

CURRICULUM VITAE

Dr. PRIYAJA P

Assistant Professor

Department of Marine Biology, Microbiology and Biochemistry

Cochin University of Science and Technology

Fine Arts Avenue

Cochin-16

Kerala



RESEARCH AREAS

- *Marine Ecology*
- *Marine Pollution*
- *Marine Biodiversity*
- *Marine Molecular Ecology*

ACADEMIC EXPERIENCE

- Dec 2016-present **Assistant Professor**, Department of Marine Biology, Microbiology and Biochemistry, Cochin University of Science and Technology, Kochi, India
- Dec 2012 – Dec 2016 **Project Scientist**, Centre for Marine Living Resources and Ecology, Ministry of Earth Sciences, Kochi, India
- Jan 2012 – Dec 2012 **Project Associate**, National Centre for Aquatic Animal Health, Cochin University of Science and Technology, Kochi, India
- May 2005 - Dec 2012 **Senior Research Fellow**, National Centre for Aquatic Animal Health, Cochin University of Science and Technology, India
- July 2003 – April 2005 **Junior Research Fellow**, National Institute of Oceanography, Regional Centre, Kochi, India

HONORS, AWARDS & FELLOWSHIPS RECEIVED

- UGC-Start Up research Grant, 2018
- State Plan Grant, Government of Kerala, 2017
- Senior Research Fellowship (USRF) 2008-2012 from CUSAT, Kerala, India.
- Junior and Senior Research Fellowship (SRF) 2005-2008 from Department of Biotechnology, Government of India.

- Junior Research Fellowship (JRF) 2003-2005 from Department of Ocean Development, Government of India.
- Best Paper Presentation Award in Conference on Microbiology of the Tropical Seas, COMITS, 13-15 December 2004 held at National Institute of Oceanography, Dona Paula, Goa.
- Chief scientist, onboard FORV *Sagar Sampada* of Cruise No.346.
- Certificate of appreciation awarded by Vice Chancellor of Cochin University of Science and Technology, for designing and developing MOOC Course on Biological Oceanography.
- Reviewer certificates from Elsevier and Wiley publishers for journal reviewing
- President, Society of Marine Biologist

FUNDED RESEARCH PROJECTS

Sl. No	Agency	Period	Project Title
1.	UGC	2018-2020	Molecular diversity and phylogenetic relationship of benthic epifauna of the southwest coast of India with special reference to echinoderms
2.	Govt. of Kerala-State Plan grant	2017-2019	Molecular diversity and phylogenetic relationship of benthic epifauna of the southwest coast of India

RESEARCH GUIDANCE

No of PhD scholars: 4
 No. of M.Sc. thesis supervised: 18
 No. of M.Phil. thesis supervised: 4

PUBLICATIONS

1. Aneena Yesudas, D. Vidyalakshmi, Gopika Sivan, K.Shameem, E.Akhil Prakash, **Priyaja P** (2023). Comparative analysis of temporal variation of heavy metal accumulation by two sea urchin species from a harbour region, including pre and post COVID 19 lock down period. *Science of the Total Environment*, 877, 162879.
2. Gopika Sivan, Aneena Yesudas, D. Vidyalakshmi, **Priyaja P** (2023). Bioerosion traces of an endolithic clionaid sponge on the gastropod shell of *Tibia curta* Sowerby II, 1842. *Marine biodiversity*, 53:26.

