


## CURRICULUM VITAE : Dr. R. MANIVANAN

Name Date of Birth Position Address (Official)  Address (Residential) E-mail ID  Telephone no. Mobile No. Website	: Dr. R. MANIVANAN : 10.06.1963 : Scientist 'B' : Ports and Harbours, Central Water and Power Research Station, Ministry of Water Resources, Ganga Rejuvenation and River Development, Khadakwasla, Pune-411 024, India C-1001, Shub Kalyan, Nanded City, Pune – 411 041. Maharashtra State, India. : vananrmani@rediffmail.com vananrmani@gmail.com : Off. : (020) 24103466, Res: (020) 67523724 (+91) 9423208883 : www.cwprs.gov.in	
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Areas of Research Interest	Modelling of Water Resource Problems. Mathematical Modelling of Engineering problems, , Water Quality Modelling, Scientific Computation, Recycling of Industrial Effluents.
Ph. D	Ph. D in Science (Botany), Area: Recycling of Textile effluents, Bharathiar University, Coimbatore, India, 2000 Title of Ph.D thesis: Impact Assessment of Regeneration potential and Utilization of Textile Effluent for Forest Tree species
National Eligibility Test (NET)	During 2001, I am qualified NET conducted by ICAR, New Delhi
Other educational qualifications	<ul style="list-style-type: none"> <li>• DIS, Annamalai University, Chidambaram, Tamilnadu India First Class, Industrial Safety,1996.</li> <li>• M.Phil, Madurai Kamaraj University Madurai, India, First Class in Energy, Environment, and Natural Resource, 1992.</li> <li>• M.Sc, Bharathidasan University , Thiruchirapally, India First Class, Environmental Sciences,1988</li> </ul>
M.S (Research) M.Tech, M.Sc Ph.D students guided and Guiding	<ul style="list-style-type: none"> <li>➤ Shri. Ramana Rao, M.S by Research, DIAT, Girinagar, Pune, India</li> <li>➤ Ms. Tejashree Kisan Shinde, M.Tech, College of Engineering, Pune, India</li> <li>➤ Ms Utkarsha Vijay Khambalkar, M.Tech, College of Engineering, Pune, India</li> <li>➤ Shri.Sanjay Nath Jha, Ph.D , Department of Environmental Sciences, Pune University, Pune, India</li> <li>➤ E.Thinakaran, Ph.D, Indian Instittue of technology, Mumbai</li> <li>➤ Ankita, Ph.D, College of Fisheries, Ratnagiri, Maharashtra State, India</li> </ul>
Recognized Ph.D guide, Doctoral Committee, vivo voce examiner and thesis examiner	<ul style="list-style-type: none"> <li>○ Department of Environmental Sciences, Pune University, Pune, Maharashtra State, India</li> <li>○ Department of Environmental Biotechnology, Bharathidasan University, Trichirappalli, Tamil Nadu State, India</li> <li>○ Institute of Ocean Management, Anna University, Chennai, Tamil Nadu State, India</li> </ul>

Work Experience :

Twenty-six years of experience in working various organizations, which includes research and academic positions in India. Having wide experience in mathematical modeling and simulation of riverine, estuarine and reservoir flow dynamics (hydrodynamics), salinity intrusion, sediment transport, morphological changes and other transport process pertaining to coastal and environmental engineering problems. Also having experience in field visit, data collection, analysis of the problem, development of software and carrying out collaborative work.

