



Curriculum Vitae

Georgakarakos Stratis**PERSONAL INFORMATION**

Surname, First Name
 Telephone
 Mobile
 e-mail
 Birthplace
 Date of birth
 Gender
 Country of Origin

 Country Code

Georgakarakos Stratis
 +30 22510-36822
 +30 694 8879235
stratisg@aegean.gr
 Athens
 26-09-1948
 M
 Greece

 GR

**WORK EXPERIENCE**

Date (from - to)
 End Date
 Name and address of employer
 Type of business or sector
 Occupation or position held

 Main activities and responsibilities

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 End Date
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 Main activities and responsibilities

2001
 today
 University of the Aegean
 Teaching, Research
 Assistant Professor of Fisheries Biology, Fisheries Acoustics and Fisheries Management, at the Department of Marine Sciences, Director of Fisheries Management and Fisheries Acoustics Laboratory
 Fisheries Management. Environmental causes of variation in fish abundance. Quantitative methods in decision analysis. Bayesian statistics and assessment of uncertainties on fisheries management. Development of management decision tools including GIS and expert systems. Development and improvement of fisheries acoustics techniques for stock assessment, species recognition, abundance estimation and Bioacoustics.

 2000
 2001
 General Secretariat for Research and Technology, Ministry of Development, Athens
 Government
 Consulting scientist
 Design and implementation of national calls for marine environment and fisheries

 1997
 2001
 Institute of Marine Biology of Crete, (presently Hellenic Centre of Marine Research)
 Research
 Head of the Department "Sonar and Marine Information Systems"
 Project Manager and Principal Research Scientist

 1986
 1997
 Institute of Marine Biology of Crete, (presently Hellenic Centre of Marine Research)
 Research
 Head of the Sonar and Remote Sensing Laboratory
 Project manager and Principal Research Scientist

 1979
 1982
 University of Munich, Zoological Institute, Germany
 Research
 Research scientist, Deutsche Forschungsgemeinschaft (DFG),
 Applied bio-cybernetic in neurophysiology and animal behaviour. Electrophysiological single neuron activity in vertebrate brain.

Date (from - to)	1985
End Date	1986
Name and type of organisation providing education or training	Institute of Marine Research, Bergen, Norway
Main subjects/occupational skills covered	Post doctoral studies in Fisheries Management and Fisheries Acoustics
Name of certification awarded	Specialisation in population dynamics, fisheries management strategies, fisheries acoustics methodology, fish abundance estimation and mapping.
Date (from - to)	1980
End Date	1985
Name and type of organisation providing education or training	University of Munich, Zoological Institute, Germany
Main subjects/occupational skills covered	Brain research and Fish Behaviour. Applied bio-cybernetic in neurophysiology and animal behaviour. Electrophysiological single neuron activity in vertebrate brain.
Name of certification awarded	Doctor's degree
Level in national classification (if appropriate)	PhD
Date (from - to)	1979
End Date	1980
Name and type of organisation providing education or training	University of Munich, Zoological Institute, Germany
Main subjects/occupational skills covered	Training in electrophysiological methods on single neuron activity of the vertebrate brain.
Name of certification awarded	Training equivalent to MSc's degree.

SKILLS AND COMPETENCES

Languages
Self-assessment
European level

English

Self-assessment
European level

German

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

SOCIAL SKILLS AND COMPETENCES

Member of Greek Ichthyologists Association, executive committee member of European Census of Marine Life, Artificial Neural Network Association.

ORGANISATIONAL SKILLS AND COMPETENCES

Member of the scientific committee of various national congresses and symposia. Manager of several national and international research projects (List 1). Organisation of several project meetings, training workshops and academic training courses.

TECHNICAL & COMPUTER SKILLS

Computer programming in MatLab, R, Visual Basic, MS Access. Data analysis in SPSS, Splus and Statistica. Experience in developing Artificial Neural Networks, analysing time series in a Bayesian approach or ARIMA components. Spatial analysis applying Kriging and Co-Kriging techniques. Specific statistical tools for population parameters estimation.

OTHER SKILLS AND COMPETENCES

Electronic development for scientific purposes, underwater technology, hydroacoustic applications, digital photography.

