PROFILE OF SCIENTIST/RESEARCH WORKER

Name: Dr.Anilkumar C

Address: Principal Scientific Officer, Kerala State Biodiversity Board, Pallimukku, Pettah, Thiruvananthapuram - 695024

Telephone: 9847090193

E-mail: anil.biodiversity@gmail.com

Qualification Ph.D. in Botany

Area(s) of Specialization: Seaweeds

Occupation/Designation: Principal Scientific Officer, Kerala State Biodiversity Board **Major Activities : Biodiversity Conservation** Awards/Recognitions

My Resume is attached for your kind perusal

RESUME

NAME : ANIL KUMAR. C DATE OF BIRTH : 16-05-1966. ADDRESS FOR COMMUNICATION : Nandhanam, GSSNRA - 252, NCC Road Peroorkada.P.O, Thiruvananthapuram India. Pin – 695005. e-mail: akcpillai@gmail.com Ph.009847090193 : MARRIED. : INDIAN.

FAMILY STATUS NATIONALITY

OUALIFICATIONS & TRAINING ATTENDED

| Degree | Subjects | Year of passing |
|-----------------------------------|---|----------------------|
| B. Sc | Botany, Chemistry and Zoology | 1986 (First class) |
| M.Sc | Botany | 1988 (First class) |
| Ph.D. | Taxonomy (Marine Algae) | January 1995. |
| Lectureship | Life Sciences | April 1996. |
| C 0312004& C 0412004 | ICT Tools for e-Readiness in Government .Module I & II | July, September,2004 |
| Certificate in Geoinformaitics | Application of Geoinformatics in the Water Sector. | September, 2005 |

| Training Need Analysis (TNA) | Science Management | August 2011 |
|---------------------------------|--------------------|-------------|
| Allarysis (TNA) | | |

EXPERIENCE :

| Designation | Organisation | Period |
|---------------------------------|---------------------------------------|-------------------------|
| Member Convenor, | Kerala State Council for Science, | 2011-2012 |
| 24 th Kerala Science | Technology and Environment | |
| Cogress | | |
| Programme Officer | Kerala Biotechnology Commission, | 01.09.2011 – presently |
| | Government of Kerala | working |
| Scientific Officer | Kerala State Council for Science, | 05.10.2008 to |
| | Technology and Environment | 31.08.2011 |
| Principal Scientific | Kerala State Biodiversity Board | 05.10.2007 to04.10.2008 |
| Officer | | |
| Scientific Officer | Kerala State Council for Science, | 12.12.2005 to |
| | Technology and Environment | 05.09.2007 |
| Scientist | Botanical Survey of India, Government | 06-11-2002 to |
| Scientist | of India. | 11-12-2005 |
| Lecturer | Directorate of Higher Secondary | 08- 08- 2000 to |
| Lecturer | Education, Govt. of Kerala | 31-10-2002 |
| Scientist | M S Swaminathan Research | 01- 08-1998 to |
| Scientist | Foundation, India | 31-07-2000 |
| Post-Doctoral Fellow | Council of Scientific and Industrial | 01-08-1995 to |
| Fost-Doctoral Fellow | Research.NewDelhi, India. | 31-07-1998 |
| Research Fellow | University Grants Commission, New | 1990-1993 |
| Research reliow | Delhi, India. | 1990-1993 |
| Lecturer in Botony | Vocational Higher Secondary | 01-06-1989 to |
| Lecturer in Botany | Education,Govt. of Kerala | 31-03-1990 |

Research Experiences.

As a researcher, I have twenty two years of experience in the study of the coastal ecology and environment of the seaweeds of India and I could publish Twenty-two research papers in the field of ecology and taxonomy of Seaweeds and four books. Reported five new algal species and a number of new Indian reports (List attached.). All these species were cataloged in the Catalogue of the Benthic Marine Algae of the Indian Ocean. Edited by Paul C. Silva, Philip W. Basson and Richard L. Moe Published by University of California Press1996.

