

Curriculum Vitae

Bedri KURTULUS, PhD., Assoc. Prof.

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Google Scholar: <https://scholar.google.com.tr/citations?user=FKToaLOAAAJ&hl=tr>

Web pages

<https://hydrogeologylab.com/>
<http://jeoloji.mu.edu.tr/>
<https://cew.kfupm.edu.sa/>

Education

- 2009** **Joint Ph.D.**, Hydrogeological Engineering, (CGPA: 3.71/4.00)
University of Poitiers /France
University of Hacettepe /Turkey
Thesis Title: "Modelling of Groundwater Flow and Quality in Karstic Systems Using Soft Computing Methods"
Advisor: *Prof.Dr. Moumtaz Razack and Prof.Dr. Serdar Bayarı*
- 2004** **M.Sc.**, Hydrogeology, *University of Poitiers/France (CGPA: 14/20, first rang)*
- 2003** **B.Sc.**, Hydrogeological Engineering, *University of Hacettepe, Turkey (CGPA: 2.71/4)*

Administrative Duties

- September 2019- Present** Head of Water Section, Center for Environment & Water, Research Institute
King Fahd University Petrol & Mineral, Saudi Arabia
- March 2018- Present** MSKU Geological Engineering Department, Remote Sensing and Geographic Information
System Department Head, Turkey
- March 2015- March 2018** MSKU Geological Engineering Department, President, Turkey
- Dec.2010-Dec. 2013** MSKU Geological Engineering Department, Vice-President, Turkey

Professional Experience

- 2019- Present** : **Sabbatical (Assoc. Prof. Dr.) – Water Section Head**
Center for Environment & Water, Research Institute
King Fahd University Petrol & Mineral /Dhahran/Saudi Arabia
- 2019- Present** : **Contractor**
Saudi Aramco, Dhahran, Saudi Arabia
- 2018 - Present** : **Assoc. Prof.Dr.**
Geological Engineering Department (Remote Sensing and GIS Section Head)
Mugla Sıtkı Kocman University/ Mugla / Turkey
- 2010 - Present** : **Consultancy and expertise for various national/international organizations**
- 2010 - 2018** : **Assist. Prof.Dr.**
Geological Engineering Department
Mugla Sıtkı Kocman University/ Mugla / Turkey
- 2015 - Present** : **General Manager**
EKOFLY Company- METU-Technopark
- 2009-2010** : **Post-Doctoral Researcher**
Geosciences and Geo-Engineering Research Department
Mines ParisTech / Fontainebleau / France
- 2004-2009** : **Joint PhD. Student &Research Assistant**
UMR CNRS 6269 HYDRASA (Hydrogeology, Clay, Soil and Alterations)
Laboratory,Poitiers University / Poitiers / France
Geology (Hydrogeological) Engineering Department
Hydrogeochemistry Laboratory
Hacettepe University / Ankara / Turkey
- 2001-2003** : **Research Internship**
Space Technologies Research Institute
TUBITAK (Scientific and Technological Research Council of Turkey)/ Ankara /
Turkey

Languages

- English (Full professional proficiency)
- French (Full professional proficiency)
- Turkish (Native)
- Arabic: elementary notions

Prizes & Fellows

- French Ministry of Foreign Affairs Grant (2013,2014,2015,2016,2017,2018,2019,2020)
- Sıtkı Koçman Foundation Publication Prizes (2010,2012,2013,2014,2016)
- TÜBİTAK (The Scientific and Technological Council of Turkey) 2221 for international exchange award (2010)
- TÜBİTAK (The Scientific and Technological Council of Turkey) International Publication award (2010,2012,2016)
- Priene Seine Post-doc fellow of Institute Carnot (2009)
- TÜBİTAK (The Scientific and Technological Council of Turkey) Ph.D. Scholarship (2006-2008)
- French Government Joint PhD. Fellowship (2005-2008)
- French Government Master Fellowship (2004-2005)

Professional Academic Activities and Services

- PMP® Certification Training, 2020
- Scientific Committee Member, CEW, King Fahd University of Petroleum & Minerals, 2020- present.
- Key Performance Indicator, Water Section Committee Head, CEW, King Fahd University of Petroleum & Minerals, 2020- present.
- Expert/Evaluator at EU-Horizon 2020- Partnership for Research and Innovation in the Mediterranean Area (PRIMA), 2018-2019.
- Expert/Evaluator at Scientific and Technological Research Council of Turkey (TÜBİTAK), 2019.
- Editor, Special Issue "Groundwater Resilience to Climate Change and High Pressure". A special issue of Water (ISSN 2073-4441). This special issue belongs to the section "Hydrology"., 2019-2020.
- Editorial Board - Turkish Journal of Earth Sciences, 2019.
- Editorial Board – Mugla Journal of Science and Technology, 2019- Present.
- Editorial Board – Turkish Journal of Maritime and Marine Sciences, 2019- Present.
- Reviewer for International Peer-Reviewed Journal:
 - Geothermics (2019*2)
 - Journal of Arabian Geoscience (2019*4)
 - Bulletin of Environmental Contamination and Toxicology (2018)
 - Journal of Hydrologic Engineering (2017, 2018)
 - Hydrogeology Journal (2019, 2017, 2015, 2014, 2013, 2012, 2011)
 - Journal of Earth and Environmental Science (2012)
 - Environmental Monitoring and Assessment (2011)
 - Natural Resource Modeling (2014, 2015)
 - Bulletin of MTA (2015, 2016,2018)
 - Desalination and Water Treatment (2016)
 - Computer and Geoscience (2016)
- Memberships:
 - AGU (American Geophysical Union)
 - EGU (European Geoscience Union)
 - IAHS (International Association of Hydrological Sciences)
 - FIRE (Ile de France Federation of Research on Environment)- FR3020
 - Association Science Culture des Anciens Boursier Français (ASCBF) www.ascbfr.com' (Vice-Chairman)
 - Hidroder (www.hidroder.org.tr)

Consultancies & Client Funded Projects (Total Budget ≈ 50,000,000 \$)

25 Client Funded projects from Saudi Aramco, McDermott, EMAS, SAIPEM, Petro Rabigh, Dynamic Industries Saudi Arabia Ltd., National Petr. Constr. Company (NPCC), Wood, Saudi Irrigation Organization.

