



Europass Curriculum Vitae



Personal information

First name(s) / Surname(s) **VASILEV, Atanas Dimitrov**
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 Nationality Bulgarian
 Date of birth 04.08.1954 (August 4, 1954)
 Gender Male

Occupation/field **Assoc. Prof. PhD; Marine Geophysicist**

Work experience https://www.researchgate.net/profile/Atanas_Vasilev

RG Score 11.44, H-index 6, Cited 113

Dates	September 1986 onwards
Occupation or position held	Researcher – Senior Researcher, Projects Leader
Main activities and responsibilities	<ul style="list-style-type: none"> □ Creation of a multi-parameter model of methane hydrates stability zone of the Black Sea. □ Study of mud volcanoes activity in different time scales and corresponding processes of heat and fluids transfer, hydrates instability and fluids escape. □ Quantitative evaluation of oil and gas potential of the Bulgarian shelf and continental slope with the methods of historico-genetic approach, on the base of world deep sea drilling data. □ Assessment of the Black Sea thermogenic hydrocarbons release history with basin analysis. □ Estimations of methane contribution to carbon budget of the water body and atmosphere from gas seeps, gas hydrates instability and mud volcano activities. Study of the connection earthquakes – bottom instability – fluids migration – mud volcanoes activity. □ Creation of big-scale models of the heat flow and temperature field: of the Earth crust and the Cenozoic sequence of the Bulgarian Black Sea part up to 40 km depth; determination of the Currie boundary parameters. □ Hydrographic and magnetic surveys for marine industry. Modeling of marinas, artificial beaches, wave loads on underwater pipelines, oil spills spreading. • Developing software for geological processes simulation and geophysical interpretation. • Analysis, interpretation and visualization of multi-parameter data.
Name and address of employer	Institute of Oceanology, Department of Marine Geology
Dates	October 1982 – June 1986
Occupation or position held	Post-Graduate Student
Main activities and responsibilities	<ul style="list-style-type: none"> □ Development of a new method for marine geothermal measurements - “on-board geothermics”. Solving of three main tasks: to prove theoretical perspective of the idea creating mathematical model and experiment numerically; conduct laboratory experiments for numerical modeling corrections; technical tools design and expedition tests. □ Member of a support team for geophysics research projects - long term sub-bottom temperature and conductivity measurements; geothermal models of shelf and slope evolution; perspective recreational and mineral resources; new methods and software for marine geophysical investigations; underwater towed vehicles. □ Creation of supporting software embracing the whole work cycle from sensors calibration to data obtaining, processing and interpretation.
Name and address of employer	Moscow State University, Geological Faculty, Department of Geophysics
Dates	May 1979 – October 1982
Occupation or position held	Geophysicist, Research support specialist

Main activities and responsibilities

- Extensive experience in shallow seismic (boomer; sparker), echo sounder, side-scan sonar and geothermal methods; data obtaining, processing, interpretation and mapping.
- Conducting of the first Bulgarian marine geothermal measurements; creation of structural maps of the Neogene and the Quaternary complexes for the shelf and continental slope from seismo-acoustical records; first evaluation of the sand deposits from sand banks.
- Working out programs for statistical analysis of experimental data, data processing, maps and graphics drawing.

Name and address of employer

Institute of Oceanology, Department of Marine Geology

Education and training

Dates

1982-1986

Title of qualification awarded

PhD in Physics & Mathematics

Principal subjects/occupational skills covered

Marine Geophysics; Thesis title "A new method for geothermal measurements on shelf areas"

Name and type of organisation

Moscow State University

Level in national or international classification

ISCED 6

Dates

1974-1979

Title of qualification awarded

MSc in Physics

Principal subjects/occupational skills covered

Physics (emphasis:

Name and type of organisation

Geophysics) Sofia State

Level in national or international classification

University

Dates

ISCED 5

Name and type of organisation

1972-1974

Dates

Bulgarian NAVY; Regular Army Service

Name and type of organisation

1968-1972

Level in national or international classification

Varna Math High School

Dates

ISCED 4

Personal skills and competences

Mother tongue(s)

