

Curriculum Vitae Dr. Sohail Barkati



Personal Profile

Father's name Hakeem Mahmood Ahmed Barkati

Born Tonk -Raj (India)
August 14,1948

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Place of Domicile Sindh

Contact:

i. Address Office: Department of Zoology
University of Karachi
Karachi-75270, Pakistan
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Present Position

Professor (Reemployed)
Department of Zoology
University of Karachi

Education

Ph.D. Marine Biology 1983 Karachi University

M.Sc. Zoology 1971 Karachi University

B.Sc. (Hons.) Zoology 1970 Karachi University

Certificate in Marine Biology 1975 **Holland** (Netherlands Institute of Sea Research, Oct.74-Mar.75)

Diploma in Marine Biology 1979 **Norway** (Institute of Marine Biology, Aug.77 - Mar. 79, Bergen)

Academic Positions Held:

a. Thirty three years of teaching and Research Experience

- Professor, Department of Zoology, University of Karachi (1995 – 2008);
- Associate Professor, “ “ “ “ “ (1989 - 1995);
- Assistant Professor, “ “ “ “ “ (1984 - 1989).
- Research Officer, “ “ “ “ “ (1973 – 1974;
1975 – 1977; 1979 - 1982).

b. Additional Assignments

Secretary Affiliation Committee:

University of Karachi, July 24, 2003 – 2008. Supervised as Incharge of Affiliation Office, matters of all government and private degree colleges affiliated to Karachi University.

Convener Land & Building Committee: University of Karachi
(1993-1994; 2005 – 2008)

Member Finance and Planning Committee, University of Karachi: **Nine Years**
(November 1990 - May 1991; 1991 – 1994; 2004-2007). Dealt with all sorts of financial management, disbursement and budget making.

Member, Syndicate subcommittee on Finances.

Chairman, Department of Zoology, University of Karachi (2006 – 2008)

Member Syndicate/Governing Boards:

- **Member Syndicate,** University of Karachi : 5 times (1990-91; 1991-1994; 1996 -1999; 2000-2003; 2004-2007).
- **Member Senate, University of Karachi:** November 1990 - May 1991; August 1991 – August 1994; 1997 – 2008). Participated actively in discussions on University budgets by reviewing comprehensively the budget proposals.
- **Member, Board of Governors:** Centre of Excellence in Marine Biology, University of Karachi (1992 - 1995; 1998 – 2002; 2002-2008).
- **Member, Board of Governors:** Applied Economics Research Centre.
- **Member Board of Governors,** Defense School of Business Education, Karachi.
- **Member Incharge, Engineering Department, University of Karachi:** September 1992 – 1994; 2005-2006
- **Convenor Rationalization Committee:** (2003-04; 2006-07) Non teaching posts of all cadres (grade 1-16 and 17 to 20) were rationalized for the first time. Posts of all teaching and non teaching departments and Administrative units were scrutinized and framed as per today's requirement.

- **Member Rationalization Committee for Teaching Staff: (1994, 2000, 2006)** Faculty positions of various cadres were adjusted (added/deleted) with change in system and number of students.
- **Convener M.Phil., M.S./Ph.D. Rules Committee: (2008)** Bylaws of admission in M.S./Ph.D. were framed by a committee constituted in Board of Advanced Studies and Research.

Member Academic Committee, Board of Secondary Education Karachi (1997-98); nominated by the Chancellor.

Member, House Allotment Committee, University of Karachi (1996-97; 1998-99; 1999-2000; 2003-04; 2004-05; 2006-07).

Member Syndicate Statutes Committee: Statutes of almost all centers/Institutes of Karachi University were reviewed for approval from Syndicate and Senate.

Member, Admission Committee, University of Karachi, 2004-05

A **Gold Medal** was awarded by the Pakistan Intellectual Forum (July 1993).

Academic Bodies Membership:

1. **Member, Board of Advance Studies and Research**, University of Karachi, (2002 – to 2008).
2. **Member Curricula Revision Committee formed by HEC.**
3. Member: Board of Studies, Department of Zoology, U.O.K. (1989-2008); Curricula for undergraduate and Graduate classes were reviewed.
4. Member: Faculty of Science, University of Karachi (1989 – 2008)
5. Member Academic Council, University of Karachi (1995 – 2008)
6. Member: Karachi Zoo Advisory Council, Zoological Garden, Karachi.