Sl.No	Period	Designations
1	Oct 2015 to till date	Scientist 'B', Central Water and Power Research Station, Pune India
2	July 2005 to Sept. 2015	Assistant Research Officer, Central Water and Power Research Station, Pune India
3	July 1997 to July 2004	Research Assistant (Scientific) Central Water and Power Research Station, Pune India
4	March 1994 to Feb.1997	Senior Research Fellow, Vellalar College for Women, Erode, Tamilnadu, India
5	July 1989 June1992	Junior Project Fellow, A.A.Government College of Arts and Sciences, Namakkal, Tamil Nadu, India
Experience in client sponsored engineering projects		<p>Successfully completed thirty five client-sponsored engineering projects of international and national importance at CWPRS, Pune. Investigations were carried out for feasibility and pre-feasibility studies by applying mathematical modelling and computational techniques. The organizations for which these studies were conducted are as follows:</p> <ol style="list-style-type: none"> <li><b>1. International Projects:</b> World Bank sponsored Hydrology Project (World Bank) Ujjani and Panshet reservoir, Maharashtra. (Reservoir hydrodynamics and Water quality studies)</li> <li><b>2. Projects of National and International Importance:</b> Ministry of Water Resources (MOWR), Govt. of India (Salinity intrusion study in Hugli estuary, West Bengal). Chilika Development Authority (CDA), Kalpasar (Gulf of Khambat) study for Govt. of Gujarat, India.</li> <li><b>3. Thermal Projects:</b> 1. Nuclear Power Corporation (India) Limited (NPCIL), Mumbai for at Jaitapur, Maharashtra 2 D and 3 D Model study (temperature dispersion), 2. Indira Gandhi Centre for Atomic Power (Department of Atomic Energy), Kalpakkam, 3. NPCIL, Mumbai for at Kovada, Andhra Pradesh 2 D and 3 D Model study (temperature dispersion),4.</li> <li><b>4. Salinity Projects:</b> 1. Chennai Petroleum Corporation Limited, Chennai at Ennore, Tamil Nadu. 2.Water and Power Consultancy Services (WAPCOS) and ABG Cement at Kharo creek, Gujarat,3. WAPCOS at Salav, Maharashtra.</li> <li><b>5. Water Quality Projects :</b> 1. Tehri Hhydro Development Corporation (THDC) Tehri at Tehri reservoir, Tehri, 2.World bank Project at Panshet and Ujjani reservoir, Maharashtra,India, 3. Maharashtra Maritime Board (MMB), Mumbai at Thane creek, Mumbai, India, 4. MMB, Mumbai at Nandgaon, Mumbai,</li> <li><b>6. Hydrodynamics &amp; Morphological /Sediment Projects :</b> 1. Cochin Port Trust at Cochin, 2. Pipav Port Trust at Pipav, 3. Redi Port Trust at Redi, 4. Paradip Port Trust at Paradip and Pasco , 5. Kakinadu Port Trust at kakinada, 6. Chilika Development Authority at Chilika lake, Orissa, 7. Kolkatta Port Trust at Haldia, west Bengal, 8. Navabundar Port Trust at Navabundar, Gujarat,9.</li> </ol>

Experience in client sponsored engineering projects (Continued)	Chennai Port Trust at Chennai, 10. Ennore Port Trust at Ennore 7. <b>Wave and Littoral Drift Studies Projects</b> : 1. IGCAR, Kalpakkam for Fast Breeder Reactor Project (PFBR) at Kalpakkam, 2. M/s Goodearth shipbuilding Pvt. Ltd. at Cuddalore, Tamilnadu, 3. M/s Kakinada SEZ Pvt. Ltd. at Kakinada, Andhra Pradesh, 4. Ennore Port Trust, Tamil Nadu at Ennore, 5. Harbour Engineering Department, Kerala at Manjeswar, Ajanur, Tannur, Valaiyil, Parapanangadi, Kerala. 8. <b>Remote Sensing Projects:</b> To demonstrate feasibility of integrating satellite derived information about shoreline evolution in existing mathematical model to predict shoreline changes at Ennore coast on 'Coastal Process - Integrating satellite Derived Data with Mathematical modelling' 1. Space Application Centre, Ahmadabad at Ennore, 2. MMB, Mumbai at Nandgaon.
Programming and Laboratory skills	Worked on various application related softwares, like: -TIDAL MODEL, SALINITY MODEL, MIKE 3D, MIKE-21 HD & AD, CHARIMA, NETWORK, FORTRAN, SEDIM etc. Worked on Silicon Graphics platform and PC based workstation for modeling and simulation. Worked on Laboratory setup like Environmental Laboratory, Chemistry and herbarium Labs, Handling and maintenance of analytical instruments such as pH meter, Conductivity meter, Flame-photometer, Absorptiometer, Spectrophotometer, Atomic Absorption Spectrophotometer, Laminar Air Flow, Colony Counter, Global Positioning System, Dissolved Oxygen Meter, Water Quality Monitor, Water Samplers, Mercury Analyser