ZETAS Company – GIZ Dubai (Deutsche Gesellschaft für Internationale Zusammenarbeit), 2012-2020 "Strategic Water Storage Recovery Project Liwa, UAE" Pumping Test Evaluation, Flow Fluid Logging Evaluation, Well Composite Log Evaluation Reports.

Research Projects (Total Budget ≈ 2,000,000 \$)

1. Fp7 ERANET-MED Project (2015-2019) “Groundwater Resilience to Climate Change and High Pressure within an IWRM Approach” (Budget: 300000 \$).
2. Liwa Project (2012 -2018) Strategic Water Storage Recovery Project Liwa, UAE (Report Budget: 1000000 \$).
3. Water Resources Investigation around Muğla City Center and Geothermal Investigation in Bağyaka (2018) Co-Project of Metropolitan Municipality of Muğla and Mugla Sitki Kocman University. (Budget: 15000 \$).
4. TÜBİTAK - 1001 project 112Y137 (2012-2014) “Spatial distribution of hydrochemical and thermal resources of Fethiye Göçek Bay and Köyceğiz, Alagöl, Sülüngür and Kocagöl Lakes” (Budget: 90000 \$).
5. TÜBİTAK 3001 project 115Y733 (2015-2017) “The Role of Human Factor on Some Inorganic Pollution Parameters in the Acisu Fields in the Middle Black Sea Region and Determination of the Effect of the Present Situation” (Budget: 18000 \$).
6. Mugla Sitki Kocman University – Scientific Research Projects (Total Budget = 80000 \$)
7. TUBİTAK (The Scientific and Technological Research Council of Turkey) and KOSGEB Project projects (2013-2015): “Assessment of water turbidity dynamics and water parameters using Unmanned Air Vehicle (UAV) in Asartepe Dam Lake and verification of data with in-situ measurement (Budget: 250000\$).
8. TUBİTAK-PIA Boshorus Research project: Modeling of groundwater flow and quality in karstic systems using soft computing methods (Principal Scientific Investigator 2006-2008) (Budget: 40000 \$).
9. GEKA Project (2012) Southern Aegean Development Agency Project: Inventory Geothermal Resources and Mineral Water İn Mugla Region (Budget: 35000\$).
10. PIREN Seine: Hydrology of wetlands to further support biogeochemical modeling of Orgeval (2009) www.piren-seine.fr and ANR Carnot Mines: “Neuro N’Eaudyssée” Coupling physical based modeling and neural networks applied to hydrology (2009) (Budget: 45000 Euro).
11. FIRE, Young researcher project: Characterizing subsurface flow in the Avenelles watershed. Nicolas Flipo, Bedri Kurtulus (2009) <http://www.fire.upmc.fr/>. (Budget: 15000 Euro).

Thesis Completed

1. Cagdas Sağır *Graduated in September 2019, The Scientific and Technological Research Council of Turkey (TÜBİTAK) PhD. Fellowship and French Government PhD. Fellowship PhD Thesis Title: “Assessment Of The Muğla Karst System (Turkey) Using A Multidisciplinary Approach: Geophysical Modelling, Time Series Analysis And Thermal Remote Sensing.”*
2. Günseli Erdem *Graduated in September 2019, The Scientific and Technological Research Council of Turkey (TÜBİTAK) PhD. Fellowship and Fellowship and French Government PhD. Fellowship. PhD Thesis Title: “Assessment of Gokova Karstic System in West Mediterranean Basin of Turkey by the Hydrogeochemical and Isotopic Analysis”*
3. Deniz Kılıç *Graduated in September 2018, Joint Master with MinesParisTECH, France. Thesis title: “Quantification of heat and water fluxes at reach scale with fiber optic distributed temperature sensing: Avenelles River”*
4. Esra Gülşen *Graduated in September 2018, SKV-French Government Master Fellowship, Thesis title: “ Use SWAT to Predict the Accurate Potential Evapotranspiration Value and Estimate the Spatial Distribution of Groundwater Recharge Rate in Dogger Aquifer”*
5. Ersin Ateş *Graduated in July 2018, The Scientific and Technological Research Council of Turkey (TÜBİTAK) Master of Science Fellowship Thesis title: “Identifying Distribution Of Chlorophyll-A Concentration Using Different Satellites (Landsat 8 Oli, Worldview 2, Sentinel 2a): A Case Study In Dalyan Lagoon, Turkey”*
6. Çağrı A. İnan *Graduated in September 2017, SKV-French Government Master Fellowship, Thesis title: “Rainfall-Runoff Prediction based on Artificial Neural Network: A Case Study in La Chartreux Spring, France”*
7. Gonca Avşar *Graduated in September 2017, SKV- French Government Master Fellowship, Thesis title: “Development of A Local Groundwater Flow Model For The Liwa Aquifer (Scheme A), (UAE)”.*
8. Erkan Düzdaş *Graduated in August 2017, M.Sc. Thesis title: “Imaging the subsurface in karst alluvium of Mugla using electrical resistivity method and IP”*
9. Tolga Necati Yaylım *Graduated in July 2017, Private Company Scholarship – ZETAS Dubai, M.Sc. Thesis title: “Assessment of head losses exponential parameter (p) in Step Drawdown Test (SDT)”*
10. Engin Günay *Graduated in April 2017, French Government Master Fellowship, M.Sc. Thesis title: “Artificial Recharge Simulation Based On Anisotropy Evaluation From*