Member Enquiry Committees:

1. Member enquiry committee constituted by Governor of Sindh for alleged misuse of funds in the Board of Intermediate Education, Karachi (1997).
2. Member Fact Finding Committee regarding misappropriation of funds and misuse of authority (1997).
3. Member Syndicate enquiry Committee regarding cases of upgradation of grade 16 and above (2006)
4. Enquiry Officer of an employ of the Centre of Excellence in Marine Biology, University of Karachi.
5. Member Enquiry Committee for Department of Political Science (1993).

Member Committees/ Boards/ Councils:

1. President, Federation of All Pakistan Universities Academic Staff Association

2. President, Karachi University Teachers' Society.
3. Joint Secretary, Zoological Society, University of Karachi, 1969 - 70.
4. Councilor Students Union, University of Karachi, 1969-70.
5. Proctorial Monitor, University of Karachi, 1968-69.
6. Treasurer, Karachi University Teachers' Society 1988 - 89.
7. Member Executive Council, Karachi University Teachers Society, 1989-90; 1992-93; 1995-96; 1997-98.
8. Member, Executive Committee, Zoological Congress 1984.
9. Member, Zoo Advisory Council, Zoological Garden, KMC (1990 – 1991).
10. Member, House Allotment Committee, University of Karachi (1993 - 1994; 1996 – 97).
11. Member, University Campus Committee, University of Karachi (1993 - 1994).
12. Member Discipline Committee, University of Karachi, 2002 – 03.
13. Member, Syndicate Committee for re-employment on contract basis (1993).
14. Member, Syndicate Committee to examine the changes proposed in the University code.
15. Member, Syndicate Committee for Rationalization of Teachers Cadre Strength, University of Karachi (1993 – 2006).
16. Member, Non-Teaching Staff Rationalization Committee, University of Karachi, 2002 – 2003; Convener of the committee: 2004 – 2008).
17. Member Syndicate subcommittee on Finances (2001- 2003).
18. Conducted Admission tests for Master and Diploma programmes in Computer Science, University of Karachi in 1989 and 1990.

Selection Boards:

1. Member Selection Board Applied Economics Research Centre, University of Karachi (1997-1999).
2. Member Appointment Committee, Board of Secondary Education Karachi, 2003 – 05.

3. Member Selection Board, Centre of Excellence in Marine Biology, University of Karachi (1992 – 1994; 2007 – 2008).
4. Member Selection Board, University of Baluchistan, Quetta.
5. Member Selection Board, University of Khairpur

Examination Affairs:

1. Member Advisory Committee for Examination Department, U.O.K (1992).
2. Member Inspection Committee for Examination Department, University of Karachi. (1992).
3. Convener Syndicate Committee on Examination Affairs

Subject Examiner

- i. Examined M. Phil. thesis, Centre of Excellence in Marine Biology, University of Karachi (1990).
- ii. Examined two M.Sc. theses, Department of Chemistry, U.O.K., 1989; 1991).
- iii. Examiner, Practical examination of B.Sc. (1990, 1991, 1993, 1994, 1995).
- iv. Examiner, M.Sc. Previous, Urdu Science College (Sep., 1991).
- v. Examiner, B.Sc. II year, S.M. Science College (1990).
- vi. Examiner, B.Sc. II year, Islamia Science College (1992).
- vii. Co-Examiner, B.Sc. II-C, Zoology (1994).
- viii. Examiner, B.Sc. I year, Govt. Jamia Millia College (1995).
- ix. Examiner, B.Sc. II year, Urdu Science College (1996).
- x. Examiner, M.Sc. Final, Urdu Science College & Jinnah Post Graduate Women College (1998).
- xi. Head Examiner, B.Sc. Zoology, IInd year Practical III, Annual Examination 2001.
- xii. Served as Examiner to M. Phil research thesis.
- xiii. Served as Examiner to B.Sc. practical exam, Colleges of Karachi.

Organizing/Management Activities

1. Member, Inauguration and Reception Committee, International Conference on Food Research (1993).
2. Member, Organizing Committee, International Conference on Expert Consultants on Plant Nematodes, University of Karachi. (1992).
3. Member, Excursion Committee, Pakistan Congress of Zoology (1989).
4. Advisor - Consultant, Hamdard-e-Naunehal, Karachi (1985 - 90).
5. Chief Election Officer for Elections of Officers Welfare Association, University of Karachi. (1991).
6. Member Administrative Committee, National Conference on Sofis and Reformation of Society, University of Karachi (1994).
7. Secretary, 14th Pakistan Congress of Zoology, session II (1994).

