

50
YEARS



SOS CHILDREN'S
VILLAGES
INDIA

A loving home for every child

TO WHOMSOEVER IT MAY CONCERN

Jesna CY studying 3rd year BSW in Christ College, Irinjalakuda has successfully completed her internship from 3rd December 2019 to 23rd December 2019 in SOS Children's Village, Puducherry. The intern undertook various significant tasks carried out in our project and was involved in important documentation within the organisation. We wish her best for all her future endeavours.

Purusharth Singh

Village Director



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

SOS Children's Village
Pillaiyarkuppam Post
Bahour Communa
Puducherry 607 402
India

T +91 413 2615976, 2615974
F +91 413 2615974
www.soschildrensvillages.in

National Office
Plot Number 4, Block C-1
Nelson Mandela Marg
Vasant Kunj
New Delhi - 110070
India

T +91-11-43239200
F +91-11-43239292
soscvil@soscvindia.org
www.soschildrensvillages.in



Pondicherry Multipurpose Social Service Society

(Regd. No : 6/77)

#81, Laporte Street, Puducherry - 605 001. Ph : 0413-2222928, Fax : 0413-2222982
Email : pmssspondy@hotmail.com, pmssspondy@gmail.com, Web : www.pmsss.org.in
director.pmsss@gmail.com, Mobile No: 9597555211

Most. Rev. Dr. Antony Anandaryar, D.D., D.C.I.,
President

Fr. C. Joseph Arumaiselvam
Secretary / Executive Director

Date: 20.12.2019

CERTIFICATE

This is to certify that Miss. Hridhya. E.H studying 3rd Year B.S.W in Christ College, Irinjalakuda, Thrissur, Kerala has undergone her Social Work learning and Field Work practices in our Organization (PMSSS) from 02-12-2019 to 21-12-2019. The Trainee had completed her learning and practices successfully. During her Field Work the trainee was punctual and sincere in her assignments.

We wish him all the best.

(Fr. C. Joseph Arumaiselvam)
Executive Director.



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda



ICT ACADEMY OF KERALA

Certificate of Completion

This is to certify that

Mariya Paul

has successfully completed the 10-day virtual training on

Learn Python by Developing a Website

organized by ICT ACADEMY OF KERALA

from 21-Septmeber-2020 to 3-October-2020



5778453-4884-4029-9474-40234407659

Santhosh Kurup
Chief Executive Officer



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

CHILDLINE

Thrissur



04/01/2020

CERTIFICATE

"TO WHOM SO EVER IT MAY CONCERN"

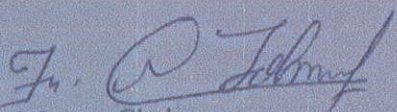
This to certify that **Ms. BETSY DEVASSY** 5th semester BSW student from Christ College, Irinjalakuda, Thrissur has efficiently and effectively served at CHILDLINE, Thrissur from 30th November 2019 to 30th December 2019 (20 days) as a part of their Concurrent Field Work

During the tenure he gained experience in the following fields:

- Assist CHILDLINE team to conduct case enquiries and home studies
- Engaged in CHILDLINE special programmes and outreach activities
- Participated in CHILDLINE awareness programme
- Assist CHILDLINE team in documentation process

This is to further certify that the CHILDLINE 1098 service is a 24 hour free emergency phone outreach service for children in need of care and protection. This is a project supported by the **Union Ministry of Women and Child Development** and linking state Governments and NGOs.

During the period of her service, I found her sincere, pleasant, open to challenge and dedicated with professional attitude. We wish her all the best in her future career endeavor.


Fr. Johnson Chalissery
Director, collaborative organization
CHILDLINE, Thrissur



COLLABORATIVE ORGANISATION
ST. CHRISTINA HOME,
PULLAZHI, THRISSUR - 680 012



NODAL ORGANISATION
VIMALA COLLEGE,
CHEROOR, THRISSUR - 680 009
Fr. Dr. Jolly Andrews
Assistant Professor -
In-charge of Principal

Christ College (Autonomous)
Irinjalakuda

"A project of the Ministry of Women and Child Development (G O I) in partnership with State Government, NGOs, Corporate sector and concerned individuals"



ICT ACADEMY OF KERALA

Certificate of Completion

This is to certify that

Alan Roy Achandy

has successfully completed the 10-day virtual training on

Learn Python by Developing a Website

organized by ICT ACADEMY OF KERALA

from 21-Septmeber-2020 to 3-October-2020



5f78444b-249c-4acc-98ed-41172640f659

Santhosh Kurup
Chief Executive Officer



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda



ICT ACADEMY OF KERALA

Certificate of Completion

This is to certify that

Edwin K J

has successfully completed the 10-day virtual training on

Learn Python by Developing a Website

organized by ICT ACADEMY OF KERALA

from 21-Septmeber-2020 to 3-October-2020



5778225-079-4594-9099-4502340065

Santhosh Kurup
Chief Executive Officer



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

50
YEARS




SOS CHILDREN'S
VILLAGES
INDIA

A loving home for every child

TO WHOMSOEVER IT MAY CONCERN

Aswani AS studying 3rd year BSW in Christ College, Irinjalakuda has successfully completed her internship from 3rd December 2019 to 23rd December 2019 in SOS Children's Village, Puducherry. The intern undertook various significant tasks carried out in our project and was involved in important documentation within the organisation. We wish her best for all her future endeavours.


Purusharth Singh
Village Director





Fr. Dr. Jolly Andrews
Assistant Professor 3 / 4
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

SOS Children's Village
Pillayaruppam Post
Bahour Commune
Puducherry 607 402
India

T +91 413 2615976, 2615974
F +91 413 2615974
www.soschildrensvillages.in

National Office
Plot Number 4, Block C-1
Nelson Mandela Marg
Vasant Kunj
New Delhi - 110070
India

T +91-11-43239200
F +91-11-43239292
soscv@soscvindia.org
www.soschildrensvillages.in



Certificate of Internship

Dear Mr. Arshak Babu P.P
from Christ College Irinjalakuda, Thrissur, Kerala
Youth for Seva congratulates you for your endearing and
committed service as an Intern.

Assigned Projects CSR Volunteering

Date 03/12/2019 to 23/12/2019

DATE : 23/12/2019


COORDINATOR





Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

Government of India
Ministry of Youth Affairs And Sports
NEHRU YUVA KENDRA
Thiruvananthapuram



Government of India
Ministry of Information & Broadcasting
REGIONAL OUTREACH BUREAU
Thiruvananthapuram

Certificate of Participation

This Certificate is presented to


Vinimariya Vincent

for active participation in the Webinar on
Cyber Space – Emerging Issues and Threats

L.C. Ponnunon
Field Exhibition Officer
Field Outreach Bureau
Govt. of India, Ministry of I & B
Kochi-682 037

18/12/2020

Issued on


B ALI SABRIN
District Youth Coordinator
Nehru Yuva Kendra
Thiruvananthapuram, Kerala

Made for free with Certify'em



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

GERIZIM REHABILITATION TRUST

(Registered under Karnataka Charitable Act. Regn. No. : 321 / 1990 – 91 dt.23.08.1990)

Head Office:

24th "D" Cross, Ejipura
Viveknagar, Bangalore –5600 47
Karnataka State, South India



Tel: 080- 2571 2015, 2571 3201

E-Mail: gerizimhelp@gmail.com

Web Site: www.gerizimhome.com

A Charitable Institution

FOUNDER: G.J. Yesudian M.A., B.Ed., D.S.S.D.H.

TREASURER / PRINCIPAL: Indira Yesudian B.A., M.Ed., D.S.E.

DIRECTOR: Joseph Ponraj

SECRETARY: S. Geetha Bai B.Com

Date: 21st December 2019

To,

The Head of the Department

Department of Social Work

Christ College (Autonomous) Irinjalakuda

Irinjalakuda North, Thrissur Dist., Kerala – 680 125.

Exposure - Interns - Department of Social Work - Christ College (Autonomous) Certificate - Active Involvement - Ananthakrishnan K S - Final Year BSW


This does serve to inform you kindly that your bonafide students (final year BSW) – **Ananthakrishnan K S**, has undergone his field work training at our Institution from 2nd December 2019 to 21st December 2019 for 20 days as required of them.

During the course of their practical exposure, they have involved to fulfill their objectives to an extent.

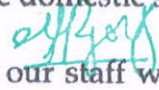
01. Opportunities provided to practice their spoken English.
02. Chances given to develop their communication skill to express their mind in words/actions to be an effective social work.
03. Dealt directly with the mentally challenged children in our organization.
04. Learnt to adjust with the existing situation while reaching out to needy people around on social service.
05. Engaged keenly to improve upon their personality.

As a part of the program, they took time to understand the mindset/background of the special children, occupied them to refresh their minds & target them simple domestic skills.

They cooperated well with our management & their rapport with our staff was congenial. We wish him well for bright career.


Joseph Ponraj
Director




Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

International Conference On Employment Opportunities in the field of Social Science



SAROVARAM
Center for Promotion of
National Integration and
Community Development



NEHRU YUVA KENDRA
Ministry of Youth Affairs and Sports



DEPT. OF SOCIOLOGY
UNIVERSITY OF KERALA
Thiruvananthapuram

CERTIFICATE OF PARTICIPATION

This is to certify that Prof./ Dr./ Mr./ Ms./ Mrs.

Soorya Mahadev M S

has participated in the *International Conference On Employment Opportunities in the field of Social Science* jointly organized by **Sarovaram** Center for the Promotion of National Integration and Community Development, **Nehru Yuva Kendra**, Thiruvananthapuram and **Dept. of Sociology**, University of Kerala Thiruvananthapuram, held on 13, 14, 15 and 16 February 2021.

Chairperson
SAROVARAM, Kerala

District Youth Officer
Nehru Yuva Kendra, Thiruvananthapuram,
Kerala

Organising Secretary
Dept. of Sociology,
University of Kerala.



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

பழங்குடியினர் மற்றும் கிராமிய அபிவிருத்தி கைய அறக்கட்டளை
CENTRE FOR TRIBALS AND RURAL DEVELOPMENT TRUST (CTRD)

Ref:

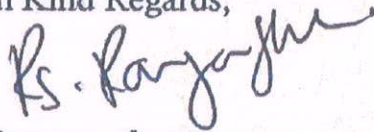
Date: 24.12.2019

TO WHOM SO EVER IT MAY CONCERN

This is to certify that ANANDAPADMANABHAN K.S, BSW (SF) from, Christ College, Irinjalakuda, Thrissur, he completed his 20 Days Fieldwork at CTRD Trust from 2nd to 24th December' 2019.

During his tenure we found his to be sincere & hard working. We wish him all the best for his future endeavors.

With Kind Regards,



RS.Ranganathan
Managing Trustee



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

Indra Nagar, Nanthatty Post, Gudalur, The Nilgiris - 643212, Tamil Nadu, India. Ph : 04262 262962, 262972

E-mail: ctrdtrust@gmail.com, ctrd@ctrdtrust.org Website: www.ctrdtrust.org



National Service Scheme
Thiruvananthapuram



Govt. of India
Ministry of Youth Affairs and Sports



NEHRU YUVA KENDRA
Thiruvananthapuram

Certificate of Participation

This is to certify that Mr./ Ms./ Mrs

Soorya mahadev.m.s

has participated the webinar on **National Youth Parliament Festival 2020 - 21** jointly organized
by **Nehru Yuva Kendra Thiruvananthapuram** and **National Service Scheme
Thiruvananthapuram** held on 28th December 2020.

Dr. ANZER R L
District Programme Officer
National Service Scheme
Thiruvananthapuram, Kerala

28/12/2020

Issued on

B ALI SABRIN
District Youth Officer
Nehru Yuva Kendra
Thiruvananthapuram, Kerala

Made for free with Certify'em



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda



OPEN SHELTER HOME FOR BOYS

An AWH Project Assisted by Ministry of Women and Child Development Govt. of India
H.No. 17/385, Bank Road, Temple Lane, Near Kanaka Sree Auditorium, Calicut - 673 001, Ph: 0495-2727650
web : www.awhonline.com, E-mail: awhfreebirds@gmail.com, awhcalicut@gmail.com, Fax : 0495 272008

23-12-2019

CERTIFICATE

This is to certify that **Ms. Akhila Jaison** sixth semester Bachelor of Social Work, Christ College (Autonomous) Irinjalakuda, Thrissur has undergone Placement field work training for 20 days at Free birds Open Shelter Home-Kozhikode, a project under the Association for Welfare of the Handicapped (AWH) assisted by the Ministry of Women and Child Government of India. During the period from 2nd December 2019 to 23rd December 2019

During here field work she was found active and involved in various activities of the organization.

We wish her all the best in future

ANEESH V.



CO-ORDINATOR
FREE BIRDS
Open Shelter Home
For Boys
Kozhikode-673001



Fr. Dr. Jolly Andrews
Assistant Professor
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

International Conference On Employment Opportunities in the field of Social Science



SAROVARAM
Center for Promotion of
National Integration and
Community Development



GOVERNMENT OF INDIA
NEHRU YUVA KENDRA
Ministry of Youth Affairs and Sports



DEPT. OF SOCIOLOGY
UNIVERSITY OF KERALA
Thiruvananthapuram

CERTIFICATE OF PARTICIPATION

This is to certify that Prof./ Dr./ Mr./ Ms./ Mrs.

Richa Joseph

has participated in the *International Conference On Employment Opportunities in the field of Social Science* jointly organized by **Sarovaram** Center for the Promotion of National Integration and Community Development, **Nehru Yuva Kendra**, Thiruvananthapuram and **Dept. of Sociology**, University of Kerala Thiruvananthapuram, held on 13, 14, 15 and 16 February 2021.

Chairperson
SAROVARAM, Kerala

District Youth Officer
Nehru Yuva Kendra, Thiruvananthapuram,
Kerala

Organising Secretary
Dept. of Sociology,
University of Kerala.



Fr. Dr. Jolly Andrew
Assistant Professor-
In-charge of Principal
Christ College Pattanam
Injalakuda



National Service Scheme
Thiruvananthapuram



Govt. of India
Ministry of Youth Affairs and Sports



NEHRU YUVA KENDRA
Thiruvananthapuram

Certificate of Participation

This is to certify that Mr./ Ms./ Mrs.

Noyal p anto

has participated the webinar on **National Youth Parliament Festival 2020 - 21** jointly organized by **Nehru Yuva Kendra Thiruvananthapuram** and **National Service Scheme Thiruvananthapuram** held on 28th December 2020.