- Interwell Connectivity “*
11. Tugba Gürcan Graduated in July 2017, SKV-French Government Master Fellowship, M.Sc. Thesis title: *“Identification of thermal and cold spring using thermal-infrared remote sensing and in-situ measurement in Mediterranean Region. “*
 12. Eray Avcı Graduated in January 2016, The Scientific and Technological Research Council of Turkey (TÜBİTAK) Master of Science Fellowship, M.Sc. Thesis title: *“A Matrix Approach for Visualisation of Selected Physico-Chemical Properties of Akyaka (Gökova) Karst Springs, Muğla.”*
 13. Can Canoglu (co-supervisor) Graduated in 2015, Phd. Thesis Title: *“Integrated Approach Determining the Saturation Degree Index In Terms of Spatio-Temporal Variations of Landslide Susceptibility”.*
 14. İliya bauchi Danladi(co-supervisor) Graduated in 2015, M.Sc. Thesis title: *“High-resolution sediment records of Lake Salda (SW anatolia) for the last millennium: Past climate changes driven by solar forcing”*
 15. Semih Okan Tunc Graduated in September 2015, SKV-French Government Master Fellowship M.Sc. Thesis title: *“Assessment Of Heavy Metals Contamination And Accumulation In Asartepe Dam Lake, Ankara, Turkey”*
 16. Huseyin Caldırak Graduated in in July 2015, The Scientific and Technological Research Council of Turkey (TÜBİTAK) Master of Science Fellowship, M.Sc. Thesis title: *Hydrogeochemical Conceptual Modelling of Lake Salda (Turkey) By Using In-Situ Measurements, Water And Sediment Sample Analysis Results*
 17. Gunseli Erdem Graduated in September 2014, SKV-French Government Master Fellowship, M.Sc. Thesis title: *“Mapping of groundwater quality and amount using GEO- ANFIS in Dogger karstic aquifer in Poitiers, France”*
 18. Cagdas Sagır Graduated in September 2014, SKV-French Government Master Fellowship, M.Sc. Thesis title: *“Assessment of hydraulic head and heavy metals interpolations using soft computing and geostatistical methods in Karabağlar Karstic Polje in Muğla, Turkey”*
 19. Buket Çelik Graduated in September 2012, Estimation of wind speed and potential wind turbine locations with soft computing methods in Mugla region, Turkey.

Student Supervision

MSc. Students

1. Hatice Turan Expected graduation in September 2020, SKV-French Government Master Fellowship
2. Muhamed Saidu Expected graduation in September 2020, SKV-French Government Master Fellowship
3. Cihan Okutan Expected graduation in September 2021, SKV-French Government Master Fellowship

PhD. Students

4. Tolga Necati Yaylım Expected graduation in September 2022, Higher Education Council of Turkey 100/2000 PhD. Fellowship.
5. Çağrı Alperen İnan Expected graduation in September 2022, Joint Phd. With Mines d’ALES, France, Higher Education Council of Turkey 100/2000 PhD. Fellowship and Ecole de Mines Fellowship.
6. Hande Mahide Yeşilmeden Expected graduation in September 2022, Joint Phd. With University of Bordeaux-Montaigne, France, Higher Education Council of Turkey 100/2000 PhD. Fellowship.
7. Gizem Türedi Expected graduation in September 2023, Higher Education Council of Turkey 100/2000 PhD. Fellowship.
8. Mesut Gündüz Expected graduation in September 2023, Higher Education Council of Turkey 100/2000 PhD. Fellowship.
9. Emre Tokluoğlu Expected graduation in September 2024, Higher Education Council of Turkey 100/2000 PhD. Fellowship.