#### Fellowships Received (prior or during Ph.D)

Ministry of Environment & Forest	Junior Project Fellow, Integrated Environmental Research Programme on River Kaveri Sponsored Govt. of India Project.
Ministry of Environment & Forest	Senior Research Fellow, Floristic survey in Burgur hills. Quantification of forest degradation, Collection of plant species at Burgur hills, Conservation measures of forest and regeneration potential of certain endangered plant species. (Govt. India Project)

Industrial Collaboration	Experience in establishing academic linkages with the CFD based software companies / industries / institutes, like, Mathlab, DHI, Delft, L&T, Port Authorities, LHI, WAPCOS, Fisheries Colleges, Academics Institutes like IIT Mumbai, IIT Chennai, College of Engineering, Sinhgad Institutes, Pune University, Baharathidasan University. Organized joint Workshops and Symposiums with some of the companies mentioned above. Delivered invited talk in several national / international conferences / symposiums.
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#### Publication of Books

New India Publishing House, New Delhi (http://www.nipabooks.com)	<b>1. Recycling of Industrial Effluents</b> <b>2. Water Quality Modelling Rivers Lakes, Estuary</b>
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Research papers Published in	
National Conferences	1. <b>Manivanan.R.</b> 1988 " Studies on occupational hazards during tungsten Inert gas arc welding on magnesium alloy plates". Presented in annual conference. Environmental society, Bishop Heber College.Trichy. 2. <b>Manivanan.R.</b> 1991 "Pollution studies of a rockpool at Namakkal ,Tamil

National Conferences (Continued)	<p>Nadu". Presented in conference held at Dept. of Aquatic biology, University of Kerala. Trivandrum.</p> <p>3. <b>Manivanan. R.</b>1994 " Student's performance in national educational tests". Presented in Brain storming session II held at Vellalar College for Women. Erode.</p> <p>4. Sinha J., <b>Manivanan R.</b>, Kanetkar C.N and L.K. Ghosh 2002 " Water quality modeling of Himalayan Region." in HYDRO 2002 at IIT Mumbai.</p> <p>5 Sinha J., Manivanan R., Kanetkar C.N and L.K. Ghosh 2002 " Hydrodynamic and Water quality model of a reservoir." in HYDRO 2003 at CWPRS, Pune.</p> <p>6. Sinha J., <b>Manivanan R.</b>, Kanetkar C.N and L.K. Ghosh 2003 " Water quality modeling of Reservoir." In Hydrology Project Seminar at NewDelhi.</p> <p>7. C B Singh, <b>R Manivanan</b>, R J Garde 2009 "Modelling of diffusion and dispersion of hot water discharge vis-a-vis hydrothermal-informatics" HYDRO2009 held at CWPRS, Pune</p> <p>8. B M Patil <b>R. Manivanan</b> C. N. Kanetkar 2009 " simulation of shoreline changes and comparison with prototype behavior" HYDRO2009 held at CWPRS, Pune</p> <p>9. B M Patil <b>R. Manivanan</b> . S.N. Jha C Kanetkar, KH Barve 2009 " simulation of shoreline changes to assess impact of proposed port " HYDRO2009 held at CWPRS, Pune</p> <p>10 Singh C B ,L R Ranganath, <b>R Manivanan</b> Dr. Anil Bagwan (2010) "Mathematical Model Studies For Six Alternatives Of Outfall System For Desalination Plant On West Coast Of India", A National Conf. on Civil Engineering for Infrastructural Developments, D.Y. Patil College Of Engineering, Akurdi, Pune – 44</p> <p>11 S N Jha <b>R Manivanan</b> and P G Saptarishi (2010) "application of a mathematical model for warm water dispersion in a coastal region" A National Conf. on Civil Engineering for Infrastructural Developments, D.Y. Patil College Of Engineering, Akurdi, Pune – 44</p> <p>12 S N Jha <b>R Manivanan</b> And P G Saptarishi (2010) "application of a heat budget model for determining temperature of a reservoir and its validation using measured data" A National Conf. on Civil Engineering for Infrastructural Developments, D.Y. Patil College Of Engineering, Akurdi, Pune – 44</p> <p>13 K H Barve, <b>R Manivanan</b>, B M Patil, C N Kanetkar (2010) "determination of an all weather port layout with mathematical models" HYDRO2010 held at MM College of Engineering, Ambala</p> <p>14 <b>R Manivanan</b>, S N Jha, B M Patil, C N Kanetkar (2010) "simulation of brine water dispersion in a tidal creek" HYDRO2010 held at MM College of Engineering, Ambala</p> <p>15. <b>R Manivanan</b>, J Sinha, T Nagendra (2012) "simulation of brine water dispersion in a creek environment" HYDRO2012 held at department of Civil Engineering, IITBombay, Mumbai,</p> <p>16. <b>R Manivanan</b>, KH Barve BM Patil (2012) "simulation of littoral drift and sand bypassing arrangement in a high littoral drift zone" HYDRO2012 to be held at department of Civil Engineering, IITBombay, Mumbai</p>
International Conferences	<p>1. Kanetkar C.N. Kothandaraman, Patil B.M. Renganath L.R.&amp; <b>R Manivanan</b>. " Simulation of warmwater dispersion in coastal environment" In INCHOE2004 at Goa.</p>

