Bellas, Spyridon (or Spyros), M.

1. PERSONAL INFORMATION

<u>Surname - Name</u>: Bellas Spyridon

Nationality: Greek

Affiliation: Institute of Petroleum Research (IPR) of FORTH (Foundation for Research and Technology -

Hellas)/ Principal Researcher

Working Address: Technical University of Crete / University Campus / M1 Building

73100, Chania, Crete, Greece

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2. Studies - Titles - Awards

27.12.2001: "Constantinos Ktenas" Prize of the Athens Academy of Sciences (Sector: Natural Sciences)

Q3.2020: Member of the Scientific Council of the IPR

Postgraduate education

Jan-Dec. 2000: Postdoctoral Research Fellow (State Foundation Institute scholarship -IKY-)

Stratigraphy, Evolution & Paleoecology of Marine Basins (E. Aegean Sea). Collaboration of Patras Univ., Dept of Mar. Geol. & Geodynamics, HCMR (Hellenic Center for Marine Research) and Dept. of Geosciences (Free University of Berlin, Germany)

13.02.1997: Doctor of Natural Sciences of the Free University of Berlin/Geosciences Dept. (Dr. rer. Nat.).

<u>KEY WORDS</u>: Stratigraphic analysis, Micropalaeontology, Sedimentary Petroleum Basins, TOC, Deep-Water Clastic Fmts-Flux-Source-Rocks, Reservoir, Eo-Oligo-Miocene/ new mid latitudes zonation.

11.1993-10.1994: European Community ERASMUS Scholar (Dept. of Geosciences, Free University of Berlin)

1991-1993: DAAD Scholar and Postgraduate Studies (Schwäbisch Hall, Dept. of Geology, Patras University)

Q1.1990: Diploma in Geology (Geological Dept. of Patras University, Greece)

3. Experience/Affiliations

- Since Q3.2020: Principal Researcher at the Institute of Petroleum Research (IPR), Greece (field of expertise: "Petroleum Exploration") / Foundation for Research and Technology -Hellas (FORTH)
- Q3.2016-Q2.2020: Vice President Upstream (Hellenic Hydrocarbon Resources Management, HHRM SA)
- Since 2012: Oil & Gas Expert in the European Federation of Geologists (EFG)
- 2012-Q2.2020: Member of the Committee for Granting Offshore Works Licenses (Ministry of Foreign Affairs)
- 2011-Q2.2016: Ministry of Energy & Environment (Geo-Expert for Oil & Gas Evaluation and Development of Greek E&P assets and blocks promotion, Upstream Team Leader)
- 2002-2011: Ministry of Public Works & Urban Planning (Geotechnical Engineering Dept., DG QC responsible, Greece)
- Q1.2002- 2020: Lecturer of Applications in Geology at various Universities (Patras, Aegean, Technical Univ. of Athens, ASPAITE, Kozani, Panteion/Athens, TU of Crete, etc)
- 1997-2001: (Geo-) Scientific Assistant, Free University of Berlin (various Geological projects worldwide, including lecturing)

4. Oil & Gas Professional Experience

- Q4. 2002 Q3. 2011: Senior Geologist in the DG of QC at the Geotechnical Engineering Central Laboratory of Greece, working on Geoengineering tests, Core drilling and descriptions and geological evaluations-correlations of wells.
- Since October 2011, as a Geologist, Expert on Hydrocarbons, Official Representative of Greece in the European Federation of Geologists (EFG) (*Sector*: "Oil & Gas Expert")
- Since 2012, as Upstream Team Leader in the Hydrocarbons Group, participated and developed, among others, the following processes:
 - Q4. 2011: Non-Exclusive Seismic Data Surveys (tender preparation, legacy seismic data evaluation).
 - Q4.2012 Q1.2013: State Representative (on-board), Seismic-Research Vessel R/V "Nord Atlantic" for the control and monitoring of the MC seismic campaign (non-exclusive surveys) conducted by the Norwegian Petroleum -Geo-Services (PGS) Exploration Ltd within the offshore zone of the Ionian Sea and S. of Crete.
 - Q3-Q4. 2013: 2D Offshore Seismic Interpretation, PGS, Oslo/Norway.
 - Q3.2014: Integration of W. Greece hydrocarbon data / Technical Report, IFP/BEICIP-FRANLAB, Paris/France.
 - Q4.2012-Q2.2020: Member of the Committee of the Ministry of Energy "For the control and monitoring of oil works in the exploitation areas PRINOS-SOUTH KAVALA". The only Greek production field(s), since the 1980's.
 - 2012- Q2. 2020: Member of Evaluation and Technical Advisor Committees for 5 on- and 24 off-shore blocks for E&P of the Ministry of Environment and Energy, in western Greece/Ionian Sea and South of Crete
 - Q4.2016-Q2.2020: VP at HHRM SA (block evaluations, assets strategy, offshore energy safety).