3. Naveen Sathyan, S., Muhammed Musthafa M., V. Anju., K. Archana., P.P. Athira., Namitha Prathap., E.R. Chaithanya., **P. Priyaja** ., I.S. Bright Singh and Rosamma Philip (2022). “Functional characterization of a histone H2A derived antimicrobial peptide HARRIOTTIN-1 from sicklefin chimaera, *Neoharriotta pinnata*”. *Developmental and Comparative Immunology*, 138,104554.
4. Aneena Yesudas, P.R. Jayachandran, Usha V. Parameshwaran and **Priyaja P (2021)**. Report on the association of valviferan isopod *Synidotea variegata* Collinge 1917 and regular sea urchin *Stomopneustes variolaris* Lamarck, 1816 from rocky subtidal regions of Vizhinjam, southwest coast of India. *Symbiosis*, 84, 105–110.
5. Peter K.L. Ng, **Priyaja P**, Biju Kumar A, Suvarna Devi S (2019). A collection of crabs (Crustacea, Brachyura) from the southwestern coast of India, with a discussion of the systematic position of *Nectopanope* Wood-Mason in Wood-Mason & Alcock, 1891 (Euryplacidae), *Zookeys*, 818(4): 1-24.
6. **Priyaja P**, Jayesh P, Haseeb M, Jose B, Philip R and Singh I.S.B (2017). Evaluation of pyocyanin toxicity in various life stages of *Penaeus monodon* and in nitrifying bacterial consortia for their safe application in recirculating aquaculture systems (RAS) to abrogate pathogenic vibrios. *Aquaculture International*, 25:743–753.
7. **Priyaja P**, Jayesh P, Philip R and Singh I.S.B (2016). Pyocyanin induced *in vitro* oxidative damage and its toxicity level in insect, fish, and human cell lines for its selective application. *Cytotechnology*. 68 (1):143-155.
8. **Priyaja P**, Dwivedi R, Sini S, Hatha M, Saravanane N, Rafeeq M and Sudhakar M (2016). Remote sensing of bacterial response to degrading phytoplankton in the Arabian Sea. *Environmental Monitoring and Assessment*, doi: 10.1007/s10661-016-5666-8.
9. **Priyaja P**, Prabhakaran M.P, Habeebrehman H, Anil Kumar K, Laluraj C.M, Martin G.D and Nair K.K.C (2016). Abundance and distribution of mesozooplankton in Andaman waters during winter monsoon. *Journal of Marine Biological Association of India*, doi: 10.6024/jmbai.2016.58.2.1948A-0x.
10. Dwivedi R, **Priyaja P**, Rafeeq M and Sudhakar M (2016). MODIS-Aqua detects *Noctiluca scintillans* and hotspots in the central Arabian Sea. *Environmental Monitoring and Assessment*, doi: 10.1007/s10661-015-5041-1.
11. Chippy K, Saravanane, N, Thomy R, **Priyaja P**, Deepika, Kumar K and Sudhakar M (2016). First record of the deep-sea giant pycnogonid, *Ascorhynchus levissimus* Loman, 1908 from the Indian Ocean. *Marine Biodiversity*, doi: 10.1007/s12526-016-0473-6.
12. Dwivedi, R, **Priyaja P**, Baliarsingh S.K, Srinivasa Kumar T and Sheno S.S.C. (2016). Basin-scale retrieval of zooplankton using split algorithm and MODIS data in the

Arabian Sea. Technical report, Indian National Centre for Ocean Information Services. Report No.: ESSO/INCOIS/ASG/TR/07(2016).

13. Jayesh P, **Priyaja P**, Philip R, and Singh I.S.B (2015). Attempts on producing lymphoid cell line from *Penaeus monodon* by induction with SV40-T and 12S EIA oncogenes. *Fish & Shellfish Immunology*, 47: 655-663.
14. **Priyaja P**, Deepika U, ChippyKhader, N Saravanane and M Sudhakar(2016). DNA Barcoding of a newly reported deep-sea pycnogonid *Ascorhynchus levissimus* Loman, 1908 from Indian Ocean. Proceedings of the national seminar on biodiversity and bioprospecting for sustainable livelihood, p.77-82, March 21-22, 2016, Cochin University of Science and Technology, Kochi, India
15. Jayesh P, Vrinda S, **Priyaja P**, Philip R and Singh I.S.B (2015). Impaired telomerase activity hinders proliferation and *in vitro* transformation of *Penaeus monodon* lymphoid cells. *Cytotechnology*, doi: 10.1007/s10616-015-9890-9.
16. **Priyaja P**, Jayesh P, Correya NS, Sreelakshmi B, SudheerNS, Philip Rand Singh I.S.B (2014). Antagonistic effects of *Pseudomonasaeruginosa* isolates from various ecological niches on *Vibrio* species pathogenic for crustaceans. *Journal of Coastal Life Medicine*, 2(1): 76-84.
17. Manjusha K, Jayesh P, Jose D, Sreelakshmi B, **Priyaja P**, Gopinath P, Saramma AV and Singh I.S.B (2012) Alkaline protease from a non-toxic mangrove isolate of *Vibrio* sp. V26 with potential application in animal cell culture. *Cytotechnology*, doi:10.1007/s10616-012-9472-z.
18. Antony S.P, Singh I.S.B, Sudheer N.S, Vrinda S, **Priyaja P** and Philip R. (2011). Molecular characterization of a crustin-like antimicrobial peptide in the giant tiger shrimp, *Penaeus monodon*, and its expression profile in response to various immunostimulants and challenge with WSSV. *Immunobiology*, 216: 184–194.
19. Pai S.S, Anas A, Jayaprakash N.S, **Priyaja P**, Sreelakshmi B, Preetha R, Philip R, Mohandas A and Singh I.S.B (2010). *Penaeus monodon* larvae can be protected from *Vibrio harveyi* infection by pre-emptive treatment of a rearing system with antagonistic or non-antagonistic bacterial probiotics. *Aquaculture Research*, 41: 847-860.

