

# MACFAST

SCHOOL OF BIOSCIENCES

Hands-on training in

# PLANT TISSUE CULTURE

Techniques and Applications

16<sup>th</sup>
16
25<sup>th</sup>
January
2019

For details contact

Programme Coordinator

Bija Dharmapalan Phone :9447121617



### School of Biosciences, MACFAST Tiruvalla

#### Report on

# Workshop on "Plant Tissue Culture techniques and Applications"

27th January 2019

The School of Biosciences MACFAST (Mar Athanasios College for Advanced Studies Thiruvalla) had organised a 10 day hands on training programme on *Plant Tissue Culture techniques and Applications* from 16<sup>th</sup> to 25<sup>th</sup> January 2019. The technical sessions were handled by faculty members from MACFAST. The programme was hosted due the enquiries which came after the success of the previous program in this same line. Many were attracted to take up this as an additional income along with their main line activities. The registration was free for the participants. The programme started with the welcome address by Mr. Biju Dharmapalan. The main sessions were handled by Mr. Biju Dharmapalan and Mr. Blessan Santhosh George, MACFAST. Other faculty members also actively took part in the training session. There were 2 participants who attended the workshop throughout the session. The registration was handled by Mr. Biju Dharmapalan.

Fr. Dr. CHERIAN J KOTTAYIL

Fr. Dr. CHERIAN J KOTTAYIL

PRINCIPAL

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Tiruvalla- 689101, Kerala

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## MAR ATHANASIOS COLLEGE FOR ADVANCED STUDIES THIRUVALLA, KERALA

(Accredited by NAAC with 'A' grade)

INDIA - 689101

# TRAINING PROGRAMME IN PLANT TISSUE CULTURE TECHNIQUES,

16th TO 25th JANUARY 2019

Application form

Name

ELDHOSE - N. PAUL

Address for correspondence:

· NADUKKUDIJILCH)

MULAVOOR P.O

MUVATTUPUZUA ERNAKULAM CDIST)

Email

: eldhosenpaul @ gmail. com.

Tel No./Mobile No

: 7034387000

Signature:

Ellhopent.

Received Rs. 5000/- as training of

# MAR ATHANASIOS COLLEGE FOR ADVANCED STUDIES

(Accredited by NAAC with 'A' grade)

INDIA - 689101

TRAINING PROGRAMME IN PLANT TISSUE CULTURE TECHNIQUES, 16th TO 25th JANUARY 2019

Application form

Address for correspondence: Pandipanambil House

AYOOV PO

Alappusha. PIN-688534

Email

: ginnvakkajoseph@emailicom.

Tel No./Mobile No

: 9645831712.

Signature:

Received Rs. 50001- as training of



TC 21/564(1) "KARUNA", KRA 56E PEROORKADA POST, TRIVANDRUM-695005 KERALA, INDIA

+91 7025403827

blessan.orion@gmail.com | blessan@macfast.org

# BLESSAN SANTHOSH GEORGE, PhD

#### PROFESSIONAL SUMMARY

Motivated teacher in Life Sciences with more than ten years of experience in University and college teaching and research.

Propensity for high quality education practices and for fundamental and society-centered research.

Experience in designing and revising post graduate programme syllabi, Chairperson of university PG programmes, Co-editor of quarterly science journal, Co-convenor of international conference, supervising postgraduate dissertation.

PhD degree awarded by FRI(Deemed)University, Dehradun

Qualified NET & GATE

#### TEACHING EXPERIENCE

# Mar Athanasios College for Advanced Studies Tiruvalla (MACFAST), Kerala — Assistant Professor

FEBRUARY 2017 - PRESENT

- Postgraduate teaching six M.Sc. programmes viz. Biochemistry, Biotechnology, Plant Biotechnology, Bionanotechnology, Bioinformatics and Phytomedical Science & Technology
- Member, PG Expert Committee in Biosciences, Mahatma Gandhi University, Kottayam
- Chairperson, M.Sc. Plant Biotechnology (2018-present), M.Sc.Phytomedical Science & Technology (2018-20)
- Co-editor, Journal of Science, Technology & Management (JSTM)
- Guest Editor, Indian Journal of Experimental Biology, Vol. 58(12)
- Co-convenor, International Conference on Advances in Food & Industrial Biotechnology, Biospectrum-2019
- Question paper setter for CUSAT, Kochi & MG University, Kottayam
- Additional and external & chief examiner of MG University
- Resource person, Online Hands on Training Programme in Primer Designing and Recombinant Vector Construction
- Resource person, Hands-on Training on Plant Tissue Culture Techniques sponsored by Kerala Biotechnology Commission
- Supervising student dissertations

#### MACFAST, Kerala - Guest Faculty

OCTOBER 2016 - JANUARY 2017

Postgraduate teaching

#### Central University of Kerala, Kasaragod - Guest Faculty

SEPTEMBER 2014 - APRIL 2016

- Postgraduate teaching in Department of Biochemistry and Molecular Biology
- Question paper setter
- Supervised student dissertation

#### RESEARCH EXPERIENCE

#### Institute of Forest Genetics and Tree Breeding (ICFRE institute), Coimbatore, Tamil Nadu — Senior & Junior Research Fellow

NOVEMBER 2010 - MAY 2014

Primary goals of the assigned DBT-funded research project were gene isolation & functional characterization of recombinant protein using bacterial and plant systems.

#### National Institute of Plant Genome Research, New Delhi — Summer Research Fellow

JULY - SEPTEMBER 2010

Recombinant protein expression

#### National Chemical Laboratory, Pune

- Summer Internship

MAY - JUNE 2009

Plant tissue culture and Phytochemical analysis

# Amrita School of Biotechnology, Amrita Vishwa Vidyapeetham, Kollam, Kerala – Summer Research Fellow

APRIL - JUNE 2008

Phytochemical analysis

#### SKILLS

- PCR based techniques: routine PCR, RACE, RT-PCR
- Gene isolation
- Data mining from Transcriptome Data for Gene Expression Analysis -real time PCR
- Molecular cloning & Microbial genetic transformation (E. coli)
- Recombinant protein production, purification & characterization
- Qualitative estimation by SDS-PAGE, Silver staining, Western blotting
- Purification by chromatographic methods
- Purification of target protein formed as inclusion bodies
- Plant genetic transformation (Tobacco)
- o Vector construction
- Agrobacterium-mediated transformation
- Plant tissue culture techniques
- Fungal bioassays
- Insect bioassays

#### **EDUCATION**

**Ph.D. in Forestry (Forest Biotechnology)** — Forest Research Institute Deemed to be University, Dehradun
2019

Institute of Forest Genetics & Tree Breeding (ICFRE Institute), Coimbatore

Thesis title: "Isolation and Functional Characterization of Recombinant Lectin from Withania somnifera (L.) Dunal"

Research guide: Dr. Modhumita Dasgupta, Scientist-F

#### M.Sc. in Biotechnology — Bharathidasan University, Tiruchirappalli 2010 | 81.2%

Department of Biotechnology, Bharathidasan University

Dissertation title: "Studies on Direct Organogenesis and Genetic Transformation in Indian Cultivar of Soybean [Glycine max (L.) Merrill] using Cotyledonary Node as Explant"

Research guide: Prof. (Dr.) A. Ganapathi

# B.Sc. in Botany & Biotechnology (Restructured) — University of Kerala 2008 | 81.3%

Mar Ivanios College, Thiruvananthapuram

#### Senior School Certificate Examination (Class XII) - CBSE

2004 | 81.2%

Arya Central School, Thiruvananthapuram

#### **AREAS OF INTEREST**

Gene expression analysis in plants during stress conditions and identifying relevant genes henceforth for plant improvement by genetic transformation Prospect of insect microbiome in pest management strategies