Bulgarian

Other language(s)/Self-assessment

European level ()*

English

Russian

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
B2	Independent user	B2	Independent user	C1	Proficient user	C1	Proficient user	C2	Proficient user
C2	Proficient user	C2	Proficient user	C1	Proficient user	C1	Proficient user	C2	Proficient user

(*) [Common European Framework of Reference for Languages](#)

Social skills and competences

- Team work: I have worked in various types of research teams – from marine geophysical data acquisition to data processing, interpretation and visualization and computer modeling of complex geological objects and processes;
- Intercultural skills: participant in EC projects CESUM-Black Sea; GASHYDAT; SeiScanX; EUROSEISMIC; ASSEMBLAGE, CRIMEA, GEO-HYDRATE, BLAKSEA SPAN, MARINE GEOHAZARD, SUGAR, COST PERGAMON, TxIS-MPP, GEO-METHANE, COST MIGRATE, GEOHydrate, BlackCO2. Good ability to adapt to multicultural environments.

Organisational skills and competences

- I am a senior researcher which also involves organizing teams to carry out various projects.
- Participation in 41 cruises on board of 23 research ships, 13: Chief Scientist, 8: Supervisor.
- Member of Bulgarian Union of Scientists, Bulgarian Geophysical Union and EAGE.
- I am a co-founder of 2 NGOs working to improve the marine environment and design and to manage anthropogenic impact – Black Sea Coastal Association and Mayday Foundation.

Technical skills and competences

Much experience in marine geophysical data acquisition, processing, interpretation and geological sampling – dGPS navigation; in situ/on-board heat flow measurements/calibration, echosounding, side scan sonar; boomer, sparker, magnetometer, ROV, gravity corers.

Computer skills and competences

Numerical methods, optimization, inverse problem theory; object oriented programming, relational database design, Client/Server development; FORTRAN, Visual Basic, C++, Delphi Client/Server, HTML, Paradox, Access, InterBase, MS SQL Server (MS Windows & Linux).