International Conferences	<p>2. <b>Manivanan R.</b> L. R. Renganath and C. N. Kanetkar 2006 " Mixing zone simulation of brine water and solid dispersion performance in the coastal environment using mathematical models" APD IAHR International Conference held at IIT, Chennai .</p> <p>3. S N Jha , <b>R Manivanan</b> and P G Saptarishi 2010 Development Of A Mathematical Model For Determining Temperature Of A Lake Based On Climatic Variations And Its Validation Using Measured Data, 9th INTERNATIONAL CONFERENCE ON HYDRO-SCIENCE AND ENGINEERING, IITM, Chennai</p> <p>4 S N Jha , <b>R Manivanan</b> and P G Saptarishi Relationship And Impact Of Climatic Factors With Coastal Environmental Parameters (Water Temperature, Dissolved Oxygen) Due To Warm Water Discharge From A Proposed Power Plant</p> <p>5 <b>R Manivanan</b>, S N Jha and B M Patil, "Simulation of salinity dispersion for relocation of intake&amp; outfall of desalination plant in coastal area" COPEDEC2012, IITM, Chennai.</p>
Journals (Peer Reviewed)	<p>1. <b>Manivanan R.</b> and Das S. K. 2002 " Phytoremediation of textile effluent through forest tree species Viz. <i>Acacia ferruginea</i> and <i>Delonix regia</i>." Indian Jr.of Environment and Ecoplanning. Vol.6 No.2 Dumka.</p> <p>2. <b>Manivanan R.</b> 2002 " Recycling of raw and treated textile effluent by forest tree species Viz. <i>Acacia ferruginea</i> and <i>Delonix regia</i>." Indian Jr.of Environment and Ecoplanning Vol.8 No.1 Dumka</p> <p>3. <b>R Manivanan</b> J Sinha and C.N. Kanetkar 2013 " Development and application of dissolved oxygen (DO) and biological oxygen demand (BOD) model for Panshet and Ujjani Reservoirs, Maharashtra, India" Jr. of Lakes and Reservoirs: Research and Management 2013 18: 1-10</p> <p>4. J. Sinha , <b>R. Manivanan</b> , C. N. Kanetkar M.Ish &amp; L. K. Ghosh F.Ish, Hydrodynamic Simulation Of Deep Reservoir By 3-D Model Pages 14-22   Published Online: 07 Jun 2012, <a href="http://Dx.Doi.Org/10.1080/09715010.2004.10514750">http://Dx.Doi.Org/10.1080/09715010.2004.10514750</a></p> <p>5. Utkarsha V. Khambalkar<sup>1</sup>, <b>Dr. R. Manivanan</b> 2016 Numerical Model Study of Industrial and Municipal Sewage Dispersion At Alandi, IJSART - Vol. 2, 7, ISSN [ONLINE] : 2395-1052,pp.225-231</p> <p>6. <b>R. Manivanan</b>, 2017, 'Water Quality Modelling For Ocean Engineering Projects - A Review', Fish &amp; Ocean Opj 3(4): OFOAJ.MS.ID.555617 (2017)</p>