Better understanding of genetic disorders for improved diagnosis

#### **AWARDS/ FELLOWSHIPS**

Indian Academy of Sciences' Summer Research Fellowship -2010 Indian Academy of Sciences' Summer Research Fellowship -2008

#### **COMPETITIVE EXAMS QUALIFIED**

CSIR-UGC Test under Eligibility for Lectureship (NET-LS) in Life Sciences - 2010 GATE in Life sciences - 2010

#### **PUBLICATIONS**

International Journal Publications (Peer-reviewed):

- 1. **George, B. S.**, Silambarasan, S., Senthil, K., Jacob, J. P., & Dasgupta, M. G. (2020). Ectopic expression of WsMBP1 from *Withania somnifera* in transgenic tobacco shows insecticidal activity against teak defoliator Hyblaea puera (Lepidoptera: Hyblaeidae). Biologia, 75, 2331-2339.
- 2. **George, B. S.**, Silambarasan, S., Senthil, K., Jacob, J. P., & Dasgupta, M. G. (2018). Characterization of an Insecticidal Protein from *Withania somnifera* against Lepidopteran and Hemipteran Pest. Molecular Biotechnology, 60(4), 290-301.
- 3. Ghosh Dasgupta M., George, B. S., Bhatia, A. & Sidhu, O. P. (2014). Characterization of *Withania somnifera* Leaf Transcriptome and Expression Analysis of Pathogenesis Related Genes during Salicylic Acid Signaling. PLoS ONE, 9(4): e94803. doi:10.1371/journal.pone.0094803 ISSN: 1932-6203

#### Publications in International Conference Proceeding:

- 4. George, B. S., Radha, V. & Ghosh Dasgupta, M. (2014). Isolation, Characterization and Expression Profiling of Glucanase from Casuarina equisetifolia. In: Nicodemus, A., Pinyopusarerk, K., Zhong, C.L., Franche, C. (Eds.), Proceedings of Casuarina Improvements for Securing Rural Livelihoods: Fifth International Casuarina Workshop, Chennai, India, 3-7 February 2014 (pp.152-157). Coimbatore, India: Institute of Forest Genetics & Tree Breeding. ISBN: 978-93-82387-12-1
- 5. Shanthi, A., Vikashini, B., **George, B. S.** & Dasgupta, M. (2014). Identification of Cinnomoyl CoA Reductase (CCR) Gene in *Casuarina equisetifolia*. In: Nicodemus, A., Pinyopusarerk, K., Zhong, C.L., Franche, C. (Eds.), Proceedings of Casuarina Improvements for Securing Rural Livelihoods: Fifth International Casuarina Workshop, Chennai, India, 3-7 February 2014 (pp.175-177). Coimbatore, India: Institute of Forest Genetics & Tree Breeding. ISBN: 978-93-82387-12-1

#### Book Chapters:

6. Nambiar-Veetil, M., Selvaraj, P., **George, B. S.**, Ganesan, M., Raghunath, T. P. & Krishnakumar, N. (2015). Synchronous and Rhythmic Light Display by a Panoramic Congregation of Fireflies at Varagaliar, Anamalai Tiger Reserve. In K. P. Laladhas, O. V. Oommen & P.R. Sudhakaran (Eds.), Biodiversity Conservation: Challenges for Future (pp. 197-201) Bentham Science Publishers. ISBN: 978-1-68108-022-2.

Other Publications in journals with ISSN number:

- 7. **George, B.S.** (2018). Plant Defense Arsenal against Insect Herbivores. Journal of Science, Technology and Management, 11(2), 133-144. (ISSN No. 0974-8334)
- 8. **George B. S.** & Dasgupta, M. G. (2017). How Do Plants Defend Themselves from their Natural Enemies? An Overview. Journal of Science, Technology and Management, 10(1), 28-41. (ISSN No. 0974-8334)

#### CONFERENCES

- 1. George, B. S., Soumya, S., Vijayan K.K., & Prasanth, G.K. (2016). Differential action of a synthetic coumarin derivative on E2 responsive genes. Poster presented at the 2nd International Conference on Structural and Functional Genomics, SASTRA University, Tanjore, India, 19-20 August, 2016.
- 2. **George, B. S.**, Ashna, O., Vijayan K.K., & Prasanth, G.K. (2016). BPA down-regulates *NRIP1* Gene. Poster co-presented at the 2nd International Conference on Structural and Functional Genomics, SASTRA University, Tanjore, India, 19-20 August, 2016.
- 3. **George, B. S.**, Prem, S., & Biju, D, (2007). A Brief Study on the Ethnic Food Habits of 'Kattunaickans' of Appankappu Village of Malappuram District. Poster presented at Biospectrum '07: International Symposium on Advances in Food Biotechnology and Nutrition, MACFAST, Kerala, 30 Nov- 1 Dec, 2007.
- 4. Das, A. K., Blessan, S., Prem, S. & Biju, D. (2007). A Brief Study on the Ethnic Foods of Kani Tribes Settled in Puravimala of Western Ghats. Paper co-presented at Biospectrum '07: International Symposium on Advances in Food Biotechnology and Nutrition, MACFAST, Kerala, 30 Nov- 1 Dec. 2007.
- 5. Biju, D., Pradeep, D. P., Stalin & **Blessan S.** (2007). Effect of Media Strength in the Multiple Shoot Production of *Bacopa Monnieri* (L.) Pennell, an important medicinal plant. Paper co-presented at the National Seminar on Medicinal Plants, Govt. Ayurveda College, Thiruvananthapuram, Kerala, 14-15 March, 2007.

#### SERVICE

Coordinator, Forestry Club, MACFAST

Editor, Bulbul, the Forestry Club Newsletter

Member, NAAC Documentation Committee

Member, Enterprise Resource Planning (ERP) development committee

Coordinator, orientation programme for first-year students

Active participation in developing contents for college website

Regular contribution to 'Conserve for Future' column in JSTM

Member of conference & workshop committees organized by college

Member, Warblers & Waders, Trivandrum

Executive Member, Center for Advancement of Life Sciences (CFAL), Trivandrum

#### REFERENCES

Dr. Modhumita Dasgupta

Scientist F, Plant Biotechnology Division, Institute of Forest Genetics & Tree Breeding, Coimbatore-2

Ph:+91 422-2484123

Email: ghoshm@icfre.org

Mr. Biju Dharmapalan

Science Communicator CSIR-NISCAIR, New Delhi Ph: +91 9447121718

Email: bijudharmapalan@gmail.com

Biju, D. Head of Department

School of Biosciences Mar Athanasios College For Advanced StudiesTiruvalla, Kerala-689101

Fax: 0469 3058017

E-mail: biju@macfast.org / biju\_dharmapalan@yahoo.co.uk

Asili, K.P.1/1151 Holy Cross Church Road Vandithadam, Vellayani (P.O) Thriruvananthapuram-695 522 Kerala, India Phone: 0469 2730331(Off.)

Phone: 0469 2730331(Off.) 09447121718 (Mob.)

