

## PERSONAL INFORMATION

## Florina Tuluca



📍 Banul Manta, 35, Bucharest (Romania)

☎ (+40)0748025550

✉ florina.tuluca@gg.unibuc.ro

## WORK EXPERIENCE

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- 2020-Present **President of the Balkan Geophysical Society (BGS)**
  - 2020- Present **President of the Romanian Society of Applied Geophysics (SGAR)**
  - 2020 -Present **Member in the Near Surface Division Committee of European Association of Geoscientists and Engineers (EAGE)**
  - 2007–Present **Teaching and research activity at the University of Bucharest, Bucharest**  
Present: Lecturer
  - 2016–2020 **Vice-President of the Romanian Society of Applied Geophysics (SGAR)**
  - 2019–03.2020 **Scientific Secretary of the Balkan Geophysical Society (BGS)**
  - 2006–2015 **Research Assistant at the Institute of Geodynamics of the Romanian Academy**
  - 2006–2007 **Research Assistant at the Bureau of Expertise and Consulting, Bucharest (Romania)**

## EDUCATION AND TRAINING

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- 2006–2009 **Doctor in Geology**  
University of Bucharest, Romania
  - 2004–2005 **Master in Environmental Engineering in Geology**  
University of Bucharest, Romania
  - 2002–2003 **Scholarship program**  
Politecnico di Torino, Italy
  - 1999–2004 **Engineer in Geophysics**  
University of Bucharest, Romania

- 2014 **Georadar -Course**  
EuroGPR School, EAGE, 2014, Athena, Greece
- 2014 **Project Manager (cod COR 242101)**  
Expert Group in accessing European Structural Funds and Cohesion, Bucharest (Romania)
- 2013 **Formator (cod COR 242401)**  
Expert Group in accessing European Structural Funds and Cohesion, Bucharest (Romania)
- 2012 **Completion of AutoCAD3D: Essentials (Level 2)**  
Man and Machine Education Center, Bucharest (Romania)
- 2008 **Completion of Advanced Resistivity Imaging Seminar**  
Advanced Geosciences Europe, Madrid (Spain)
- 2007 **Completion of College on Soil Physics**  
International Centre for Theoretical Physics (ICTP) - Abdus Salam, Trieste (Italy)

## PERSONAL SKILLS

Mother tongue(s) Romanian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
Italian	C1	C1	B2	B2	B1

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user  
Common European Framework of Reference for Languages

## Communication & Training skills

Good communication skills gained through my experience as a teacher, project manager, team leader and trainer.

- Teaching activity at Faculty of Geology and Geophysics, University of Bucharest, since 2007
- Keynote speaker & trainer for Geophysical Prospection in the frame of 1st International Summer School "New Geomatics Technologies, Methods and Tools for accurate Surveying Investigation of Land and Space-Object" organized by the University USAMVB& the University of Bucharest (UB) 16 – 25.09, 2013
- Keynote speaker & trainer for Geophysical applications in the frame of - The 2nd International Summer School "New geomatics technologies for investigations in geospatial phenomena" organized by the University USAMVB & the UB - September 15 – 29, 2014
- Field Trainer for Electrical Prospection Method (2007 -2019) for students enrolled in Geophysics at University of Bucharest
- Keynote speaker & trainer for High resolution geoelectrical method–lecture (notes & practical activity)

in the frame of 3rd International Summer School organized by the University USAMVB & the University of Bucharest (UB), 2016

- Keynote speaker & trainer for High resolution geoelectrical method –lecture notes & practical activity in the frame of 4th International Summer School “Capture the World with geomatics Faster, Smarter, Better” organized by the University USAMVB & the University of Bucharest (UB) 12 – 20.09, 2016
- Keynote speaker at the Workshop “Groundwater and soil pollution investigation – Geophysical approach” at International Multidisciplinary Scientific Geoconferences, June 2015, Bulgaria, Albena
- Keynote speaker for Environmental Geophysics–lecture notes & practical activity in the frame of 5th International Summer School entitled “SmArT technologies for SmArT solutions” organized by the University USAMVB & the University of Bucharest (UB) 7 – 15.09, 2017
- Keynote speaker & trainer in the frame of The 7 th International summer school 2019 entitled DISCOVER REALITY WITH GEOMATICS”, organized by the University USAMVB & the University of Bucharest (UB) & The University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca, 13 – 20.09, 2019
- Keynote speaker and trainer for geoelectrical prospection methods in the frame of “1st Workshop on Geoelectrical Methods” of Romanian Society of Applied Geophysics, 2017; “2st Workshop on Geoelectrical Methods” of Romanian Society of Applied Geophysics, 2018 ; “3st Workshop on Geoelectrical Methods” of Romanian Society of Applied Geophysics, 2019; “4th Workshop on Geoelectrical Methods” of Romanian Society of Applied Geophysics, 2020
- GIS keynotes and practical applications trainer in the frame of “Workshop GIS in Geology and Geophysics”, 21-22 November 2017, Bucharest
- Keynote speaker and trainer in the international project “Electrical Signatures of Groundwater-Student's Geophysical Quest”, Field Camp program of Society of Exploration Geophysicists (SEG), 2015