8. Member Local Organizing Committee, 17th Pakistan Congress of Zoology (1997).
9. Member, Executive Council, Zoological Society of Pakistan (1997-99; by election on all Pakistan basis).
10. Resource Person, 6-days In-Service Training course in Zoology, organized by Higher Education Commission, Jan 27 – Feb 1, 2003.
11. Member, Organizing Committee, International meeting on Plant Nematology.

Editorial Consultant of Research Journals:

- i. Marine Research; Pak. J. Sci. Ind. Res.; Scientific Khyber.
- ii. International Journal of Biology & Biotechnology.
- iii. Pakistan Journal of Oceanography
- iv. Records Zoological Survey of Pakistan.
- v. Assistant Editor, Urdu Magazine “Takhlig” 1970-71, University of Karachi.

Research Interests

Reproductive Biology, Population dynamics, Growth, Tissue Condition Index, Aquaculture, Ecology, Mangrove Fauna.

Research Projects Supervised

1. Principal Investigator NSRD Project, “Biomass and species composition of a littoral rocky shore of the Karachi coast”.
2. Conducted and supervised research project on “Mangrove fauna (invertebrate) of Karachi-Sindh coast” PARC research project, 1983 - 1987 (Principal Investigator: Dr. Nasima M. Tirmizi).
3. Co-Principal Investigator research project entitled, “Ecology of coastal areas of Karachi” (1992 - 93).
4. “The ecology of four rocky ledges along the Sindh coast” (Investigators: Dr. Sohail Barkati & Prof. Zakia Khanum; 1994).
5. “Study of marine benthic molluscs in relation to pollution” (Investigator: Prof. Dr. Sohail Barkati; 2004).
6. “A comparative study of population structure and condition index of some abundant gastropod molluscs from exploited and non-exploited sites”. (Investigator: Prof. Dr. Sohail Barkati & Dr. Solaha Rahman; 2005).
7. “Studies on the biochemical composition of abundant gastropod, Turbo intercostalis from Karachi Coast” (Investigator: Prof. Dr. Sohail Barkati & Dr. Solaha Rahman; 2006).

Research work Supervised (Annexure)

M.Sc.

Nine (9) research projects leading to M.Sc. degree in Zoology were supervised.

M.A.S.

Two (2) research projects leading to M.A.S. degree in Marine sciences were supervised.

M. Phil.

Two (2) research projects leading to M. Phil. in Marine Biology and Marine Science were supervised.

Ph.D.

Five (5) research projects leading to Ph.D. in Marine Science and Zoology were supervised and two students are currently working.

Invited Seminars:

1. Allometric growth in the clam *Macoma balthica* from the Dutch Wadden Sea. Presented at the Institute of Marine Biology, University of Karachi, 1975.
2. Some aspects of autecology of a mussel population in Lindaspollene, Norway. Presented at the Institute of Marine Biology, University of Bergen, Norway, 1978.
3. Delivered a lecture on Promotion of Fish Consumption in Pakistan, Govt. College of Home Economics (October, 1986).

Symposium and Workshops Participation:

1. Participant to workshop on the organization and planning of fishery research and related marine biological research. 19-25 June, 1978, Bergen, Norway.
2. Chaired a session of the International Symposium organized by Zoological Society London on 4th May 1990, held at Regent's Park London.
3. Presented a Joint Paper in the International Symposium on "Environmental impact of burrowing animals and animal burrows", held on 3 - 4 May 1990, held by the Zoological Society of London at Regent's Park, London.
4. Participant to first Pakistan Congress of Zoology, Quaid-e-Azam University, Lahore, 1980.
5. Presented a talk on Population dynamics of the blue mussel *Mytilus edulis*, Institute of Marine Biology, Bergen, Norway (1978).
6. Attended meetings of International Union for the conservation of Nature and Natural Resources (IUCN), 24 November, 1985 Karachi, on Environmental management of Korangi/Phitti Creek Ecosystem and Indus Delta.
7. Participant to National workshop on Mangroves, University of Karachi, August 1983.
8. Presented a joint paper in the National Workshop on Mangroves, P.A.R.C., 1983.