Dr. ANZER R L
District Programme Officer
National Service Scheme
Thiruvananthapuram, Kerala

28/12/2020

Issued on

B ALI SABRIN
District Youth Officer
Nehru Yuva Kendra
Thiruvananthapuram, Kerala

Made for free with Certify'em



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

50
YEARS



SOS CHILDREN'S
VILLAGES
INDIA

A loving home for every child

TO WHOMSOEVER IT MAY CONCERN

Abhirami KP studying 3rd year BSW in Christ College, Irinjalakuda has successfully completed her internship from 3rd December 2019 to 23rd December 2019 in SOS Children's Village, Puducherry. The intern undertook various significant tasks carried out in our project and was involved in important documentation within the organisation. We wish her best for all her future endeavours.

Purusharth Singh

Village Director



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

SOS Children's Village
Pillayarkuppam Post
Bahour Commune
Puducherry 607 402
India

T +91 413 2615976, 2615974
F +91 413 2615974
www.soschildrensvillages.in

National Office
Plot Number 4, Block C-I
Nelson Mandela Marg
Vasant Kunj
New Delhi - 110070
India

T +91-11-43239200
F +91-11-43239292
soscv@soscvindia.net
www.sosc*

பழங்குடியினர் மற்றும் கிராமிய அபிவிருத்தி கைய அறக்கட்டளை
CENTRE FOR TRIBALS AND RURAL DEVELOPMENT TRUST (CTRD)

Ref:

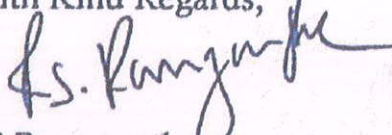
Date: 24.12.2019

TO WHOM SO EVER IT MAY CONCERN

This is to certify that VIPIN BABU A., BSW (SF) from, Christ College, Irinjalakuda, Thrissur, he completed his 20 Days Fieldwork at CTRD Trust from 2nd to 24th December' 2019.

During his tenure we found his to be sincere & hard working. We wish him all the best for his future endeavors.

With Kind Regards,



RS.Ranganathan
Managing Trustee



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

Indra Nagar, Nanthally Post, Gudalur, The Nilgiris - 643212, Tamil Nadu, India. Ph : 04262 262962, 262972

E-mail: ctrdtrust@gmail.com, ctrd@ctrdtrust.org Website: www.ctrdtrust.org


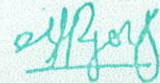
21st December 2019

TO WHOM SO EVER IT MAY CONCERN

This is to certify that **Ms. Surabhi Suresh** from **Christ College Irinjalakuda (Autonomous), Thrissur** has successfully completed her 20 days field work at Shreyas, Sulthan Bathery, Wayanad from 2nd December 2019 to 21st December 2019. During the internship, she got opportunity to familiarize herself with different departments and community development initiatives of Shreyas and practice social work methods. She did following activities during her placement very sincerely and efficiently.

- Learned Administrative Structure and Organizational Profile
- Conducted training programme and sports meet for tribal community
- Conducted group work
- Coordinated Recovery activities for the victims of Kerala Floods 2018
- Prepared Case Study and practised Case Work
- Documentation of the programmes
- Conducted social experiment and collective action
- Organized street play
- Participated in the 4 tier evaluation process of Shreyas

We wish all success in her future endeavors.



Adv. Fr. Benny Edayath
Executive Director



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

21st December 2019

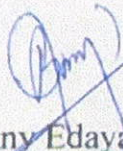
TO WHOM SO EVER IT MAY CONCERN

This is to certify that **Mr. Sujin Gigi** from **Christ College Irinjalakuda (Autonomous), Thrissur** has successfully completed his 20 days field work at Shreyas, Sulthan Bathery, Wayanad from 2nd December 2019 to 21st December 2019. During the internship, he got opportunity to familiarize himself with different departments and community development initiatives of Shreyas and practice social work methods. He did following activities during his placement very sincerely and efficiently.

- Learned Administrative Structure and Organizational Profile
- Conducted training programme and sports meet for tribal community
- Conducted group work
- Coordinated Recovery activities for the victims of Kerala Floods 2018
- Prepared Case Study and practised Case Work
- Documentation of the programmes
- Conducted social experiment and collective action
- Organized street play
- Participated in the 4 tier evaluation process of Shreyas

Sujin Gigi

We wish all success in his future endeavors


Adv. Fr. Benny Edayath
Executive Director



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda



Since : 1960

QUILON SOCIAL SERVICE SOCIETY (Q.S.S.S)

(Reg No. Q137/60)

Fatima Road, Kollam- 691 013, Kerala

Certificate of Completion

This is to certify that SIYA SHABU *of* CHRIST COLLEGE, IRINJALAKUDA

has successfully completed the Concurrent Field Work / Block Placement

for 20 *days at this Organization from* 02-12-2019 *to* 27-12-2019

Date.. 27/12/2019

Abraham
Agency Supervisor



Abraham
Director

affairs



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda



OPEN SHELTER HOME FOR BOYS

An AWH Project Assisted by Ministry of Women and Child Development Govt. of India

H.No. 17/385, Bank Road, Temple Lane, Near Kanaka Sree Auditorium, Calicut - 673 001, Ph: 0495-2727850
web : www.awhonline.com, E-mail: awhfreebirds@gmail.com, awhcalicut@gmail.com, Fax : 0495 272008


23-12-2019

CERTIFICATE

This is to certify that Ms. Silpa Varghese sixth semester Bachelor of Social Work, Christ College (Autonomous) Irinjalakuda, Thrissur has undergone Placement field work training for 20 days at Free birds Open Shelter Home- Kozhikode, a project under the Association for Welfare of the Handicapped (AWH) assisted by the Ministry of Women and Child Government of India. During the period from 2nd December 2019 to 23rd December 2019

During here field work she was found active and involved in various activities of the organization.

We wish her all the best in future

ANESH.V. 



CO-ORDINATOR
FREE BIRDS
Open Shelter Home
For Boys
Kozhikode-673001

Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

GERIZIM REHABILITATION TRUST

(Registered under Karnataka Charitable Act. Regn. No. : 321 / 1990 – 91 dt.23.08.1990)

Head Office:

24th "D" Cross, Ejipura
Viveknagar, Bangalore –5600 47
Karnataka State, South India



Tel: 080- 2571 2015, 2571 3201

E-Mail: gerizimhelp@gmail.com

Web Site: www.gerizimhome.com

A Charitable Institution

FOUNDER: G.J. Yesudian M.A., B.Ed., D.S.S.D.H.

TREASURER / PRINCIPAL: Indira Yesudian B.A., M.Ed., D.S.E.

DIRECTOR: Joseph Ponraj

SECRETARY: S. Geetha Bai B.Com

Date: 21st December 2019

To,
The Head of the Department
Department of Social Work
Christ College (Autonomous) Irinjalakuda
Irinjalakuda North, Thrissur Dist., Kerala – 680 125.

Exposure - Interns - Department of Social Work - Christ College (Autonomous) Certificate - Active Involvement - Sani Simon - Final Year BSW

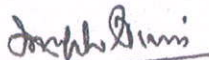
This does serve to inform you kindly that your bonafide students (final year BSW) – Sani Simon, has undergone his field work training at our Institution from 2nd December 2019 to 21st December 2019 for 20 days as required of them.

During the course of their practical exposure, they have involved to fulfill their objectives to an extent.

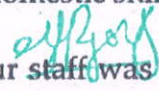
01. Opportunities provided to practice their spoken English.
02. Chances given to develop their communication skill to express their mind in words/actions to be an effective social work.
03. Dealt directly with the mentally challenged children in our organization.
04. Learnt to adjust with the existing situation while reaching out to needy people around on social service.
05. Engaged keenly to improve upon their personality.

As a part of the program, they took time to understand the mindset/background of the special children, occupied them to refresh their minds & target them simple domestic skills.

They cooperated well with our management & their rapport with our staff was congenial. We wish him well for bright career.


Joseph Ponraj
Director




Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda



Certificate of Internship

Dear Ms. Sandhya A.S
from Christ College Irinjalakuda, Thrissur, Kerala
Youth for Seva congratulates you for your endearing and
committed service as an Intern.

Assigned Projects CSR Volunteering

Date 03/12/2019 to 23/12/2019

DATE : 23/12/2019


COORDINATOR





Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda



Pondicherry Multipurpose Social Service Society

(Regd. No : 6/77)

#81, Laporte Street, Puducherry - 605 001. Ph : 0413-2222928, Fax : 0413-2222982
Email : pmssspondy@hotmail.com, pmssspondy@gmail.com, Web : www.pmsss.org.in

director.pmsss@gmail.com,

Mobile No: 9597555211

Most. Rev. Dr. Antony Anandaryar, D.D., D.C.I.,
President

Fr. C. Joseph Arumaiselvam
Secretary / Executive Director

Date: 20.12.2019

CERTIFICATE

This is to certify that **Miss. Revathy. P.M** studying **3rd Year B.S.W** in **Christ College, Irinjalakuda, Thrissur, Kerala** has undergone her **Social Work learning and Field Work practices** in our Organization (PMSSS) from **02-12-2019 to 21-12-2019**. The Trainee had completed her **learning and practices successfully**. During her Field Work the trainee was **punctual and sincere** in her assignments.

We wish him all the best.

(Fr. C. Joseph Arumaiselvam)
Executive Director.



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda



Pondicherry Multipurpose Social Service Society

(Regd. No : 6/77)

#81, Laporte Street, Puducherry - 605 001. Ph : 0413-2222928, Fax : 0413-2222982
Email : pmssspondy@hotmail.com, pmssspondy@gmail.com, Web : www.pmsss.org.in
director.pmsss@gmail.com, Mobile No: 9597555211

Most. Rev. Dr. Antony Anandaryar, D.D., D.C.I.
President

Fr. C. Joseph Arumaiselvam
Secretary / Executive Director

Date: 20.12.2019

CERTIFICATE

This is to certify that Miss. Renjitha. M.R studying 3rd Year B.S.W in Christ College, Irinjalakuda, Thrissur, Kerala has undergone her Social Work learning and Field Work practices in our Organization (PMSSS) from 02-12-2019 to 21-12-2019. The Trainee had completed her learning and practices successfully. During her Field Work the trainee was punctual and sincere in her assignments.

We wish him all the best.

(Fr. C. Joseph Arumaiselvam)
Executive Director.



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

GERIZIM REHABILITATION TRUST

(Registered under Karnataka Charitable Act. Regn. No. : 321 / 1990 - 91 dt.23.08.1990)

Head Office:

24th "D" Cross, Ejjipura
Viveknagar, Bangalore -5600 47
Karnataka State, South India



Tel: 080- 2571 2015, 2571 3201

E-Mail: gerizimhelp@gmail.com

Web Site: www.gerizimhome.com

A Charitable Institution

FOUNDER: G.J. Yesudian M.A., B.Ed., D.S.S.D.H.

TREASURER / PRINCIPAL: Indira Yesudian B.A., M.Ed., D.S.E.

DIRECTOR: Joseph Ponraj

SECRETARY: S. Geetha Bai B.Com

Date: 21st December 2019

To,

The Head of the Department

Department of Social Work

Christ College (Autonomous) Irinjalakuda

Irinjalakuda North, Thrissur Dist., Kerala - 680 125.

Exposure - Interns - Department of Social Work - Christ College (Autonomous) Certificate - Active Involvement - Rahul Nelson M D - Final Year BSW

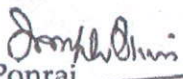
This does serve to inform you kindly that your bonafide students (final year BSW) - **Rahul Nelson M D**, has undergone his field work training at our Institution from 2nd December 2019 to 21st December 2019 for 20 days as required of them.

During the course of their practical exposure, they have involved to fulfill their objectives to an extent.

01. Opportunities provided to practice their spoken English.
02. Chances given to develop their communication skill to express their mind in words/actions to be an effective social work.
03. Dealt directly with the mentally challenged children in our organization.
04. Learnt to adjust with the existing situation while reaching out to needy people around on social service.
05. Engaged keenly to improve upon their personality.

As a part of the program, they took time to understand the mindset/background of the special children, occupied them to refresh their minds & target them simple domestic skills.

They cooperated well with our management & their rapport with our staff was congenial. We wish him well for bright career.


Joseph Ponraj
Director



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda



TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Mr. Manu Johnson** pursuing BSW from Christ College, **Irinjalakuda** has volunteered with Samarthanam Cochin branch from 2nd December to 30th December 2019 and completed 20 days of service.

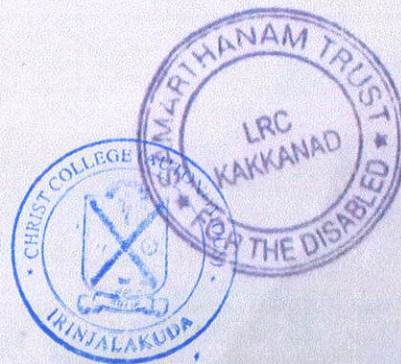
While in Samarthanam he worked in livelihood resource center. The main role assigned to him was job placement support where he contacted many prospective recruiters to place the students undertaking the course. He has taught students basic about innovation and need to update themselves with industry required skills as a part of national education day, then he conducted a one-hour training on presentation skills and how to improve the presentation skills. He helped with the presentations and idea generation on improving the visibility and awareness about the course. We found him sincere throughout the whole period and wish him all the best for his future endeavors.

This organization is a registered NGO working towards the empowerment of persons with disabilities, and underprivileged people through various developmental initiatives focusing on educational, social, economic, cultural and technological aspects and to create an inclusive and indiscriminate society for them.

Joy Antony

Lead- LRC Kochi

30.12.2019



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

50
YEARS



SOS CHILDREN'S
VILLAGES
INDIA

A loving home for every child

TO WHOMSOEVER IT MAY CONCERN

Abhirami KP studying 3rd year BSW in **Christ College, Irinjalakuda** has successfully completed her internship from **3rd December 2019** to **23rd December 2019** in **SOS Children's Village, Puducherry**. The intern undertook various significant tasks carried out in our project and was involved in important documentation within the organisation. We wish her best for all her future endeavours.

Purusharth Singh

Village Director



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

SOS Children's Village
Pillayarkuppam Post
Bahour Commune
Puducherry 607 402
India

T +91 413 2615976, 2615974
F +91 413 2615974
www.soschildrensvillages.in

National Office
Plot Number 4, Block C-1
Nelson Mandela Marg
Vasant Kunj
New Delhi - 110070
India

T +91-11-43239200
F +91-11-43239292
soscvl@soscvindia.org
www.soschildrensvillages.in

50
YEARS




SOS CHILDREN'S
VILLAGES
INDIA

A loving home for every child

TO WHOMSOEVER IT MAY CONCERN

Aswani AS studying 3rd year BSW in Christ College, Irinjalakuda has successfully completed her internship from 3rd December 2019 to 23rd December 2019 in SOS Children's Village, Puducherry. The intern undertook various significant tasks carried out in our project and was involved in important documentation within the organisation. We wish her best for all her future endeavours.