## BOOK CHAPTERS

(Articles Published in Books)	<p>1. <b>Manivanan R.</b> 2004 " <b>Recycling of raw and treated textile effluent by forest tree species Viz. <i>Acacia ferruginea</i> and <i>Delonix regia</i>.</b>" Book: Environmental Biotechnology, Edited by Dr. Arvind Kumar</p> <p>2. <b>Manivanan R.</b> 2003 " <b>Recycling of raw and treated textile effluent by forest tree species Viz. <i>Acacia ferruginea</i> and <i>Delonix regia</i>.</b>" Book: Environmental Bioreclamation, Edited by Dr. Arvind Kumar</p> <p>3. <b>Manivanan R.</b> 2014 " <b>Advances In Temperature Disposal And Dispersion From Nuclear Power Plants</b>" Advances in Coastal and Marine Resources: Environmental Management and Governance (Springer) Edited by Charles W. Finkl and Christopher Makowski</p> <p>4. <b>Manivanan R</b> 2014 " <b>Advances In Brine Disposal And Dispersion</b></p>
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	<p><b>In The Coastal Ecosystem From Desalination Plants”</b> Advances in Coastal and Marine Resources: Environmental Management and Governance (Springer) Edited by Charles W. Finkl and Christopher Makowski</p> <p><b>5. Manivanan R 2014 “Advancement Of Technology For Detecting Shoreline Changes In East Coast Of India And Comparison With Prototype Behavior”</b> Advances in Coastal and Marine Resources: Modelling and Remote Sensing ) Edited by Charles W. Finkl</p> <p><b>6. Manivanan R 2017 “Coastal Wetland Restoration : Concept, Methodology and Application areas with respect to Indian Coast”</b> <i>Coastal Wetlands: Alteration and Remediation</i> Edited by Charles W. Finkl</p>
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### Technical Reports for Externally funded Projects

<p>Technical Projects and Reports (during the tenure at CWPRS, Pune, Vellalar College,Erode, Tamil nadu, India</p> <p>Technical Projects and Reports (during the tenure at CWPRS, Pune, Vellalar College,Erode, Tamil nadu, India (Continued)</p>	<p>36. Mathematical modeling studies to examine effluent dispersion for the proposed port at Thane creek, Mumbai for MMB, Mumbai. (Draft Report Submitted)</p> <p>35. 2D Mathematical modeling studies for estimation of scour depth and design discharge for the Vettar and Kaduvaiyar rivers at Nagapattinam and velankanni coastal area at Taminadu for Southeern Railways.</p> <p>34. 3D Mathematical modeling studies for confirming locations of intake/outfall for the proposed captive power plants with associated desalination plants at Salav, Maharastra. 2011</p> <p>33. 3D mathematical model studies for dispersion of condensor cooling water discharge from proposed nuclear power plant at Jaitapur, Ratnagiri Dist., Maharashtra. (going on)</p> <p>32. Mathematical modeling studies for finding out location of intake/ outfall at salav, raigad, Maharastra 2010</p> <p>31. Mathematical model studies for wave tranquility and shoreline changes due to the proposed development of fisheries harbour at Parapanangadi, Kerala, December,</p> <p>30. Mathematical model studies for wave tranquility and shoreline changes due to the proposed development of fisheries harbour at vellayil, Kerala, June, 2010</p> <p>29. Mathematical model studies for wave tranquility and shoreline changes due to the proposed development of fisheries harbour at Thanur, Kerala, May, 2010</p> <p>28. Mathematical model studies for relocation of CPCL intake and outfall for proposed development of shipyard cum port facility at Kattupallil, Tamilnadu, Feb, 2010</p> <p>27. Mathematical model studies for wave tranquility and shoreline changes due to the proposed development of fisheries harbour at Manjeswar, Kerala, Feb, 2010 2009</p> <p>26. Mathematical model studies for simulation of littoral drift and shoreline changes for the proposed Phase II development at Ennore port, Tamil Nadu, August, 2009</p> <p>25. Mathematical model studies for development of port facilities for M/s Kakinada SEZ Pvt. Ltd. at Kakinada, Andhra Pradesh, on 'Estimation of littoral drift distribution, shoreline changes and sand bypassing arrangement</p> <p>24. Mathematical model studies for locating intake/outfall of the proposed desalination plant in Kharo creek, Gujarat, March 2009</p> <p>23. Mathematical model studies for development of port facilities for M/s Goodearth shipbuilding Pvt. Ltd. at Cuddalore, Tamilnadu, Chapter 4</p>
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Technical Projects and Reports (during the tenure at CWPRS, Pune, Vellalar College, Erode, Tamil Nadu, India (Continued)