#### RESUME

PERSONAL PROFILE

Full Name Biju Dharmapalan

Date of birth 24.03.1977

Passport No M8621905

Marital status Married

Fathers Name Sri. C. Dharmapalan

Educational Qualification :M.Phil. Life Science (Biochemistry specialization),

M.Sc. Botany (Biotechnology specialization)
Qualified NET and GATE Examination

**EXPERIENCE** 

Position held	Institution	Period		Nature of work	
5		From	То		
Head of Department	School of Biosciences, Mar Athanasios College for Advanced Studies, Tiruvalla. www.macfast.org	6 <sup>th</sup> July 2014	•	Leading the post graduate department of bioscience having 6 M.Sc. courses	
Assistant Professor	MACFAST	1 <sup>st</sup> May 2010		Teaching for M.Sc. Plant Biotechnology, Phytomedical Sciences and Technology Project guidance	
Lecturer	Mar Athanasios College for Advanced Studies	2 <sup>nd</sup> July 2007	30 <sup>th</sup> April 2010	Teaching for M.Sc. Plant Biotechnology, Biochemistry, Bioinformatics and Phytomedical sciences and technology	
Guest Lecturer	Dept. of Botany Mar Ivanios College Trivandrum	11.06.2002 22.11.2006	18.11.2005 31.5.2007	Teaching for B.Sc Biotechnology and Botany	
	mvanaram	22.11.2000	31.3.2007	courses.	

				Guiding student projects
Junior Research Fellow	Dept. of Biotechnology T.B.G.R.I,Palode	6.11.2000	10.06.2002	Micro –propagation of Rattans
Senior Research Fellow	Division of Crop Improvement C.P.C.R.I. , Kasargod	3.07.2000	3.11.2000	Germplasm collection of Coconut under NATP project

### **EDUCATIONAL PROFILE**

Area of specialization	Institution/ University	Year of passing	% of marks
Life Sciences (Biochemistry specialization)	Department of Marine Biology, Microbiology & Biochemistry	2007	70.8 %
	Cochin University of Science and Technology (CUSAT)		
Botany	University College Trivandrum (UGC -	1999	70.0 %
(Biotechnology specialization)	CPE Status & NAAC accredited)		NINTH RANK
Botany (Main) Chemistry.	Mar Ivanios College	1997	90.9%
Zoology (Sub.)	University of Kerala		FOURTH RANK
Biology, Chemistry, Physics	Mar Ivanios College	1994	76%
Science, Maths, So cial Science, Eng.,	Durga High School, Kanhangad Board of Public Exams Kerala	1992	85%
	Life Sciences (Biochemistry specialization)  Botany (Biotechnology specialization)  Botany (Main) Chemistry, Zoology (Sub.)  Biology,Chemistry, Physics Science,Maths,So	Life Sciences  (Biochemistry specialization)  Botany  (Biotechnology specialization)  CPE Status & NAAC accredited)  University of Kerala  Botany (Main)  Botany (Main)  Chemistry,  Zoology (Sub.)  Biology, Chemistry,  Physics  Mar Ivanios College  University of Kerala  Mar Ivanios College  Chemistry,  Durga High School, Kanhangad  Cial Science, Eng.,	Life Sciences  (Biochemistry specialization)  Department of Marine Biology, Microbiology & Biochemistry  Specialization)  Cochin University of Science and Technology (CUSAT)  Botany  (Biotechnology Specialization)  University College Trivandrum (UGC - 1999 CPE Status & NAAC accredited)  University of Kerala  Botany (Main)  Mar Ivanios College  Chemistry, (NACC accredited A grade)  Zoology (Sub.)  University of Kerala  Biology, Chemistry, Mar Ivanios College  Science, Maths, So cial Science, Eng.,

#### OTHER EXAMINATIONS

- ✓ NPTEL (Ministry of HRD,Govt.of India) Online Certificate Course in Proteins and Gelbased Proteomics with 57%,2015
- ✓ UGC sponsored Refresher Course in Bio-Sciences organized by UGC-ASC Himachal Pradesh University, Shimla from September 9<sup>th</sup> to 28<sup>th</sup> 2013 (Grade A).
- ✓ UGC sponsored first Refresher Course in Life Sciences organized by UGC-ASC Banaras Hindu University, Varanasi from May 12th to June 1st 2010 (Grade A).
- ✓ UGC sponsored Special Summer School for University teachers from 23<sup>rd</sup> July to 12<sup>th</sup> August 2008 [equivalent to one OP/ RC as per UGC order D.O. No. F24-1/2008 (Misc./ASC) dated 21 June 2008] at UGC-ASC University of Kerala (Grade A).

✓ Certificate course in Environmental Studies , IGNOU,1999, First Class

✓ Honours Diploma in computer science ,Lakhotia Computer center &Mar Ivanios computer center Trivandrum, 1997

#### **PROJECTS HANDLED**

- Induction of multiple shoots from the cotyledonary node of Aegle marmelose(L.) Corr." sponsored by Kerala State Council for Science, Technology and Environment, 2015.
- > Initiation of Somatic Embryos from the leaves of Coleus vettiveroides Jacob, sponsored by Kerala State Council for Science, Technology and Environment, 2015
- Establishment of a herbal garden for mass education and wide spread cultivation by raising herbal nursery" sponsored by National Medicinal Plants Board (F.No.Z.18017/187/CSS/HG/KE-01/2014-15-NMPB).
- "In vitro regeneration from the nodes of Inflorescence peduncle of Eryngium foetidum L.", sponsored by Kerala State Council for Science, Technology and Environment, 2014.
- "In vitro culture of Gloriosa superba L., an endangered medicinal plant, sponsored by Kerala State Council for Science, Technology and Environment, 2014.
- > "Callus initiation from the immature flower buds of Ensete superbum Roxb." sponsored by Kerala State Council for Science, Technology and Environment, 2012.
- "Developing a protocol for in vitro propagation of screw pines", sponsored by Kerala State Council for Science, Technology and Environment, 2012.
- "Development of an in vitro protocol for rapid multiplication of Rhizophora mucronata, a vulnerable plant" sponsored by Kerala State Council for Science, Technology and Environment, 2010.
- Identification of conserved regulatory elements at the miRNA region of Arabidopsis thalina, 2010
- ✓ "Evaluation of antioxidant activity of Musa cultivars" submitted to the Cochin University of science and Technology, 2007

- Phytochemical screening of Alangium salviifolium Wangerin, Derris trifoliata Lour. And Premna cordifolia J.Graham, 2007
- In vitro multiplication and biochemical studies of Coleus vettiveroides Jacob, 2007
- Standardization of in vitro media for recalcitrant seeds of Castanospermum australe A.Cunn & C.Fraser ex Hook.And Derris trifoliata Lour.,2007
- "Annotation of Oryza sativa L. ssp. indica ESTs",2006
- "In vitro Multiplication And Biochemical Studies Of Selected herbals Cymbopogon flexuosus (Steud.)
   Wats., Piper longum L., and Bacopa monnieri (L.) Pennell", 2006.
- Effect of various Plant Growth Regulators on the microclones of Bambusa arundinacea (Retz.)
   Willd.,2006.
- "Isolation and characterization of oligophilic endophytic bacteria from economically important plants using rDNA sequencing" submitted to Indian Academy of Sciences, Bangalore, 2005.
- Guided the project "Phytochemical investigation and antibacterial activity of selected medicinal plants", 2005
- Guided the project "Invitro studies on Gymnemma sylvestre, a vulnerable medicinal plant", 2005
- ✓ "Partial purification and characterization of invertase from the developing seeds of Brassica campestris, submitted to Indian Academy of Sciences, 2001.
- ✓ "Micropropagation and conservation of a rare medicinal plant Aristolochia barcteata, submitted to the University of Kerala, 1999.