Organisational / managerial skills

- Excellent managerial experience gained in national/international programmes/ projects and as a Treasurer for the Romanian Society of Applied Geophysics (2012-2016)
- Specialization as Project Manager (cod COR 242101) – Trained by Expert Group in accessing European Structural Funds and Cohesion, 2011, Bucharest

**Programme/Project (selection)**

Project director of SGAR GEOHERITAGE Program 2020 & 2021

Project director & R.FM - **Programme/Project:** Electrical Signatures of Groundwater-Student's Geophysical Quest, 2015

Project director & R.FM - **Programme/Project:** Application of geophysical methods in the strategy of soil and subsoil protection. Case study: Hydrocarbon pollution of soil and groundwater, 2007-2009

Project director & R.FM - **Programme/Project:** Geophysical study of Toplita area for termomineral groundwater location, 2012

Project Leader - Participation in implementing 5 educational community projects 2013-2020

**Note: R.FM** - Resp. in the financial management

Chair of “Workshop GIS in Geology and Geophysics”, 21-22 November 2017, Bucharest

Chair of “1st Workshop on Geoelectrical Methods” of Romanian Society of Applied Geophysics 19-21 May, 2016; “2st Workshop on Geoelectrical Methods” of Romanian Society of Applied Geophysics, 2017 ; “3st Workshop on Geoelectrical Methods” of Romanian Society of Applied Geophysics, 24-26 May 2018; “4th Workshop on Geoelectrical Methods” of Romanian Society of Applied Geophysics, 2019

Member of Organizing Committee of the Geoscience Symposium 2016, 2017, 2018 and 2019

Member of International Steering Committee of the 10th Balkan Geophysical Congress 2019

Chair of the International Symposium GEOSCIENCE 2020, Bucharest

Member of Scientific Committee for Near Surface Geoscience 2020 Conference of EAGE

Member of Local Advisory Committee for Near Surface Geoscience Conference and Exhibition 2020

Chair of the International Steering Committee of 11th Congress of the Balkan Geophysical Society 2021

- Job-related skills**
- Expert level in advanced application of geoelectrical acquisition systems (Vertical Electrical Soundings and Electrical Resistivity Tomography) and electromagnetic method. 12 years' experience in non-invasive and non-destructive geophysical methods, in ERT data acquisition, processing and interpretation. Field experience for investigation using 2D and 3D ERT method. Expert utilisation in 2D and 3D electrical data modelling. Experience in field team leadership.
  - 12 years experience in applied geoelectrical methods for natural and anthropic hazards evaluation, data processing and integrated data interpretation (geological-geophysical-hydrogeological-geochemical-technological data).
  - Field Trainer for Electrical Prospection Methods (2007 -2019)
  - Reviewer for international conferences : Balkan Geophysical Congress 2021, Near Surface Geoscience 2020, International Symposium GEOSCIENCE 2020, SGEM 2020, 81 EAGE Annual Conference and Exhibition, London, 2019; Near Surface Geoscience 2019, 10<sup>th</sup> Balkan Geophysical Congress 2019, 79th EAGE Conference & Exhibition 2017; 23rd European Meeting of Environmental and Engineering Geophysics, 2017; 80th EAGE Conference & Exhibition 2018; 24th European Meeting of Environmental and Engineering Geophysics 2018; 25th European Meeting of Environmental and Engineering Geophysics, 2018;
  - Reviewer for "Near-Surface Geophysics" and "Acta Geophysica" Journals

- Digital competence**
- Knowledge of geophysical data processing software: EarthImager3D, Res3Dinv, EarthImager2D, Res2Dinv, EarthImager1D, Res2DMod, Res3Dmod, Golden Software Surfer, Golden Software Voxler, Prism 2.5., Rockworks.
- Knowledge of GIS and Computer Aided Design software (CAD): ArcGis 10.5, AutoCAD Raster Design, AutoCAD.