Purusharth Singh
Village Director





Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

SOS Children's Village
Pillayarkuppam Post
Bahour Commune
Puducherry 607 402
India

T +91 413 2615976, 2615974
F +91 413 2615974
www.soschildrensvillages.in

National Office
Plot Number 4, Block C-I
Nelson Mandela Marg
Vasant Kunj
New Delhi - 110070
India

T +91-11-43239200
F +91-11-43239292
sosvi@sosvindia.org
www.soschildrensvillages.in

50
YEARS



SOS CHILDREN'S
VILLAGES
INDIA

A loving home for every child

TO WHOMSOEVER IT MAY CONCERN

Jesna CY studying 3rd year BSW in Christ College, Irinjalakuda has successfully completed her internship from 3rd December 2019 to 23rd December 2019 in SOS Children's Village, Puducherry. The intern undertook various significant tasks carried out in our project and was involved in important documentation within the organisation. We wish her best for all her future endeavours.

Purusharth Singh

Village Director



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

50
YEARS



SOS CHILDREN'S
VILLAGES
INDIA

A loving home for every child

TO WHOMSOEVER IT MAY CONCERN

Maneesha KP studying 3rd year BSW in **Christ College, Irinjalakuda** has successfully completed her internship from 3rd December 2019 to 23rd December 2019 in **SOS Children's Village, Puducherry**. The intern undertook various significant tasks carried out in our project and was involved in important documentation within the organisation. We wish her best for all her future endeavours.

Purusharth Singh

Village Director



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

SOS Children's Village
Pillayarkuppam Post
Bahour Commune
Puducherry 607 402
India

T +91 413 2615976, 2615974
F +91 413 2615974
www.soschildrensvillages.in

National Office
Plot Number 4, Block C-1
Nelson Mandela Marg
Vasant Kunj
New Delhi - 110070
India

T +91-11-43239200
F +91-11-43239292
soscv@soscvindia.org
www.soschildrensvillages.in



TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms. Lekshmi Priya T U** pursuing BSW from Christ College, Irinjalakuda has volunteered with Samarthanam Cochin branch from 2nd December to 30th December 2019 and completed 20 days of service.

While in Samarthanam she worked in livelihood resource center. The main role assigned to her was job placement support where she contacted many prospective recruiters to place the students undertaking the course. She has taught students basic about innovation and need to update themselves with industry required skills as a part of national education day, then she conducted a one-hour training on presentation skills and how to improve the presentation skills. She helped with the presentations and idea generation on improving the visibility and awareness about the course. We found her sincere throughout the whole period and wish her all the best for her future endeavors.

This organization is a registered NGO working towards the empowerment of persons with disabilities, and underprivileged people through various developmental initiatives focusing on educational, social, economic, cultural and technological aspects and to create an inclusive and indiscriminate society for them.

Joy Antoney

Lead- LRC Kochi

30.12.2019



Fr. Dr. Jolly Andrews
Assistant Professor-
in-charge of Principal
Christ College (Autonomous)
Irinjalakuda



Pondicherry Multipurpose Social Service Society

(Regd. No : 6/77)

#81, Laporte Street, Puducherry - 605 001. Ph : 0413-2222928, Fax : 0413-2222982
Email : pmssspondy@hotmail.com, pmssspondy@gmail.com, Web : www.pmsss.org.in
director.pmsss@gmail.com, Mobile No: 9597555211

Most. Rev. Dr. Antony Anandaryar, D.D., D.C.I., -
President

Fr. C. Joseph Arumaiselvam
Secretary / Executive Director

Date: 20.12.2019

CERTIFICATE

This is to certify that Miss. Hridhya. E.H studying 3rd Year B.S.W in Christ College, Irinjalakuda, Thrissur, Kerala has undergone her Social Work learning and Field Work practices in our Organization (PMSSS) from 02-12-2019 to 21-12-2019. The Trainee had completed her learning and practices successfully. During her Field Work the trainee was punctual and sincere in her assignments.

We wish him all the best.

(Fr. C. Joseph Arumaiselvam)
Executive Director.



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

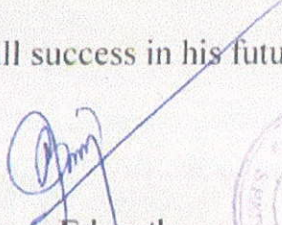
21st December 2019

TO WHOM SO EVER IT MAY CONCERN

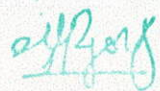
This is to certify that **Mr. Ashish Manohar** from **Christ College Irinjalakuda (Autonomous), Thrissur** has successfully completed his 20 days field work at Shreyas, Sulthan Bathery, Wayanad from 2nd December 2019 to 21st December 2019. During the internship, he got opportunity to familiarize himself with different departments and community development initiatives of Shreyas and practice social work methods. He did following activities during his placement very sincerely and efficiently.

- Learned Administrative Structure and Organizational Profile
- Conducted training programme and sports meet for tribal community
- Conducted group work
- Coordinated Recovery activities for the victims of Kerala Floods 2018
- Prepared Case Study and practised Case Work
- Documentation of the programmes
- Conducted social experiment and collective action
- Organized street play
- Participated in the 4 tier evaluation process of Shreyas

We wish all success in his future endeavors.


Adv. Fr. Benny Edayath
Executive Director




Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda



(04936) 220479
9497705392



No .77 ,Sulthan Bathery-673592
Wayanad, Kerala, India.



shreyasbathery@gmail.com
shreyaswayanad@gmail.com



www.shreyas.org
<https://www.facebook.com/shreyassby>



PUNARJANI

CHARITABLE TRUST FOR DE-ADDICTION & REHABILITATION

Reg. No. 217/2004

POOMALA P.O, Thrissur, Kerala Pin : 680 581

Phone: 0487-2201015, 9747201015, 9744830474, 8281478832, Web: www.punarjani.org, E-mail: punarjanipoomala@yahoo.com

TO WHOM SO EVER IT MAY CONCERN

This is to certify that Ms. ANUPAMA. P S, D/o. Sajeevan P A, final year student of B.S.W (Roll No: CCARBSW002), Christ College Autonomous, Irinjalakuda, India, has under gone for field work from 2nd December 2019 to 21st December 2019 at this institution. During the period of her field work, she was found punctual, hardworking and inquisitive.

We wish all success in her future endeavor.

Poomala

21/12/2019

Dr. Johns K. Mangalam, Ph.D., LLB

Reg. No. 217/2004

Poomala. P.O.
Thrissur

Managing Director.



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda



Scanner Pro

GERIZIM REHABILITATION TRUST

(Registered under Karnataka Charitable Act. Regn. No. : 321 / 1990 – 91 dt.23.08.1990)

Head Office:

24th "D" Cross, Ejipura
Viveknagar, Bangalore –5600 47
Karnataka State, South India



Tel: 080- 2571 2015, 2571 3201

E-Mail: gerizimhelp@gmail.com

Web Site: www.gerizimhome.com

A Charitable Institution

FOUNDER: G.J. Yesudian M.A., B.Ed., D.S.S.D.H.

TREASURER / PRINCIPAL: Indira Yesudian B.A., M.Ed., D.S.E.

DIRECTOR: Joseph Ponraj

SECRETARY: S. Geetha Bai B.Com

Date: 21st December 2019

To,

The Head of the Department

Department of Social Work

Christ College (Autonomous) Irinjalakuda

Irinjalakuda North, Thrissur Dist., Kerala – 680 125.

Exposure - Interns - Department of Social Work - Christ College (Autonomous) Certificate - Active Involvement - Ananthkrishnan K S - Final Year BSW

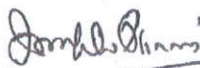
This does serve to inform you kindly that your bonafide students (final year BSW) – **Ananthkrishnan K S**, has undergone his field work training at our Institution from 2nd December 2019 to 21st December 2019 for 20 days as required of them.

During the course of their practical exposure, they have involved to fulfill their objectives to an extent.

01. Opportunities provided to practice their spoken English.
02. Chances given to develop their communication skill to express their mind in words/actions to be an effective social work.
03. Dealt directly with the mentally challenged children in our organization.
04. Learnt to adjust with the existing situation while reaching out to needy people around on social service.
05. Engaged keenly to improve upon their personality.

As a part of the program, they took time to understand the mindset/background of the special children, occupied them to refresh their minds & target them simple domestic skills.

They cooperated well with our management & their rapport with our staff was congenial. We wish him well for bright career.


Joseph Ponraj
Director




Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

பழங்குடியினர் மற்றும் கிராமிய அபிவிருத்தி மைய அறக்கட்டளை
CENTRE FOR TRIBALS AND RURAL DEVELOPMENT TRUST (CTRD)

Ref:

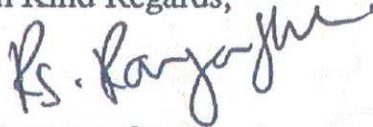
Date: 24.12.2019

TO WHOM SO EVER IT MAY CONCERN

This is to certify that ANANDAPADMANABHAN K.S, BSW (SF) from, Christ College, Irinjalakuda, Thrissur, he completed his 20 Days Fieldwork at CTRD Trust from 2nd to 24th December' 2019.

During his tenure we found his to be sincere & hard working. We wish him all the best for his future endeavors.

With Kind Regards,



RS.Ranganathan
Managing Trustee



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

Indra Nagar, Nanthatty Post, Gudalur, The Nilgiris - 643212, Tamil Nadu, India. Ph : 04262 262962, 262972

E-mail: ctrdtrust@gmail.com, ctrd@ctrdtrust.org Website: www.ctrdtrust.org



OPEN SHELTER HOME FOR BOYS

An AWH Project Assisted by Ministry of Women and Child Development Govt. of India
H.No. 17/385, Bank Road, Temple Lane, Near Kanaka Sree Auditorium, Calicut - 673 001, Ph: 0495-2727650
web : www.awhonline.com, E-mail: awhfreebirds@gmail.com, awhcalicut@gmail.com, Fax : 0495 272008

23-12-2019

CERTIFICATE

This is to certify that **Ms. Akhila Jaison** sixth semester Bachelor of Social Work, Christ College (Autonomous) Irinjalakuda, Thrissur has undergone Placement field work training for 20 days at Free birds Open Shelter Home-Kozhikode, a project under the Association for Welfare of the Handicapped (AWH) assisted by the Ministry of Women and Child Government of India. During the period from 2nd December 2019 to 23rd December 2019

During here field work she was found active and involved in various activities of the organization.

We wish her all the best in future

Aneesha V.



CO-ORDINATOR
FREE BIRDS
Open Shelter Home
for Boys
Kozhikode-673001



Fr. Dr. Jolly Andrew
Assistant Professor
In-charge of Principa
Christ College (Autonom
Irinjalakuda

GERIZIM REHABILITATION TRUST

(Registered under Karnataka Charitable Act. Regn. No. : 321 / 1990 - 91 dt.23.08.1990)

Head Office:

24th "D" Cross, Ejipura
Viveknagar, Bangalore -5600 47
Karnataka State, South India



Tel: 080- 2571 2015, 2571 3201
E-Mail: gerizimhelp@gmail.com
Web Site: www.gerizimhome.com
A Charitable Institution

FOUNDER: G.J. Yesudian M.A., B.Ed., D.S.S.D.H.
DIRECTOR: Joseph Ponraj

TREASURER / PRINCIPAL: Indira Yesudian B.A., M.Ed., D.S.E.

SECRETARY: S. Geetha Bai B.Com
Date: 21st December 2019

To,
The Head of the Department
Department of Social Work
Christ College (Autonomous) Irinjalakuda
Irinjalakuda North, Thrissur Dist., Kerala - 680 125.

Exposure - Interns - Department of Social Work - Christ College (Autonomous) Certificate - Active Involvement - Abel Myson - Final Year BSW


This does serve to inform you kindly that your bonafide students (final year BSW) - **Abel Myson**, has undergone his field work training at our Institution from 2nd December 2019 to 21st December 2019 for 20 days as required of them.

During the course of their practical exposure, they have involved to fulfill their objectives to an extent.

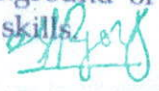
01. Opportunities provided to practice their spoken English.
02. Chances given to develop their communication skill to express their mind in words/actions to be an effective social work.
03. Dealt directly with the mentally challenged children in our organization.
04. Learnt to adjust with the existing situation while reaching out to needy people around on social service.
05. Engaged keenly to improve upon their personality.

As a part of the program, they took time to understand the mindset/background of the special children, occupied them to refresh their minds & target them simple domestic skills.

They cooperated well with our management & their rapport with our staff was congenial. We wish him well for bright career.


Joseph Ponraj
Director




Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

Government of India
Ministry of Youth Affairs And Sports
NEHRU YUVA KENDRA
Thiruvananthapuram



Government of India
Ministry of Information & Broadcasting
REGIONAL OUTREACH BUREAU
Thiruvananthapuram

Certificate of Participation

This Certificate is presented to


Joseph Nicholas

for active participation in the Webinar on
Cyber Space – Emerging Issues and Threats

L.C. Ponnunom
Field Exhibition Officer
Field Outreach Bureau
Govt. of India, Ministry of I & B
Kochi-682 037

18/12/2020

Issued on


B ALI SABRIN
District Youth Coordinator
Nehru Yuva Kendra
Thiruvananthapuram, Kerala

Made for free with Certify'em



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

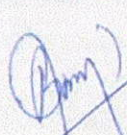
21st December 2019

TO WHOM SO EVER IT MAY CONCERN

This is to certify that **Mr. Sujin Gigi** from **Christ College Irinjalakuda (Autonomous), Thrissur** has successfully completed his 20 days field work at Shreyas, Sulthan Bathery, Wayanad from 2nd December 2019 to 21st December 2019. During the internship, he got opportunity to familiarize himself with different departments and community development initiatives of Shreyas and practice social work methods. He did following activities during his placement very sincerely and efficiently.

- Learned Administrative Structure and Organizational Profile
- Conducted training programme and sports meet for tribal community
- Conducted group work
- Coordinated Recovery activities for the victims of Kerala Floods 2018
- Prepared Case Study and practised Case Work
- Documentation of the programmes
- Conducted social experiment and collective action
- Organized street play
- Participated in the 4 tier evaluation process of Shreyas

We wish all success in his future endeavors.


Adv. Fr. Benny Edayath
Executive Director





Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

International Conference On Employment Opportunities in the field of Social Science



SAROVARAM
Center for Promotion of
National Integration and
Community Development



NEHRU YUVA KENDRA
Ministry of Youth Affairs and Sports



DEPT. OF SOCIOLOGY
UNIVERSITY OF KERALA
Thiruvananthapuram

CERTIFICATE OF PARTICIPATION

This is to certify that Prof./ Dr./ Mr./ Ms./ Mrs.

Jesrin

has participated in the *International Conference On Employment Opportunities in the field of Social Science* jointly organized by **Sarovaram** Center for the Promotion of National Integration and Community Development, **Nehru Yuva Kendra**, Thiruvananthapuram and **Dept. of Sociology**, University of Kerala Thiruvananthapuram, held on 13, 14, 15 and 16 February 2021.