CONFERENCE/SEMINAR PAPERS

INTERNATIONAL

1. Gopika Sivan, Aneena Yesudas, Vidyalakshmi D, **Priyaja P** “Comparative study of heavy metal accumulation in three different sponges from Kovalam: Southwest coast of India” International Conference on Soil, water and Air Pollution, ICSWAP 2022, 27-28 October 2022, School of Environmental Studies, CUSAT, Kerala.

2. Vidyalakshmi D, Athena Peter, Aneena Yesudas, Gopika Sivan and **Priyaja P**. Microplastics from selected harbours and drive-in beaches of North Kerala coast during pre-monsoon and monsoon seasons. Multidisciplinary Online International Conference, 4 December 2022, St. Stephens College, Uzhavoor, Kerala.
3. Aneena Yesudas, Sreejyothi M, Aleena Roy, Vidyalakshmi D, Gopika Sivan and **Priyaja P**. Assessment of microplastics in sea urchin from West Coast of India, Multidisciplinary Online International Conference, 4 December 2022, St. Stephens College, Uzhavoor, Kerala.
4. Vidyalakshmi D, Aneena Yesudas, and **Priyaja P** (2021). Assessment of heavy metal pollution using bivalve mollusc, *Perna perna* from Vizhinjam harbour, South west coast of India during pre-monsoon and post monsoon seasons. Conference -YOUMARES 12 "Heading to a Sustainable and Clean Ocean", 8-10-2021, Hamburg University, Germany.
5. Aneena Yesudas, Vidyalakshmi D, Gopika Sivan and **Priyaja P** (2021). Assessment of Trace metal concentrations in regular sea urchin *Stomopneustes variolaris* from Vizhinjam harbour, south west coast of India during premonsoon and post monsoon seasons. Conference -YOUMARES 12 "Heading to a Sustainable and Clean Ocean", 8-10-2021, Hamburg University, Germany.
6. Gopika Sivan, Aneena Yesudas, Vidyalakshmi, D and **Priyaja P** (2021). Report on Endolithic Bioeroding Sponge *Clionacelata* Grant, 1826 Infesting *Tibia Curta* Sowerby II, 1842 from Kollam, South West Coast of India. International Webinar on Conservation of Life Below Water, March 18-20, 2021, University of Kerala.
7. Aneena Yesudas, Vidyalakshmi D, Gopika Sivan, **Priyaja P** (2021). Inter-annual variations in the trace metal accumulation at Muzhappilangadu beach Kerala, with special reference to regular echinoid *Salmacis bicolour*. International webinar on Environmental Conservation: Necessity and Challenges, Alphonsa College, Pala, 5-6 November 2021.
8. Vidyalakshmi D, Aneena Yesudas, Gopika Sivan, **Priyaja P** (2021). Annual variation of heavy metal pollution in a Drive-in beach of North Kerala with special reference to bivalve *Perna viridis*. International webinar on Environmental Conservation: Necessity and Challenges, Alphonsa College, Pala, 5-6 November 2021.
9. Anusree C, Smitha B.R and **Priyaja P** (2019). Spatio-temporal variation of mesozooplankton in the Southeastern Arabian Sea open ocean associated with pre-monsoon stratification. International Conference on Frontiers in Marine Science-Challenges and Prospects: Cochin University of Science and Technology, Kochi, Kerala, Dec 16-20, 2019.
10. Roopasree R.K, Hussain S.M, and **Priyaja P** (2019). Distribution and Diversity of Planktonic Ostracoda in the South West Coast of India. International Conference on Frontiers in Marine Science-Challenges and Prospects: Cochin University of Science and Technology, Kochi, Kerala, Dec 16-20, 2019.