Publications

ISI Journal List

1. Sağır C., **Kurtulus B.**, Razack, M., 2020. M., Hydrodynamic Characterization of Mugla Karst Aquifer Using Correlation and Spectral Analyses on the Rainfall and Springs Water-Level Time Series. *WATER*. 12(1), 85; <https://doi.org/10.3390/w12010085>
2. **Kurtulus B.**, Yaylım TN., Avsar O., Kulac F., Razack, M., 2019. The Well Efficiency Criteria Revisited—Development of a General Well Efficiency Criteria (GWEC) Based on Rorabaugh's Model. *WATER*. 11, 1784; doi:10.3390/w11091784
3. Erdem G., Sağır C., Okan T., **Kurtulus B.**, Canoğlu MC. 2019. Assessment of Heavy Metal Contamination Using Geostatistical Analyses in Asartepe Dam Lake (Turkey) *Fresenius Environmental Bulletin Journal*. 28:10, 7408-7418.
4. Kurtulus T., **Kurtulus B.**, Avsar O., Avsar U., 2019 Evaluating the thermal stratification of Köyceğiz Lake (SW Turkey) using in-situ and remote sensing observations, *Journal of African Earth Science*. <https://doi.org/10.1016/j.jafrearsci.2019.103559>
5. Canoglu MC., **Kurtulus B.**, Razack, M., Interactions between Soil – Aquifer System in Terms of Water Flux in Vadose Zone: An Example from Marais Poitevin (Western France), 2019. *Carpathian Journal of Earth and Environmental Sciences*, Vol. 14, No. 1, p. 171 - 180; DOI:10.26471/cjees/2019/014/069.
6. Gulsen HI, Avsar O., Avsar U., **Kurtulus B.**, Tunca E., 2018. Spatial distribution of some elements and elemental contamination in the sediments of Köyceğiz Lake (SW Turkey), *Environmental Earth Science*, 77: 546. <https://doi.org/10.1007/s12665-018-7724-8>.
7. Inan CA, Canoglu MC, **Kurtulus B.**, 2018. A New Artificial Neural Network Model for the Prediction of Rainfall-Runoff Relationship for La Chartreux Spring, France, *Fresenius Environmental Bulletin Journal*. 27, 7354-7363.
8. Çaldırak H., **Kurtulus B.** 2018. Evidence of Possible Recharge Zones in an Alkaline Lake Salda, Burdur, Turkey, *Journal of the Indian Society of Remote Sensing*, <https://doi.org/10.1007/s12524-018-0779-x>.
9. Avsar Ö., Avşar U., Arslan S., **Kurtulus B.**, Niedermann S., Güleç N. 2017. Subaqueous hot springs in Köyceğiz Lake, Dalyan Channel and Fethiye-Göcek Bay (SW Turkey): locations, chemistry and origins, *Journal of Volcanology and Geothermal Research*, 345, 81-97.
10. Sağır C., **Kurtulus B.** 2017. Hydraulic head and groundwater ¹¹¹Cd content interpolations using empirical bayesian kriging (EBK) and geo-adaptive neuro-fuzzy inference system (GEO-ANFIS), *Water SA*, 43 (3), 509-519.
11. **Kurtulus B.**, Sağır C., Avsar O. 2017. Assessment of Metal-Metalloid Content Using Geostatistical Methods in Groundwater of Karabaglar Polje (Muğla), Turkey, *Bulletin of the Mineral Research and Exploration*, DOI: <http://dx.doi.org/10.19111/bulletinofmre.304493>.
12. Canoglu MC., **Kurtulus B.** 2017. Permeability of Savcibey Dam (Bilecik) Axis Location and Design of Grout Curtain. *Bulletin of the Mineral Research and Exploration*, <http://dx.doi.org/10.19111/bmre.00419>.
13. Caldırak H., **Kurtulus B.**, Canoglu C., Tunca E., 2017. Assessment of heavy metal contamination and accumulation patterns in coastal and deep sediments of Lake Salda, Turkey *Fresenius Environmental Bulletin Journal*, 26 (12A), 8047-8061.
14. Avşar Ö, **Kurtulus B.** Gürsu S., Kuşcu G.G., Kaçaroğlu F., 2016, Geochemical and isotopic characteristics of structurally controlled geothermal and mineral waters of Muğla (SW Turkey) *Geothermics*, 64, 466-481.
15. Mouhri A., Flipo N., Rejiba F., C de Fouquet, Bodet L., **Kurtulus B.**, Tallec G., Durand V., Jost A., Ansart P., Goblet P., 2013, Designing a Multi-Scale Sampling System of Stream-Aquifer Interfaces in Sedimentary Basin, *Journal of Hydrology*, 504, 194-206.
16. Tunca E., Ucuncu E., **Kurtulus B.**, Ozkanc A.D., Atasagun S., 2013. Accumulation trends of metals and a metalloid in the freshwater crayfish *Astacus leptodactylus* from Lake Yeniçag (Turkey). *Ecology and Chemistry*, 29,754-769.
17. **Kurtulus B.** 2012. High Resolution Numerical Modelling of SO₂ Emission: A Power Plant Case Study. *Building Simulation*, 5, 135-146.
18. **Kurtulus B.**, Flipo, N. 2012. Hydraulic head interpolation using ANFIS—model selection and sensitivity analysis. *Computers & Geosciences*, 38, 43–51.
19. **Kurtulus B.** and Razack M. 2010. Modeling daily discharge of a large karstic aquifer using soft computing methods: Artificial neural network and neuro-fuzzy. *Journal of Hydrology*, 381, 1-2, 101-111.
20. **Kurtulus B.**, Razack M. 2007, Evaluation of the ability of an artificial neural network model to simulate the input-output responses of a large karstic aquifer. The la Rochefoucauld (Charente, France). *Hydrogeology Journal*, 15, 241-254.

Book Chapter

21. **Kurtulus B.**, Flipo N., Goblet, P., Vilain G., Tournebize J. and Gaelle T. 2011. Hydraulic head interpolation in an aquifer unit using ANFIS and Ordinary Kriging. Studies in Computational Intelligence (SCI) published by *Springer-Verlag*, *Book Chapter*, 343, 265-276.

Non-ISI Journals List

22. Caldırak H., **Kurtulus B.** 2018. Geotechnical Properties of Natural Structural Materials Utilized in Belenyenice Dam and Engineering Approaches on Body Type Selection, *Journal of Engineering science and design*, DOI: <http://dx.doi.org/10.21923/jesd.413676>
23. Avsar Ö., **Kurtulus B.** 2017. Distribution of Water and Bottom Sediment Temperature of Köyceğiz Lake, *Geological Bulletin of Turkey*, <https://doi.org/10.24232/jmd.334546>
24. Canolgu MC., **Kurtulus B.** 2017. Determination of the Dam Axis Permeability for the Design and the Optimization of Grout Curtain: An Example from Orhanlar Dam (Kütahya-Pazarlar). *Periodicals of Engineering and Natural Sciences* Vol. 5 No. 1. ISSN 2303-4521.
25. Canoglu MC., **Kurtulus B.** 2016. Body Type Optimization of Water Structures and Engineering Parameters Determination of Natural Structural Materials: An Example of Kışlademirli Dam (Kütahya), *Karalmas Science and Engineering Journal*. 6(2):250-264.