#### MEMBERSHIP IN PROFESSIONAL BODIES

- President, Centre for Advancement of Life Sciences (CFAL), Trivandrum
- Life Member, Indian Science Congress Association ,Kolkatta
- Life Member, Society of Marine Biologists, CUSAT, Cochin
- Life Member, Society for Biotechnologists, India
- Member, The Science Advisory Board (Membership Number: 87224)
- Member,WWF Nature Club,Trivandrum

#### **AWARDS AND ACHIEVEMENTS**

- Chairperson, Institutional Ethics Committee, Pushpagiri Nursing College Tiruvalla,2016
- Listed in the Data Base of Science Communicators in India, published by Vignan Prasar, DST, Govt. of India, 2013
- Listed as Mentors/Resource persons for Summer/Winter Camps and other INSPIRE initiatives, DST
- Qualified ICAR-NET Examination in Agricultural Biotechnology (Roll No. 1090100209).
- Attended the Second Science Conclave with Nobel Laureates sponsored by MHRD,DST, Govt. of India at IIIT Allahabad as Invited Teacher Nominee,8th December to 14th December 2009.
- Attended the first Science Conclave with Nobel Laureates sponsored by MHRD,DST, Govt. of India at IIIT Allahabad as Invited Teacher Nominee,14th December to 21st December 2008.
- Attended the 74<sup>th</sup> Annual meeting of Indian Academy of Sciences, Bangalore held at IIT Delhi as an invited teacher delegate, 31<sup>st</sup> October to 2<sup>nd</sup> November 2008
- Attended the 19<sup>th</sup> Mid-Year meeting of Indian Academy of Sciences, Bangalore held at Indian Institute of Science as an invited teacher delegate, 4-5 July 2008
- Co-ordinated Two lecture workshop sponsored by Indian Academy of Sciences, Bangalore
- Qualified GATE examination in LifeSciences conducted by Indian Institute of Technology
- The profile has been listed in the Marquis Who's Who Science and Engineering 10th edition
- Attended the 73<sup>rd</sup> Annual meeting of Indian Academy of Sciences, Bangalore held at Thiruvananthapuram as an invited teacher delegate, 1-4<sup>th</sup> November 2007
- Attended the 18<sup>th</sup> Mid-Year meeting of Indian Academy of Sciences, Bangalore held at Indian Institute of Science as an invited teacher delegate, 13-14 July 2007
- Awarded the Cochin University of Science and Technology Merit Scholarship for M.Phil. Life Sciences programme 2006
- Availed the Summer Visiting Teacher Fellowship from Indian Academy of Sciences, Bangalore, 2005
- The research paper "Micropropagation of Syzygium samarangense, a medicinal plant" presented at National Symposium on recent trends in Biotechnology got third prize in the poster category,2005
- Availed the Summer Visiting Student Fellowship from Indian Academy of Sciences, Bangalore, 2001
- Received First Prize at the State level Essay writing competition conducted by STEC, Govt. of Kerala,in connection with National Science Day Celebrations 2000
- Selected for National Merit scholarship 1999

- Awarded Ninth Rank by University of Kerala for M.Sc. 1999
- Awarded the University of Kerala Merit Scholarship 1997-1999
- Awarded Second Rank by University of Kerala for B.Sc. 1997
- Awarded the University of Kerala Merit Scholarship 1994-1997
- Awarded The Abdul Salam Memorial Prize for the best outgoing student in Botany from Mar Ivanios College, 1997
- Third prize in Research type project presented at the Kasargod District Science Fair, 1992

#### TRAINING PROGRAMMES / WORKSHOPS ATTENDED

- Training programme in Phytochemical Techniques organized by Department of Chemistry, Forest Research Institute Dehradun, 20th March 2016
- ➤ ICAR sponsored Summer school on "Novel genomic tools and modern breeding approaches for enhancing productivity and nutritional quality of pulse crops" at ICAR-IIPR, Kanpur from 05-25 Sept., 2015
- ▶ ICAR Sponsored Training programme on —Evaluation of Transgenic Crop Plants for Drought Tolerance|| organized by the Department of Crop Physiology, University of Agricultural Sciences, GKVK, Bangalore from 6th to 11th October 2014.
- ▶ UGC sponsored Refresher Course in Bio-Sciences organized by UGC-ASC Himachal Pradesh University, Shimla from September 9<sup>th</sup> to 28<sup>th</sup> 2013
- ➤ Workshop of VALUE virtual labs on Biotechnology and Biomedical Engineering organized by Amrita School of Biotehnology on 14<sup>th</sup> August 2013
- Workshop on "Introduction to GIS,GPS and remote sensing using Quantum GIS" organized by Foundation for ecological Research, advocacy and Learning (FERAL), Pondicherry from 1st July to 5th July 2013
- Attended the National Workshop cum Research Colloquium on APPLICABLE MATHEMATICS IN BASIC SCIENCE EDUCATION & RESEARCH organized by the Kerala State Council for Science, Technology and Environment from 5th April to 7th April 2013.
- Attended the Science Communication and Journalism Workshop conducted by the Kerala State Council for Science ,Technology and Environment on January 7th 2013 at Trivandrum
- Attended the 5th Orientation Course for Programme Officers organized by ETI for National Service Scheme at Rajagiri College of Social Sciences from 8th to 14th August 2012.
- ▶ ISTE Workshop on "Introduction to Research Methodology" under the National Mission on Education through ICT Conducted by IIT Bombay from June 25th to July 4th, 2012

- Attended the discussion meeting cum workshop on Individuals and Groups organized by the International Centre for Theoretical Science at Almora from 22<sup>nd</sup> May to 31<sup>st</sup> May 2012
- Curriculum Review Workshop (P.G Biosciences) held at School of Biosciences, M.G.University from 10<sup>th</sup> to 12<sup>th</sup> April 2012.
- Refresher Course on "Cell and Molecular Biology Techniques" organized by Indian Academy of Sciences, Indian National Science Academy, New Delhi ,The National Academy of Sciences and TIFAC, Manipal Life Sciences Centre, Manipal University from 23rd January to 4th February 2012.
- ▶ UGC-NRCBS Winter School on Plant Tissue Culture Applications organized by UGC-Networking Resorce Centre In Biological Sciences, Madurai Kamaraj university from 8<sup>th</sup> August o 22<sup>nd</sup> August 2011.
- DBT Sponsored Hands on training in Genomics conducted by Centre for Education Research in Biology and Biotechnology (CREBB), University of Hyderabad from 16<sup>th</sup> May to 20<sup>th</sup> May 2011.
- Workshop on Academic writing organized by Kerala State Council for Science Technology and Environment on 12th and 13th May 2011.
- Workshop on Biodiversity Education organized in connection with the First Indian Biodiversity Congress, Thiruvananthapuram, 27<sup>th</sup> December 2010.
- National Refresher Course On 'RECENT ADVANCES IN CHEMICAL SCIENCE AND ITS TECHNOLOGICAL APPLICATIONS', 8–21 December 2010 Sponsored by Indian Academy of Sciences, Bangalore Indian National Science Academy, New Delhi ,The National Academy of Sciences, India, Allahabad at Sikkim Manipal Institute of Technology, Majitar, Rangpo, Sikkim
- ➤ UGC sponsored first Refresher Course in Life Sciences organized by UGC-ASC Banaras Hindu University, Varanasi from May 12<sup>th</sup> to June 1<sup>st</sup> 2010 (Grade A).
- DST SERC School on Chronobiology organized by Jawaharlal Nehru Centre for Advanced Studies (JNCASR), Bangalore from 25th December 2009 to 7th January 2010
- DST sponsored School on Advanced Biological Inorganic Chemistry held at Tata Institute of Fundamental Research (TIFR), Mumbai from Nov 2-4, 2009
- AICTE sponsored Staff Development Programme "Advanced Level Intensive Training Programme in I.T and Management" organized by MACFAST, Tiruvalla from Feb 11<sup>th</sup> to 25<sup>th</sup> 2009.
- UGC sponsored Special Summer School for University teachers from 23<sup>rd</sup> July to 12<sup>th</sup> August 2008 [equivalent to one OP/ RC as per UGC order D.O. No. F24-1/2008