5. Geological Experience (briefly)

Specialization in both clastic and carbonate formations studies including the transitional system cases. Long experience in structurally complex areas, thrust and fold belts (Alpine, Pyrenean), subduction, accretionary prism, wedge and strike-slip faults (Aegean Arc System, Eastern Mediterranean). Moreover, my experience extends to evaporitic formations (both of Triassic and Messinian age) and to Paleozoic (Devonian of Germany), Mesozoic (Jurassic and Cretaceous of Morocco, Germany and Greece) and Cenozoic (Paleocene of Spain, Eocene of Poland-Greece, Oligocene of Greece, Miocene of Malta, Greece, Pliocene of Greece and Bolivia, Pleistocene to Recent of Greece and Indian Ocean Triple Junction) age sedimentary rocks from various projects (on- and off-shore) including Bolivia, Poland, Spain, Germany, Morocco, Malta, Oman, Arabian Peninsula (with BG) and Greece. Moreover, I have taken part in many Excursions-Field Trips (Germany, Poland, Greece) leading and advising IOCs and Service Companies on the regional and local field geology.

My expertise includes but is not restricted to:

- Core analysis (geol., sediment., stratigr., petrogr., etc.)
- Thin sections for biostr., SEM preparation-study and microscopy
- Geotechnical Engineering Laboratory and in situ tests and QC
- Geosynthesis of various Geo-Data (structural, geophysical, geochemical, data-logs etc)
- Basin evolution Seq. Stratigr., Source routes identification
- Opening new frontier areas (legacy geo-data evaluation, wells re-examination)
- Promoting special characteristics of blocks concessions
- Negotiating agreement terms (geological-financial)
- Evaluating production fields/reservoirs in existent blocks or prospects (G&G)
- Environmental Plans-Reports evaluation (SEIA, EIA, EBR, EAP)
- Identifying and proposing new prospects
- Managing tender procedures
- State organizations E&P management coordination
- Local content and Social Impact studies relevant to E&P

6. Academic Experience

Lecturing applied geological aspects, such as applied, engineering, and environmental geology, biostratigraphic analysis, facies development, bio-evolution, microfossils and biostratigraphic applications to petroleum geology at various Universities:

- 1997-2001: Free University of Berlin (FU-Berlin, Geo-sciences Department, full-time courses)
- 2002-2009: Free University of Berlin (FU-Berlin, Geo-sciences Department -Short courses)
- 2002-2005: Univ. of Aegean (Environment Department Mytilene Island), [full-position, Asst. Prof.]
- Q3-Q4 2005: Univ. of Ioannina (Department of Environment, University Faculty of Agrinion) [full-position, Asst. Prof.]
- 2003-2008: Univ. of Patras (Geology Department Patras), [half-position, Asst. Prof.]
- 2005-2015: Higher School of Pedagogical & Technological Education (Civil Engineer Department Athens), [full-position, Applications Prof., Asst. Prof.]

Giving courses and seminars in MSc's:

- 2020-2021: Technical University of Crete (MSC course in Petroleum Engineering)
- 2018-2020: Univ. of Western Macedonia (MSc course in Oil&Gas transportation and safety, TAP Project)
- 2018-2019: Pantaion Univ., Athens (MSc seminar, Department of International, European and Area Studies)
- 2018: National and Kapodistrian Univ. of Athens (Department of Geology & Geoenvironment, MSc seminar)
- 2015: Technical Univ. of Athens (School of Mining & Metallurgical Engineering, MSc seminar)

Three times was appointed as External Evaluator of the Greek Independent Authority for the Evaluation of the Quality of the Higher Level Educational Institutes (HQA, evaluating Departments and Universities of Greece).

Supervised & Co-supervised more than 50 Diploma and Master Theses (Germany and Greece) and 1 PhD.

Since 2008 reviewer in relevant Journals.

Has given numerous talks in relevant Congresses, Workshops and Meetings, International, European and domestic (Greek) ones.

7. Organization of (recent) Relevant Congresses

- AAPG Conference (Africa Region) 2019: The Eastern Mediterranean Maga-Basin: New data, New Ideas and New Opportunities, 6-7th September, Alexandria, Egypt, Member of Organizing Committee & Co-Chair of Session 1: Tectonic Controls on Stratigraphy and Hydrocarbon Systems.
 https://www.aapg.org/global/africa/events/workshop/Articleid/51680/the-eastern-mediterranean-mega-basin-new-data-new-ideas-and-new-opportunities#152312141-organizing-committee
- Regional Conference on Geomorphology, RCG, Sept. 2019 (Geomorphology of Climatically and Tectonically Sensitive Areas), IAG National Scientific Member for Greece. - International Association of Geomorphologists, Convener & Co-Chair of the Scientific Session S11: Seismic Geomorphology. https://rcg2019.com/#1555016872242-a1c4202e-edaa
- 1st Educational Seminar for the «Environment and Safety in Exploration and Exploitation of Hydrocarbons», Ioannina, Greece, June, 2019, Hotel Grand Serai. Coordinator and Invited Opening Speaker by Repsol S.A.
- Geological Society, International Congress May, 2019. Organizer and Chair of the Special Session T6.S.1:
 From Exploration to Technological Advantages and Sustainability.
 https://www.gsg2019.gr/special-sessions/