PUBLICATIONS selected

Scientific papers

1. Palialexis A., **Georgakarakos S.**, Karakassis I. Lika K. and Valavanis V. D. (2011) Fish distribution predictions from different points of view: comparing associative neural networks, geostatistics and regression models. *Hydrobiologia* (in press).
2. Palialexis A., **Georgakarakos S.**, Karakassis I. Lika K. and Valavanis V. D. (2011) Prediction of marine species distribution from presence-absence acoustic data: comparing the fitting efficiency and the predictive capacity of conventional and novel distribution models. *Hydrobiologia* (in press).
3. Trygonis V, **Georgakarakos S**, Simmonds EJ. (2009) An operational system for automatic school identification on multibeam sonar echoes, *ICES JOURNAL OF MARINE SCIENCE* 66 (5): 935-949 JUN 2009
4. **Georgakarakos S**, Kitsiou D. (2008) Mapping abundance distribution of small pelagic species applying hydroacoustics and Co-kriging techniques. *Hydrobiologia* 612: 155-169 OCT 2008
5. Brehmer P, **Georgakarakos S**, Josse E, et al. (2007) Adaptation of fisheries sonar for monitoring schools of large pelagic fish: dependence of schooling behaviour on fish finding efficiency. *AQUATIC LIVING RESOURCES* 20 (4): 377-384 OCT-DEC 2007
6. Brehmer P., Lafont, T., **Georgakarakos, S.**, Josse, E., Gerlotto, F., Collet, C. (2006). Omnidirectional multibeam sonar monitoring: applications in fisheries science, *Fish and Fisheries*, 2006, 7, 165–179, Fluctuating environment. *Biodiversity and Conservation*, Vol. 14, pp. 2347-2359
7. **Georgakarakos S.**, D. Koutsoubas, and V. Valavanis. (2006). Time series analysis and forecasting techniques applied on loliginid and ommastrephid landings in Greek waters. *Fisheries Research* 78 (2006) 55–71.
8. **Georgakarakos S.** (2005) Investigation of the beam effect on fish school parameters: A simulation approach. Proceedings of the International Conference "Underwater Acoustic Measurements: Technologies & Results", Heraklion, Crete, Greece, 28th June – 1st July 2005.
9. Valavanis VD, **Georgakarakos S**, Kapantagakis A, Palialexis A, Katara I (2004). A GIS Environmental Modelling Approach to Essential Fish Habitat Designation. *Ecological Modelling*, 178, 417-427.
10. Gerlotto F., **Georgakarakos S.** and Eriksen P. 2000. The application of multibeam sonar to shallow water acoustic surveys: potential use and applications. *Aquat. Living Resour.* Vol. 13 (5) 2000.

Proceedings

1. **Georgakarakos S.**, Haralabous J., Valavanis V, Arvanitidis C., and Koutsoubas D. (2000). Prediction of fishery exploitation stocks of Loliginids and Ommastrephids in Greek waters using uni- and multivariate time series analysis techniques. Cephalopod biomass and production, 3-7 July 2000, Aberdeen. CIAC 2000.
2. Beare, D.J., D.G. Reid, P.Petitgas, P. Carrera, S.**Georgakarakos**, J.Haralabous, M. Iglesias, B. Liorzou, J. Masse, and R.Muino. (2000). Spatio-temporal patterns in pelagic fish school abundance and size: a study of pelagic fish aggregation using acoustic surveys from Senegal to Shetland. In: Theme session on incorporation of external factors in marine resource surveys, Advisory Committee on Fishery Management, K:03
3. **Georgakarakos, S.**, Haralabous, J., Koutsoubas, D., Arvanitidis, C. & Kapantagakis, A., 2001. Modelling and forecasting annual cephalopod catches in Greek waters by applying time-series analysis techniques and artificial neural networks. International Council for the Exploration of the Sea, C.M. 2001/K:11.
4. Valavanis VD, Kapantagakis A, **Georgakarakos S**, Katara I, Palialexis A (2002). GIS mapping of marine species feeding grounds through analysis of satellite imagery. Proceedings of the Second International Symposium on GIS/Spatial Analyses in Fishery and Aquatic Sciences, Sep. 3-6, Brighton UK.
5. Kapantagakis A, Valavanis VD, **Georgakarakos S**, Palialexis A, Katara I (2002). Analysis of fisheries catch data in relation to temperature anomalies in SE Mediterranean using GIS. Proceedings of the Second International Symposium on GIS/Spatial Analyses in Fishery and Aquatic Sciences, Sep. 3-6, Brighton UK.
6. Gerlotto, F; P. Fernandes, E.J. Simmonds, S. **Georgakarakos**, P. Brehmer, D. Reid, P. Copland and J. Paramo, (2003), Three-dimensional Underwater Imaging for Fisheries Research, 146th ASA Meeting, Austin, TX, USA.
7. Brehmer P., F. Gerlotto, E. Josse, S. **Georgakarakos**. Analysis from omnidirectional multibeam fisheries sonar of aggregative pelagic fish and vessel *in-situ* dynamics, formalisation, limits and applications in fisheries sciences. Proceed.of the Intern. Conf. "Underwater Acoustic Measurements: Technologies & Results", Heraklion, Greece, 2005.
8. **Georgakarakos S.** Investigation of the beam effect on fish school parameters: A simulation approach. Proceed. of the Intern. Conf. "Underwater Acoustic Measurements: Technologies & Results", Heraklion, Greece, 2005.
9. Palialexis A, **Georgakarakos S**, Karakassis I, Lika K, Valavanis VD (2010). Introducing Associative Neural Networks to marine habitat modeling using acoustic and remote sensed data. Proceedings of the 39th CIESM Congress.
10. Trygonis, V., S. **Georgakarakos**, P. Brehmer (2010) Exploitation des données issues d'un sonar omnidirectionnel. International Marine Science & Technology, Brest, 2010