9. Organized the lecture series of B.C.C.I. Foundation Chair in Marine Sciences, 1985-86.
10. Attended 2nd meeting of IUCN on 30th September 1986, Karachi.
11. Attended meetings of the National Commission on Agriculture Fisheries Committee, 1986.
12. Presented a joint paper in the International Conference on Marine Sciences of the Arabian Sea March 29 - April 2, 1986, Karachi.
13. Presented a joint paper in the National Seminar on Fisheries policy and planning, 21st - 23rd September 1986. Marine Fisheries Department, Karachi.
14. Presented a joint paper in the International Seminar on Quran and Science, 26 June 1986, Karachi.

Institutes/Organisations Visited

1. Institute of Sea Research, Texel, Holland, (1974).
2. Department of Zoology, Free University of Amsterdam, Holland (1974).
3. Rijkesmuseum, Leiden, Holland (1974).
4. Mussel Experimental Station, Texel, Holland (1974).
5. Molluscan Division, Natural History Section, British Museum, England (1975).
6. Laboratories of Marine Biological Association of United Kingdom, Plymouth, England (1975).
7. Institute of Environmental Research, Plymouth, England (1975).
8. Institute of Sea Research, Bergen, Norway (1978).
9. Institute of Marine Biology, Bergen, Norway (1977 - 79).
10. Zoological Society, Regents Park, London (1990).
11. Natural History Museum, New York, USA.

Oceanographic Cruises (Professional) Attended:

1. Participant to three months cruise in the Gharo-Phitti Creeks for obtaining hydrographical data, 1973.
2. One day cruise in the Wadden Sea (North Sea) on the research vessel Ephyra for macrobenthos study, in 1974.
3. Participant to six months cruise along the entire coast of Pakistan on the research vessel Dr. Fridtjof Nansen during the period January to June 1977.

University Affiliations:

- Department of Zoology, University of Karachi, 1971-72, 1989-todate.
- Institute of Marine Biology, University of Karachi, 1972-74; 1975-77; 1979-83.
- Institute of Sea Research, Netherlands, 1974-75.
- Institute of Marine Biology, Bergen, 1977-79.
- Research Scheme, Port Qasim Pollution Project, Institute of Marine Biology, University of Karachi, 1982.
- Research Scheme Mangrove Fauna of Karachi.

- Marine Reference Collection Centre, University of Karachi (1983-84).
Institute of Marine Sciences, University of Karachi (1984- 1989).

Research Supervision:

M.Sc.

Following research projects leading to M.Sc. degree in Zoology were supervised:

	Name of Student	Title	Year	Degree Awarded
1.	Surayya Jabeen	Studies on allometric and relative growth of two species of <i>Turbo</i> from Karachi coast.	1991	Degree awarded.
2.	Naila Habib	Studies on allometric and relative growth of two species of <i>Cerithium</i> from Karachi coast.	1991	Degree awarded.
3.	Razia Sultana	Studies on allometric and relative growth on <i>Euchelus asper</i> and <i>Trochus stellatus</i> .	1991	Degree awarded.
4.	Aamra Waris	Marine fishes of Pakistan - An annotated bibliography.	1992	Degree awarded.
5.	Amber Abdul Rahim	Marine Crustacea of Pakistan - An annotated bibliography.	1992	Degree awarded.
6.	Solaha Rahman	Mangrove research in Pakistan- An annotated bibliography.	1992	Degree awarded.
7.	Naheed Darakhshan	Marine Molluscs of Pakistan - an annotated bibliography	1994	Degree awarded.
8.	Rabia	Some aspects of growth of two species of <i>Nerita</i> from Karachi coast.	2003	Degree awarded.
9.	Hina Saleem	Analysis of benthic molluscs in relation to disturbance and pollution.	2003	Degree awarded.

M.A.S.

Two research projects leading to M.A.S. degree in Marine sciences were supervised.

	Name of Student	Title	Year	Degree Awarded
1.	Raees Mohammad Khan	Relative growth in three species of oysters.	1985	Degree awarded.
2.	Yasmeen Choudhry	Effect of tidal height on growth of mussels. Paper published (Pak. J. Sci. Ind. Res., Vol. 31: 415 - 422).	1985	

M. Phil.

Two research projects leading to M. Phil. in Marine Biology and Marine Science were supervised / enrolled.