Chairperson
SAROVARAM, Kerala

District Youth Officer
Nehru Yuva Kendra, Thiruvananthapuram,
Kerala

Organising Secretary
Dept. of Sociology,
University of Kerala.



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

GERIZIM REHABILITATION TRUST

(Registered under Karnataka Charitable Act. Regn. No. : 321 / 1990 – 91 dt.23.08.1990)

Head Office:

24th "D" Cross, Ejipura
Viveknagar, Bangalore –5600 47
Karnataka State, South India



Tel: 080- 2571 2015, 2571 3201

E-Mail: gerizimhelp@gmail.com

Web Site: www.gerizimhome.com

A Charitable Institution

FOUNDER: G.J. Yesudian M.A., B.Ed., D.S.S.D.H.

TREASURER / PRINCIPAL: Indira Yesudian B.A., M.Ed., D.S.E.

DIRECTOR: Joseph Ponraj

SECRETARY: S. Geetha Bai B.Com

Date: 21st December 2019

To,
The Head of the Department
Department of Social Work
Christ College (Autonomous) Irinjalakuda
Irinjalakuda North, Thrissur Dist., Kerala – 680 125.

Exposure - Interns - Department of Social Work - Christ College (Autonomous) Certificate - Active Involvement - Sani Simon - Final Year BSW

This does serve to inform you kindly that your bonafide students (final year BSW) – **Sani Simon**, has undergone his field work training at our Institution from 2nd December 2019 to 21st December 2019 for 20 days as required of them.

During the course of their practical exposure, they have involved to fulfill their objectives to an extent.

01. Opportunities provided to practice their spoken English.
02. Chances given to develop their communication skill to express their mind in words/actions to be an effective social work.
03. Dealt directly with the mentally challenged children in our organization.
04. Learnt to adjust with the existing situation while reaching out to needy people around on social service.
05. Engaged keenly to improve upon their personality.

As a part of the program, they took time to understand the mindset/background of the special children, occupied them to refresh their minds & target them simple domestic skills.

They cooperated well with our management & their rapport with our staff was congenial. We wish him well for bright career.

Joseph Ponraj
Director



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

International Conference On Employment Opportunities in the field of Social Science



SAROVARAM
Center for Promotion of
National Integration and
Community Development



GOVERNMENT OF INDIA
NEHRU YUVA KENDRA
Ministry of Youth Affairs and Sports



DEPT. OF SOCIOLOGY
UNIVERSITY OF KERALA
Thiruvananthapuram

CERTIFICATE OF PARTICIPATION

This is to certify that Prof./ Dr./ Mr./ Ms./ Mrs.

Jesin Thattil

has participated in the *International Conference On Employment Opportunities in the field of Social Science* jointly organized by **Sarovaram** Center for the Promotion of National Integration and Community Development, **Nehru Yuva Kendra**, Thiruvananthapuram and **Dept. of Sociology**, University of Kerala Thiruvananthapuram, held on 13, 14, 15 and 16 February 2021.

Chairperson
SAROVARAM, Kerala

District Youth Officer
Nehru Yuva Kendra, Thiruvananthapuram,
Kerala

Organising Secretary
Dept. of Sociology,
University of Kerala.



Fr. Dr. Jolly Andrews
Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda



Certificate of Internship

Dear Ms. Sandhya A.S
from Christ College Irinjalakuda, Thrissur, Kerala
Youth for Seva congratulates you for your endearing and
committed service as an Intern.

Assigned Projects CSR Volunteering

Date 03/12/2019 to 23/12/2019

DATE : 23/12/2019


John Jacob
COORDINATOR

all good



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

International Conference On Employment Opportunities in the field of Social Science



SAROVARAM
Center for Promotion of
National Integration and
Community Development



GOVERNMENT OF INDIA
NEHRU YUVA KENDRA
Ministry of Youth Affairs and Sports



DEPT. OF SOCIOLOGY
UNIVERSITY OF KERALA
Thiruvananthapuram

CERTIFICATE OF PARTICIPATION

This is to certify that Prof./ Dr./ Mr./ Ms./ Mrs.

Asma P.M

has participated in the *International Conference On Employment Opportunities in the field of Social Science* jointly organized by **Sarovaram** Center for the Promotion of National Integration and Community Development, **Nehru Yuva Kendra**, Thiruvananthapuram and **Dept. of Sociology**, University of Kerala Thiruvananthapuram, held on 13, 14, 15 and 16 February 2021.

Chairperson
SAROVARAM, Kerala

District Youth Officer
Nehru Yuva Kendra, Thiruvananthapuram,
Kerala

Organising Secretary
Dept. of Sociology,
University of Kerala.



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda



PUNARJANI

CHARITABLE TRUST FOR DE-ADDICTION & REHABILITATION

Reg. No. 217/2004

POOMALA P.O, Thrissur, Kerala Pin : 680 581

Phone: 0487-2201015, 9747201015, 9744830474, 8281478832, Web: www.punarjani.org, E-mail: punarjanipoomala@yahoo.com

TO WHOM SO EVER IT MAY CONCERN

This is to certify that Ms. ANUPAMA. P S, D/o. Sajeevan P A, final year student of B.S.W (Roll No: CCARBSW002), Christ College Autonomous, Irinjalakuda, India, has under gone for field work from 2nd December 2019 to 21st December 2019 at this institution. During the period of her field work, she was found punctual, hardworking and inquisitive.

We wish all success in her future endeavor.

Poomala

21/12/2019

Dr. Johns K. Mangalam, Ph.D., LLB

Reg. No: 217/2004
Poomala. P.O.
Thrissur

Managing Director.



Fr. Dr. Jolly Andrews

Assistant Professor-

In charge of Principal

Christ College Autonomous
Irinjalakuda



Government of India
Ministry of Youth Affairs And Sports
NEHRU YUVA KENDRA
Thiruvananthapuram



Government of India
Ministry of Information & Broadcasting
REGIONAL OUTREACH BUREAU
Thiruvananthapuram

Certificate of Participation

This Certificate is presented to

Ansil Gafoor

for active participation in the Webinar on
Cyber Space – Emerging Issues and Threats

L.C. Ponnunnon
L.C. Ponnunnon
Field Extension Officer
Field Outreach Bureau
Govt. of India, Ministry of I & B
Kochi-682 037

18/12/2020

Issued on

B Ali Sabrin
B ALI SABRIN
District Youth Coordinator
Nehru Yuva Kendra
Thiruvananthapuram, Kerala

Made for free with Certify'em



Fr. Dr. Jolly Andrews
Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

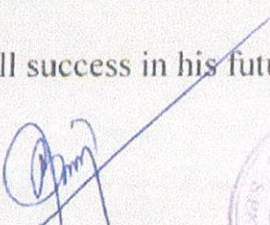
21st December 2019

TO WHOM SO EVER IT MAY CONCERN


This is to certify that **Mr. Ashish Manohar** from **Christ College Irinjalakuda (Autonomous), Thrissur** has successfully completed his 20 days field work at Shreyas, Sulthan Bathery, Wayanad from 2nd December 2019 to 21st December 2019. During the internship, he got opportunity to familiarize himself with different departments and community development initiatives of Shreyas and practice social work methods. He did following activities during his placement very sincerely and efficiently.

- Learned Administrative Structure and Organizational Profile
- Conducted training programme and sports meet for tribal community
- Conducted group work
- Coordinated Recovery activities for the victims of Kerala Floods 2018
- Prepared Case Study and practised Case Work
- Documentation of the programmes
- Conducted social experiment and collective action
- Organized street play
- Participated in the 4 tier evaluation process of Shreyas

We wish all success in his future endeavors.


Adv. Fr. Benny Edayath
Executive Director




Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda



Government of India
Ministry of Youth Affairs And Sports
NEHRU YUVA KENDRA
Thiruvananthapuram



Government of India
Ministry of Information & Broadcasting
REGIONAL OUTREACH BUREAU
Thiruvananthapuram

Certificate of Participation

This Certificate is presented to


Ajsal Abbas

for active participation in the Webinar on
Cyber Space – Emerging Issues and Threats

L.C. Ponnunon
Field Exhibition Officer
Field Outreach Bureau
Govt. of India, Ministry of I & B
Kochi-682 037

18/12/2020

Issued on


B ALI SABRIN
District Youth Coordinator
Nehru Yuva Kendra
Thiruvananthapuram, Kerala

Made for free with Certify'em



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda



കുടുംബ ക്ഷേമ വകുപ്പ്
പ്രസിഡൻ്റ്

പി.ഒ. ചിറ്റിയൂരി - 680301

ഫോൺ: 0487-2658712, 9496046126

നെന്മണിക്കര ഗ്രാമപഞ്ചായത്ത്

പാലിയക്കര, തൃശ്ശൂർ ജില്ല

തീയതി: 15/10/2017

EXPERIENCE CERTIFICATE

This is certify that, M/s. Veni Vasudevan had successfully completed her concurrent field work as a social work trainee from 23-June- 2017 to 15- Oct-2017 in Nenmanikkara Grama Panchayat. We wish her all the success in future endeavour.

President

Nenmanikkara Grama Panchayath



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

SHREYAS
SHREYAS
ORGANIZATION FOR SUSTAINABLE DEVELOPMENT AND JUSTICE

Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

Certificate

This is to certify that Mr./Ms. *Yeni Yasudayan*
Christ College, Irinjalakuda has undergone *25* days

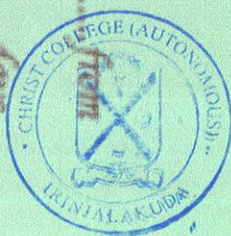
of Social Work Training/Placement at Shreyas, Sulthan Bathery, Wayanad.

28/2/2019
Date

[Signature]
Official Seal



Executive Director



SHREYAS

ORGANIZATION FOR SUSTAINABLE DEVELOPMENT AND JUSTICE
Sulthan Bathery, P.O. No. 77, Wayanad, Kerala 673592
www.shreyas.org | phone: 97461 22222



Dept. of Women & Child Development, Kerala



PSYCHOSOCIAL FIRST AID FOR SURVIVORS OF KERALA FLOOD DISASTER

Certificate of Participation

This is to certify that Mr./Mrs./Ms. VENI VASUDEVAN attended the training program on Psychosocial first aid in Disasters conducted by National Institute of Mental Health and Neurosciences (NIMHANS), Bengaluru in collaboration with Department of Women and Child Development and Department of Health & Family welfare, Government of Kerala. He/ She provided psychosocial first aid for the survivors and their families in the flood affected area from 20.8.18 to 2.9.18 & 5.9.18 in Thrissur District, Kerala in the capacity of (Project Coordinator/Team Leader/Volunteer).

District Child Protection Officer
Thrissur
Govt. of Kerala

District Nodal Officer
Mental Health Programme
Dept. of Health Services

Registrar
NIMHANS



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

International Conference On Employment Opportunities in the field of Social Science



SAROVARAM
Center for Promotion of
National Integration and
Community Development



NEHRU YUVA KENDRA
Ministry of Youth Affairs and Sports



DEPT. OF SOCIOLOGY
UNIVERSITY OF KERALA
Thiruvananthapuram

CERTIFICATE OF PARTICIPATION

This is to certify that Prof./ Dr./ Mr./ Ms./ Mrs.

Vishnu T P

has participated in the *International Conference On Employment Opportunities in the field of Social Science* jointly organized by **Sarovaram** Center for the Promotion of National Integration and Community Development, **Nehru Yuva Kendra**, Thiruvananthapuram and **Dept. of Sociology**, University of Kerala Thiruvananthapuram, held on 13, 14, 15 and 16 February 2021.

Chairperson
SAROVARAM, Kerala

District Youth Officer
Nehru Yuva Kendra, Thiruvananthapuram,
Kerala

Organising Secretary
Dept. of Sociology,
University of Kerala.



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda



KUDUMBASHREE DISTRICT MISSION, THRISSUR

STATE POVERTY ERADICATION MISSION
(Local Self Govt. Dept, Govt. Of Kerala)
Collectorate, Thrissur-3

Email: spemtsr1@gmail.com

Phone: 0487-2362517

No. 1650/A/17/KS/TSR

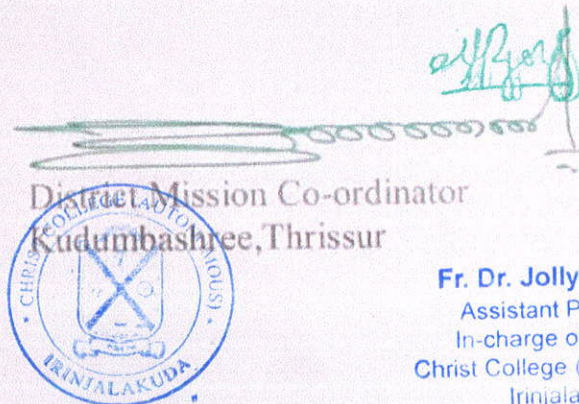
Date: 29-11-2018

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Ms. **MARY VINAYA JOSE** (D/o) N P JOSE, Nadamkuzhy House, Pulluvazhy (PO), Perumbavoor, Ernamkulam(Dt), 683541 has been completed her 20 days concurrent field placement in Kudumbashree District Mission, Thrissur from 05-07-2018 to 22-09-2018 as part of her course in Bachelor of Social Work, 5th Semester, Christ College, Irinjalakuda.

She placed in Irinjalakkuda CDS-1 to work in liaison with Snehitha Programme. During her tenure we found her as honest, hard working and well-behaved with us.

We wish all success in her future endeavors.



District Mission Co-ordinator
Kudumbashree, Thrissur

Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

International Conference On Employment Opportunities in the field of Social Science



SAROVARAM
Center for Promotion of
National Integration and
Community Development



GOVERNMENT OF INDIA
NEHRU YUVA KENDRA
Ministry of Youth Affairs and Sports



DEPT. OF SOCIOLOGY
UNIVERSITY OF KERALA
Thiruvananthapuram

CERTIFICATE OF PARTICIPATION

This is to certify that Prof./ Dr./ Mr./ Ms./ Mrs.

Vinimariya Vincent

has participated in the *International Conference On Employment Opportunities in the field of Social Science* jointly organized by **Sarovaram** Center for the Promotion of National Integration and Community Development, **Nehru Yuva Kendra**, Thiruvananthapuram and **Dept. of Sociology**, University of Kerala Thiruvananthapuram, held on 13, 14, 15 and 16 February 2021.

Chairperson
SAROVARAM, Kerala

District Youth Officer
Nehru Yuva Kendra, Thiruvananthapuram,
Kerala

Organising Secretary
Dept. of Sociology,
University of Kerala.