- on 'Mathematical model studies for estimation of littoral drift distribution, shoreline changes and sand bypassing
22. Mathematical model studies for determination of location and alignment of proposed jetties at Haldia, west Bengal (Revised) February 2009
21. To demonstrate feasibility of integrating satellite derived information about shoreline evolution in existing mathematical model to predict shoreline changes at Ennore coast, Chapter 3 on 'Coastal Process - Integrating satellite Derived Data with Mathematical modelling'. 20. 2D mathematical model studies for dispersion of condenser cooling water discharge from proposed nuclear power plant at Jaitapur, Ratnagiri Dist., Maharashtra, (Revision 1), October 2008
19. Mathematical model studies for wave propagation and hydrodynamics for development of fish landing facilities at Navabundar, Gujarat, July 2008
- 2007 18. 2D mathematical model studies for dispersion of condenser cooling water discharge from proposed nuclear power plant at Jaitapur, Ratnagiri Dist., Maharashtra, October 2007
- 2006 17. Mathematical model studies for determination of location and alignment of proposed jetties at Haldia, west Bengal, September 2006
16. Mathematical model studies to assess the impact of proposed port of M/s POSCO on adjacent coastline of Paradip port, Orissa, August 2006
15. Hydraulic model studies for examining feasibility of alternative layouts for expansion of port facilities at Paradip, Orissa, June 2006
14. Supplementary mathematical model studies for littoral drift and thermal recirculation for sea water intake/outfall of fast breeder reactor project (PFBR), April 2006
- 2005 13. Supplementary mathematical model studies for littoral drift and thermal recirculation for sea water intake/outfall of fast breeder reactor project (PFBR), (Revised Draft), December, 2005.
- 12 Mathematical model studies to investigating hydrodynamics at Redi Port, Sindudurg District, Maharashtra ( Maharashtra Maritime Board)
- 11 Mathematical model studies for location of intake/ outfall of Desalination plant for Chennai Petroleum Corporation Limited, Chennai, Pune
- 10 Mathematical model studies for location of intake/ outfall for Proto type Fast Breeder Reactor at Kalpakkam (Indira Gandhi Centre for Atomic Research, Kalpakkam)
- 9 Mathematical model studies to investigating hydrodynamics and morphological changes at Chilika lake, Orissa (Chilika Development Authority)
- 8 Development of mathematical model to predict water quality in Panshet and Ujjani reservoir, Maharashtra 1998
- 7 Field investigation and development of mathematical model to predict water quality in Panshet and Ujjani reservoir, Maharashtra.
- 6 Mathematical model studies to investigating hydrodynamics and water quality at Tehri reservoir, Tehri
- 5 Mathematical model studies to investigating hydrodynamics and accidental oil spill at Mangalore Port, mangalore
- 4 Mathematical model studies to investigating hydrodynamics and morphological changes due to extension of port at Pipav
- 3 Mathematical model studies to investigating hydrodynamics and morphological changes due to extension of port at Cochin 1994-1997
- 2 Ecological analysis of vegetation, Floristic survey, conservation measures