Proceedings and Posters

26. Erdem G., **Kurtuluş B.**, Sağır C., Avşar Ö., Canoğlu MC and Razack M., International Groundwater Resilience to Climate Change and High Pressure Conference, Environmental Isotope Variations in the Azmak Springs: Implication for Water Mixing and Recharge Conditions. 8-10 May 2019, Mugla, Turkey
27. Sağır C., Düzdaş E. Erdem G., **Kurtuluş B.**, Avşar Ö., Canoğlu MC, Kurtulus DF, Razack M., International Groundwater Resilience to Climate Change and High Pressure Conference. Assessment of karst spring geometry using electrical resistivity tomography on Azmak Springs, Ula, Muğla, Turkey. 8-10 May 2019, Mugla, Turkey
28. Yeşilmeden HM, **Kurtulus B.**, Avşar Ö, Aksu H., International Groundwater Resilience to Climate Change and High Pressure Conference. Evaluation of the Characteristics of Surface Ice Layer of Çıldır Lake with Remote Sensing. 8-10 May 2019, Mugla, Turkey
29. Alperen Cl., **Kurtulus B.** International Groundwater Resilience to Climate Change and High Pressure Conference. Flood Monitoring with Synthetic Aperture Radar Imagery (Sentinel -1): A Case Study in Turkish Thrace. 8-10 May 2019, Mugla, Turkey
30. Yahiaoui S., Meddi M., Razack M., **Kurtulus B.** and Boufekane A., International Groundwater Resilience to Climate Change and High Pressure Conference. Groundwater quality of Mitidja Plain 8-10 May 2019, Mugla, Turkey
31. Razack M., **Kurtulus B.**, Meddi M., Canoglu MC, Shorieh A., Sagir C., Erdem G., Louis L., Delbirani Y., Chambat A., Gilbert E. International Groundwater Resilience to Climate Change and High Pressure Conference. Is groundwater resilience to climate changes and high pressures an opposite concept? An assessment based on the analysis of the Dogger aquifer in Poitou region, France. 8-10 May 2019, Mugla, Turkey.
32. Erdem G., Çağdaş. S., Avşar. Ö., **Kurtuluş B.**, Gürüler M., International Groundwater Resilience to Climate Change and High Pressure Conference. Hydrogeological assessment of a geothermal source near Yatagan, SW, Turkey. 8-10 May 2019, Mugla, Turkey
33. Gürcan T., **Kurtulus B.**, Avsar O., Avsar U., Monitoring sea surface/depth temperature using Landsat thermal data and in-situ measurement in Fethiye-Gocek Bay, Turkey. International Symposium on sustainable Aviation, 9-11 July 2018 Rome, Italy. (poster)
34. Uslular G. Sagır C., Kuscu G., **Kurtulus B.**, A preliminary UAV application on Kula Monogenetic Field (western Anatolia, Turkey) 7th International Maar Conference. 21-25 May 2018. Olot, Spain.
35. **Kurtulus B.**, Erdem G., Sağır C., Kurtulus D.F., Avsar O., Razack M., Spring Temperature Monitoring Using Thermal-UAV: Azmak Spring, Gokova, Turkey. International Symposium on sustainable Aviation, 9-11 July 2018. Rome, Italy