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Injalakuda

Effect of Apoptosis on Human Prostate Cancer Cells (PC3, DU145 AND LNCaP) Using *Curcumin longa*

Anitha Joice*1, Dilla Jose2, J. Manju Bashini3 and P. Senthilkumaar4

1Department of Biotechnology, St. Joseph Arts and Science College, Kovur, Chennai, India.

2Department of Zoology, Christ College, Irinjalakuda, Kerala.

3Department of Zoology, L.N. Government College, Ponneri, Tamil Nadu, India

4P.G. and Research Department of Zoology, Sir Theagaraya College, Chennai, India.

Abstract

Cancer cells usually have increased cell proliferation; have ability to survive in unique environment and decreased apoptosis. Decreased apoptosis gives the cancer cells a survival advantage. All cells showed a small base line apoptotic level. Treatment of cancer cells with curcumin significantly increased apoptosis by Caspase 3/7 assay, Annexin IV assay and tunel assay suggesting that both early and late apoptotic events are triggered by curcumin. Increased apoptosis by curcumin may be used to kill the cancer cells and thereby help in treatment of cancer. The overall results obtained in the study point out that the active molecule present in *Curcuma longa* have considerable consequence on the survival of human prostate cancer cell lines. Finally, it is concluded that curcuminoids are a group of phenolic compounds isolated from the rhizome of *Curcuma longa* has various pharmacological properties. They exhibit growth inhibitory effects on a broad range of tumors and act as potent anticancer, anti-inflammatory and analgesic agent and more research should be carried out and this data should be made accessible for both health care providers and patients for safe anticancer treatments.

Keywords - Curcumin, cancer, apoptosis, therapy.

INTRODUCTION

Curcumin is the medicinal extract of a rhizomatous herbaceous perennial plant of the ginger family, Zingiberaceae bearing many rhizomes on its root system which are the source of its culinary spice known as turmeric. The plant belongs to the genus: *Curcuma* and species: *longa*. Its scientific name is *Curcuma longa* Linnaeus and it is native in southeast India. It has gained access to many other parts of the world as an exotic variety. Curcumin (diferuloylmethane) is a polyphenol derived from the rhizome of the turmeric plant, *Curcuma longa*. It is a non-nutritive food chemical used as a flavouring, coloring agent and as a food preservative. It has been consumed for centuries as a dietary spice regularly at a reasonable amount by people in Asian countries. Modern therapist attention started to revolve round the turmeric species for its wide use in traditional medicine as a effective antioxidant, anti-inflammatory, analgesic and anticancer agent. Several pilot studies showing suppression in cellular transformation, proliferation, invasion, angiogenesis, and metastasis have further kindled their interest. Being a blood-brain barrier permeable substance exhibiting a diverse range of actions including free radical scavenging activity *in vitro* and *in vivo* with cardio and neuro-protective effects added strength to the world-wide attention.

Cancer is an abnormal growth and proliferation of cells. It is a fearsome disease because the patient suffers pain, disfigurement and loss of many physiological processes ending in fatality in most cases. The alarming facet of cancer is that it may occur at any time at any age in any part of the body. It is caused by a complex, poorly understood interplay of genetic and environmental factors. It continues to represent the largest cause of mortality in the world and kills annually about 3500 per million populations around the world. Although more anticancer drugs are in active development with many of them under clinical trials, there is a pressing necessity to develop much more efficient and less toxic drugs especially from the plant kingdom to offer a cure for cancer patients. The overall aims and objectives of the current study is to observe the following end results: Apoptosis effect of curcumin using PC3, DU145 AND LNCaP prostate cancer cell line and Caspase 3/7 assay, Annexin IV assay and Tunel assay.

Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

Government of India
Ministry of Youth Affairs And Sports
NEHRU YUVA KENDRA
Thiruvananthapuram



Government of India
Ministry of Information & Broadcasting
REGIONAL OUTREACH BUREAU
Thiruvananthapuram

Certificate of Participation

This Certificate is presented to


Soorya mahadev.m.s

for active participation in the Webinar on
Cyber Space – Emerging Issues and Threats


L.C. Ponnambal
Field Exhibition Officer
Field Outreach Bureau
Govt. of India, Ministry of I & B
Kochi-682 037

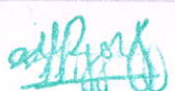
18/12/2020

Issued on


B ALI SABRIN
District Youth Coordinator
Nehru Yuva Kendra
Thiruvananthapuram, Kerala

Made for free with Certify'em




Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

Effect of Apoptosis on Human Prostate Cancer Cells (PC3, DU145 AND LNCaP) Using *Curcumin longa*

Anitha Joice*1, Dilla Jose2, J. Manju Bashini3 and P. Senthilkumaar4

1Department of Biotechnology, St. Joseph Arts and Science College, Kovur, Chennai, India.

2Department of Zoology, Christ College, Irinjalakuda, Kerala.

3Department of Zoology, L.N. Government College, Ponneri, Tamil Nadu, India

4P.G. and Research Department of Zoology, Sir Theagaraya College, Chennai, India.

Abstract

Cancer cells usually have increased cell proliferation; have ability to survive in unique environment and decreased apoptosis. Decreased apoptosis gives the cancer cells a survival advantage. All cells showed a small base line apoptotic level. Treatment of cancer cells with curcumin significantly increased apoptosis by Caspase 3/7 assay, Annexin IV assay and tunel assay suggesting that both early and late apoptotic events are triggered by curcumin. Increased apoptosis by curcumin may be used to kill the cancer cells and thereby help in treatment of cancer. The overall results obtained in the study point out that the active molecule present in *Curcuma longa* have considerable consequence on the survival of human prostate cancer cell lines. Finally, it is concluded that curcuminoids are a group of phenolic compounds isolated from the rhizome of *Curcuma longa* has various pharmacological properties. They exhibit growth inhibitory effects on a broad range of tumors and act as potent anticancer, anti-inflammatory and analgesic agent and more research should be carried out and this data should be made accessible for both health care providers and patients for safe anticancer treatments.

Keywords - Curcumin, cancer, apoptosis, therapy.

INTRODUCTION

Curcumin is the medicinal extract of a rhizomatous herbaceous perennial plant of the ginger family, Zingiberaceae bearing many rhizomes on its root system which are the source of its culinary spice known as turmeric. The plant belongs to the genus: *Curcuma* and species: *longa*. Its scientific name is *Curcuma longa* Linnaeus and it is native in southeast India. It has gained access to many other parts of the world as an exotic variety. Curcumin (diferuloylmethane) is a polyphenol derived from the rhizome of the turmeric plant, *Curcuma longa*. It is a non-nutritive food chemical used as a flavouring, coloring agent and as a food preservative. It has been consumed for centuries as a dietary spice regularly at a reasonable amount by people in Asian countries. Modern therapist attention started to revolve round the turmeric species for its wide use in traditional medicine as a effective antioxidant, anti-inflammatory, analgesic and anticancer agent. Several pilot studies showing suppression in cellular transformation, proliferation, invasion, angiogenesis, and metastasis have further kindled their interest. Being a blood-brain barrier permeable substance exhibiting a diverse range of actions including free radical scavenging activity *in vitro* and *in vivo* with cardio and neuro-protective effects added strength to the world-wide attention.

Cancer is an abnormal growth and proliferation of cells. It is a fearsome disease because the patient suffers pain, disfigurement and loss of many physiological processes ending in fatality in most cases. The alarming facet of cancer is that it may occur at any time at any age in any part of the body. It is caused by a complex, poorly understood interplay of genetic and environmental factors. It continues to represent the largest cause of mortality in the world and kills annually about 3500 per million populations around the world. Although more anticancer drugs are in active development with many of them under clinical trials, there is a pressing necessity to develop much more efficient and less toxic drugs especially from the plant kingdom to offer a cure for cancer patients. The overall aims and objectives of the current study is to observe the following end results: Apoptosis effect of curcumin using PC3, DU145 AND LNCaP prostate cancer cell line and Caspase 3/7 assay, Annexin IV assay and Tunel assay.

Fr. Dr. Jolly Andrews

Assistant Professor-

In-charge of Principal

Christ College (Autonomous)

Irinjalakuda

Government of India
Ministry of Youth Affairs And Sports
NEHRU YUVA KENDRA
Thiruvananthapuram



Government of India
Ministry of Information & Broadcasting
REGIONAL OUTREACH BUREAU
Thiruvananthapuram

Certificate of Participation

This Certificate is presented to

Richa Joseph

for active participation in the Webinar on
Cyber Space – Emerging Issues and Threats

L.C. Ponnunom
Field Exhibition Officer
Field Outreach Bureau
Govt. of India, Ministry of I & B
Kochi-682 037

18/12/2020

Issued on

B Ali Sabrin
B ALI SABRIN
District Youth Coordinator
Nehru Yuva Kendra
Thiruvananthapuram, Kerala

Made for free with CertifyEm



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

Effect of Apoptosis on Human Prostate Cancer Cells (PC3, DU145 AND LNCaP) Using *Curcumin longa*

Anitha Joice*1, Dilla Jose2, J. Manju Bashini3 and P. Senthilkumar4

1Department of Biotechnology, St. Joseph Arts and Science College, Kovur, Chennai, India.

2Department of Zoology, Christ College, Irinjalakuda, Kerala.

3Department of Zoology, L.N. Government College, Ponneri, Tamil Nadu, India

4P.G. and Research Department of Zoology, Sir Theagaraya College, Chennai, India.

Abstract

Cancer cells usually have increased cell proliferation; have ability to survive in unique environment and decreased apoptosis. Decreased apoptosis gives the cancer cells a survival advantage. All cells showed a small base line apoptotic level. Treatment of cancer cells with curcumin significantly increased apoptosis by Caspase 3/7 assay, Annexin IV assay and tunel assay suggesting that both early and late apoptotic events are triggered by curcumin. Increased apoptosis by curcumin may be used to kill the cancer cells and thereby help in treatment of cancer. The overall results obtained in the study point out that the active molecule present in *Curcuma longa* have considerable consequence on the survival of human prostate cancer cell lines. Finally, it is concluded that curcuminoids are a group of phenolic compounds isolated from the rhizome of *Curcuma longa* has various pharmacological properties. They exhibit growth inhibitory effects on a broad range of tumors and act as potent anticancer, anti-inflammatory and analgesic agent and more research should be carried out and this data should be made accessible for both health care providers and patients for safe anticancer treatments.

Keywords - Curcumin, cancer, apoptosis, therapy.

INTRODUCTION

Curcumin is the medicinal extract of a rhizomatous herbaceous perennial plant of the ginger family, Zingiberaceae bearing many rhizomes on its root system which are the source of its culinary spice known as turmeric. The plant belongs to the genus: *Curcuma* and species: *longa*. Its scientific name is *Curcuma longa* Linnaeus and it is native in southeast India. It has gained access to many other parts of the world as an exotic variety. Curcumin (diferuloylmethane) is a polyphenol derived from the rhizome of the turmeric plant, *Curcuma longa*. It is a non-nutritive food chemical used as a flavouring, coloring agent and as a food preservative. It has been consumed for centuries as a dietary spice regularly at a reasonable amount by people in Asian countries. Modern therapist attention started to revolve round the turmeric species for its wide use in traditional medicine as a effective antioxidant, anti-inflammatory, analgesic and anticancer agent. Several pilot studies showing suppression in cellular transformation, proliferation, invasion, angiogenesis, and metastasis have further kindled their interest. Being a blood-brain barrier permeable substance exhibiting a diverse range of actions including free radical scavenging activity *in vitro* and *in vivo* with cardio and neuro-protective effects added strength to the world-wide attention.

Cancer is an abnormal growth and proliferation of cells. It is a fearsome disease because the patient suffers pain, disfigurement and loss of many physiological processes ending in fatality in most cases. The alarming facet of cancer is that it may occur at any time at any age in any part of the body. It is caused by a complex, poorly understood interplay of genetic and environmental factors. It continues to represent the largest cause of mortality in the world and kills annually about 3500 per million populations around the world. Although more anticancer drugs are in active development with many of them under clinical trials, there is a pressing necessity to develop much more efficient and less toxic drugs especially from the plant kingdom to offer a cure for cancer patients. The overall aims and objectives of the current study is to observe the following end results: Apoptosis effect of curcumin using PC3, DU145 AND LNCaP prostate cancer cell line and Caspase 3/7 assay, Annexin IV assay and Tunel assay.

Fr. Dr. Jolly Andrews

Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

International Conference On Employment Opportunities in the field of Social Science



SAROVARAM
Center for Promotion of
National Integration and
Community Development



GOVERNMENT OF INDIA
NEHRU YUVA KENDRA
Ministry of Youth Affairs and Sports



DEPT. OF SOCIOLOGY
UNIVERSITY OF KERALA
Thiruvananthapuram

CERTIFICATE OF PARTICIPATION

This is to certify that Prof./ Dr./ Mr./ Ms./ Mrs.

Pearl Elsa Mathew

has participated in the *International Conference On Employment Opportunities in the field of Social Science* jointly organized by **Sarovaram** Center for the Promotion of National Integration and Community Development, **Nehru Yuva Kendra**, Thiruvananthapuram and **Dept. of Sociology**, University of Kerala Thiruvananthapuram, held on 13, 14, 15 and 16 February 2021.

Chairperson
SAROVARAM, Kerala

District Youth Officer
Nehru Yuva Kendra, Thiruvananthapuram,
Kerala

Organising Secretary
Dept. of Sociology,
University of Kerala.



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda



Effect of Apoptosis on Human Breast Cancer Cell Line (MCF-7 and MDA-MB231) Using *Curcuma longa*

Anitha Joice^{*1}, Dilla Jose², J. Manju Bashini³ and P. Senthilkumar³

¹Department of Biotechnology, St. Joseph Arts and Science College, Kovur, Chennai, India.

²P.G and Department of Zoology, Christ College, Irinjalakuda, Kerala.

³P.G. and Research Department of Zoology, Sir Theagaraya College, Chennai, India.

Received: 7 Oct 2018 / Accepted: 8 Nov 2018 / Published online: 21 Jan 2019

Corresponding Author Email: manjubashini82@gmail.com

Abstract

Cancer cells usually have increased cell proliferation; have ability to survive in unique environment and decreased apoptosis. Decreased apoptosis gives the cancer cells a survival advantage. All cells showed a small base line apoptotic level. Treatment of cancer cells with curcumin significantly increased apoptosis by Caspase 3/7 assay, Annexin IV assay and tunel assay suggesting that both early and late apoptotic events are triggered by curcumin. Increased apoptosis by curcumin may be used to kill the cancer cells and thereby help in treatment of cancer. The overall results obtained in the study point out that the active molecule present in *Curcuma longa* have considerable consequence on the survival of human breast cancer cell lines. Finally, it is concluded that curcuminoids are a group of phenolic compounds isolated from the rhizome of *Curcuma longa* has various pharmacological properties. They exhibit growth inhibitory effects on a broad range of tumors and act as potent anticancer, anti-inflammatory and analgesic agent and more research should be carried out and this data should be made accessible for both health care providers and patients for safe anticancer treatments.