	and regeneration of certain endemic and endangered species at Burgur Hills, Erode, Periyar District. (Govt. India Project, MINISTRY OF ENVIRONMENT AND FOREST) 1994-1997. 1 Integrated Environmental Research Programme on River Kaveri (Govt. India, MINISTRY OF ENVIRONMENT AND FOREST) 1989-1992
Membership of Professional Societies	Life member - Indian Society for Hydraulics (ISH), 2000
Editorial Board Memberships	<ol style="list-style-type: none"> <li>1. Pluralidade- Associate Editor <i>Website: <a href="http://www.Pluralidade.Info/Eindex.Html">Wwww.Pluralidade.Info/Eindex.Html</a></i></li> <li>2. Golden Research Thoughts (Grt)- Associate Editor <i>Web Site: <a href="http://Aygrt.Isrj.Org">Aygrt.Isrj.Org</a></i></li> <li>3. Global Scholars Journal Of Physical And Applied Sciences <i>Web site : <a href="http://www.globalscholarsjournals.org">http://www.globalscholarsjournals.org</a></i></li> <li>4. Ocean &amp; Coastal Management Journal</li> <li>5. Journal of Earth Science &amp; Climatic Change</li> <li>6. Journal of Marine Science: Research &amp; Development</li> <li>7. Journal of Fisheries &amp; Livestock Production <a href="http://www.esciencecentral.org/reviewer-profile/R_Manivanan/">http://www.esciencecentral.org/reviewer-profile/R_Manivanan/</a></li> <li>8. Journal of Pollution Effects &amp; Control</li> <li>9. Journal of Water Resources and Ocean Science</li> <li>10. Journal of Coastal Research (JCR)</li> <li>11. Ecological Modelling</li> <li>12. Journal of Coastal Zone Management</li> </ol>

### Journal Reviewer

#### ELSEVIER:

- 1) JOURNAL OF ECOLOGICAL MODELLING – 4 papers
- 2) JOURNAL OF ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH 4 papers
- 3) JOURNAL OF OCEAN AND COASTAL MANAGEMENT (Received from Elsevier Publishing house a Excellency certificate in reviewing research paper during 2013) – 35 papers
- 4) JOURNAL OF COASTAL RESEARCH- 10 papers
- 5) Environmental Group Journals by OMICS publishing group -30 papers

SPRINGER: 1. BIOLOGICAL INVASIONS -3 papers 2. Environmental Science and Pollution Research- 10 papers

No. of Papers critically reviewed: more than 100 research papers in above journals.

### Invited Lecture Delivered in Following Organizations

Institute of Life Sciences, Fergusson College, Pune, Maharashtra, India	Recycling of industrial effluents
Institute of Life Sciences, Fergusson College, Pune, Maharashtra, India	OZONE
Department of Chemistry, Holy Cross College, Trichy, Tamilnadu, India	Recycling of industrial effluents
National Water Academy, Ministry of water Resources, Government of India, Khadakwasla, Pune -24, India	Simulation of Marine outfall
CWPRS, Ministry of water Resources, Government of	1. Simulation of Marine outfall,



India, Khadakwasla, Pune -24, India	2. Water Quality Modeling for coastal Engineering Projects (many times)
Symbiosis International University, Symbiosis School of Biological Sciences, Lavale, Pune	Water Quality Modeling (Physico Chemical and biological parameters)

**Member in various committees**

Committee Members	<ol style="list-style-type: none"> <li>1. Vidhyalaya Management Committee, Kendra Vidhyalaya, Girinagar, Pune 25</li> <li>2. Organising Training Programmes for Indian and international student and participants in various subjects of Hydraulics such as coastal hydraulics, Coastal Protection, Mathematical modeling for coastal engineering, River hydraulics, water quality modeling, water resources, dam safety, Rain water harvesting, water conservation etc at Central Water and Power Research Station, Pune</li> <li>3 Judge for the Debate on " Sustainable Life " of M.Sc Students of Environmental Sciences, Institute of Life Sciences, Fergusson College, Pune, Maharastra during OZONE day Celebrations.</li> <li>4. Climate Change Cell, CWPRS, Khadakwasla, Pune 24, India(June 2016 onwards)</li> </ol>
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The above statements made by me are true and best of my knowledge and belief.

Signature

(Dr. R. Manivanan)