36. Erdem G., Sağır C., Üçüncü T.E., **Kurtulus B.**, Avşar O., Canoğlu M.C., Razack M., Statistical Analysis of Metal Contents of the Azmak Karstic spring (Muğla), Turkey. National hydrogeology and water resources symposium, 27-29 September 2018, Ankara, Turkey
37. Gunay E., **Kurtulus B.**, Le Coz M., Razack M., Anisotropy obtained from the study of interwell connectivity measurement and its use in hydrogeological models. National hydrogeology and water resources symposium, 27-29 September 2018, Ankara, Turkey
38. Rothmund H.İ.G., Avsar Ö, **Kurtulus B.**, Heavy Metal Contamination Analysis of Bottom Sediments of Köyceğiz Lake and Fethiye - Göcek Bay, SW Turkey. EGU 2018 08-13 April, Vienna, Austria.
39. Canoglu MC., **Kurtulus B.**, Hydraulic Properties of Çilekli Dam Foundation and Preventions of Potential Leakages International Conference on African Large River Basin Hydrology 06 & 09 May 2018 Algiers / Algeria.
40. Razack M., Meddi M., **Kurtulus B.**, Le Coz M., Sagir C., Gunseli E., Avsar O., Bilal S., GRECPIMA, a EU funded project on groundwater resilience to climate change and high pressure. IGWC 2017- 7th International Groundwater Conference New Delhi 11-13 December 2017.
41. Sagir C., Gunseli E., **Kurtulus B.**, Avsar O., Kurtuluş DF, Tunca E, Le Coz M., Razack M., Potential of unmanned aerial vehicle (UAV) remote sensing in karst springs: Muğla, Turkey. IGWC 2017- 7th International Groundwater Conference New Delhi 11-13 December 2017.
42. Sagir C., Le Coz M., **Kurtulus B.**, Razack M., Determining climate change effects on vegetation in various land covers using NDVI in the Poitou region, France. IGWC 2017- 7th International Groundwater Conference New Delhi 11-13 December 2017.
43. Erdem G., Sagir C., **Kurtulus B.**, Avsar O., Tunca E, Le Coz M., Razack M., Nitrate assessment of karst springs in Gökova, SW Turkey. IGWC 2017- 7th International Groundwater Conference New Delhi 11-13 December 2017.
44. Duzdas E., **Kurtulus B.**, Erdem G., Sagir C., Gurcan T., Avsar O., Le Coz M., Razack M., Electrical Resistivity Tomography (ERT) and Induced Polarization (IP) Applied to Karst Alluvium: Case Study from Azmak Spring, Mugla, Turkey. IGWC 2017- 7th International Groundwater Conference New Delhi 11-13 December 2017.
45. Gürcan T., **Kurtulus B.**, Avsar O., Avsar U., 3D Thermal Stratification of Koycegiz Lake, Turkey. EGU 2017 23-28 April, Vienna, Austria. (poster)
46. Gülsen. E, **Kurtulus B.**, Yaylım, TN., Avsar O., Transmissivity interpolation using Fluid Flow Log data at different depth level in Liwa Aquifer, UAE. EGU 2017 23-28 April, Vienna, Austria. (poster)
47. Gürcan T., **Kurtulus B.**, Avsar O., Mapping of Hot/Cold Springs in a Large Lake Using Thermal Remote Sensing and In-situ Measurement. AGU 2016 Fall Meeting, 12-16 December, San Francisco, USA. (poster)
48. Sağır C., Erdem, G., **Kurtulus B.**, Kurtulus DFK, Tunca E., Le Coz M., Razack M., UAV Applications in Hydrology: A Case Study in Gökova, Muğla, AGU 2016 Fall Meeting, 12-16 December, San Francisco, USA. (poster)
49. Yaylım TN., **Kurtulus B.**, Avsar O., Interpretation of Nonlinear Well Loss Coefficients for Rorabaugh (1953) Method. AGU 2016 Fall Meeting, 12-16 December, San Francisco, USA. (poster)
50. Arslan, Ş., Avşar, Ö., Niedermann, S., Avşar, U., **Kurtulus, B.**, Güleş, N., Noble gas isotopes and gas compositions of on-land and subaqueous thermal springs in the Koycegiz Lake and Dalaman plain area, Turkey, 43rd International Association of Hydrogeologists (IAH) congress, 24-29 September 2016, Montpellier, France
51. Tunca E.U., **Kurtulus B.**, Antropogenic Contamination Assessment in Asartepe Dam Lake Sediment, 1st International Black Sea Congress on Environmental Sciences (1st IBCESS), August 31-September 03, 2016 Giresun, Turkey.
52. Erdem, G. Sağır C., Canoğlu MC. and **Kurtulus B.** Comparison of Empirical Bayesian Kriging and Geo-Anfis Methods for Interpolating Hydraulic Head in a Karst Alluvium July 10-14, 2016 İEMSs, Toulouse, France
53. Gürcan T., **Kurtulus B.**, Tunca E., Mutlu T., Kurtulus D.F., Amphibious Unmanned Air Vehicle Based Remote Sensing Using Multispectral Camera. April 06-10, 2015. 68. Turkey Geology Congress, Ankara, Turkey.
54. Danladi I.B., Çaldırak H., Acar D., Girgin N.B., Taban T., **Kurtulus B.**, Ön S.A., Environmental Changes in the Lake Salda for the Past 100 Years. April 06-10, 2015. 68. Turkey Geology Congress, Ankara, Turkey.
55. Erdem G., **Kurtulus B.**, Razack M., Groundwater Quality Mapping Based on "GEO-ANFIS" Method in a Karstic Aquifer (DOGGER Aquifer, Poitiers, France). April 06-10, 2015. 68. Turkey Geology Congress, Ankara, Turkey.
56. Çaldırak H., **Kurtulus B.**, Ön, S.A., Determination Current Hydrogeochemistry of Lake Salda and Prediction Maps of Potential Recharge Zones. April 06-10, 2015. 68. Turkey Geology Congress, Ankara, Turkey.

