Curriculum Vitae

Personal information

First name / Surname

Address Via Nemorense, 177 - 00199 Roma (Italy)

Roberto Bencini

Mobile: +39 330 207443

Telephone(s) +39 06 59874028 (office, also fax); +39 06 86219275 (home)

E-mail robbenci@tin.it

Nationality Italian

Date of birth 23.12.1955

Gender Male

Other | Married, 2 daughters (31 and 25, now independent)

Occupational field

Petroleum Geoscientist, Naturally Fractured Reservoirs, CO₂

Work experience

Main activities and responsibilities

Dates | 1999 to present

Occupation or position held | Owner-Founder and Director

Oil & Gas Exploration, Development and Production, Naturally Fractured Reservoirs (NFR) expert, Underground Gas Storage, CBM and Unconventionals, Asset evaluation, Regional petroleum play studies, Due Diligence, New Business Development, Fund Raising, Energy Consulting.

- Identified NFR oil opportunity, applied for and obtained in 2003 the Ksar Hadada exploration permit in Southern Tunisia for the Operator, and retained 1.5% Profit Oil participation.
- Identified and evaluated the Isarene block in SE Algeria for Petroceltic International plc (PCI) in 2004 (530 million BOE recoverable reserves, NRF). Got 30 times PCI Share Price growth in 14 months.
- Founded the two initial companies of the Independent Resources Group in 2002 and 2003. Founded Independent Resources plc (IR plc, now Echo Energy plc) in June 2005, retaining a significant shareholding. Obtained a £2 Million pre-IPO funding in June 2005 and £5.1 Million at IPO in December 2005 for IR plc. Continued promoting IR plc on AIM through June 2008 (£6.91 Million fundraising) and June 2010 (£2.60 Million fundraising). As GA.I.A.'s representative, was member of the IR plc Board as Technical Director from foundation to January 2015.
- Conducted Energy and Environmental analysis and research in 1999-2009 for private and public research bodies (PTRC, Canada http://ptrc.ca; INGV, Italy www.ingv.it, ENEL spa, Italy www.enel.it; others public and private).
- Discovered new method for desorbing gas from coal for a CBM project (Patent pending).
- In addition, evaluated: Namibia underground water resources, mostly in NFR rocks; Central Turkey geothermal potential; Georgia underground gas storage (UGS) potential in NFR rock; NW Borneo and onshore Indonesia oil&gas potential; onshore Myanmar opportunity, Italy gas production opportunities, Colombia multi-TCF gas prospect in naturally fractured turbiditic sandstone.
- Extensive Due Diligence experience for oil&gas assets and companies, especially involving NFR.
- Included in 2018 in the List of Oil and Gas Upstream Experts to the Ministry of Economic Development, National Mining Office for Hydrocarbons and Geo-resources, of the Republic of Italy.
- Co-founded in 2001 the CO2NET FP5 Thematic Network, advising the European Commission on CCS matters. Coordinated an EC FP6 research proposal (MISECO2) in 2003. Was nominated "Integrator" for the US\$ 25 Million IEA international Weyburn EOR CO2 project, years 2000-2004.

Name and address of employer

GA.I.A. srl

Via Lucrino, 25 - 00199 Roma (Italy)

Type of business or sector

Complex petroleum geology, including overthrust belt plays and naturally fractured reservoirs (NFR). Underground gas storage, CO₂ geological storage. Hydrocarbon exploration and production (subsurface) including unconventionals and Coal Bed Methane (CBM).

All geological disciplines (expert in structural geology, basement reservoirs, sequence stratigraphy, turbidites, petroleum geochemistry, hydrodynamics), geomechanics, induced seismicity, Geophysical prospecting (reflection seismology acquisition and interpretation, gravity, magnetics, geoelectric), Reservoir Engineering, Reservoir simulation, Geocellular Modelling, Well prognosis, Well drilling, Petroleum Economics (including probabilistic oil&gas reserves), Contracts and Petroleum Law. Areas of expertise: Europe (especially North Sea, Italy, Romania), Africa (especially Algeria, Tunisia, Libya, Egypt and Morocco), North and South America, Middle East, Far East, Australia.