Keywords

Curcumin, cancer, apoptosis, therapy.

INTRODUCTION

Curcumin is the medicinal extract of a rhizomatous herbaceous perennial plant of the ginger family, Zingiberaceae bearing many rhizomes on its root system which are the source of its culinary spice known as turmeric. The plant belongs to the genus: *Curcuma* and species: *longa*. Its scientific name is *Curcuma longa* Linnaeus and it is native in southeast India. It has gained access to many other parts of the world as an exotic variety. Curcumin

(diferuloylmethane) is a polyphenol derived from the rhizome of the turmeric plant, *Curcuma longa*. It is a non-nutritive food chemical used as a flavouring, coloring agent and as a food preservative. It has been consumed for centuries as a dietary spice regularly at a reasonable amount by people in Asian countries. Modern therapist attention started to revolve round the turmeric species for its wide use in traditional medicine as a effective antioxidant, anti-inflammatory, analgesic and anticancer agent.

International Conference On Employment Opportunities in the field of Social Science



SAROVARAM
Center for Promotion of
National Integration and
Community Development



GOVERNMENT OF INDIA
NEHRU YUVA KENDRA
Ministry of Youth Affairs and Sports



DEPT. OF SOCIOLOGY
UNIVERSITY OF KERALA
Thiruvananthapuram

CERTIFICATE OF PARTICIPATION

This is to certify that Prof./ Dr./ Mr./ Ms./ Mrs.

Noyal Anto

has participated in the *International Conference On Employment Opportunities in the field of Social Science* jointly organized by **Sarovaram** Center for the Promotion of National Integration and Community Development, **Nehru Yuva Kendra**, Thiruvananthapuram and **Dept. of Sociology**, University of Kerala Thiruvananthapuram, held on 13, 14, 15 and 16 February 2021.

Chairperson
SAROVARAM, Kerala

District Youth Officer
Nehru Yuva Kendra, Thiruvananthapuram,
Kerala

Organising Secretary
Dept. of Sociology,
University of Kerala.



Fr. Dr. Jolly Andre
Assistant Professor
In-charge of Princip
Christ College (Autonom
Irinjalakuda

International Conference On Employment Opportunities in the field of Social Science



SAROVARAM
Center for Promotion of
National Integration and
Community Development



GOVERNMENT OF INDIA
NEHRU YUVA KENDRA
Ministry of Youth Affairs and Sports



DEPT. OF SOCIOLOGY
UNIVERSITY OF KERALA
Thiruvananthapuram

CERTIFICATE OF PARTICIPATION

This is to certify that Prof./ Dr./ Mr./ Ms./ Mrs.

Lavish Panthosh M P

has participated in the *International Conference On Employment Opportunities in the field of Social Science* jointly organized by **Sarovaram** Center for the Promotion of National Integration and Community Development, **Nehru Yuva Kendra**, Thiruvananthapuram and **Dept. of Sociology**, University of Kerala Thiruvananthapuram, held on 13, 14, 15 and 16 February 2021.

Chairperson
SAROVARAM, Kerala

District Youth Officer
Nehru Yuva Kendra, Thiruvananthapuram,
Kerala

Organising Secretary
Dept. of Sociology,
University of Kerala.



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda



Effect of Apoptosis on Human Breast Cancer Cell Line (MCF-7 and MDA-MB231) Using *Curcuma longa*

Anitha Joice^{*1}, Dilla Jose², J. Manju Bashini³ and P. Senthilkumar³

¹Department of Biotechnology, St. Joseph Arts and Science College, Kovur, Chennai, India.

²P.G and Department of Zoology, Christ College, Irinjalakuda, Kerala.

³P.G. and Research Department of Zoology, Sir Theagaraya College, Chennai, India.

Received: 7 Oct 2018 / Accepted: 8 Nov 2018 / Published online: 21 Jan 2019

Corresponding Author Email: manjubashini82@gmail.com

Abstract

Cancer cells usually have increased cell proliferation; have ability to survive in unique environment and decreased apoptosis. Decreased apoptosis gives the cancer cells a survival advantage. All cells showed a small base line apoptotic level. Treatment of cancer cells with curcumin significantly increased apoptosis by Caspase 3/7 assay, Annexin IV assay and tunel assay suggesting that both early and late apoptotic events are triggered by curcumin. Increased apoptosis by curcumin may be used to kill the cancer cells and thereby help in treatment of cancer. The overall results obtained in the study point out that the active molecule present in *Curcuma longa* have considerable consequence on the survival of human breast cancer cell lines. Finally, it is concluded that curcuminoids are a group of phenolic compounds isolated from the rhizome of *Curcuma longa* has various pharmacological properties. They exhibit growth inhibitory effects on a broad range of tumors and act as potent anticancer, anti-inflammatory and analgesic agent and more research should be carried out and this data should be made accessible for both health care providers and patients for safe anticancer treatments.

Keywords

Curcumin, cancer, apoptosis, therapy.

INTRODUCTION

Curcumin is the medicinal extract of a rhizomatous herbaceous perennial plant of the ginger family, Zingiberaceae bearing many rhizomes on its root system which are the source of its culinary spice known as turmeric. The plant belongs to the genus: *Curcuma* and species: *longa*. Its scientific name is *Curcuma longa* Linnaeus and it is native in southeast India. It has gained access to many other parts of the world as an exotic variety. Curcumin

(diferuloylmethane) is a polyphenol derived from the rhizome of the turmeric plant, *Curcuma longa*. It is a non-nutritive food chemical used as a flavouring, coloring agent and as a food preservative. It has been consumed for centuries as a dietary spice regularly at a reasonable amount by people in Asian countries. Modern therapist attention started to revolve round the turmeric species for its wide use in traditional medicine as a effective antioxidant, anti-inflammatory, analgesic and anticancer agent.

Fr. Dr. Jolly Andrews
Assistant Professor-
in-charge of Principal

Christ College (Autonomous)
Irinjalakuda

International Conference On Employment Opportunities in the field of Social Science



SAROVARAM
Center for Promotion of
National Integration and
Community Development



GOVERNMENT OF INDIA
NEHRU YUVA KENDRA
Ministry of Youth Affairs and Sports



DEPT. OF SOCIOLOGY
UNIVERSITY OF KERALA
Thiruvananthapuram

CERTIFICATE OF PARTICIPATION

This is to certify that Prof./ Dr./ Mr./ Ms./ Mrs.

Lavish Panthosh M P

has participated in the *International Conference On Employment Opportunities in the field of Social Science* jointly organized by **Sarovaram** Center for the Promotion of National Integration and Community Development, **Nehru Yuva Kendra**, Thiruvananthapuram and **Dept. of Sociology**, University of Kerala Thiruvananthapuram, held on 13, 14, 15 and 16 February 2021.

Chairperson
SAROVARAM, Kerala

District Youth Officer
Nehru Yuva Kendra, Thiruvananthapuram,
Kerala

Organising Secretary
Dept. of Sociology,
University of Kerala.



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Imjalakuda

Two new species of the genus *Marengo* Peckham et Peckham, 1892 (Araneae: Salticidae) from Western Ghats of India

Два новых вида из рода *Marengo* Peckham et Peckham, 1892 (Araneae: Salticidae) из Западных Гат Индии

Puthoor Pattammal Sudhin^{1*}, Karunnappilli Shamsudheen Nafin^{1,2},
Suresh P. Benjamin³, Ambalarambil Vasu Sudhikumar^{1,4}
П.П. Судхин^{1*}, К.С. Нафин¹, С.П. Бенджамин², А.В. Судхикумар¹

¹ Centre for Animal Taxonomy and Ecology, Department of Zoology, Christ College (Autonomous), Irinjalakuda – 680 125, Kerala, India. E-mails: ²nafinks5@gmail.com, ⁴avsudhi@rediffmail.com

³ National Institute of Fundamental Studies, Hantana Road, Kandy, Sri Lanka. E-mail: suresh.benjamin@gmail.com

*Corresponding author. E-mail: sudhinpp@gmail.com

KEY WORDS: Aranei, jumping spiders, distribution, Kerala, taxonomy, Wayanad Wildlife Sanctuary.

КЛЮЧЕВЫЕ СЛОВА: Aranei, пауки-скакунчики, распространение, Керала, таксономия, заповедник Вэйнад.

ABSTRACT. Two new jumping spiders of the genus *Marengo* Peckham et Peckham, 1892 from the Wayanad Wildlife Sanctuary, Western Ghats, Kerala, India — *M. zebra* sp.n. (♂♀) and *M. batheryensis* sp.n. (♂♀) — are diagnosed, described and illustrated. Distribution of all the Indian *Marengo* species is mapped as well.

How to cite this article: Sudhin P.P., Nafin K.S., Benjamin S.P., Sudhikumar A.V. 2019. Two new species of the genus *Marengo* Peckham et Peckham, 1892 (Araneae: Salticidae) from Western Ghats of India // *Arthropoda Selecta*. Vol.28. No.3. P.435–444. doi: 10.15298/arthsel. 28.3.08

РЕЗЮМЕ. Два вида пауков-скакунчиков из рода *Marengo* Peckham et Peckham, 1892 из заповедника Вэйнад, Западные Гаты, Керала, Индия — *M. zebra* sp.n. (♂♀) и *M. batheryensis* sp.n. (♂♀) — диагностированы, описаны и иллюстрированы. Распространение всех индийских видов *Marengo* также прокартировано.

Introduction

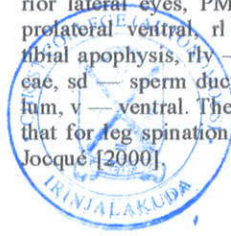
The genus *Marengo* was established by Peckham & Peckham [1892] on the basis of the generotype *Marengo crassipes* Peckham et Peckham, 1892 from Sri Lanka. Currently, the genus contains six valid species, of which five were described from Sri Lanka and one from Thailand [WSC, 2019]. Gupta & Siliwal [2012] reported on a single male of *M. crassipes* from the states of Uttarakhand, which to date has been the only record of *Marengo* from India. In the present paper, we

have described two new species, *M. zebra* and *M. batheryensis*, from the Wayanad Wildlife Sanctuary lying in the southern Western Ghats region, Kerala, India. The current geographic distribution of the genus in India is mapped as well.

Materials and methods

Spiders were hand-collected and preserved in 70% ethanol. A morphological examination was undertaken under a Leica M205 C stereomicroscope. The microphotographic images were taken by means of Leica DMC4500 digital camera attached to Leica M205 C stereomicroscope, with the software package Leica Application Suite (LAS), version 4.3.0. LAS montage facility. All measurements are in mm. Measurement data for palps and legs are as follows: total length [femur, patella, tibia, metatarsus (except palp), tarsus]. The studied specimens are deposited in the reference collection at the Centre for Animal Taxonomy and Ecology (CATE), Department of Zoology, Christ College (Autonomous), Irinjalakuda, Kerala, India.

Abbreviations used in the text and figures: ALE — anterior lateral eyes, AME — anterior median eyes, cd — copulatory duct, co — copulatory opening, der — damaged embolic region, do — dorsal, e — embolus, ec — embolic coil, fd — fertilization duct, pl — prolateral, PLE — posterior lateral eyes, PME — posterior median eyes, plv — prolateral ventral, rl — retrolateral, RTA — retrolateral tibial apophysis, rlv — retrolateral ventral, s — spermathecae, sd — sperm duct, ts — translucent septum, t — tegulum, v — ventral. The terminology follows Reiskind [1969]; that for leg spination follows the format by Bosselaers & Jocque [2000].



Dr. J. J. Andrews
Assistant Professor
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

Nonstandard FDTD Realization of Radiation Behaviour of Epsilon Negative Metamaterial Corner Reflector Antenna

Jovia Jose^{1,2}, Sikha K. Simon^{1,3}, Joe Kizhakooden^{1,3}, Jolly Andrews¹ and V. P. Joseph¹

¹Christ College (Autonomous), Irinjalakuda, 680125, University of Calicut, Kerala, India

²Vimala College (Autonomous), Thrissur, 680009, University of Calicut, Kerala, India

³St. Thomas' College (Autonomous), Thrissur, 680001, University of Calicut, Kerala, India
jovia.jose@gmail.com

Abstract – The radiation behaviour of a corner reflector antenna designed using epsilon negative (ENG) artificial wire medium is realized using nonstandard Finite Difference Time Domain (NS-FDTD) method and the results are compared with standard FDTD algorithm. High accuracy NS-FDTD algorithm which requires less iteration for convergence is for the first time implemented for metamaterial corner reflector antenna. This is achieved by extending this powerful algorithm by addressing the stability related issues in conducting media and the proposed work may find potential applications in the simulation studies of dispersive and metamaterial designs.

I. INTRODUCTION

One of the major issues for the implementation of standard Finite Difference Time Domain (FDTD) method in structural designs related to metamaterials is the requirement of large domain space which, in turn, requires high computational cost. A modified form of FDTD, named as nonstandard Finite Difference Time Domain (NS-FDTD), has proved to be highly effective in many aspects like accuracy and speed and it achieves the same result with λ/h (ratio of wavelength to grid space) = 8 which the standard one can only attain with $\lambda/h = 1140$ [1]. NS-FDTD has already been successfully implemented for dielectric medium [2] and for structures having low conductivity. Quite recently, this powerful algorithm which considerably enhances the computational efficiency is reported for a plane conducting plasma medium [3]. In this work, for the first time, we have successfully employed NS-FDTD method to analyze the radiation behaviour of a corner reflector antenna designed using conducting wires in the form of an artificial Epsilon Negative (ENG) plasma medium by considering the stability issues related to the convergence of the function used [4]. The already predicted accuracy claims of NS-FDTD is achieved in a metamedium and the results are compared with standard FDTD.