My major interest is in the study of marine algae – taxonomy, ecology, culture and cultivation. Major contribution was in *Porphyra* and made a thorough investigation on the taxonomy of the species of *Porphyra* available from the Indian coast and published it in *Feddes Repertorium* from Germany (1997). Out of the eight Indian species, reported five species including two new species, one from Kerala and other from Maharashtra, India. Also made a detailed study on the ecology and reproductive phenology of *P. suborbicualta*. Culture studies in the laboratory, spore liberation, germination,

conchocelis establishment, conchospores germination, physiological studies, chemical studies of P.*chauhanii* has also been made. As a continuation for this study, I was awarded Research Associateship by the CSIR, New Delhi, India, for the project entitled "Cultivation of *Porphyra* in the open estuary of Ashtamudi lake, Kerala.".

I got the opportunity to associate with the world renowned Agricultural Scientist-**Dr. M. S. Swaminathan** for a period of two years for studying the biodiversity and its conservation aspects of the Wayanad area of the Western Ghats.

Programme Management Experiences.

As a Scientist in the Botanical Survey of India, I have been the investigator of a major project entitled "Coastal and marine flora of Malvan Marine Sanctuary, Maharashtra, India" and I have completed the work with remarkable achievement with a number of publications including new species. I was also in charge of the Library, mounting section, photography division and vehicles. I have conducted many field trips in connection with the Environmental Impact Assessment studies and projects. I have been the convenor of many meetings.

As a Scientific Officer in the Kerala State Council for Science, Technology and Environment (KSCSTE), I have been in charge of monitoring and managing about 600 research projects on different fields like Life Sciences, Physical Sciences, Engineering and Technology. I have been conducted many field visits and meetings to evaluate and monitor these projects. For a short period, I have been assigned the charge of managing the 'School of Mathematics', a joint venture of KSCSTE and Department of Atomic Energy.

As a Principal Scientific Officer in the Kerala State Biodiversity Board, I have been the Head of Technical programmes of the Board. I have been organized many meetings of National and International Level. Conducted training programmes, awareness campaigns for different sections of the society like the teachers, students, bureaucrats, politicians, media and judiciary. One of the major task is the preparation of Peoples Biodiversity Register. This is a very laborious process with the active participation of the local people in association with the scientists, teachers and other voluntary organisations. Awareness creation and training is a major component of this programme. Publication of hand books and manuals. Contributed in the preparation of an Environmental Policy and Organic Farming Policy for the state of Kerala, India.

As a Programme Officer in the Kerala Biotechnology Commission (KBC), I have been entrusted with the implementation of the Biotechnology policy of the Government of Kerala. Kerala Biotechnology commission is taking a lead role in promoting R&D in the area of Biotechnology. Programmes of the KBC include financial support for selected projects under, Agricultural Biotechnology, Marine Biotechnology, Environmental Biotechnology and Health Biotechnology. In addition to this, KBC provides financial support for Human Resource development in Biotechnology by giving Post Doctoral Research fellowship and also Pre-Post doctoral fellowships.

In addition to this, I have been appointed by the Government of Kerala as the Member Convenor of the 24th Kerala Science Congress (www.ksc.kerala.gov.in). Kerala Science Congress (KSC) is an annual Flagship Science event, aimed at providing a platform for young scientific talents as well as leading scientists to interact, present their achievements and develop scientific collaboration and team building. During the event universities, research institutions and other related organisations in the State come together and actively participate in the exchange of knowledge in the field of Science & Technology in the State. The three day in situ programme is attended by more than 1000 scientists and eminent personalities from the different walks of life. The progamme is inaugurated by the Chief Minister of Kerala.

PH.D. THESIS EVALUATED:

- 1. The ecology and species diversity of the algal flora of the river Kallada (University of Kerala).
- 2. Studies of the species diversity of Cyanobacteria from different habitats of Kerala (University of Kerala).