#### (Misc./ASC) dated 21 June 2008] at UGC-ASC University of Kerala (Grade A).

- National workshop on **Application of Radioisotopes in Biology**, organized by Board of Radiation and Isotope Technology, Dept. of Atomic Energy and Mangalore University, 7-10 March 2008
- Residential workshop for Development and Scrutiny of Text books for Std.XII Feb.2008
- Residential Workshop for the Development of Textbooks (Std XII)-Phase I (based on prerevised NCERT Syllabus) organized by State Council of Education Research And Training(SCERT), January 2008
- Hands on practice in Molecular Visualization Software conducted by DBT (Govt. of India) sponsored Bioinformatics Facility, University of Kerala, 2007.
- Training programme in "recombinant DNA technology" conducted by Shreedhar Bhat's Lab, Bangalore 13-27th June 2007.
- Kerala State Council for Science, Technology and Environment sponsored Workshop on Intellectual Property Right: Prospects and Procedure, 27th -28th September 2007.
- Workshop on instrumental methods of analysis, Organized by Western regional instrumentation center, Mumbai and STIC, CUSAT, 9<sup>th</sup> −13<sup>th</sup> Oct. 2006.
- ➤ UGC sponsored National workshop on Advanced Techniques in Biotechnology, 26-28<sup>th</sup> March 2005, Holy cross college, Nagarcoil
- Certificate program in Bioinformatics, Anna University, Chennai, Oct 2004
- Workshop on Microbial biotechnology and Bioinformatics, University of Madras, Chennai, July 2004
- Attended as resource person in two orientation programmes conducted by SCERT, Govt. of Kerala for Plus two teachers,2003
- "Orientation programme in new frontiers in plant taxonomy for plant diversity conservation" sponsored by **DST**, **Delhi**,1998

#### **ADMINISTRATIVE ASSIGNMENTS**

SPOC, NPTEL Local Chapter MACFAST

- Visiting Faculty, Institute of Life Sciences, Ahmedabad University, 2014
- Member, Panel of Experts for the Evaluation of Papers for the 26th Kerala Science Congress
  to be held on the 28th- 31st January 2014 at Kalpetta, Wayanad organized by the Kerala State
  Council for Science Technology and Environment.
- Associate Editor , Journal of Science Technology and Management (ISSN NO: 0974-8334),2013,2014
- Member Editorial Board Member, SAS Publishers
- Examiner for M.Phil. programme, Bharatiyar University ,Coimbatore,2012
- Programme Officer, National Service Scheme Unit No 124, from 4th July 2012 onwards.
- Chairman, PG Board of Examiners ,M.G.University , M.Sc. Plant Biotechnology 2013 onwards
- Co-ordinator, AMRITA VALUE Virtual Lab Nodal Center, MACFAST, 2014, 2015
- Convener, Student Support and Progression and Research and Consultancy criterion UGC-NAAC Accreditation Committee MACFAST 2016
- Sole Examiner Genetic Engineering and Plant Tissue Culture of M.Sc. Plant Biotechnology, M.G. University, 2010-11

#### CONFERENCES/TRAINING PROGRAMMES ORGANIZED

- Co-ordinator, Seminar on "Seminar on Recent Innovations in Food Packaging Technology" by Dr Arunkumar P ,Scientist ,CFTRI,Mysoru,on 11th May 2016.
- Co- cordinator, Two day lecture workshop "Lecture Workshop on Recent Advances in Life Sciences" organized during 11<sup>th</sup> and 12<sup>th</sup> April 2016 sponsored by Indian Academy of Science, Bangalore, Indian National Science Academy, New Delhi, The National Academy of Sciences, India, Allahabad
- Co-ordinator, Second CSP Iyer Memorial Lecture "Bridging gap between Materials andBiology: An era of interdisciplinary research" by Dr. Bikramjith Basu, Professor, Indian Institute of Science, Bangalore, on 11<sup>th</sup> March 2016.
- Co-ordinator, Seminar on "Seminar on Recent Innovations In Biomaterial Research From India" organized as part of National Technology Day Celebrations 2016 sponsored by Kerala State Council for Science Technology and Environment,26<sup>th</sup> February 2016.
- Programme Co-ordinator, Hands-on training on Plant Tissue Culture techniques and Applications from 7<sup>th</sup> to 18<sup>th</sup> January 2016 sponsored by Kerala Biotechnology Commission

- Organizing Secretary, International Conference on Advances in Bioprocess Technology sponsored by DST,Govt.of India and KSCSTE, Govt.of Kerala during 26<sup>th</sup> to 28<sup>th</sup> Nov 2015
- Co-ordinator ,Symposium on Recent Innovations in Tissue Engineering & Nano Sciences Technical sessions by Dr.Nandakumar Kalarikkal ,M.G .University and Dr. Ipsita Roy, University of Westminister, London at MACFAST Tiruvalla on 8th October 2015
- Co-ordinator, Seminar on "Laser based non-invasive glucose monitor for people with diabetes" by Prof.Gin Jose, University of Leeds, United Kingdom on 19<sup>th</sup> August 2015.
- Co-ordinator IISER Pune Lecture Workshop on Recent Trends in Life Sciences (IISER Pune outreach programe) organized by School of Biosciences ,MACFAST on 26<sup>th</sup> June 2015
- Co-ordinator , Seminar on "Technological Advances in Biomedical Research in India" organized as part of National Technology Day Celebrations 2015 sponsored by Kerala State Council for Science Technology and Environment, 11th May 2015
- Co-ordinator, Seminar on 'Nanomaterials and Nanocomposites' by Prof.(Dr.) Sabu Thomas, Hon.Director, International Inter University Centre for Nanoscience, MG University, Kottayam, 6<sup>th</sup> May 2015
- Co-ordinator, Seminar on "Seminar on Recent Advances in Plant Science -Metabolic Engineering of Food Crops for the food Security of Nation" organized as part of National Science Day Celebrations 2015 sponsored by Kerala State Council for Science Technology and Environment,28<sup>th</sup> Feb 2015
- Co-ordinator, Seminar on 'Small RNAs and Epigenetics: The dark matter of genomes' by Dr P.V.Shivaprasad, National Centre for Biological Sciences (NCBS) on 5th December 2014
- Co-ordinator, CSP Iyer Memorial Lecture Series, —Membrane transport and its applications in medicine and agriculture by Dr.M.K.Mathew, Professor at National Centre for Biological Sciences (NCBS) on 29th September 2014
- Co- cordinator, Two day lecture workshop ""Molecular Biology in the 21<sup>st</sup> Century" organized during 28<sup>th</sup> and 29<sup>th</sup> March 2014 sponsored by Indian Academy of Science, Bangalore, Indian National Science Academy, New Delhi, The National Academy of Sciences, India, Allahabad
- Co-ordinator, Seminar on "Fostering Scientific Temper for the Upliftment of Society" organized as part of National Science Day Celebrations 2014 sponsored by Kerala State Council for Science Technology and Environment, 28th Feb 2014
- Organizing committee member, International Symposium on "Computational Biology and Drug Design" held at MACFAST from 10<sup>th</sup> July to 12<sup>th</sup> July 2013..
- Co-ordinator, Seminar on "Relevance of GM Crops in Food Security" organized as part of National Science Day Celebrations 2013 sponsored by Kerala State Council for Science Technology and Environment,28<sup>th</sup> Feb 2013