## ADDITIONAL INFORMATION

- Projects**
- Resume:
- Project director/ Leader** of 6 research programs
  - Team member or responsible of ERT/VES data acquisition and processing in over 25 research programs
  - Full list of projects is available on request.

- Honours and awards**
- Recipient of „Stefan Hepites" **Award of Romanian Academy**, 2016, for the paper “ Lateral detachment in progress within the Vrancea slab (Romania): inferences from intermediate-depth seismicity patterns ”(in collective)
  - Recipient of „Best Pitch" Award for in the frame of **HEPTech Symposium** "Connecting Science and Commerce", Prague, 2015
  - Recipient of „Best presentation" Award for Applied Geophysics Paper of the „**14th International Multidisciplinary Scientific GeoConference SGEM 2014**", **Bulgaria**

## Conferences and Scientific Papers

Published scientific papers & presentations: 92 (Full list available on request).

- **Books & Book Chapters:**
  - Georgescu P, **Chitea F.**, 2016, Electrical Prospecting I-Prospecting methods in DC, Ed. Of University of Bucharest, ISBN 978-606-16-0758-7 (in Romanian)
  - Chitea F.**, Ioane D., Stanciu I. (ED), GEOSCIENCE 2020 -Book of Abstracts D.O.I: 10.5281/zenodo.4287551
  - Chitea F.** (Ed.), GEOSCIENCE FOR SOCIETY, EDUCATION AND ENVIRONMENT, 2021. Reserved D.O.I. 10.5281/zenodo.4322617

- Anghelache MA., Mitrofan H., **Chitea F.**, Damian A., Vişan M., Cadicheanu N., 2018, The Space-Time Distribution of Moderate- and Large-Magnitude Vrancea Earthquakes Fits Numerically-Predicted Stress Patterns. In: Vacareanu R., Ionescu C. (eds) Seismic Hazard and Risk Assessment. Springer Natural Hazards. Springer, Cham .DOI [https://doi.org/10.1007/978-3-319-74724-8\\_3](https://doi.org/10.1007/978-3-319-74724-8_3), Print ISBN 978-3-319-74723-1, Online ISBN 978-3-319-74724-8

Balan S.F., Ioane D., Cioflan C., Panea I., Apostol B., Malita Z., **Chitea F.**, Anghelache M.A., 2014. Scenarios for Local Seismic Effects of Tulcea (Romania) Crustal Earthquakes - Preliminary Approach of the Seismic Risk Characterization for Tulcea City. Earthquake Hazard Impact and Urban Planning, Environmental Hazards Series, Springer. pp 85-103, DOI 10.1007/978-94-007-7981-5\_5. Online ISBN 978-94-007-7981-5. Print ISBN 978-94-007-7980-8

Ioane D., Diaconescu M., **Chitea F.**, Garbacea G., 2014. Active Fault systems and their significance for urban planning in Bucharest, Romania. Earthquake Hazard Impact and Urban Planning, Environmental Hazards Series, Springer, pp 15- 43. DOI 10.1007/978-94-007-7981-5\_2. Online ISBN 978-94-007-7981-5. Print ISBN 978-94-007-7980

**Chitea F.**, Nuțu-Dragomir M-L., Niculae L., 2020, Geological observations on the outcrops, landslide affected areas and some other erosion forms in Pucioasa town and its surroundings as a basis for geotourism development, in Chitea F. (Ed.), GEOSCIENCE FOR SOCIETY, EDUCATION AND ENVIRONMENT, 2021. Reserved D.O.I. 10.5281/zenodo.4322617

Mitrofan H., Marin C., **Chitea F.**, Niculae L., 2020, Groundwater chemical signatures-possible clues for the seemingly erratic productivity of a geothermal aquifer hosted by a 1km thick carbonate sequence in the Moesian Platform (Romania) in Chitea F. (Ed.), GEOSCIENCE FOR SOCIETY, EDUCATION AND ENVIRONMENT, 2021. Reserved D.O.I. 10.5281/zenodo.4322617

- **Publication (selection)**

**Chitea F.**, Mitrofan H., Fikos I., Stanciu I.M., Diacopolos C., Stochici R., Geophysical and geochemical observations on Mud Volcanoes from Paclele Mici, Romania, accepted for publication in Rev.roum. Geophysique/ Rom. Geophys. J

**Chitea F.** Georgescu P., Ioane D., 2011, Geophysical detection of marine intrusions in Black Sea coastal areas (Romania) using VES and ERT data, Geo-Eco-Marina nr. 17, p 177 – 184.2.