RESEARCH GUIDANCE:

- 1. Research Guidance given to two students and the degree have been awarded for the following thesis work.
- 2. Ecology and Taxonomy of Mulla Mutha River, submitted to the Bharathidasan University, Coimbatore in 2005.
- 3. Ecology of Vamanapuram River with special Emphasis on Pollution, submitted to the Annamalai University in 2008.

PROJECTS UNDERTAKEN:

- 1. EIA (Environmental Impact Assessment) study for the Jihe-Kathapur Lift Irrigation Scheme, Satara Dist. Maharashtra, India.
- 2. Coastal and marine flora of Malvan Marine Sanctuary, Maharashtra, India.
- 3. Cultivation of Porphyra in the open estuary of Ashtamudi lake, Kerala.
- 4. "Ecology and taxonomy of the marine algae of Kerala."

BOOKS PUBLISHED

- 1. 'Biodiversity'' (Jaivavaividhiam in Malayalam) published by M.S. Swaminathan Research Foundation, Madras.
- 2. Checklist of Indian Marine alga published by Department of Botany, S.N. College, Kollam.
- 3. Selected papers on Algae, published by Department of Botany, S.N. College, Kollam.
- 4. A text book of practical biology for Higher Secondary Course & VHSE.

EDITORIAL WORK UNDERTAKEN

- 1. General Editor of the Proceedings of the24th Kerala Science Congress 29-31 January 2012, Rubber Research Institute of India, Kottayam
- 2. General Editor of the Compendium on "Climate Change: Plantation Crops & Spices of Kerala" in connection with the 24th Kerala Science Congress 29-31

January 2012, Rubber Research Institute of India, Kottayam

3. Editorial member of the Proceedings of the 23rd Kerala Science Congress 29-31 January 2011, Centre for Earth Science Studies, Thiruvananthapuram

FELLOWSHIPS RECEIVED

- Research Fellowship from the University Grants Commission, New Delhi.
- Post Doctoral Fellowship from Council of Scientific and Industrial Research, New Delhi.

AWARD RECEIVED

National award for the best paper presented on the 3rd National Congress on Medicinal Plants, December 27, 1999.at Thrissur, Kerala.

References on International Publications

1. Catalogue of the Benthic Marine Algae of the Indian Ocean. Edited by Paul C. Silva, Philip W. Basson and Richard L. Moe Published by University of California Press1996.

Membership of Professional bodies/Committees

- 1. Executive member of the Indian Botanical Society (Kerala Chapter)
- 2. Functioned as the Chairman of the IV th Scientific session of the 5th National Seminar on Medicinal Plants -2006 organised by the Department of Pharmacognosy, Government Ayurveda College, Thiruvananthapuram on 27th and 28th March 2006.
- 3. Functioned as Convenor for the Award committee of Dr. S. Vasudev Award.
- 4. Functioned as the Convenor for the Programme Monitoring Committee of the Kerala School of Mathematics.
- 5. Functioned as the Member of different Kerala Science Congress Committees.
- 6. Member of the sub-committee for deciding the priority areas of WGD Programmes for 2006-07 (Planning Board)
- 7. Member Convenor of the 24th Kerala Science Congress committee scheduled at Kottayam.
- 8. Convenor, Building and Housekeeping committee, KSCSTE, Sasthrabhavan
- 9. Secretary, Friends of Cultural Unity in Science, the recreation club of KSCSTE

Seminars Organised:

- a. Member Convenor of the 24th Kerala Science Congress 29-31 January 2012, Rubber Research Institute of India, Kottayam
- b. Co-Convenor of the Reception Committee of the 23rd Kerala Science Congress 29-31 January 2011, Centre for Earth Science Studies, Thiruvananthapuram
- c. Convenor of the National Workshop on the Aspects and Prospects of Taxonomy Teaching and Research held during $29 30^{\text{th}}$ October 2010 at Thiruvananthapuram