11. Aneena Yesudas, Jayachandran C, Usha Parameshwaran and **Priyaja P** (2019). A report on the association of isopod with sea urchin from the coast of Vizhinjam, Kerala. International Conference on Frontiers in Marine Science-Challenges and Prospects: Cochin University of Science and Technology, Kochi, Kerala, Dec 16-20, 2019.
12. Ann Mary V.B, Vishnu A.V, Ravinesh R, Usha Prameshwaran and **Priyaja P** (2019). Molecular characterisation and phylogenetic analysis of benthic epifauna along the south west coast of India. International Conference on Frontiers in Marine Science-Challenges and Prospects: Cochin University of Science and Technology, Kochi, Kerala, Dec 16-20, 2019.
13. **Priyaja P**, Jayesh P, Blessy Jose, Rosamma Philip, I.S. Bright Singh (2018). Cloning and overexpression of *Phz* genes encoding phenazine biosynthetic pathway for the enhanced production of pyocyanin in *Pseudomonas aeruginosa* MCCB117. Two day international seminar on "Molecular Biology- an Underpinning to Life Sciences", 08-09 January 2018, Farook College, Calicut, India.
14. Venu S, Vinu Jacob, Chippy Khader, Ravi Ranjan, Deepika U, **Priyaja P**, Sumod K.S, Meera K.M, Deepa K.P, Deepika U (2016). Species composition and depth-wise distribution of deep sea fauna around Andaman Islands, Indian EEZ. International Conference on Climate change adaptation and biodiversity: Ecological sustainability and resource management for livelihood security (ASA: ICCS- 2016).
15. **Priyaja P**, R.M Dwivedi, M Rafeeq, N Saravanane, N Ramaiah, V Fernandes and M Sudhakar (2015). Development of a model for the estimation of zooplankton biomass using remote sensing. *International Symposium on the Indian Ocean*, November 30-December 4, 2015, Goa, India.
16. **Priyaja P**, Neil SS, Sreelakshmi B, Preetha R, Philip R, Singh ISB (2006) A comparative study of pyocyanin production potential of isolates of *Pseudomonas aeruginosa* from different environments. 7th Asia Pacific Marine Biotechnology Conference 2nd-5th November 2006, Kochi, India.

NATIONAL

1. **Priyaja P**, Chippy Khader, Abdul Jaleel, N. Saravanane and M. Sudhakar (2017). An unusual occurrence of Flabelligerids, *Treadwellius bifidus*- a new record from Bay of Bengal with DNA Barcoding. National seminar on Marine Ecosystems and Health, March 16-17, 2017, Cochin University of Science and Technology, Kochi, India.
2. **Priyaja P**, Deepika U, Chippy K, N Saravanane and M Sudhakar (2016). DNA Barcoding of a newly reported deep-sea pycnogonid *Ascorhynchus levissimus* Loman, 1908 from Indian Ocean. National seminar on Biodiversity and Bioprospecting for sustainable livelihood, March 21-22, 2016, Cochin University of Science and Technology, Kochi, India.

3. **Priyaja P**, Philip R (2004) Screening of marine actinomycetes as a source of antiviral compounds for application against white spot disease in prawns. Poster AQM (P)-07 in Conference on Microbiology of the Tropical Seas, COMITS, 13th -15th December 2004 held at National institute of Oceanography, Dona Paula, Goa.

BOOKS/CHAPTERS PUBLISHED

1. BijoyNandan S, **Priyaja P**, Jayachandran P.R (2020). *Frontiers in Benthic Science*. Directorate of Public Relations and Publications, CUSAT, Kochi, India. ISBN 978-81-936217-7-6.
2. BijoyNandan S, **Priyaja P**, Swapna P. Antony, Padmakumar K.B, Harikrishnan M, Sreerexha P.R, JayachandranP.R. (2019). Abstract proceedings- International Conference on Benthos. Directorate of Public Relations and Publications *for* Department of Marine Biology, Microbiology and Biochemistry, CUSAT, Kochi, India. ISBN 978-81-936217-5-2.
3. A.A Mohamed Hatha, PS Sunil, Swapna P. Antony, KB Padmakumar, **Priyaja P**,Abhilash S.,Abhijith KK. International Conference on Frontiers in Marine Science-Challenges and Prospects: MARICON 2019. Directorate of Public Relations and Publications, CUSAT, Kochi,India. ISBN: 978-81922264-3-9.