ATTACHMENTS
International research
projects

LIST A: MANAGEMENT OF RESEARCH PROJECTS

1. 1985-1989 SFS, Greece - Hydroacoustics.
2. 1986-1989 FISH-POP, Appraisal of fisheries resources by hydroacoustics.
3. 1989-1991 FISH-POP II, Study contracts No 3011. Assessment of pelagic fish resources in the Aegean and Ionian Seas by hydroacoustic survey methods.
4. 1991-1993 BIOMASS (FAR/MA 2 542/90. «Biomass Acoustical Selection System»; F,UK,GR).
5. 1991-1994 STRIDE-153, «National system for the management of fisheries resources»
6. 1991-1993 Marine-Dbase, «Development of a database system for the marine environment»
7. 1992-1995 FISHCAL /FAR/MA- 91. «Improvement of the fish stock assessment methodology»; GR, I.
8. 1994-1995 FISHSAT, «Application of remote sensing techniques in fisheries management»
9. 1995-1998 ACOUSTICS/AIR; N, UK, GR. «Acoustic properties of fish and their exploitation in classification schemes for fish stock assessment».
10. 1996-1999 FIGIS/FAIR, F, S, GR, I. «Spatio-temporal analysis of the fishery resources, their environment and exploitation in the Mediterranean: Experimental use of Geographic Information Systems».
11. 1997-2000 CLUSTER/FAIR, F, UK, GR, S. «Aggregation patterns of pelagic commercial fish species under different situations and their impact on exploitation and assessment».
12. 1997-2000 AVITIS/FAIR, F, UK, GR, DK. «Three-dimension analysis and visualisation of the spatial structure of fish schools using multibeam sonar image processing».
13. 1997-1998 ABDMAP, Environment and Climate, UK, F, D, GR. «Algal bloom Detection, Monitoring and Prediction».
14. 1997-2000 CEPHAVAR/FAIR CT 97-1520. Cephalopod resources dynamics: Patterns in Environmental and Genetic Variation.
15. 1999-2001 NATURA 2000. Identification and classification of marine ecosystems
16. 2001-2006 FADIO/QoL, F, USA, S, N, GR, B. «Fish Aggregating Devices as Instrumented Observatories of Pelagic Ecosystems (FADIO).
17. 2003-2007 IMAS/EPAN, HCMR, UA, UTH, Q&R, InfoMap, Lamans «Development of an Integrated Management System to support the sustainability of Greek Fisheries resources (IMAS-Fish).
18. 2003-2006 THALATTA/EPAN, FORTH, HCMR, UA. «Hellenic Network for Marine Acoustic Technology (THALATTA).
19. 2006-2010 ECOSUMMER, EE, Marie Curie «ECOsystem approach to SUstainable Management of the Marine Environment and its living Resources».
20. 2006-2009 FishSat / EPAL, UA. «Estimation of migration patterns of the large pelagic species in Northern Aegean Sea, applying remote sensing techniques.