- d. Officer in Charge of the 21st Kerala Science Congress, held at Kollam during 28 31 January 2009.
- e. One day Workshop on Biodiversity Conservation- for Secretariat staff on 17th March 2008 at the Government Guest House, Thycaud, Thiruvananthapuram.
- f. One day Seminar on 12th November, 2007 on the birthday of Dr.Salim Ali, at Science and Technology Museum, Thiruvananthapuram
- g. State Level launching of support to Eco-clubs and Seminars on Biodiversity and its Sustainable use at College level 2007
- h. State level workshop at Thiruvananthapuram on 7th and 8th September 2007 for formulating the Kerala State Organic Farming Policy at Thycaud Guest House.
- i. One day workshop on Environmental Awareness for Media Persons at the Govt. Guest House, Thycaud 2007
- j. Seminar on Biodiversity Major Challenges for Conservation and Sustainable Utilization at the Science and Technolgy Museum 2007
- k. Regional discussion meetings to finalise the policy documents on Organic Farming and Environment at Kollam, Palghat and Kozhikode during 2007
- 1. "Seminar on Environmental Education and Biodiversity Conservation" in the 14 Districts of Kerala 2007
- m. International Biological Diversity Day Celebrations on 22 May, at the Science and Technology Museum Conference Hall, Thiruvananthapuram 2007
- n. Earth Day Celebrations at the Priyadersini Auditorium, Thiruvananthapuram 2007

Seminars attended:

- 1. "Workshop on Taxonomists" organized by the Kerala Biodiversity Board on 23-24th March 2007 at Govt. Guest House, Thiruvanathapuram.
- 2. Seminar on World Environment Day on 05.06.2006
- 3. All India Symposium on "Sea shore Ecosystem Diversity in India". held from 26th to 28th Feb. 1993 at Madras.
- 4. International Symposium on "Recent Advances in Phycology" from 11-15 th July, 1994 at CAS in Botany, Madras.
- 5. "Gene-in Development and in High Tech Plants" on 24 th Feb, 1996 at S.N College, Kollam.
- National Symposium on Algae and Environment held from 13th to 15th February, 2003 at the Department of Environmental Sciences, University of Kerala, Trivandrum, India.
- 7. National Seminar on "Bioinformatics & Biodiversity Data Management" held from 15th to 17th May 2003 at Trivandrum organised by Tropical Botanic Garden and Research Institute, Trivandrum.
- 8. Presented Educational Training Programmes in *Asianet*, a Malayalam T. V. Channel.

List incomplete...

Other experiences of academic importance

- I. Experience in Computer soft wares like word, PowerPoint, excel and Photoshop
- 2. Experiences in Photography-Field and Photomicrography

- 3. Experience line drawing and floristic works
- 4. Secretary, Indian Management and Technology Centre (IMTC), Trivandrum; a Non-Governmental Organization