GENBANK SUBMISSIONS

EF062511, EF062512, F062513, EU008081, EF053508, FJ652049, FJ652048, FJ665509, FJ665510, FJ535568, KT718001, KU708837, KU708836, KU886234, KX008311, KX179492

ADHOC REVIEWER OF JOURNALS

- Regional Studies in Marine Sciences
- Aquatic Ecology
- Aquaculture Research
- Symbiosis
- Indian Journal of Geo-Marine Sciences
- Journal of the Marine Biological Association of India

MOOC Course developed: 1 (5 credit course on “Biological Oceanography”)

ADMINISTRATIVE AND ORGANIZATIONAL EXPERIENCE

- Organizing Secretary, International Conference on Benthos organized by Department of Marine Biology, Microbiology and Biochemistry, Cochin University of Science and Technology, Kochi, India during 6-9, March 2019.

- Organizing committee member in International Conference on Frontiers in Marine Science-Challenges and Prospects: Cochin University of Science and Technology, Kochi, India during 16-20, Dec 2019.
- Organizing committee member in UGC Sponsored National Seminar on Marine Ecosystem Health organized by Department of Marine Biology, Microbiology and Biochemistry, Cochin University of Science and Technology, Kochi, India during 12-13, March 2017.
- Member (Since 2014), Centre for Environmental Research & Management (CERM), Cochin, India.

CRUISE EXPERIENCE

- More than 300 days of cruise experience along Arabian Sea, Bay of Bengal and Andaman Sea, onboard research vessel FORV *Sagar Sampada*.

MEMBERSHIPS IN PROFESSIONAL ORGANIZATIONS/ACADEMIC BODIES

- Life member, Society of Marine Biological Association, (SOMB) India.
- Life member, Ocean Society of India (OSI)
- Life member, Marine Biology Alumni Association
- Life Member, Mangrove Society of India
- Life time member, Society for Marine Research and Conservation (SMRC), India.
- Member, Indian Science Congress Association
- Member, Centre for Environmental Research & Management (CERM), India
- Member, Board of Studies in Marine Biology, Cochin University of Science & Technology
- Member, Board of Studies in MPhil, School of Industrial Fisheries, Cochin University of Science & Technology
- External examiner, St. Albert's College, Ernakulam
- External examiner for question paper setting, University of Calicut
- External examiner for Kerala University of Fisheries and Ocean Studies (KUFOS), Kochi
- External examiner for question Paper Setting for Central Marine Fisheries Research Institute (CMFRI), Kochi

RESOURCE PERSONS IN VARIOUS CAPACITIES

- As a Resource Person delivered a talk on 'Marine Biodiversity and Ecosystem', as part of world wild life week webinar at St. Stephen's College, Uzhavoor, Kerala on 8-10-2020.

- Chaired the session on Climate Change and Plankton in the Marine Biology Lecture series webinar, March 29, 2021, Cochin University of Science and Technology, Kochi, Kerala
- Chaired the session on Live Feeds in Mariculture in the Marine Biology Lecture series webinar, March 6, 2021, Cochin University of Science and Technology, Kochi, Kerala
- As a Resource Person delivered a talk on ‘Tools and Techniques in Biological Research’ for Online Workshop on Tools and Techniques in Biological Research, Vimala college, Thrissur, Kerala on 6-10-2020.
- As a Resource Person delivered a talk on ‘Impact of Pollution on Marine Ecosystem’ for BIO-FEST Online lecture series, N.S.S. college, Ottappalam, Kerala on 24-09-2020.
- Resource Person for delivering lecture on ‘Flora and Fauna’ for the trainee Coast Guard officers at Coast Guard Training Centre, Kochi.
- As a Resource Person delivered lectures for DBT net work project " Marine synthetic biology: building national capacity and human resource" at Cochin University of Science and Technology, Kerala in August 2018.
- As a Resource Person delivered a talk on ‘Climate Change and Marine Biodiversity’ for "Sasthrayan" organised by Cochin University of Science and Technology, Kerala on 27-02-2018.
- As a Resource Person delivered a talk on ‘Impact of Climate Change on Marine Ecosystem’ for National Seminar on Impact of Climate Change on Flora and fauna, N.S.S. college, Ottappalam, Kerala on 21-02-2018.
- As a Resource Person delivered a talk on ‘Ozone and Marine Ecosystem’ for Ozone day observations at St.Xaviers College for Women, Aluva, Kerala on 26-09-2017.