	Name of Student	Title	Year	Degree Awarded
1.	Zohra Khatoon	The breeding and population structure of a mangrove Clam <i>Marcia cor.</i>	1998	Degree awarded.
2.	Iqbal Hussain	Bioecology of molluscan wood borers from Karachi mangroves.	1989	Degree awarded.

Ph.D.

Seven research projects leading to Ph.D. in Marine Science and Zoology were supervised.

	Name of Student	Title	Year	Degree Awarded
1.	Meher Fatima	Growth indices, nutritive value and chemical significance of the green mussel.	1996	Degree awarded
2.	Fahmida Firdous	Some aspects of bioecological studies of green turtle (<i>Chelonia mydas</i>) and olive ridley turtle (<i>Lepidochelys olivacea</i>) from Karachi coast	2003	Degree awarded.
3.	Solaha Rahman	Molluscan fauna of intertidal rocky ledge of Karachi - A comparative ecological study.	2003	Degree awarded.
4.	C.M. Shafique	Some aspects of bioecology of Ayubia National Park, NWFP.	2004	Degree awarded.
5.	Najam Khurshid	Ecological studies of waterfowl of Karachi coast.	2004	Degree awarded.
6.	S. Ajazuddin	Bioecology of the Manora Channel Lagoon (Karachi, Pakistan)		Enrolled for Ph. D.
7.	M. Mansoor Qazi	Bio-ecology of some chordate animals in captivity		Enrolled for M. Phil./Ph. D.

**Publications
Of
Dr. Sohail Barkati**

- 1. Books: six**
- 2. Research Papers (Total): seventy seven (77)**
- 3. Research Papers (Last ten years) (30)**
- 4. Popular Articles: seventy six (76)** published on topics related to:
 - i. Science Fiction for children.(published mostly in Hamdard Naunehal; Payam-e-Taleem)
 - ii. Education and students.(Reputed journals and National News Papers)
 - iii. Fiction and general interest: Ghalib and Education; Health, Philosophy, published in leading journals of fiction and health.
 - iv. A chapter on Quran and Oceanography published by Institute of policy studies, Islamabad (Co-author: Nasima Tirmizi).
 - v. Weekly column () in the daily newspaper – Jang (1969).

BOOKS

1. Rahman, S. & Barkati, S. 2011. Species composition and abundance of benthic molluscs along four rocky shores of Karachi, Pakistan. VDM Verlag Dr. Müller, ISBN 978-3-639-35505-5: 152 pages.
2. Barkati, S., Khurshid, N. & Rahman, S., 2011. Seasonal Changes in Waterfowl Community of Clifton Coast, Karachi. VDM Verlag Dr. Müller, ISBN 978-3639375947: 80 pages.
3. Rahman, S. & Barkati, S., 2011. Bibliography on mangrove research in Pakistan. VDM Verlag Dr. Müller, ISBN 978-3-639-37818-4: 392 pages.
4. Barkati, S., Firdous, F. & Rahman, S., 2011. Tagging and recovery of marine turtles from the coast of Karachi. LAP LAMBERT Academic Publishing GmbH & Co. KG, ISBN 978-3- 8454-7339-0: 96 pages.
5. Barkati, S. & Hussain, I., 2011. Seasonal Changes in Waterfowl Community of Clifton Coast, Karachi. LAP LAMBERT Academic Publishing GmbH & Co. KG, ISBN 978-3- 8454-4405-5: 88 pp.
6. Shafique, C.M. & Barkati, S., 2012. Some Aspects of Bioecology of Ayubia National Park, Pakistan. LAP LAMBERT Academic Publishing GmbH & Co. KG, ISBN 978-3- 8484-1115-3: 240 pp.

RESEARCH PAPERS

(Last Ten Years)