- Co-ordinator Bioscience Seminar Series, Special Lecture by Prof.S.Mahadevan, Indian Institute of Science Bangalore on 20<sup>th</sup> June 2012
- Joint Secretary, International Symposium and Congress on Advances in Herbal Science And technology, 25-27<sup>th</sup> November 2011.
- Co- cordinator, Two day lecture workshop "Evolution and Natural Selection" organized during 29<sup>th</sup> and 30<sup>th</sup> January 2009 sponsored by Indian Academy of Science, Bangalore, Indian National Science Academy, New Delhi, The National Academy of Sciences, India, Allahabad.
- Organizing secretary, International Symposium. Second Green Revolution: Priorities, Programmes, Social and Ethical Issues organized during 2-4 July 2009 at Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram
- Convener, Two week certificate course in Bioinformatics organized by the School of Biosciences during 20<sup>th</sup> July -3<sup>rd</sup> August 2009
- Co-ordinator, "Chromosome Capping and Ribosome Mapping in the light of Nobel Prize 2009" –an interface between scientists, teachers and students, 20<sup>th</sup> October 2009
- Joint Secretary "National Symposium on Recent Trends in Algal Biotechnology" August 3-5,2010
- Organizing committee member, International Symposium on "Food Biotechnology and Nutrition" held at MACFAST on 31st Nov and 1st Dec 2008.
- Co- ordinator ,Two day Lecture Workshop on 'Gene Structure and Function –
  Concepts to New Developments' organized during 31 January and 1 February 2008
  sponsored by Indian Academy of Science, Bangalore, Indian National Science
  Academy, New Delhi, The National Academy of Sciences, India, Allahabad.

#### Invited Talk

- Career Guidance session for B.A. and B.Sc. students of SN College for Women Kollam as part of A Day with Scholar Programme on 15th March 2016.
- Invited lecture on "Career Avenues in Botany" at Fatima Matha National College, Kollam as part of Botany Association Inauguration on 15th February 2016
- A session in Biological Sciences in "Wings of Hope", a seminar on career guidance organized by YMCA Trivandrum in association with Metro Manorama on 30<sup>th</sup> May 2015
- "Excitements And Avenues In Life Science" at Kerala Varma College Thrissur on 19th February 2015
- "Excitements And Avenues In Life Science" at Govt.College Nattakom, Kottayam on 2<sup>nd</sup> February 2015
- Excitements And Avenues In Life Science "at PazhassiRaja College ,Pulpally,Wayanad on 8th August 2014
- Your passion, Your Life "on 24th August 2013 at Sarvodya Central School Trivandrum
- "Excitements And Avenues In Life Science" at Mar Ivanios College on 23rd August 2013

- Invited talk on "Can GM Crops provide Food Security?" given at School of Chemical Sciences, M.G.University Kottayam as part of National Science Day Celebration 2013 on 15th Feb 2013
- Invited lecture at Department of Botany St .Thomas College Kozhencherry as part of Botany Association Inauguration, December 2012
- Career guidance for B.Sc. students at Mar Ivanios College, Trivandrum, 2012
- Resource person for UGC sponsored CSIR coaching at Mar Ivanios College,2008 &,2009
- Resource person for UGC sponsored CSIR coaching at Mahatma Gandhi University,2011, 2010 & 2009.

#### **PUBLICATIONS**

#### **Journals**

- 1. Biju Dharmapalan, Current science, 2015, 109 (7), 1220-1221
- 2. Biju Dharmapalan, Current science, 2013, 105 (12), 1654
- Biju Dharmapalan\*, Renuka S, Jisha, S and Somy Varghese. An Efficient Protocol for Large-Scale Plantlet Production from the Apical Meristem of *MusaParadisiaca* L. cv 'Nendran. International Journal of Agriculture, Environment & Biotechnology, 2013, 6(3): 341-345.
- Beesha S Kamal, Padmaja V, Biju Dharmapalan. Induction of callus from leaf and petiole of the plant Coleus vettiveroids Jacob. Scholars Academic Journal of Biosciences, 2013,1(6), 326-328
- 5. Biju Dharmapalan, Current science, 2012,102 (9), 1245-46
- 6. Biju Dharmapalan, Current science, 2011, 101 (10), 1265
- Biju Dharmapalan et al. Establishment of Fast-Growing Normal Root Culture from the Leaves of Coleus vettiveroides Jacob. Advanced Biotech, 2011, 11 (3),16-18
- 8. Biju Dharmapalan, Current science, 2011, 100 (8), 1119
- Biju Dharmapalan, Arun K Das & N.Stalin. An Efficient Protocol for Multiple Shoot Initiation in Coleus vettiveroides Jacob, Medicinally Important Plant. Advanced Biotech, 2011, 10 (9), 34-36.
- Biju Dharmapalan, Pradeep, D.P. Sajan, J.S & Abhilash Babu. Isolation and characterization of essential from the leaves of *Cymbopogon flexuosus* (Steud.) Wats. Growing in Aryanad. *Journal of Science Technology and Management*, 2011, 3 (4), 5-8.
- 11. Biju Dharmapalan, Current science, 2008,94(11), 1350-51
- 12. Biju Dharmapalan, Current science, 2007,93(11), 1469

- 13. Biju Dharmapalan, Current science, 2006,91(9), 1125
- 14. Biju Dharmapalan, Current science, 2005,88(10)
- 15. Biju Dharmapalan, Current science, 2003,85, 561
- 16. Biju Dharmapalan, Current science, 2002,82, 904
- 17. Biju Dharmapalan, Current science, 2001,81, 629

#### Text Books /Chapters in Books

- ▶ Biju Dharmapalan (2016). Plant Biochemistry- A introduction. Narosa, Delhi
- ➢ Biju Dharmapalan et al. (2014). Elicitors as an inducer of secondary metabolites in plant cell cultures. Recent Progress in Medicinal Plants-Biotechnology and Genetic EngineeringII, Vol 39,eds J.N.Gov &Ananda Kumar. Studium Press LLC, USA. pp 87-94
- Arun K Das, Biju Dharmapalan, Stalin and Karpaga Raja Sundari. (2014). Analysis of Chemical composition leaf essential oil in Toddalia asiatica by GC/MS analysis. In Recent Progress in Medicinal Plants-Biotechnolog and Genetic Engineering II, Vol 39, eds J.N.Govil & Ananda Kumar. Studium Press LLC, USA. pp 87-94
- Biju Dharmapalan (2012). Scientific Research Methodology. Narosa, Delhi
- Biju Dharmapalan, Harinandanan,P.V. Jyothish,M.S. and Meganath,V.(2012) Initiation of multiple show Buds in *Clerodendron inerme*, a mangrove associate. In Non-Timber Forest Products and Medicin Plants-Conservation, improvement and sustainable utilization, eds Sanjay Singh and Rameshwar Da ICFRE, Dehradun. pp 28-32
- ➢ Biju Dharmapalan et al. (2012). Fermented Products from Mango. In Mango Production and Processir Technology, Vol 1,eds Sudha G Valavi et al. Studium Press LLC, USA. pp 648-654
- ➤ Vijayakumaran Nair & Biju Dharmapalan (2012). *Methodology of Plant Science*, 1st edition. Academic Thiruvananthapuram
- Vijayakumaran Nair & Biju Dharmapalan (2011). Methodology and perspectives of Science-Botany,. Academic Thiruvananthapuram
- ➤ Vijayakumaran Nair & Biju Dharmapalan (2010). *Methodology and perspectives of Science-Zoology*,. Academic Thiruvananthapuram
- ➤ AnilKumar, Roy, Biju, D. & Rajith (2011). Botany for plus one, 9th edition. New Jyothi Publication Thiruvananthapuram
- ➤ AnilKumar, Rajith, Roy & Biju, D (2011). Botany for plus two, 9th edition. New Jyothi Publication Thiruvananthapuram

#### **News Paper Article**

- Biju Dharmapalan (2015). Sastram Ennum Nalayum (Malayalam) Bharatdarshan News Paper, Feb 26, 2015.
- Biju Dharmapalan (2011). The politics of Endosulphan: A mockery of humanity?. Merinews, 23<sup>rd</sup> April 2011. (http://www.merinews.com/article/the-politics-of-endosulphan-a-mockery-of-humanity/15848071.shtml)
- Biju Dharmapalan (2010). Standard of science education on the decline in India. Merinews ,27<sup>th</sup>
  Jan 2010. (http://www.merinews.com/article/standard-of-science-education-on-the-decline-in-India/15795593.shtml)
- Koshy Samuel and Biju, D. The Hindu Metro Plus, Trivandrum. 18 June 2001.