Other skills and competences

Additional information

Certificate in Marine Crew. Driving licence Category B

1. **Vassilev, A., L. Dimitrov, 2002.** Spatial and qualitative evaluation of the Black Sea gas hydrates (in Russian and English). *Russian Geology and Geophysics*, 43 (7), 637-649.
2. **Vassilev, A., 2003.** Black Sea Basin: 65 Million Years Methane Breath. *Comptes Rendus de l'Academie bulgare des Sciences*, Vol. 56, No. 3, 9-14.
3. **Poort J., A. Vassilev, L. Dimitrov, 2005.** Did postglacial catastrophic flooding trigger massive changes in the Black Sea gas hydrate reservoir? *Terra Nova*, 17 (2), 135-140.
4. **Vassilev, A., 2006.** Optimistic and Pessimistic Model Assessments of the Black Sea Gas Hydrates. *Comptes Rendus de l'Academie bulgare des Sciences*, Vol. 59, No. 5, 543-550.
5. **Vassilev A., Botev E., Hristova R., 2006.** Dvurechenskii Mud Volcano, Black Sea: Long Term Activity from Sedimentation, Seismicity and Tsunami Data. *Comptes Rendus de l'Academie bulgare des Sciences*, Vol. 59, No. 11, 1181-1186.
6. **Poort J., R. I. Kutas, J. Klerkx, S. E. Beaubien, S. Lombardi, L. Dimitrov, A. Vassilev, L. Naudts, 2007.** Strong heat flow variability in an active shallow gas environment, Dnepr palaeo-delta, Black Sea. *Geo-Marine Letters*, 27:2-4, 185. DOI 10.1007/s00367-007-0072-4.
7. **Vassilev A., 2010.** First Bulgarian Gas Hydrates: Assessment from Probable BSRs. *Geology and Mineral Resources of the World Ocean*, ISSN 1999-7566, NASU, Kiev, No. 2, 22-26.
8. **Kostyanov, S., G. Trapov, S. Dimovski, A. Vasilev, V. Stoyanov, E. Kostadinov, 2011.** Numerical modeling of geothermal fields in Black Sea and their geological interpretation. 3rd BS Sci. Conf. & UP-GRADE Proj. Joint Conf., Odessa, UA, 1-4.11.2011, 141-142.
9. **Vasilev A., E. Kozhuharov, 2012.** Gas Hydrates and Bottom Instability: Black Sea, Bulgaria. *SGEM2012 Conf. Proceedings*, Vol. 3, 957-964. DOI: 10.5593/sgem2012/s14.v3004
10. **Vasilev A., E. Kozhuharov, 2012.** Seismicity and Mud Volcanism: Black Sea, Bulgaria. *SGEM2012 Conf. Proceedings*, Vol. 3, 987-992. DOI: 10.5593/sgem2012/s14.v3008
11. **Nikishin, A., A. Okay, O. Tuysuz, A. Demirel, N. Amelin, E. Petrov, I. Gabriel, E. Kozhuharov, A. Vasilev, 2013.** Geological Structure and Eocene to Recent History of the Western Black Sea: New Models Based on Results of "Geology without Limits" International 2D Seismic Project. *Proceedings: IV Conf. "Geology & Hydrocarbon Potential of the Balkan-Black Sea Region"*, 11-15/9, Varna, BG, ISBN 978-954-92738-5-4, A-4, 32-37.
12. **Vasilev A., V. Slabakova, G. Kunev, 2013.** Black Sea, Cape Kaliakra, Zelenka: First Infrared Study of Submarine Methane Seepages. *Proceedings: "Geology & Hydrocarbon Potential of the Black Sea Region"*, 11-15/9, Varna, ISBN 978-954-92738-5-4, D-5, 222-229.
13. **Vasilev A., E. Kozhuharov, 2014.** Inverse problem theory search of subbottom methane: Black Sea, Aladja Bank. II National Congress of Physics, 25-29 Sep., Sofia, Bulgaria.
14. **Vasilev A., E. Kozhuharov, R. Hristova, D. Truhchev, G. Shtereva, 2014.** Black Sea: scalable sources & sinks of greenhouse gases. II National Congress of Physics, 25-29/9, Sofia.
15. **Vasilev, A., 2014.** SUGAR Site: Regional setting. *GEOMAR Report Nr. 15* (Editors: Bialas J., I. Klauke, M. Haeckel. Maria S. Merian Cruise 34, Leg 1 & 2, Varna, 06.12.13-16.01.14)
16. **Vasilev, A., 2015.** Geothermal Anomalies of Gas Hydrate Deposit. *EAGE, 8th Congress of the Balkan Geophysical Society*, 5-8 Oct. 2015, Chania, Greece. DOI: 10.3997/2214-4609.201414170
17. **Vasilev, A., 2015.** Geothermal evolution of gas hydrate deposits: BEEZ in the Black Sea. *Comptes Rendus de l'Academie bulgare des Sciences*, 68, 9, 1135-1144.
18. **Vasilev, A., 2015.** Geothermal study of gas hydrates from Danube paleodelta –BEEZ of the Black Sea. "GEOPHYSICS 2015", 20-22 May 2015, Sofia.
19. **Dimitrov O., A. Vassilev, 2016.** Comprehensive analysis of data from geophysical studies in the W Black Sea. *Comptes Rendus de l'Academie bulgare des Sciences*, 69, 10, 1333-1340.
20. **R/V METEOR cruise report M142, 2018** (Ed. G. Bohrmann & G. Ohling). *Drilling Gas Hydrates in the Danube Deep-Sea Fan, Black Sea*, Varna-Varna, 4 Nov.–9 Dec. 2017. DFG BMWi (with contributions of **cruise participants**)
21. **Tinivella U, Giustiniani M, Cordero I and Vasilev A, 2019.** Gas Hydrate: Environmental and Climate Impacts. *Geosciences*, 9, 443, 1-7, doi: 10.3390/geosciences9100443
22. **Minshull T, Marín-Moreno H, ..., Vasilev A, Vázquez J, 2020.** Hydrate occurrence in Europe: A review of available evidence. *Marine and Petroleum Geology*, 111, 735-764, ISSN 0264-8172, doi: 10.1016/j.marpetgeo.2019.08.014

Bulgarian patent: *Parlichev D., A. Vassilev, M. Karakolev, P. Ikonov, 1986.* Geological gravity corer for heat flow measurements and gas capture. BG Patent No. 40109 A MPK G 01 N 1/02 (priority from 10.06.1985).