup>st</sup> Class) - Exploration Geophysics with Physics and Mathematics

#### **1992 – Sydney University**

Bachelor of Applied Science – Diagnostic Radiography (First year only)

**Referees** - It would be appreciated if you could advise me prior to contacting my referees.