II. FORMULATION OF THE PROBLEM AND DESIGN OF THE STRUCTURE

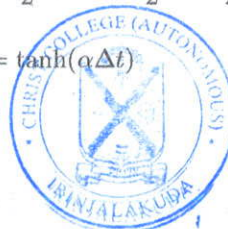
For employing NS-FDTD, we have incorporated wave equation method instead of using Maxwell's equations. The absorbing wave equation given by Cole [4] is used for designing the ENG medium which made by periodic array of thin conducting wires for the proposed corner reflector antenna and is given by

$$E_z(\mathbf{x}, t + \Delta t) = E_z(\mathbf{x}, t) + \left(\frac{1-a}{1+a}\right)[E_z(\mathbf{x}, t) - E_z(\mathbf{x}, t - \Delta t)] + \left(\frac{v^2}{1+a}\right)D_o^2 E_z(\mathbf{x}, t) \quad (1)$$

where v^2 and a are given by

$$v^2 = \frac{1}{\sin^2\left(\frac{kh}{2}\right)} \left[\sin^2\left(\frac{\omega\Delta t}{2}\right) \cosh^2\left(\frac{\alpha\Delta t}{2}\right) - \sinh^2\left(\frac{\alpha\Delta t}{2}\right) \cos^2\left(\frac{\omega\Delta t}{2}\right) + \frac{1}{2} \tanh(\alpha\Delta t) \sinh(\alpha\Delta t) \cos(\omega\Delta t) \right] \quad (2)$$

$$a = \tanh(\alpha\Delta t) \quad (3)$$



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

Government of India
Ministry of Youth Affairs And Sports
NEHRU YUVA KENDRA
Thiruvananthapuram



Government of India
Ministry of Information & Broadcasting
REGIONAL OUTREACH BUREAU
Thiruvananthapuram

Certificate of Participation

This Certificate is presented to


Jefrin

for active participation in the Webinar on
Cyber Space – Emerging Issues and Threats

L.C. Ponnunon
Field Exhibition Officer
Field Outreach Bureau
Govt. of India, Ministry of I & B
Kochi-682 037

18/12/2020

Issued on


B ALI SABRIN
District Youth Coordinator
Nehru Yuva Kendra
Thiruvananthapuram, Kerala

Made for free with Certify'em





Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

Wide Band Microwave Absorber using Flexible Broadside Coupled Split Ring Resonator Metamaterial Structure

Umadevi K. S^{2,3}, Sikha K. Simon^{1,4}, Sreedevi P. Chakyar¹, Jolly Andrews¹ and V. P. Joseph¹

¹Christ College(Autonomous) Irinjalakuda, University of Calicut, Physics, Thrissur, Kerala, India

²Newmann College, Thodupuza, M.G. University, Physics, Kottayam, Kerala, India

³Prajyothi Nikethan College, Pudukkad, University of Calicut, Electronics, Thrissur, Kerala, India

⁴ St. Thomas' College (Autonomous), University of Calicut, Physics, Thrissur, Kerala, India

vpj@christcollegeijk.edu.in

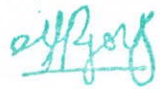
Abstract – This paper proposes a wide band microwave absorber in a bulk form realized using a Broad Side Coupled Split Ring Resonator (BCSRR) metamaterial structural units fabricated in a novel way which possesses structural flexibility and wide band frequency tunability. Instead of using a conventional structure, the two conducting rings of the structure are prepared separately by photochemical etching using thin copper sheets glued on polypropylene film. The resonant property studies of the BCSRR show a noticeable tunability in resonant frequency with spacing variation, a result not observed using other conventional SRR structures. A spacing variation of 1 mm of a typical BCSRR unit shows around 3 GHz resonant tunability which makes it suitable for materializing various sensor applications. The resonant properties of BCSRR in a bulk form made with specific structural dimensions arranged in periodic manner with progressively varying spacing using layers of cotton fabric, show wide band resonant absorption. By suitably modifying the structural parameters of BCSRR rings, the range of the frequency absorption band can be specifically designed. The result of the study predicts a possibility of using this proposed BCSRR designs in various types of wide band absorbers.

I. INTRODUCTION

There is vibrant research carried out by different groups in order to explore the potential possibilities and manifold applications of different types of Split Ring Resonators (SRRs) [1]. Broad Side Coupled Split Ring Resonator (BCSRR), one of the important candidates for negative permeability metamaterial resonating units, is widely used in different sensors, miniaturized antennas, frequency selective surfaces etc [2]. Conventionally BCSRRs are constructed by etching the rings of the structure on two sides of a single substrate and there by will have a fixed resonating frequency due to the thickness of the substrate used for selected structural parameters. By designing BCSRR in a novel way by fabricating the two rings on separate substrate of the same material, the spacing variation between the rings leading to wide band frequency tunability was easily achieved [3]. Instead of using rigid substrates for fabricating the rings, we have incorporated flexible, lossless microfilms as the substrate unit which will provide the added advantage of flexibility [4]. In this paper, such specially designed BCSRR units are periodically structured to materialize a bulk medium to achieve a noticeable wide band frequency absorption which is not possible with conventional structures.

II. FABRICATION AND MEASUREMENTS

The rings of BCSRR are fabricated on thin copper sheets of thickness 20 μm . The substrate used is a polypropylene film of thickness 18 μm which is glued to the copper sheets. By using photochemical etching method the required BCSRR rings of specific dimensions are fabricated. Three sets of rings with inner radius $r = 5.4$ mm, 4.7 mm, 3.0 mm and width $w = 2.7$ mm, 1.8 mm, 2 mm and slit width $d = 0.2$ mm are precisely made. Cotton fabric strips of thickness of 0.1 mm are used for achieving the required spacing between the rings of the BCSRR. Planar array of BCSRR rings with periodicity 12 mm having five columns with varying spacing using different


P. Dr. Jolly Andrews
Assistant Professor
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

Government of India
Ministry of Youth Affairs And Sports
NEHRU YUVA KENDRA
Thiruvananthapuram



Government of India
Ministry of Information & Broadcasting
REGIONAL OUTREACH BUREAU
Thiruvananthapuram

Certificate of Participation

This Certificate is presented to


Jefin Thattil

for active participation in the Webinar on
Cyber Space – Emerging Issues and Threats

L.C. Ponnunon
Field Exhibition Officer
Field Outreach Bureau
Govt. of India, Ministry of I & B
Kochi-682 037

18/12/2020

Issued on


B ALI SABRIN
District Youth Coordinator
Nehru Yuva Kendra
Thiruvananthapuram, Kerala

Made for free with Certify'em





Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

Two new species of the tribe Ballini Banks, 1892 from India
(Araneae: Salticidae)

Два новых вида трибы Ballini Banks, 1892 из Индии
(Araneae: Salticidae)

Jobi J. Malamel^{1,2}, Dhruv A. Prajapati^{1,2,3,*},
Ambalarambil V. Sudhikumar^{1,4}, Pothalil A. Sebastian²
Джоби Дж. Маламел^{1,2}, Дхрув А. Праджапати^{1,2,3,*},
Амбалапарамбил В. Судхикумар^{1,4}, Потхалил А. Себастиан²

¹ Research and Development Centre, Bharathiar University, Coimbatore – 641 014, India.

² Division of Arachnology, Zoology Dep., Sacred Heart College, Thevara, Cochin, Kerala 682 013, India

³ GEER Foundation, Indroda Nature Park, Gandhinagar, Gujarat 382007, India.

⁴ Centre for Animal Taxonomy and Ecology, Zoology Dep., Christ College, Irinjalakuda, Kerala, 680 125, India

*Corresponding author. E-mail: dhruvspidy215@gmail.com

KEY WORDS. Aranei, jumping spiders, taxonomy, diagnostic characters, distribution.

КЛЮЧЕВЫЕ СЛОВА. Aranei, пауки-скакуны, таксономия, диагностические признаки, распространение.

ABSTRACT. The genus *Indomarengo* Benjamin, 2004 is reported from India for the first time. Two new species of the genera *Indomarengo* and *Marengo* Peckham et Peckham, 1892 are described. Detailed morphological descriptions, diagnoses and illustrations for both species and SEM images for the new *Indomarengo* species are provided. Several new morphological characters of the genus *Indomarengo* are discussed. Collecting localities of both new species are mapped.

How to cite this article: Malamel J.J., Prajapati D.A., Sudhikumar A.V., Sebastian P.A. 2019. Two new species of the tribe Ballini Banks, 1892 from India (Araneae: Salticidae) // Arthropoda Selecta. Vol.28. No.3. P.424–434. doi: 10.15298/arthscl. 28.3.07

РЕЗЮМЕ. Род *Indomarengo* Benjamin, 2004 впервые отмечен из Индии. Описаны два новых вида из родов *Indomarengo* и *Marengo* Peckham et Peckham, 1892. Даны детальные морфологические описания, диагнозы и рисунки для обоих видов и SEM изображения для вида *Indomarengo*. Обсуждаются несколько новых морфологических признаков для рода *Indomarengo*. Точки находок обоих видов прокартированы.

Introduction

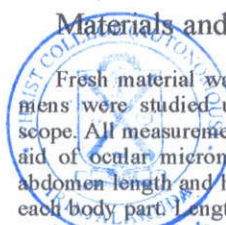
According to Maddison [2015], the jumping spider family Salticidae consists of 588 genera in seven subfamilies, 30 tribes and 13 subtribes. The subfamily Marpissoida Maddison et Hedin, 2003 includes three tribes: Ballini Banks, 1892, Tisanibini Maddison, 2015 and Dendryphantini Menge, 1879 [Maddison, 2015].

Jumping spiders of the tribe Ballini are distributed in Asia, Africa, Europe and Australia, accounting for 84 species in 15 genera [Maddison, 2015; WSC, 2019], but two more genera — *Ligdus* Thorell, 1895 and *Homalattus* White, 1841, which are currently listed as *incertae sedis* — could also be members of the Ballini [Maddison, 2015]. Asia seems to be the most diverse continent for the Ballini, whereas Europe (one genus) and Australia (two genera) are least diverse [WSC, 2019].

Based on morphological characters, Benjamin [2004, 2006] revised the Ballini and erected two Asian genera (*Indomarengo* Benjamin, 2004 and *Leikung* Benjamin, 2004) and an African one (*Afromarengo* Benjamin, 2004). *Indomarengo* consists of three species: *I. chandra* Benjamin, 2004, *I. sarawakensis* Benjamin, 2004 and *I. thomsoni* (Wanless, 1978) distributed in SE Asia [WSC, 2019]. In the present paper we aim (1) to describe a new *Indomarengo* species from India, hence recording the genus from India for the first time, and (2) to describe a new *Marengo* species from India. A distribution map for both species is also provided.

Materials and Methods

Fresh material was hand-collected from foliage. Specimens were studied under a LEICA S8APO stereomicroscope. All measurements are in mm and were made with the aid of ocular micrometer. Measurements of cephalic and abdomen length and height were taken at the middle part of each body part. Lengths of palp and leg segments are given as follows: total (femur, patella, tibia, metatarsus (except palp), tarsus). Spine positions are as follows: prolateral,



Dr. Jolly Andrews
Assistant Professor-Principal
(Autonomous)
Christ College, Irinjalakuda

International Conference On Employment Opportunities in the field of Social Science



SAROVARAM
Center for Promotion of
National Integration and
Community Development



NEHRU YUVA KENDRA
Ministry of Youth Affairs and Sports



DEPT. OF SOCIOLOGY
UNIVERSITY OF KERALA
Thiruvananthapuram

CERTIFICATE OF PARTICIPATION

This is to certify that Prof./ Dr./ Mr./ Ms./ Mrs.

Isaac Sabu Thattil

has participated in the *International Conference On Employment Opportunities in the field of Social Science* jointly organized by **Sarovaram** Center for the Promotion of National Integration and Community Development, **Nehru Yuva Kendra**, Thiruvananthapuram and **Dept. of Sociology**, University of Kerala Thiruvananthapuram, held on 13, 14, 15 and 16 February 2021.

Chairperson
SAROVARAM, Kerala

District Youth Officer
Nehru Yuva Kendra, Thiruvananthapuram,
Kerala

Organising Secretary
Dept. of Sociology,
University of Kerala.



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Injalakuda

http://doi.org/10.11646/zootaxa.4154.4.9
http://zoobank.org/urn:lsid:zoobank.org:pub:67A91F69-EC41-4BE3-9F78-4A15750C321A

**On the type species of the genus *Aetius* O. Pickard-Cambridge, 1896:
The first description of male with notes on cymbial notch and mating plug
(Araneae: Corinnidae: Castianeirinae)**

PUTHOOR PATTAMMAL SUDHIN¹, KARUNNAPPILLI SHAMSUDHEEN NAFIN^{1,3},
ZOË SIMMONS² & AMBALAPARAMBIL VASU SUDHIKUMAR¹

¹Centre for Animal Taxonomy and Ecology, Department of Zoology, Christ College, Irinjalakuda, Kerala, 680 125, India

²Oxford University Museum of Natural History, Parks Road, Oxford, OX1 3PW, United Kingdom

³Corresponding author. E-mail: nafinks5@gmail.com

The rare ant mimicking sac spider genus *Aetius* was erected by O. Pickard-Cambridge in 1896 based on an unspecified number of female specimen(s) collected from Sri Lanka. The type species of the genus, *A. decollatus* O. Pickard-Cambridge, 1896, has been redescribed twice based on the holotype (Majumder & Tikader 1991; Deeleman-Reinhold 2001). Reimoser (1934) recorded the genus for the first time from India, who collected a male specimen from Mudumalai Tiger Reserve in Tamil Nadu State of southern India. This specimen was identified as *A. decollatus*, but it was never formally described and was later recognised to be a penultimate male (Dankittipakul & Singtripop 2013). Deeleman-Reinhold (2001) described the second representative of the genus, *A. nocturnus*, based on a single female specimen from Borneo, 105 years after the establishment of the genus. Dankittipakul & Singtripop (2013) described the male of *A. nocturnus*, thereby revealing the male genitalia of the genus, but the type species was still known only from the female sex.

This paper provides the first description of the hitherto unknown male of *A. decollatus* and redescribes the female based on freshly collected materials from the Wayanad Wildlife Sanctuary in the Kerala State, which is part of the Western Ghats of India, and the agricultural plains of Pollachi in the Tamil Nadu State of India. The proposed function and significance of the semi-circular cymbial notch of the male palp, which is unique to the males of *Aetius* spp. (Dankittipakul & Singtripop 2013), is discussed. The occurrence of mating plugs in the genus and variations in body pattern are reported. Additionally, the current distribution of *A. decollatus* is mapped.

Fresh material was collected directly by hand. All measurements are in millimetres (mm). Length of palp and leg segments are as follows: total (femur, patella, tibia, metatarsus (except palp), and tarsus). Description and terminology follow Reiskind (1969) and Raven (2015), and spine positions follow the format of Bosselaers & Jocqué (2000). The following morphological indices are also recorded: carapace index = carapace width/carapace length x 100, sternum index = sternum width/sternum length x 100, abdominal index = abdominal width/abdominal length x 100, dorsal sclerite index = dorsal sclerite width/dorsal sclerite length x 100. Drawings were made by the aid of a drawing tube attached to the microscope. The micro photographic images were taken with Olympus EPL-3 digital camera attached to a Magnus MSZ TR stereo microscope; the photographs were stacked using Combine ZP software (www.hadleyweb.pwp.blueyonder.co.uk) to create a final image. The specimens are deposited in a reference collection housed at the Centre for Animal Taxonomy and Ecology, Department of Zoology, Christ College, Irinjalakuda, Kerala (CATE).