List of Papers Published

- 1. Anil Kumar.C and M.V.N. Panikkar, 1992. Marine algae of Kerala II *Sphacelaria* Lyngbye (Sphacelariales, Phaeophyceae). Seaweed Res. Utiln. 14 (2)129-134.
- 2. Anil Kumar.C. and M.V.N. Panikkar, 1993. Observations on two species of *Champia* from the Kerala Coast. Phykos-32 :13-16.
- 3. Anil Kumar. C. and M.V.N. Panikkar. 1993. Species of the genus *Spyridia* Harvey (Ceramiales, Rhodophyta) from Kerala. Seaweed Res. Utiln. 16 (1&2) :17-22.
- 4. Anil Kumar.C. and M.V.N. Panikkar, 1993. A new species of *Myriogramme* Kylin (Delesserales, Rhodophyta) from Kerala. Seaweed. Res. Utiln. 16 (1&2) :199-203.
- 5. Anil Kumar.C. and M.V.N. Panikkar. 1993. A new species of *Pseudobryopsis* Berthold (Siphonales, Chlorophyta) from Kerala. Seaweed. Res. Utiln. 16 (1&2) 135-138.
- 6 Anil Kumar.C. and M.V.N. Panikkar. 1994. Siphonaceous green algae of the Kerala Coast J.Eco.Taxo.Bot. 18(2):483-487
- 7. Anil Kumar.C. and M.V.N. Panikkar. 1994. Observations on three species of Herposiphonia Naegeli from the Kerala Coast. Phykos 33(1&2): 67 69
- 8. Anil Kumar. C. and M.V.N. Panikkar. 1994. Species of *Polysiphonia* Grevelle (Ceramiales, Rodophyta) from the Kerala Coast, India, Bionature.14(1): 53-55.
- 9. Anil Kumar.C. *Mushroom cultivation*. 1994. Modern Trends in Botany. 81-96.
- 10. Anil Kumar.C. and M.V.N. Panikkar. 1995. The species of *Prophyra* C.A.Agardh from Kerala. Seaweed. Res. Utiln. 17:151-160.
- 11. Sindhu.P., C. Anilkumar and M.V.N. Panikkar. 1995. Ecological studies on *Padina tetrastromatica* Hauck (Phaeophyta, Dictyotales) in the Quilon coast of Kerala. Seaweed res. Utiln. 17.
- 12. Anil Kumar.C. ; P. Sindhu and M.V.N. Panikkar. 1995 Ecology and reproductive Phenology of *Porphyra suborbiculata* Kjellman (Bangiales, Rhodophyceae) from Kerala. Seaweed res. Ultin. 17 : 37-50.
- 13. Anil Kumar. C and M.V.N. Panikkar 1997. Indian Species of *Porphyra* (Rhodophyceae, Bangiales). Feddes Repertorium. 108, 5-6, 419-423.
- 14. Anil Kumar C, G.R. Jayakumar and K.G. Sreekumar. 1999. *Gymnema sylvestre*, R. Br. A pharmacognostical outlook. Presented in the 3rd National

Congreee on Medicinal Plants, Thrissur, Kerala, India.

- Beenakumari, S.K., G.R. Jayakumar, K.G. Sreekumar and C. Anilkumar 1999. Conservation of traditional Medicinal Plants and multiplication techniques. Presented in the 3rd National Congrees on Medicinal Plants, Thrissur, Kerala, India.
- 16. Anil Kumar C, 2003. "Seaweeds A Potential source of Food, Fine chemicals, Fertilizer and Medicine for the future". Proce. of Swadeshi Science Congress at MSSRF, Kalpatta, Kerala, India.
- 17. Anilkumar.C, 2003. Observations on the species of *Ceramium* (Cermiales Rhodophyta) from Kerala. Bull. Bot. Surv. India 45 (1-4) : 173-178.
- 18. Anilkumar C & P.S.N. Rao, 2004. Species of *Caulerpa* (Caulerpaceae-Chlorophyta) commonly called sea grapes from the Malvan coast, Maharashtra, India. Bull. Bot. Sur. India.
- 19. Sonali V. Jadiye, Anilkumar, C & P.S.N. Rao,2004. On occurrence and reproductive behaviour of a red alga *Catenella* (Greville) from the west coast of India. Indian Journal of Forestry.
- 20. Anilkumar, C. & P. S. N. Rao,2005. Observations on the species of *Ceramium* (Ceramials Rhodophyta) from Malvan coast of Maharashtra. Indian Journal of Forestry.
- Anilkumar C & P. S. N. Rao, 2005. A new species of *Porphyra* (Rhodophyta, Bangiales) from the Malvan coast of Maharashtra, India. Feddes Repertorium Volume 116, Issue 3-4 : 222-225. Berlin
- 22. Sonali Jadiye, C.Anilkumar and P.S.N.Rao, 2006. Sexual anomaly in a marine red alga *Polysiphonia unguiformis* Boergesen. Current Science: Volume 90 Number 3: 289