**Chitea F.**, Ioane D., Serban A., 2016, Soil chemical pollution reflected in groundwater electrical properties, Romanian Reports in Physics, Vol. 68, No. 2, P. 760–773

Georgescu P., Ioane D., Niculescu B.M., **Chitea F.**, 2010, Geoelectrical investigations of marine intrusions on the Romanian Black Sea shore, Geo-Eco-Marina, nr. 16, p 85 – 92.

Ioane D., **Chitea F.**, 2012, ERT and VES studies for thermo-mineral water in Toplita area, Romania. Geo-Eco-Marina nr. 18, p 179 – 185

Mitrofan H., Marin C., **Chitea F.**, Cadicheanu N., Povară I., Tudorache A., Ioniță D.E., Anghelache M.A., 2021, Multi - kilometre long pathway of geofluids migration: Clues concerning an ophiolite serpentinization setting possibly responsible for the inferred abiotic provenance of methane in thermal water outflows of the South - West Carpathians (Romania), Terra Nova, <https://doi.org/10.1111/ter.12491>

Mitrofan H., Anghelache M.A., **Chitea F.**, 2010, Shallow seismic activity (< 55Km) triggered along the Marasesti-Galati-Braila lineament in response to the major sub-crustal earthquakes of Vrancea area, Rev.roum. Geophysique/ Rom. Geophys. J., tome 54, p. 39-54, 2010

Mitrofan H., **Chitea F.**, Anghelache M-A., Marin C., Tudorache A., 2010, Subsurface Temperature signatures related to particular focal mechanisms, in Romania (Vrancea) and Northern Italy seismic regions.-, Romanian Reports in Physics, vol 62, Issue: 4, p: 854-864,

Mitrofan H., **Chitea F.**, Anghelache M-A., Visan M., 2014, Possible Triggered Seismicity Signatures Associated to the Vrancea Intermediate-Depth Strong Earthquakes (SE Carpathians, Romania). Seismological Research Letters, volume 85, no. 2.

Mitrofan H., Marin C., Zugravescu D., **Chitea F.**, Anghelache M-A., Besutiu L., Tudorache A., 2010, Persistent pre-seismic signature detected by means of Na-K-Mg geothermometry records in a saline spring of Vrancea area (Romania), Natural Hazards and Earth Systems Sciences, vol 10, Issue: 2, p: 217-225, doi:10.5194/nhess-10-217-2010. SNIP: 1.57,

Mitrofan H., Anghelache M-A., **Chitea F.**, Damian A., Cadicheanu N., Visan M., 2016, Lateral detachment in progress within the Vrancea slab (Romania): inferences from intermediate-depth seismicity patterns, Geophys. J. Int. 205, 864–875 doi: 10.1093/gji/ggv533

Anghelache M.A., Mitrofan H., **Chitea F.**, Cadicheanu N., Water as Hazard – A Case Scenario of Groundwater Radionuclide Pollution in Cernavodă Area, Due to the Effects of Earthquakes, KIT Scientific Publishing, Print on Demand 2018 – Gedruckt auf FSC- ISBN 978-3-7315-0736-9 DOI 10.5445/KSP/1000076621

**Chitea F.**, 2016, Electrical signatures of Mud Volcanoes-case studies from Romania, SGEM 2016 Conference Proceedings Book 1, Volume III, pp 467-4743.

**Chitea F.**, Ioane D., 2016, Evaluation of mineral groundwater resources in Harghita Mts. (Romania) using resistivity tomography and spatial data fusion, 2016, SGEM Conference Proceedings Book 1, Volume I, pp 777-784

**Chitea F.**, Ioane D., Airinei I., Serban A., Dorobantu A., 2014, Geoelectrical methods applied for prospecting an area with geothermal potential, 14th GeoConference on Science and Technology exploration and mining -Conference Proceedings, Vol 1, pp 459-466 **Chitea F.**, Ioane D., Damian A., 2015, Geophysical studies for hazard delineation in salt mine environments Proceedings of SGEM 2105, Vol 3, pp 871-878.

**Chitea F.**, Ioane D., Serban A., 2015. Electrical properties of groundwater resources and its importance for geophysical prospection, Proceedings of SGEM 2105, Vol 3, pp 823-830

**Chitea F.**, Ioane D., Serban A., 2014, Integrated methods for analyzing an area affected by oil and waste water pollution, 14th GeoConference on Science and Technology exploration and mining - Conference Proceedings, Vol 1, pp 497-504 DOI: 10.5593/SGEM2014/B11/S5.066