1. Barkati, S. & Fatima, M., 2001. A study of heavy metals in soft tissue of green mussels from Karachi coast. International Conference on trace metals in the aquatic environment. 25-26 January. 2001. National Institute of Oceanography, Karachi, Pakistan.
2. Shafique, C.M. & Barkati, S., 2002. Status and ecology of Chilton wild goat *Capra chiltanensis* of Chilton Hazargangi National Park, Baluchistan. Rec. Zool. Survey of Pakistan, Vol. 14: 81-93.
3. Rahman, S. & Barkati, S., 2004. Development of abundance – biomass curves indicating pollution and disturbance in molluscan communities on four beaches near Karachi, Pakistan. Pakistan J. Zool., Vol. 36(2): 111-123.
4. Shafique, C.M., Barkati, S. & Mirza, Z.B., 2004. Ecology of flying squirrels of Ayubia National Park NWFP-Pakistan. Final Research Report, April 2004. Zoological Survey Department & World Wide Fund for Nature - Pakistan: 71 pp.
5. Oshida, T., Shafique, C.M., Barkati, S., & Masuda, R., 2004. A preliminary study on genetic diversity of small populations of two flying squirrel species from Pakistan (*Hylopetes fimbriatus* and *Petaurista petaurista albiventer*), based on mitochondrial DNA control region sequences. Mammal Study, Vol. 29: 21-26.
6. Barkati, S., 2004. Study of marine benthic molluscs in relation to pollution. Res. Rep., University of Karachi: 31 pp
7. Oshida, T., Shafique, C.M., Barkati, S., Fujita, Y., Lin, L. & Masuda, R. 2004. A preliminary study on molecular phylogeny of giant flying squirrels, genus *Petaurista* (Rodentia, Sciuridae) based on mitochondrial cytochrome b gene sequences. Russian Journal of Theriology, Vol. 3(1): 15-24.
8. Oshida, T., Shafique, C.M., Barkati, S., Yasuda, M., Hussein, N.A., Endo, H., Yanagawa, H. & Masuda, R., 2004. Phylogenetic position of the small Kashmir flying squirrel, *Hylopetes fimbriatus* (\equiv *Eoglaucomys fimbriatus*), in the subfamily Pteromyinae. Can. J. Zool., Vol. 82: 1336-1342.

9. Oshida, T., Shafique, C.M. & Barkati, S., 2005. A note on a new habitat of the woolly flying squirrel *Eupetaurus cinereus* in the northern area of Pakistan. *Mammal Study*, Vol. 30: 73-76.
10. Barkati, S. & Rahman, S., 2005. Some aspects of reproductive biology and allometric growth of two species of *Nerita* (Gastropoda: Mollusca) from northern Arabian Sea. *International J. Biology & Biotechnology*, Vol. 2(1): 37-45.
11. Barkati, S. & Rahman, S., 2005. A comparative study of population structure and condition index of some abundant gastropod molluscs from exploited and non-exploited sites. *Res. Rep.*, University of Karachi: 28 pp.
12. Barkati, S. & Rahman, S., 2005. Species composition and faunal diversity at three sites of Sindh mangroves. *Pakistan J. Zool.*, Vol. 37(1): 17-31.
13. Rahman, S. & Barkati, S., 2006. A comparative study of population structure and condition index of two species of gastropod molluscs from exploited and non-exploited sites of Karachi Coast. *International J. Biology & Biotechnology*, Vol. 3(1): pp. 31-37.
14. Fatima, M., Barkati, S. & Rahman, S., 2006. Population structure and allometric growth of *Perna viridis* from Karachi coast. *International J. Biology & Biotechnology*, Vol. 3(2): 319-328.
15. Barkati, S., Rahman, S. & Khatoon, Z., 2006. Population structure and allometric growth of a mangrove clam, *Marcia cor* (Sowerby). *Pakistan Journal of Oceanography*, Vol. 2(1): 9-22.
16. Shafique, C. M., Barkati, S., Oshida, T. & Ando M., 2006. Comparison of diets between two sympatric flying squirrel species in northern Pakistan. *Journal of Mammalogy*, Vol. 87 (4): 784-789.
17. Shafique, C. M., Barkati, S. and Rizvi, A., 2008. Bird Records of Ayubia National Park, District Abbottabad, NWFP-Pakistan. *Rec. Zool. Surv. Pakistan*, Vol. 18: 12-35.
18. Shafique, C. M., Barkati, S. and Rizvi, A., 2008. Study of environmental variables in the moist-temperate environs of Western Himalayan mountain range, Pakistan. *Rec. Zool. Surv. Pakistan*, Vol. 18: 53-60.
19. Shafique, C.M., Barkati, S., Oshida, T. & Ando, M., 2009. Comparison of nest trees of two sympatric flying squirrel species in northern Pakistan. *Mamm. Biol.*, 74: 240-244.