#### Magazine Article

- Biju Dharmapalan (2016). Craig Venter The Crazy Scientist who conquered Life . Science India, Vol 19,No.5, pp 23-29
- Biju Dharmapalan (2015) . Unzipping the functions of DNA Repair. Science Reporter. Vol. 52 , No.12, pp 40-42.
- Biju Dharmapalan (2015). Indian Scientist Develops Non-invasive Blood Monitoring Device.
   Science Reporter. Vol. 52, No.12, pp 12-13.
- Biju Dharmapalan (2015) . Evolution at Crossroads-Moving Towards a New Synthetic Biological World. Science Reporter. Vol. 52, No.10, pp 29-32
- Biju Dharmapalan (2015). Satyajit Mayor The Man who Took Cell Biology Serendipitously.
   Science India, Vol 18,No.9, pp 25-27
- Biju Dharmapalan (2015). Dr. Arun Kumar Shukla The Scientist who Elucidated the Structure of G Protein-Coupled Receptors (GPCRs). Science India, Vol 18,No.8, pp 42-44.
- Biju Dharmapalan (2015). What we need is good teachers. Education Insider, May 2015
- Biju Dharmapalan (2015). Scientists in Your Backyard Professor Akhilesh Kumar Tyagi The Man Behind the Indian Initiative on Tomato Genome Sequencing. Science India, Vol 18,No.5, pp 17-18.
- Biju Dharmapalan (2015). Scientists in Your Backyard Prof. Thanu Padmanabhan -The Man who Changed the World of Indian Cosmology . Science India, Vol 18, No. 3, pp 36-38.
- Biju Dharmapalan (2015). Scientists in Your Backyard Prof. P.N. Rangarajan Passionate researcher involved in vaccine production. Science India, Vol 18,No.2, pp 47-49
- Biju Dharmapalan (2015). Discoverers of brain's 'Inner GPS' get 2014 Nobel Recognition. Science India, Vol 18,No.1, pp 21-26.
- Biju Dharmapalan (2014) . Breaking the Abbe's Limit. Science Reporter. Vol. 51, No.12, pp 22-24

- Biju Dharmapalan (2014). Ebola Re-emergence, a Challenging Task for Science and Society.
   Science India, Vol. 17, No. 11, pp 17-23
- Biju Dharmapalan (2014). Scientists in Your Backyard Prof. Vinod Kumar Singh. Science India, Vol. 17, No. 11, pp 31-32.
- Biju Dharmapalan (2014) . Interview with Prof.Ignachumuthu. Science Reporter. Vol. 51, No.9, pp 42-44
- Biju Dharmapalan (2014). Scientists in Your Backyard Prof.Suman Chakraborty A Pioneer in the Field of Microfluidics. Science India, Vol. 17, No. 8, pp 40-42.
- Biju Dharmapalan (2014). Dr. Shweta Tyagi Understanding the Regulation of Cell Cycle. Science India, Vol. 17, No. 6, pp 21-23.
- Biju Dharmapalan (2014). Conserving the Vellayani Lake. Science Reporter. Vol. 51, No.6, pp 22-24
- Biju Dharmapalan (2014) . Fred Sanager Father of Biopolymer Sequencing is no more. Science Reporter. Vol. 51, No.3, pp 22-25
- Biju Dharmapalan (2014). Dr.P.K.K.Nair-The father of Indian Palynology. Science India, Vol. 17, No. 4, pp 29-31.
- Biju Dharmapalan (2014) .Carrying forward the legacy of Indian Medicine-interview with Prof M.S.Valiathan. Science Reporter. Vol. 51, No.12, pp 44-47
- Biju Dharmapalan (2014). Prof. Vijay Kumar Sharma -Physicist Turned Chronobiologist. Science India, Vol. 17, No. 3, pp 32-34.
- Biju Dharmapalan (2014). Prof. M.S. Swaminathan The Pillar Behind India's Green Revolution. Science India., Vol. 17, No. 2, pp 25-27.
- Biju Dharmapalan (2013) .Nobel Recognition for Recognition for Cellular Postal Service. Science Reporter. Vol. 50, No.12, pp 18-19
- Biju Dharmapalan (2013). Prof. Roddam Narasimha The Man Who Loved Aerospace Fluid Dynamics. Science India, Vol. 16, No. 12, pp 22-24.
- Biju Dharmapalan and Jewel C Jose (2013). The Amazing World of Essential Oils. Science India ,Vol. 16, No. 11, pp 41-47
- Biju Dharmapalan (2013). Prof. P. Pushpangadan The Man who Promoted Benefit Sharing of Traditional Knowledge. Science India, Vol. 16, No. 11, pp 25-28.
- Biju Dharmapalan (2013) .Obaid Siddiqi-man who change the outlook of Biological Sciences in India. Science Reporter. Vol. 50, No.10, pp 19-23.
- Biju Dharmapalan (2013). Boon or Bane. Education Insider ,DC Books, 1st October 2013.
   http://www.educationinsider.net

- Biju Dharmapalan (2013). Prof.M.Vijayan-A revolutionist who initiated biophysics research in India.
   Science India. Vol. 16, No. 10, pp 18-21.
- Biju Dharmapalan (2013). Prof.M.S. Valiathan-The man who understood the rhythm of life.. Science
   India. Vol. 16, No. 9, pp 17-19
- Biju Dharmapalan (2013). Book Review on C.V Raman-a biography by Uma Parameswaran..
   Science India. Vol. 16, No. 9, pp 27-30
- Biju Dharmapalan (2013) .Carl Woese. Science Reporter. Vol. 50 , No.7 , pp 24-25.
- Biju Dharmapalan (2013). Dismantle department system to save science education. Education Insider ,DC Books, July 2013, pp 38-39.
- Biju Dharmapalan and Ajith Ashokan (2013) .Myristica Swamps-Evoluntionary Relics .
   Science Reporter. Vol. 50 , No.6, pp 45-48.
- Biju Dharmapalan(2012) . Rewriting the dogma of Life. Science Reporter. Vol. 49, No.12, pp 21-23.
- Biju Dharmapalan, M.S. Jyothish and P.V. Harinandanan (2012). Floral mimicry Nature's deception for survival in plants. Science India. Vol. 15, No.12, pp 21-24.
- Biju Dharmapalan(2012) .Hortus Malabaricus –Celebrating the Tricentennial of a Botanic Epic. Science Reporter. Vol. 49, 10, pp 26-28.
- Biju Dharmapalan Sruthimol C. Bhasi and M.S. Jyothish (2012). Termite A ubiquitous and inimitable creature "Science India. Vol. 15, No. 9, pp 9-13.
- Biju Dharmapalan, M.S. Jyothish, Ajith Asokan and P.V. Harinandanan (2012). Mangrove
   Palm A Versatile Unique Palm. Science Reporter. Vol. 49, No.7, pp 53-54.
- Biju Dharmapalan (2012). Sustainable use of plant biotechnology in agriculture for food security.
   Science India. Vol. 15, No. 5, pp 8-16
- Biju Dharmapalan and K.G. Sreekala (2011). How a flower produces colour? An overview of biochemical aspects behind flower colouration. Science India. Vol. 15. No. 2, pp 4-8.
- Biju Dharmapalan(2011). A Nobel for a Noble Cause. Science Reporter. Vol. 48, No.12,
   December 2011, pp 47-48.
- Biju Dharmapalan, M.S. Jyothish and P.V. Harinandanan(2011). Unsung Heroes of Mangrove Ecosystem—Mangrove Crabs . Science Reporter. Vol. 48, No.10, pp 53-56.
- Biju Dharmapalan & Vanila Varghese(2011). Nature's Geometry-The Fibonacci way. Science India
   Vol. 14, No. 10, pp 4 8.