2005 - 2017 **Dates** Occupation or position held Founder. Technical Director and Board Member (2005-2015). Subsurface Consultant (2015-2017). Main activities and responsibilities New Business development and technical project direction (budget: up to 30 million Euro, 2005-2014). Identified, applied for and appraised the Grosseto, Italy CBM play (>160 BCF recoverable), Identified and applied for the Underground Gas Storage NFR site of Rivara, Italy (112 BCF working gas capacity). Identified and applied for the Sibilla, Adriatic Sea (Italy) CO₂ storage site (0.4 to 1.5 billion ton CO₂ capacity), obtaining a positive Environmental Impact Assessment (EIA) Ministerial Decree for the project. Selected and managed technical contractors and service companies for the operated projects. Evaluated several oil&gas opportunities in UK, Tunisia, Egypt and Turkey (Geology, Geophysics, Reservoir Engineering). E&P operations (seismic planning and interpretation, well prognosis, reserves calculation). Advised on terms for M&A Contracts. Fundraising for company projects (2005-2014). Technical team creation and mentoring. Integrated multidisciplinary technical consultancy. ECHO ENERGY PLC (formerly Independent Resources plc) (www.echoenergyplc.com) Name and address of employer 4th Floor, 40 George Street, London W1U 7DT (United Kingdom) New Business Development; Hydrocarbon exploration and production; Naturally Fractured Reservoirs Type of business or sector (NFR) assessment; Unconventional oil and gas, including Coal Bed Methane (CBM); Underground gas storage; CO₂ geological storage. 1985 - 1998 Dates Occupation or position held Senior Geoscientist and Chief Geologist Main activities and responsibilities New Business Development, project management and multidisciplinary subsurface evaluation for petroleum exploration and production (Geology, Geophysics, Reservoir Engineering). Tempa Rossa NFR oil field discovery and appraisal (440 million BOE recoverable reserves), Basilicata, Italy. Berkine Basin discovery and appraisal (several fields, 3 billion bbls recoverable), Algeria. Elephant (El Feel) NFR oil field discovery (700 million bbls recoverable), Murzuq Basin, Libya. Bhit gas field (1.35 TCF recoverable), Pakistan. Colombia, Venezuela. Application for the acreage were the Torrente Baganza gas field (53.3 BCF recoverable) was later discovered in Northern Italy. Achieved multi-million dollar reduction in farm-in costs through comparative play evaluation in Algeria. Identified hydrodynamic trapping oil prospects in Algeria using innovative techniques. North Africa, Italy (and Sicily), Malta, Middle East play assessment and exploration. E&P operations. Name and address of employer LASMO plc (now ENI spa. www.eni.it) 100, Liverpool Street - London, EC2B 2BB (United Kingdom) Hydrocarbon exploration and production Type of business or sector 1981 - 1985 Dates Occupation or position held Well site Geologist, Petroleum Geoscientist (Geologist and Geophysicist) Main activities and responsibilities Subsurface analysis and prospect evaluation (UK and Norwegian North Sea, Italy, North Africa, USA), including reflection seismic interpretation and a detailed hydrodynamic study of the Tertiary reservoirs of the UK sector of the North Sea. Interpretation of the Haltenbanken area, offshore Norway. Well site Geologist (Alba field discovery, UKCS). Prospect/Lead generation and maturation. E&P operations. GULF OIL E&P (now Chevron Corporation, www.chevron.com) Name and address of employer 2, Portman Street, London, W1A 0AN (United Kingdom) Type of business or sector Hydrocarbon exploration and production 1978 Dates Occupation or position held Researcher Main activities and responsibilities X-Ray clay mineralogy, sedimentary petrography, geological surveying. During this period, admittance to the PhD programme of Scuola Normale Superiore (Science Class) of Pisa (Italy). Name and address of employer Istituto di Mineralogia e Petrografia (Institute of Mineralogy and Petrography, now part of the Earth Science Dpt.), Pisa University (www.dst.unipi.it/en/) Via Santa Maria, 53 56126 Pisa (Italy) Type of business or sector University, Earth Science research, Mineralogy and Geology For more information on Europass go to http://europass.cedefop.europa.eu

Education and training

Dates

1981 - 1999

Title of qualification awarded

"Successful Completion" diplomas

Principal subjects/occupational skills covered 46 professional development courses in Petroleum Geology, Log Interpretation, Well Site Geology, Structural Geology, Petroleum Geochemistry, Reservoir Engineering, Sedimentology, Economics, Business, HSE, Specialist Software, Management (list available).

Name and type of organisation providing education and training Various (OGCI, IHRDC, EXLOG, GSL, IDI, etc.)

Level in national or international classification International: ISCED level 6, Post-graduate professional development

Dates

1980 - 1981

Title of qualification awarded

Certificate of Training in "Experience Broadening Program for Geophysicists", GULF OIL,

Principal subjects/occupational skills covered Exploration Seismology (acquisition, processing, interpretation, 2D + 3D), Gravity and Magnetics, Log interpretation and formation evaluation, Seismic modelling and synthetics.

Name and type of organisation providing education and training Level in national or international classification

GULF Research and Development Company (Houston Technical Services Center) Houston, Texas (USA) - Research Center of an integrated Major Oil Company

International: ISCED level 6, Post-graduate professional development, 1000 hours.

Dates

1974 - 1978

Title of qualification awarded

MSc Degree in Earth Sciences, with 3 experimental Theses (1 main Thesis, two secondary Theses). Admitted to the Scuola Normale Superiore PhD programme in Earth Sciences in 1978.

Principal subjects/occupational skills

Chemistry, physics, mineralogy, palaeontology, petrography, stratigraphy, geography, geology, geophysics, geochemistry, applied geology.