WORKSHOP/ TRAINING ATTENDED

- Online Guru Dakshtha- Faculty Induction Programme (FIP), conducted by UGC-HRDC, Gujarat University from 27-7-2020 to 25-8-2020.
- Online Training Course in Genomic Data Analysis and Experimental Strategy, June 26-30, 2020, Centre for Stem Cell and Cancer Genomics, AMI BioScience, Coimbatore
- Winter school on ‘Responsible fishing: Recent advances in resource and energy conservation’, 21-11-19 to 11-12-19, ICAR- Central Institute of fisheries Technology, Kochi, India.

- Training programme on REVIVAL citizen science, 5-8-2019, Central Marine Fisheries Research Institute, Kochi, India.
- International Training Workshop on 'MEIOFAUNA' (Exploring the Taxonomy and Systematics of Benthos) ITW'02, 06-09 February 2018, Cochin University of Science and Technology, Kochi, India.
- Training workshop on 'Statistical Tools for Marine Biologists', 27-03-2017 to 31-03-2017, Cochin University of Science and Technology, Kochi, India.
- Hands-on training - 'Next Generation Sequencing and Bioinformatics for Genomics and Healthcare' December 16- 17, 2011, Rajiv Gandhi Centre for Biotechnology, Kerala, India.
- Training in "Basics of remote Sensing, GIS & GNSS", Aug4-Nov 14, 2014, Indian Institute of Remote sensing, Govt. of India.

NATIONAL/ INTERNATIONAL SEMINARS/ CONFERENCES ATTENDED

- International Conference on Frontiers in Marine Science-Challenges and Prospects: 16-20, Dec 2020, Cochin University of Science and Technology, Kochi, India.
- International Conference on Benthos, 6-9, March 2019, Cochin University of Science and Technology, Kochi, India.
- National Seminar on Impact of Climate Change on Flora and fauna, February 21, 2018, N.S.S. college, Ottappalam, Kerala
- International seminar on Molecular Biology- an Underpinning to Life Sciences, January 8-9, 2018, Farook College, Calicut, Kerala.
- Curtain Raiser Seminar to IISF2017 on Climate Change and Sustainability of Ocean Resources, 4 Oct, 2017, Centre for Marine Living Resources and Ecology, Kochi.
- National seminar on Marine Ecosystem Health, 16-17 March, 2017, Cochin University of Science and Technology, Kochi, India.
- National workshop on Mud Banks of Kerala: Status, Issues and Societal Concern, 10-11 Feb 2017, National Institute of Oceanography, Kochi, Kerala.
- National seminar on Biodiversity and Bioprospecting for sustainable livelihood, March 21-22, 2016, Cochin University of Science and Technology, Kochi, India
- National seminar on Climate Change and Marine Ecosystems', Cochin University of Science and Technology, India.

- Seminar on Environmental Issues, 5 June 2011, Cochin University of science and Technology
- Seminar on “Wetlands-Value and Functions” 2nd February 2011 held at Cochin University of science and Technology
- Participated in 97th Indian Science Congress held at Trivandrum, Kerala from January 3 to 7, 2010
- UGC Sponsored National Seminar – “Marine Biology-Advances and Prospects” 10th Nov. 2006 held at Cochin University of science and Technology
- National Seminar- “Bioactive Compounds from Marine Organisms” March 14 – 15, 2008 held at Cochin University of science and Technology
- National Symposium- “Impact of Climate Change on Aquatic Ecosystems” 18-19 February 2010 held at Cochin University of science and Technology
- Conference on Microbiology of the Tropical Seas, COMITS, 13-15 December 2004 held at National institute of Oceanography, Dona Paula, Goa.
- 7th Asia Pacific Marine Biotechnology Conference, APMBC, 2-5 November 2006, Kochi, India.

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