- Biju Dharmapalan, Abhilash Babu & Arun K. Das (2011). Conserving Screw Pines. Science Reporter. Vol. 48, No.6, pp 56-57.
- Biju Dharmapalan & Harinandanan, P.V. (2011). Are we serious about conserving biodiversity?"
   Science India .Vol. 14, No. 6, pp 16-19.
- Biju Dharmapalan , Karshakan, July 2011, pp 68-70
- Biju Dharmapalan ,Karshakan, June 2011, pp 30-31
- Biju Dharmapalan ,Karshakan, May 2011, pp 30-31
- Biju Dharmapalan ,Karshakan, April 2011, pp 30-31
- Biju Dharmapalan ,Karshakan, March 2011, pp 19-20

#### **Proceedings**

- Biju Dharmapalan, Somy Varghese & Vanila Varghese (2012). Initiation of callus from immature flower buds of *Ensete superbum* (Roxb.) Cheesman. Proceedings of the Third International Seminar on Sustainable Utilization of Tropical Plant Biomass through Biotechnology. KVM College of Engineering &Information Technology, Chertala.
- Renuka,S., Jisha,S., and Biju Dharmapalan (2012). An efficient protocol for large scale plantlet production from the apical meristems of *Musa paradiasica* L.cv.Nendran. Proceedings of the Third International Seminar on Sustainable Utilization of Tropical Plant Biomass through Biotechnology.KVM College of Engineering &Information Technology, Chertala.
- Biju Dharmapalan (2010). Evaluation of antioxidant activity of Musa cultivars using TBARS assay.
  Proceedings National seminar on nutritional phytochemicals. Christain college Kattakada
- Arun,K.D., Stalin, N. and Biu,D. (2008) .In vitro initiation of roots from leaves of Alangium salvifolium (Linn.f.) Wang. Proceedings 7<sup>th</sup> National Seminar on Medicinal Plants. Govt. Ayurveda College, Thiruvananthapuram
- Biju Dharmapalan, Pradeep , Arun and Rajakrishnan (2007). Chemical composition and antimicrobial activity of essential oil from the leaves of Cymbopogon flexuosus (Steud.) Wats. Proceedings 6th National seminar on medicinal plants. Govt. Ayurveda College, Thiruvananthapuram
- Biju Dharmapalan, Pradeep, Stalin and Blessan (2007). Effect of media strength in the multiple shoot production of Bacopa monnieri (L.) Pennell, an important medicinal plant. Proceedings 6<sup>th</sup> National seminar on medicinal plants. Govt. Ayurveda College, Thiruvananthapuram
- Biju Dharmapalan, Abhilash Babu & Rajakrishnan. (2007). Phytochemical investigation and antibacterial activity of Gymnema sylvestre (retz.) r.br. ex roem. schult. and andrographis paniculata (burm.f.) wall. ex nees. Proceedings of the nineteenth Kerala science congress.

- ❖ Biju Dharmapalan & Pradeep, D.P. (2007). Multiple shoot production and biochemical analyses in Bacopa monnieri, an important medicinal plant. Proceedings of the ninety fourth annual session of the Indian science congress association.
- ♣ Biju Dharmapalan et al. (2006). Micropropagation of Gymnemma sylvestre, a vulnerable medicinal plant. Proceedings of the ninety third annual session of the Indian science congress association, Part IV p242.
- Biju,D., Pradeep,D.P. Sajan,J.S. & Chandrapraprabha,M.G.(2006). In vitro culture and biochemical studies of *Cymbopon flexuosus* (steud.) Wats. Proceedings 5th National seminar on medicinal plants. Govt. Ayurveda College, Thiruvananthapuram.
- Vinaya Mohan George, Shafi Thompson & Biju Dharmapalan (2005) . Micropropagation of Syzygium samarangense, a medicinal plant. Proceedings National Symposium on recent trends in biotechnology. Sree Buddha College of Engineering, Alapuzha.
- Biju Dharmapalan (2005). A brief study of effect of various PGRs in the micropropagation of Santalum album L., an endangered plant. 4th National seminar on medicinal plants. Govt Ayurveda College, Thiruvananthapuram.
- Vinil Varghese, Abhilash Babu & Biju Dharmapalan (2005) . Analyzing and characterization of p53 gene (in silico). Proceedings National Symposium on recent trends in biotechnology. Sree Buddha College of Engineering, Alapuzha.
- Vinaya,M.G. Biju,D., Shafi,&K.T.C.Panicker (2005). Induction of callus in endangered medicinal plant Gymnemma sylvestre. Proceedings 4th National seminar on medicinal plants. Govt Ayurveda College, Thiruvananthapuram
- Vinil,V., Biju,D., Pradeep & Mahesh (2005). Bioinformatics a valuable tool in biomedical research. Proceedings 4th National seminar on medicinal plants. Govt Ayurveda College, Thiruvananthapuram.
- Linda, Deepa, Darshana, Biju, Panicker (2005). Study of genetic polymorphism in GSTT1 and GSTM1 Genes. 4th National seminar on medicinal plants. Govt Ayurveda College, Thiruvananthapuram.
- Biju,D. (2000). Conservation of plants in changing world. Proceedings National Environment Awareness Campaign. Centre for Interdisciplinary studies, Trivandrum.
- Biju,D.(1999).Conservation of rare medicinal plant Aristolochia bracteata. Proceedings 9<sup>th</sup> Swadeshi science congress.
- ❖ Biju,D. (1998). *Taxonomy as tool in Biodiversity conservation*. Proceedings International conference on Conservation of Tropical species, communities and ecosystems. TBGRI, Palode.

Biju,D. (1998). Need for tree planting and protection. Proceedings National Environment Awareness Campaign. Centre for Interdisciplinary studies, Trivandrum.

#### Radio Talk

- Interview with Dr Sreekumar, Scientist, JNTBRI on Radio MACFAST 90.4
- Interview with Dr Gin Jose, Professor, University of Leeds, UK on Radio MACFAST 90.4
- Interview with Dr M.K. Mathew, Professor, NCBS on Radio MACFAST 90.4
- ❖ Interview with Rev Dr Kuruvila, regarding Science and Religion on Radio MACFAST 90.4
- Interview with Rev. Dr Ignachumuthu, Former Vice Chancellor of Madras University on Radio MACFAST 90.4

**Hobbies:** Travelling, Reading and Philately

#### **ADDRESS OF REFEREES**

1)Dr . P.V .Shivaprasad

National Centre for Biological Sciences (NCBS) Tata Institute of Fundamental Research GKVK, Bellary Road, Bangalore 560065, India Phone:09740618525

Email: shivaprasad@ncbs.res.in

2) Dr .Babu Philip

Former Professor
Dept. of Marine Biology,
Microbiology & Biochemistry
Cochin University of Science &
Technology (CUSAT).Cochin
Ph: 9847746019

Email: drbabuphilip@gmail.com

3)Dr.V. Nagaraja

Professor
Department of Microbiology
& Cell Biology
Indian Institute of Science
Bangalore
Ph: +91 80 22932598
Email:vraj@mcbl.iisc.ernet.in