- Bellas, S. M. (2019 In Greek): The Greek E&P concessions and their management by the HHRM SA. In: P. Chalatsi (Ed.), Hellenic Hydrocarbon Resources Management SA Publications "Hydrocarbons in Greece: The role of HHRM", pp. 25-40; Athens; Greece. https://www.greekhydrocarbons.gr/gr/News_Texnika_gr.html
- Kosmidou, V, Makrodimitras, G., Bellas, S. (2019): A Regional Study of the Ionian Sea and its Hydrocarbon Prospectivity. – 15th Int. Congress of the Geol. Soc. Greece (ΕΓΕ 2019), 22-24 May, Athens. [Bull. Soc. Geol. Greece, Sp. Publ., 7 (Ext. Abstr.): 137-138].
- Kosmidou, V., Bellas, S., Bassias, Y. (2018)- Offshore Western Peloponnese: Structural Elements and Differences from Northern Ionian, Greece. First EAGE Workshop on Geophysical and Geological Challenges in the Hydrocarbon Provinces of the Eastern Mediterranean (Proceedings Volume 2018), St. Julian's, 6-7th Dec., La Valetta; Malta. https://doi.org/10.3997/2214-4609.201803039
- Fournillon, A., Carayon, V., Allard, J., Lie, Ø., and Bellas, S. (2017): Mesozoic and Cenozoic offshore shallow water carbonates of Northwestern Greece: seismic expression of an emerging play. -79th EAGE Conference and Exhibition (Proceedings Volume 2017), 12-15th June, Paris; France. https://doi.org/10.3997/2214-4609.201700633
- Carayon, V., Montadert, L., Allard, J., Lie, Ø., Stamataki, S., and Bellas, S. (2016): Petroleum Systems and Exploration play fairways in the western Greece and southern Crete offshore. AAPG/SEG ICE (Abstr.), 3-6th April, Barcelona; Spain. https://doi.org/10.1190/ice2016-6494539.1
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- Panagopoulos, G., Manoutsoglou, E., Vafidis, A., Soupios, P. and S. Bellas (2015): Subsurface Structure of Tympaki Basin (Crete, Greece) Based on Well and Geophysical Data.- 8th Congress of the Balkan Geophysical Society, Chania; Crete. https://doi.org/10.3997/2214-4609.201414142
- Bellas, S. (2015 *In Greek*): Chapter 2. Latest developments in the Exploration, Exploitation and Production sector of Hydrocarbons in Greece. In the book: "Hydrocarbons Law" (Eds. N. Farantouris, Kosmidis, T.), pp. 23-38; Legal Library, Athens, ISBN: 978-960-562-387-6.
- Schjeldsøe Berg, M., Fürstenau, J., Bellas, S. (2014): Exploring Greece with a new subsurface perspective. Offshore Magazine (July 2014): 40-43; www.offshore-mag.com
- Schjeldsøe Berg, M., Lie, Ø., Bellas, S. & Angelopoulos, A. (2014): Unlocking Offshore Greece: New Regional GeoStreamer Datasets provide Key Answers. - GeoExPro, vol. 11, issue 4: pp. 80-84, London; UK. https://www.geoexpro.com/magazine/vol-11-no-4
- Bellas, S. (2014a, b & c): Technical Report(s) on the Petroleum Geology of Western Greece and Exploration Potential of "NW-Peloponnese", "Aitoloakarnania" and "Arta-Preveza" Contract Areas (Blocks 1,2 & 3).- Ministry of Env., Energy & Climate Change, Petroleum Policy Directorate, Athens; Greece. [Data Package Reports]. (143, 135 and 139 pages respectively).
- Lie, Ø., Fürstenau, J., Bellas, S., Tsifoutidis, G. (2013): Exploration: *A Fresh Look at the Oil & Gas Potential of Greece.* GeoExPro, vol. 10, issue 6: pp. 46-48, London. https://www.geoexpro.com/magazine/vol-10-no-6
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 Geotechnical and Geological Engineering, 29: 1049-1062; Springer. https://doi.org/10.1007/s10706-011-9436-7

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- Bartholdy, J., Bellas, S.M., Cosovic, V. Premec Fucek, V. & H. Keupp (1999): Processes controlling Eocene mid-latitude larger foraminifera accumulations: Modelling of the stratigraphic architecture of a fore-arc basin (Podhale Basin, Poland).- Geologica Carpathica, 50/6: 435-448; Bratislava.
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- Bartholdy, J., Bellas, S.M. & Manutsoglu, E. (1998): Remarks on the distribution of large sized Nummulites in the Middle Eocene marine deposits of the northern Tatra Mountains Range, Poland.- Conference and Workshop on Tertiary to Recent Larger Foraminifera, "Their depositional Environments and Importance as Petroleum Reservoirs", February 15-19th, 1998, Kingston,: p. 5; UK.