57. Sagir C., **Kurtulus, B.**, Razack. M., Assessment of Hydraulic Head and Heavy Metals Interpolations Performed By Different Methods (SOFT Computing and Geostatistics) in Karabağlar Polje, Muğla, Turkey. April 06-10, 2015. 68. Turkey Geology Congress, Ankara, Turkey.
58. Taban T., Girgin N.B., Acar D., Bauchi I.D., Caldirak H., **Kurtulus B.**, Ön S.A., Determination of Holocene Climate Variability from the Salda Lake Sedimentary Records. April 06-10, 2015. 68. Turkey Geology Congress, Ankara, Turkey. (poster)
59. Avcı E., Çaldırak H., **Kurtulus B.**, Portable Field Water Temperature Meter, April 06-10, 2015. 68. Turkey Geology Congress, Ankara, Turkey. (poster)
60. Ankut Z., Avşar U., Avşar Ö., Arslan S., **Kurtulus B.**, Güleç N. Investigation of Spatial Distribution of Geochemical Properties of the Köyceğiz Lake Bottom Sediments and Effect of Subaqueous Geothermal Springs on These Properties. April 06-10, 2015. 68. Turkey Geology Congress, Ankara, Turkey. (poster)
61. Avsar O., Ulas A., **Kurtulus B.**, Arslan S., Guleç N., Discovery of a subaqueous hot spring by a new method in Fethiye-Göcek Bay (SW Turkey). International Symposium on Eastern Mediterranean Geology (ISEGM), Mugla, Turkey, 13-17 October, 2014.
62. Banladi İ., Caldirak H., Akçer O., **Kurtulus B.**, The Water Stratification in Lake Salda, International Symposium on Eastern Mediterranean Geology (ISEGM), Mugla, Turkey, 13-17 October, 2014. (poster)
63. Avşar Ö., **Kurtulus, B.**, Kacaroglu F., Kuscu G., Gürsu S., Comparison of Wet and Arid Season Stable Isotope Characteristics of Thermal and Mineral Waters in Muğla (SW Turkey) International Symposium on Eastern Mediterranean Geology (ISEGM), Mugla, Turkey, 13-17 October, 2014.
64. **Kurtulus B.**, Caldirak H., Banladi I., Akcer O.S., Recharge of Lake Salda, Turkey. International Symposium on Eastern Mediterranean Geology (ISEGM), Mugla, Turkey, 13-17 October, 2014. (poster)
65. **Kurtulus B.**, Avsar O., Yaylım T.N., Gunay E., Estimation of Hydraulic Properties of Liwa Aquifer from an Unconfined Pumping Test Data and Evaluation of Data by using Boulton(1963) and Neuman(1975) models, International Symposium on Eastern Mediterranean Geology (ISEGM), Mugla, Turkey, 13-17 October, 2014 (poster).
66. Avsar O., Ulas A., **Kurtulus B.**, Arslan S., Guleç N., Subaqueous hot springs in Köyceğiz Lake and Dalyan Channel (SW Turkey). EGU General Assembly Vienna, Austria, 27 April -01 May 2014.
67. Avşar Ö., **Kurtuluş B.**, Gürsu S., Kacaroglu F., Kuşcu G., Hydrogeochemical and Isotopic Properties of geothermal and mineral resources in Muğla Region/Turkey, April 01-05, 2013, 66. TJK Congress Ankara, Turkey.
68. Mutlu T, Çoşkun V., Esin E., Yayla M., **Kurtulus B.**, Tunca E., Kurtulus DFK., Tekinalp O., Test of an Amphious Unmanned air vehicle for remote sensing purposes. TMMOB Mechanical Engineering VI. National Aircraft and Aerospace Engineering Congress 03-04 May 2013 / Eskisehir/Turkey
69. Avsar O., **Kurtulus B.** Ulas A., Arslan S., Guleç N., Determination of spatial distribution and hydrochemistry of subaqueous thermal springs in the lacustrine and nearshore environments in southwest Anatolia. EGU General Assembly Vienna, Austria, 7 April -12 April 2013.
70. Avsar O., **Kurtulus B.**, Kacaroglu F., Kuscu G. Gursu S., Hydrogeochemical characterization of thermal and mineral waters of Muğla (SW Turkey) EGU General Assembly Vienna, Austria, 7 April -12 April 2013.
71. Özdede S., Kurtuluş DF, **Kurtulus B.** Investigation of Bodrum Region wind resource potential and determination of possible place for a wind turbine IV. National Aerospace and aircraft conference (UHUK) 12-14 September 2012, Hava Harp Okulu, İstanbul/Turkey
72. Mutlu T., Çoşkun V., **Kurtulus B.**, Tunca E., Kurtuluş D.F., Tekinalp O., Development of an Unmanned Air Vehicle platform for Water turbidity and water parameters measurement, I. National Aerospace technology and application congress 16-22 November 2012 – İzmir, Turkey
73. Mourini, A., Flipo, N., Rejiba F., Durand V. Tallec G., **Kurtulus B.**, DE Fouquet C., Jost Q., Bodel L., Mise en place d'un dispositif expérimentale multi échelle pour quantifier les échanges nappe-rivière dans un système aquifère multicouche. [Designing a Multiscale Experimental sampling system for quantification of stream-aquifer water exchange in a multilayer aquifer system] GFHN GEOFCAN, Orleans, Nov 29- Dec. 01, 2011.
74. **Kurtulus B.**, Flipo N., Hydraulic Head Interpolation using neural Networks: Orgeval experimental site/ France. May 05-09, 2010, 63. Turkey Geology Congress, Ankara, Turkey.
75. Alkeveli T., Öztan S., **Kurtulus B.**, Bayar B., Başak M., İlker Ç., Uslular E.G., 2010. The Correlation of Land Surface and Sea Surface Temperature values by Using Different Satellites Data (ASTER, LANDSAT TM, MODIS), 2. Geology Remote Sensing Symposium, November 4-5 2010, MTA General Directory, Ankara, Turkey.

76. **Kurtulus B.**, Flipo N., Goblet P., Sensitivity analysis on an adaptive neuro fuzzy inference system (ANFIS) for hydraulic head interpolation: Orgeval experimental site/ France. XVIII international Conference on Computational Methods in Water Resources June 21-24, 2010 Barcelone, Spain.
77. **Kurtulus B.**, Flipo N., Goblet P., Villain G., Turnobize J., Talec G., Comparison of Anfis and Ordinary Kriging to Assess Hydraulic Head distribution: The Orgeval case study, International Joint Conference on Computational Intelligence, Madeira Lisbon, 5-7 October 2009.
78. **Kurtulus B.**, Flipo N., Tallec G., Tournebize J., Villain G., Garnier J., Ansart P., Caractérisation des contributions de surface et hydrogéologique du BV de l'Orgeval, site expérimental du GIS ORACLE, par interpolation de données piézométriques. Comparaison de méthodes géostatistiques. [Characterization of surface and hydrogeologic contributions of BV Orgeval, experimental site of GIS ORACLE, by interpolation of piezometric data] GFHN, Aix en Provence, Nov 25-26, 2009.
79. **Kurtulus B.**, Razack M., Bayarı S., Modeling the daily discharges of large karstic aquifers using artificial neural networks (ANN) methodology. Analysis of single-parameter vs. multiple-parameters inputs ANN models. 35th Groundwater and Ecosystems Congress, Lisbon, 17-21 September 2007.