20. Rahman, S. & Barkati, S. 2009. Studies on index of disturbance of benthic molluscs at four rocky shores of Karachi. *Pakistan J. Oceanography*, Vol. 5(1&2): 19-28.
21. Firdous, F., Barkati, S. & Rahman, S. 2009. Hatching and rearing of two species of marine turtles from Karachi, Pakistan. *Rec. Zool. Surv. Pakistan*, 19: 01-07.
22. Khurshid, S.N., Barkati, S. & Rahman, S. 2009. Seasonal changes in waterfowl community of Hawkesbay, Karachi coast, based on guild structure. *Rec. Zool. Surv. Pakistan*, 19: 18-24.
23. Rahman, S. & Barkati, S. 2010. Diversity of benthic macromolluscs on four rocky shores of Karachi coast, Pakistan. *International J. Biology & Biotechnology*, 7(1-2): 111-120.
24. Khurshid, S.N., Barkati, S. & Rahman, S. 2010. Guild based population structure of shorebirds from Karachi Coast, Pakistan. *International J. Biology & Biotechnology*, 7(1-2): 127-133.
25. Rahman, S. & Barkati, S. 2010. Seasonal variation in heavy metals of two species of molluscs, *Perna viridis* (bivalvia) and *Turbo coronatus* (gastropod) from Manora, Karachi, Pakistan. *International J. Biology & Biotechnology*, 7(1-2): 121-126.
26. Rahman, S. & Barkati, S. 2010. A Comparative Study of Molluscan Biomass on Four Rocky Shores of Karachi, Pakistan. *International J. Biology & Biotechnology*, 7(4): 463-470.
27. Shafique, C. M. & Barkati, S. 2010. Mammalian fauna of Ayubia National Park District Abbottabad Khyber-Pukhtoonkhwa province Pakistan. *International J. Biology & Biotechnology*, 7(4): 455-461.
28. Firdous, F., Barkati, S. and Rahman, S. 2010. Studies on nesting and tagging of two species of marine turtles of Karachi coast. *Pakistan J. Oceanography*, 6(1): 1-14.
29. Firdous, F., Barkati, S. & Rahman, S. 2011. Studies on transplantation of marine turtles at Karachi Coast. *Pak. J. Sci. Ind. Res. Ser. B: Biol. Sci.*, Vol. 54 (1): 29-33.
30. Shafique, C. M. & Barkati, S. 2011. Some bio-ecological studies on cavity nesters in Ayubia National Park, District Abbottabad, Khyber-Pukhtoonkhwa province Pakistan. *International J. Biology & Biotechnology*, 8(2): 299-303.

31. Rahman, S. & Barkati, S. 2012. Spatial and Temporal Variation in Species Composition and Abundance of Benthic Molluscs along Four Rocky Shores of Karachi. *Turkish Journal of Zoology*, Vol. 36 (3): 291-306.
32. Firdous, F., Rahman, S. & Barkati, S. The Nesting Dynamics of Sea Turtles at Karachi Coast. *International J. Biol. Biotech.*, (In press).
33. Shafique, C. M., Barkati, S. and Qaiser, M. Floristic Studies of Ayubia National Park, NWFP-Pakistan. *Journal of Botany, Pakistan*. (Sent to press).
34. Shafique, C.M., Barkati, S., Oshida, T., Ahmad I., and A. Rizvi. New taxonomic status of Red Himalayan Giant Flying Squirrel *Petaurista petaurista albiventer* (Sent to press)

RESEARCH PAPERS

(Total Publications)

1. Barkati, S. & Ahmed, M., 1974. Reproductive cycle of the marine mussel *Perna viridis*. Pakistan J. Zool., V bbol. 6: 31-40.
2. Barkati, S., 1980. Sex-ratio, fecundity and larval development of *Alpheus inopinatus* Holthuis and Gottlieb, 1958. Proc.1st Pakistan Cong. Zool., Vol. 8: 355-358
3. Barkati, S. & Ahmed, M., 1980. Studies on reproductive biology of some prosobranchs from the coast of Karachi (Pakistan) bordering the northern Arabian Sea. I Observations on *Planaxis sulcatus* (Born, 1980). The Veliger, Vol. 24: 355-358.
4. Skjoldal, H.R. & Barkati, S., 1982. ATP content and adenylate energy charge of the mussel *Mytilus edulis* during the annual reproductive cycle in Lindaspollane, western Norway. Mar. Biol. Vol. 70: 1-6.
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