Name and type of organisation providing education and training

Sciences Faculty, University of Pisa (Italy)

Level in national or international classification

National Marks, Laurea, 110/110 with Honours International: ISCED level 6

Personal skills and competences

Mother tongue

Italian

Other languages

Self-assessment

European level (*)

English

French Spanish English, French, Spanish

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|--------------------------|------------------|---------|------------------|--------------------|-----------------|-------------------|-----------------|---------|-----------------|
| Understanding | | | | Speaking | | | | Writing | |
| Listening | | Reading | | Spoken interaction | | Spoken production | | | |
| C2 | Proficient user | C2 | Proficient user | C2 | Proficient user | C2 | Proficient user | C2 | Proficient user |
| B2 | Independent user | В2 | Independent user | A2 | Basic user | A2 | Basic user | A2 | Basic user |
| B2 | Independent user | B2 | Independent user | A2 | Basic user | A2 | Basic user | A2 | Basic user |

(*) Common European Framework of Reference for Languages

Social skills and competences

Multilingual and multicultural attitude.

Good communicator (written, spoken), confident and clear presenter.

Strong team player, value driven.

Strong professional work ethic.

Pleasant mentor to junior staff, keen educator.

Has environmental sensibility and experience.

Soft skills

Good conceptualiser, particularly for complex and uncertain situations.

Multi-specialist, with vast cross-disciplinary experience. Effective technical integrator.

Able to gain and provide a broad view as well as to do deep analysis, according to the need.

Determined to solve problems, dedicated to his job, enthusiastic hard worker, strongly self-motivated. Creative and innovative, lateral thinker.

Multidisciplinary technical knowledge acquired in an operating international environment.

Proven cost cutter and fundraiser. Strong entrepreneurial attitude. Commercial acumen.

Valuable network of contacts, colleagues and friends.

Good up-to-date computer literacy (MS Office, technical software for geological modelling, seismic interpretation and reservoir simulation, other specialized technical software).

Vast general education, from Classics to Technology.

Additional information

Lecturing and Teaching Activity:

- Contract Lecturer (Tutor Didattico) at Bologna University "Alma Mater", Italy for CO₂ storage and CCS/CCUS (academic years 2018-19 and 2019-20, https://www.unibo.it/sitoweb/roberto.bencini).
- Visiting Lecturer at the Virtual University of Uganda (VUU) for the course "Upstream Oil and Gas Engineering/Subsurface Fundamentals" in the MBA in Oil and Gas, PGD in Upstream Oil and Gas Management and MSC in Oil and Gas Management, 2019 and 2020 (https://virtualuni.ac.ug/upstream-oil-and-gas-engineering-fundamentals/).
- Post-graduate Master in "Management of Energy and Environment", Rome (Italy), "La Sapienza" University, 2002 to 2013; "Roma Tre" University, 2014.
- Post Graduate Master in "Energy Resources Management", Rome (Italy), SAFE (<u>www.safeonline.it</u>),
 1998 to 2019. Course Director in the 1998 first edition.
- University and Post-Graduate lectures at "La Sapienza" University (Rome), "Tor Vergata" University (Rome), Perugia University, Modena University, Bologna University, St. John's University (Rome).
- Tutor or Co-tutor for 7 Bachelor, Master or PhD Thesis in the period 2003-2016.

Bibliometrics (Google Scholar)

Citations: 294 H Index: 8 i10-index: 7

Publications (scientific papers and books), Presentations and Posters:

22 scientific papers, 3 books, 6 posters,

30 oral presentations and abstracts,

14 grey literature articles.

Industry Reports:

>200 Industry technical reports (mostly Hydrocarbon E&P, Underground Gas Storage, CO₂ Storage).

Appointments:

- Member of the Carbon Capture, Utilisation and Storage (CCUS) Knowledge Network of the Resources Study Group, World Energy Council (2014 to present).
- Enrolled to REPRISE, the official list of Scientific Experts of the Ministry of Education, University and Research, Department for Higher Education and Research, of the Republic of Italy for the subjects of "Competitive industrial research and social development" and "Economic and financial evaluation" (2018 to present).
- European Expert for Petroleum Geology, Oil&Gas exploration and production, CO₂ geological storage, Shale Gas, Geothermal Energy (1999 to present).
- National Expert for Italy at IPCC (Intergovernmental Panel on Climate Change) Working Group III, assessing and approving the IPCC Special Report on CO₂ Capture and Storage, Montreal, 2005.
- Member of the Editorial Board, National Geological Survey of Italy (1996-2002).

Scientific and Professional Membership:

- **AAPG** (American Association of Petroleum Geologists), European Delegate to the House of Delegates, 2000-2002, Team Leader Italy, 2002-2005;
- GSL (Geological Society of London), Chartered Petroleum Geologist since 1992;
- SPE (Society of Petroleum Engineers), Board Member, Pescara Section, 1997-98;
- SGI (Società Geologica Italiana).

Rome, February 2020