Reports

80. **Kurtulus B.**, Avsar O. "Final Well Completion Reports for Scheme A, B and C" Strategic Water Recovery Project, Liwa UAE 2017 (440 individual reports).
81. **Kurtulus B.**, Avsar O. "Composite Logs drawing for Recovery Well, Clustered Monitoring Well and Solitary Well using GeODin Software" Strategic Water Recovery Project, Liwa UAE 2017.
82. **Kurtulus B.**, Avsar O. "Flow Fluid Logging Evaluation Report for Scheme A, B and C" Strategic Water Recovery Project, Liwa UAE 2017 (440 individual reports).
83. **Kurtulus B.**, Avsar O. "Solitary Well Test Evaluation Report" Strategic Water Recovery Project, Liwa UAE 2016.
84. **Kurtulus B.**, Avsar O. "Multiple Well Test Evaluation Report" Strategic Water Recovery Project, Liwa UAE 2016.
85. **Kurtulus B.**, Avsar O. "Pumping Test Evaluation Report" Strategic Water Recovery Project, Liwa UAE 2015 (330 Individual Reports).
86. **Kurtulus B.**, Kurtulus DFK, Tunca E., Coskun V., Mutlu T, Alkeveli T., TÜBİTAK 112Y212 project report Assessment of water turbidity dynamics and water parameters using Unmanned Air Vehicle (UAV) in Asartepe Dam lake and verification of data with in-situ measurement 2013.
87. Flipo N., Rejiba F., **Kurtulus B.**, Tournebize J., Tallec G., Vilain G., Garnier J., Ansart P., Lotteau M., Caractérisation des fonctionnements hydrologique et hydrogéologique du bassin de l'Orgeval (Hydrology and hydrogeology characterisation of Orgeval basin), 2009, Piren Seine Report.
88. Bayarı S, **Kurtulus B.**, Özyurt N., Razack M., Çiner A., Albani, A. , Caner L., Modelling of Groundwater Flow and Quality in Karstic Systems Using Soft Computing Methods (Neural Networks, Fuzzy Logic) TÜBİTAK ÇAYDAG 105Y155, 2009: 1-143.
89. **Kurtulus, B.**, 2003, Determination of the NDVI values of Harran Plain and Syria. TÜBİTAK-Space Report pp 1-45.

Publication in Under Review or Preparation

- Yeşilmeden H., Alperen Ç.İ., **Kurtulus B.**, Avşar Ö., Canoglu C., Land subsidence assessment under excessive groundwater pumping using ESA Sentinel-1 satellite data: A case study of Konya Basin, Turkey (Submitted to Environmental Earth Science).
- Sağır Ç., Duzdas, E., Aksoy E., **Kurtulus B.**, Avşar Ö., Canoglu MC., Ayrancı K., Soupios P. 2D/3D Analysis of the karst aquifer structure using Combined Geophysical Methods: A Case Study from Azmak Spring, Gokova Bay, Turkey (*in preparation to submit applied Journal of Hydrology*).
- Erdem G., Avşar Ö, **Kurtulus B.**, Canoglu MC., Razack M. Hydrogeochemical Conceptual Model of Gökova Plain-Azmak Springs System (*in preparation to submit WATER*).
- Razack M., **Kurtulus B.**, Meddi Mohamed, Canoglu MC. Shoried A. Sagir C., Günseli E., Louis F., Delbirani Y., Chambar A., Gilbert E., Is groundwater resilience to climate changes and high pressures an opposite concept ? An assessment based on the analysis of the Dogger aquifer in Poitou region, France (*in preparation to submit WATER*).

Competitions

AIAA DBF 2013, Tucson, USA Co-Supervisor of Nymph Noir Team (12 students) 10th place in 81 teams (1st among Turkish and all other foreign teams apart USA) (8th place in the report among 81 teams)

Euroavia Air Cargo Challenge 2011, 12-14 August 2011, Stuttgart Co-Supervisor of 2 Teams (12 students): (sponsored by ASELSAN with 20000 TL) Nymph Noir (7th place-A/C with 1.96 kg empty weight and a payload of 6.4 kg), Nymph Rouge (11th place-A/C with 2.195 kg empty weight and a payload of 6 kg)

Conference Organization

- International Groundwater Resilience to Climate Change and High Pressure Conference, 8-10 May 2019, Muğla, TURKEY, www.grecpima.com
- "ISEM 8th International Symposium on Eastern Mediterranean Geology." 13-17 October 2014 <http://isemg.org/> TURKEY
- "Applied Geosciences Turkish - French Summer Workshop" 4-6 August 2011 TOBB-ETU ANKARA/TURKEY.
- "The Tenth International Conference on Combustion and Energy Utilization" 2010 ICCEU-MUGLA /TURKEY

Teaching Experiences (Last Two Year)

Year/Semester	Code	Courses
2018-2019 Spring	GEOE 5525	Groundwater Modeling
	GEOE 5523	Geographic Information Systems (GIS)
2018-2019 Fall	GEOE 4513	Computer Application in Geological Engineering
	GEOE 4519	Introduction To GIS
	GEOE 5523	Geographic Information Systems (GIS)
	GEOE 4002	Geological Engineering Design I
2017-2018 Spring	GEOE 2007	Geostatistics
	GEOE 3509	Introduction To GIS
	GEOE 4513	Computer Applications In Geological Engineering
	GEOE 5090	Graduate Seminar
	GEOE 5523	Geographic Information Systems (GIS)
	GEOE 5525	Groundwater Modeling
	GEOE 6503	Entrepreneurship

Computational Skills

OS	: Windows, Linux, UNIX
Software	: ARCGIS 10.5, Rockwork, Isatis, Visual Modflow Flex, Groundwater Vistas, GMS 10.2, PHREQC, GMT, GMTSAR, SNAP, GEODIN, Aqutesolv, Aquifer test, Jchess, Tecplot, Feflow, ENVI, Erdas, SPSS, LaTeX, MapInfo, Surfer, Global Mapper, Fluent-Ansys, Gambit, Grapher, MS Office
Languages	: Matlab2019, Python

Interests

- Play classical 'ud' (a Turkish classical music instrument)
- Member of Turkish Classical Music chorus of Presidency of Hacettepe University