Abbreviations used in the text: AER—anterior eye row, ALE—anterior lateral eye, AME—anterior median eye, do—dorsal, MOQ—median ocular quadrangle, OUMNH—Oxford University Museum of Natural History, pl—prolateral, PER—posterior eye row, PLE—posterior lateral eye, PME—posterior median eye, r—retrolateral, rlv—retrolateral ventral, vt—ventral.

The authors are grateful to Fr. Dr Jose Thekkan CMI, Principal, Christ College, Irinjalakuda, Kerala for providing all the facilities for conducting this research. We are thankful to Mr Pradeep M. Sankaran, Division of Arachnology, Sacred Heart College, Thevara, India, for the valuable guidance and encouragement that helped materialize this MS. We are immensely grateful to Dr Charles R. Haddad, Department of Zoology & Entomology, University of the Free State, South Africa for the insightful suggestions that greatly improved the manuscript. We greatly acknowledge the constructive comments and suggestions made by the reviewers, Dr Yuri M. Marusik and Dr Mathew Leister. Thanks are due to Ms Katherine Child for her help in photographing the specimen from the Pickard-Cambridge collection at OUMNH. Many thanks to Mr Jimmy Paul, Dr Mathew M. Joseph and Mr Jayadevan C. Sreedharashenoy for their help in detecting the

பழங்குடியினர் மற்றும் கிராமிய அபிவிருத்தி மைய அறக்கட்டளை
CENTRE FOR TRIBALS AND RURAL DEVELOPMENT TRUST (CTRD)

Ref:

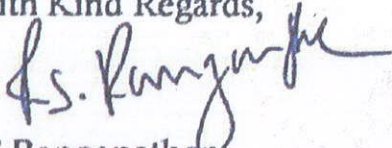
Date: 24.12.2019

TO WHOM SO EVER IT MAY CONCERN

This is to certify that VIPIN BABU A., BSW (SF) from, Christ College, Irinjalakuda, Thrissur, he completed his 20 Days Fieldwork at CTRD Trust from 2nd to 24th December' 2019.

During his tenure we found his to be sincere & hard working. We wish him all the best for his future endeavors.

With Kind Regards,



RS.Ranganathan
Managing Trustee



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

International Conference On Employment Opportunities in the field of Social Science



SAROVARAM
Center for Promotion of
National Integration and
Community Development



GOVERNMENT OF INDIA
NEHRU YUVA KENDRA
Ministry of Youth Affairs and Sports



DEPT. OF SOCIOLOGY
UNIVERSITY OF KERALA
Thiruvananthapuram

CERTIFICATE OF PARTICIPATION

This is to certify that Prof./ Dr./ Mr./ Ms./ Mrs.

Keema George

has participated in the *International Conference On Employment Opportunities in the field of Social Science* jointly organized by **Sarovaram** Center for the Promotion of National Integration and Community Development, **Nehru Yuva Kendra**, Thiruvananthapuram and **Dept. of Sociology**, University of Kerala Thiruvananthapuram, held on 13, 14, 15 and 16 February 2021.

Chairperson
SAROVARAM, Kerala

District Youth Officer
Nehru Yuva Kendra, Thiruvananthapuram,
Kerala

Organising Secretary
Dept. of Sociology,
University of Kerala.



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda



International Research Journal of Natural and Applied Sciences
Vol. 3, Issue 8, August 2016 IF- 3.827 ISSN: (2349-4077)
© Associated Asia Research Foundation (AARF)
Website: www.aarf.asia Email : editor@aarf.asia , editoraarf@gmail.com

LANDSLIDE SUCEPTIBILITY ANALYSIS OF KOTHAMANGALAM- MUNNAR HIGHWAY USING GEOINFOEMATICS

Subin K. Jose*, Mahesh Jayakumar, Vijod M***

*Geology and Environmental Science, Christ College, Irinjalakuda.

**Kerala University of Fisheries and Ocean studies (KUFOS), Kochi.

ABSTRACT

Landslides occur in a large variety of forms depending on the type and speed of movements, the material involved and the triggering mechanism. The research area comprises an area of 77 km road stretch Kothamangalam-Munnar highway (NH49) of Kerala and it was situated at in two districts Idukki and Ernakulam. The present study tries to identify different landslide prone areas in Kothamangalam-Munnar highway (NH49) of Kerala by using Remote Sensing and GIS. In the present study raster based weightage method was carried out for the preparation of landslide susceptibility zonation map. For the study data utilized include survey of India Topographic maps, Indian Remote Sensing Satellite data and Rainfall data from the Indian Meteorological Department. In this study a set of 6 instability factors corresponding to the causative factors for the instability were prepared using remote sensing information and topographic sheets. Different thematic layers such as slope, aspect, elevation, drainage density, landuse and rainfall were created for the preparation of landslide susceptibility zonation map. The accuracy of landslide prediction map was verified by field investigation using GPS.

Key words: *Landslide, Geographic Information System, Remote Sensing, Disaster, Prediction*

INTRODUCTION

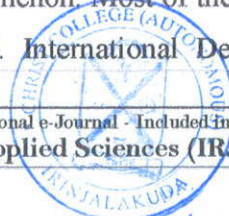
Natural disasters such as landslides, earthquakes, flood, drought, cyclone, volcanic eruptions, environmental degradation etc are of global phenomenon. Most of the countries are experiencing either one or more disasters at regular interval. International Decade for Natural Disaster

A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories.
International Research Journal of Natural and Applied Sciences (IRJNAS) ISSN: (2349-4077)

Er. Dr. Jolly Andrews

Assistant Professor-
In-charge of Principal

Christ College (Autonomous)
Irinjalakuda



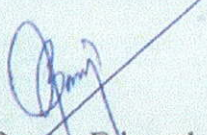
21st December 2019

TO WHOM SO EVER IT MAY CONCERN

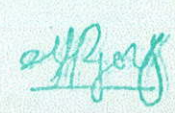
This is to certify that **Ms. Surabhi Suresh** from **Christ College Irinjalakuda (Autonomous), Thrissur** has successfully completed her 20 days field work at Shreyas, Sulthan Bathery, Wayanad from 2nd December 2019 to 21st December 2019. During the internship, she got opportunity to familiarize herself with different departments and community development initiatives of Shreyas and practice social work methods. She did following activities during her placement very sincerely and efficiently.

- Learned Administrative Structure and Organizational Profile
- Conducted training programme and sports meet for tribal community
- Conducted group work
- Coordinated Recovery activities for the victims of Kerala Floods 2018
- Prepared Case Study and practised Case Work
- Documentation of the programmes
- Conducted social experiment and collective action
- Organized street play
- Participated in the 4 tier evaluation process of Shreyas

We wish all success in her future endeavors.


Adv. Fr. Benny Edayath
Executive Director




Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda



International Conference On Employment Opportunities in the field of Social Science



SAROVARAM
Center for Promotion of
National Integration and
Community Development



GOVERNMENT OF INDIA
NEHRU YUVA KENDRA
Ministry of Youth Affairs and Sports



DEPT. OF SOCIOLOGY
UNIVERSITY OF KERALA
Thiruvananthapuram

CERTIFICATE OF PARTICIPATION

This is to certify that Prof./ Dr./ Mr./ Ms./ Mrs.

Farisa k

has participated in the *International Conference On Employment Opportunities in the field of Social Science* jointly organized by **Sarovaram** Center for the Promotion of National Integration and Community Development, **Nehru Yuva Kendra**, Thiruvananthapuram and **Dept. of Sociology**, University of Kerala Thiruvananthapuram, held on 13, 14, 15 and 16 February 2021.

Chairperson
SAROVARAM, Kerala

District Youth Officer
Nehru Yuva Kendra, Thiruvananthapuram,
Kerala

Organising Secretary
Dept. of Sociology,
University of Kerala.



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

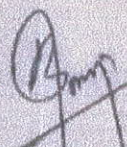
21st December 2019

TO WHOM SO EVER IT MAY CONCERN


This is to certify that Ms. Sreedevi N C from Christ College Irinjalakuda (Autonomous), Thrissur has successfully completed her 20 days field work at Shreyas, Sulthan Bathery, Wayanad from 2nd December 2019 to 21st December 2019. During the internship, she got opportunity to familiarize herself with different departments and community development initiatives of Shreyas and practice social work methods. She did following activities during her placement very sincerely and efficiently.

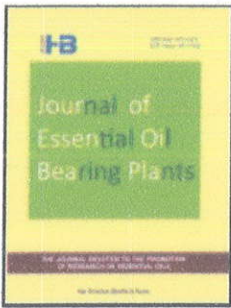
- Learned Administrative Structure and Organizational Profile
- Conducted training programme and sports meet for tribal community
- Conducted group work
- Coordinated Recovery activities for the victims of Kerala Floods 2018
- Prepared Case Study and practised Case Work
- Documentation of the programmes
- Conducted social experiment and collective action
- Organized street play
- Participated in the 4 tier evaluation process of Shreyas

We wish all success in her future endeavors.


Adv. Fr. Benny Edayath
Executive Director




Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda



Chemical Composition of the Essential Oils from Stem, Root, Fruit and Leaf of Piper longum Linn

Titto Varughese, Prakash Kumar Unnikrishnan, M. Deepak, Indira Balachandran & A.B. Rema Shree

To cite this article: Titto Varughese, Prakash Kumar Unnikrishnan, M. Deepak, Indira Balachandran & A.B. Rema Shree (2016) Chemical Composition of the Essential Oils from Stem, Root, Fruit and Leaf of Piper longum Linn, Journal of Essential Oil Bearing Plants, 19:1, 52-58, DOI: [10.1080/0972060X.2015.1119065](https://doi.org/10.1080/0972060X.2015.1119065)

To link to this article: <http://dx.doi.org/10.1080/0972060X.2015.1119065>



Published online: 07 Mar 2016.



Submit your article to this journal [↗](#)



View related articles [↗](#)



View Crossmark data [↗](#)

Handwritten signature



Fr. Dr. Jolly Andrews
Assistant Professor-
in-charge of Principal
Christ College (Autonomous)
Irinjalakuda

Full Terms & Conditions of access and use can be found at
<http://www.tandfonline.com/action/journalInformation?journalCode=teop20>

Government of India
Ministry of Youth Affairs And Sports
NEHRU YUVA KENDRA
Thiruvananthapuram



Government of India
Ministry of Information & Broadcasting
REGIONAL OUTREACH BUREAU
Thiruvananthapuram

Certificate of Participation

This Certificate is presented to

Asma.p.m

for active participation in the Webinar on
Cyber Space – Emerging Issues and Threats

[Signature]
L.C. Ponnayyan
Field Exhibition Officer
Field Outreach Bureau
Govt. of India, Ministry of I & B
Kochi-682 037

18/12/2020

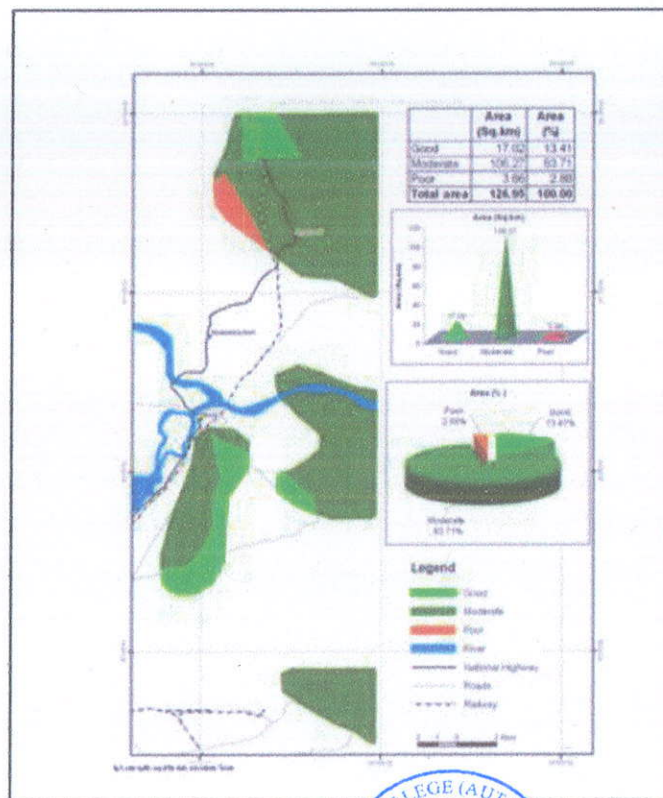
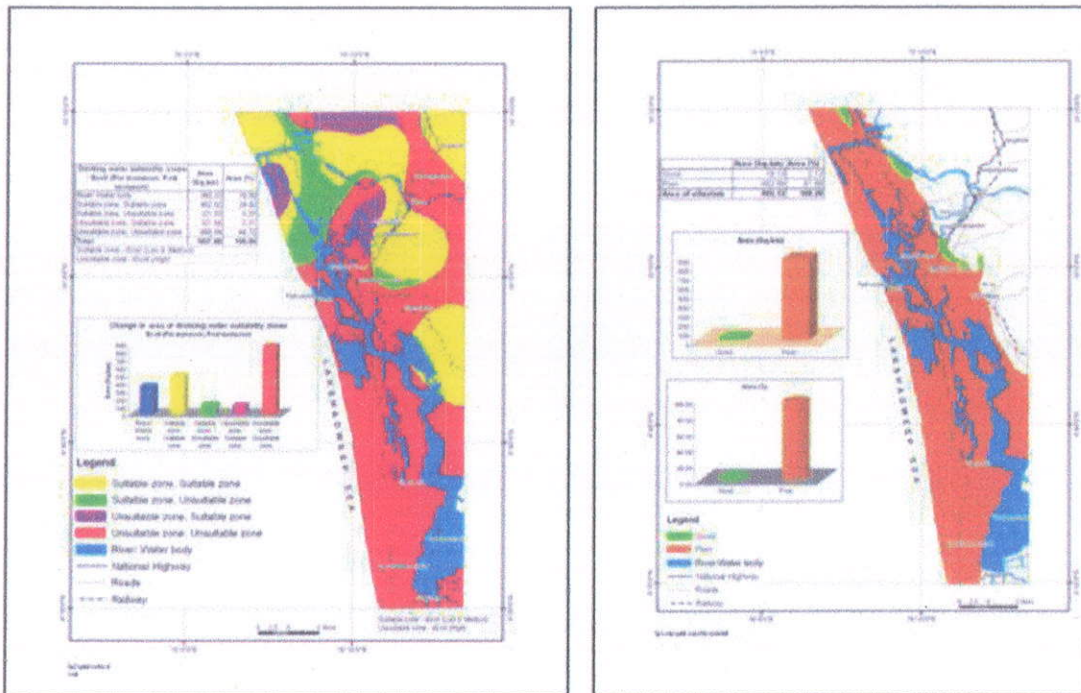
Issued on

[Signature]
B ALI SABRIN
District Youth Coordinator
Nehru Yuva Kendra
Thiruvananthapuram, Kerala

Made for free with Certify'em



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Mangalakuda

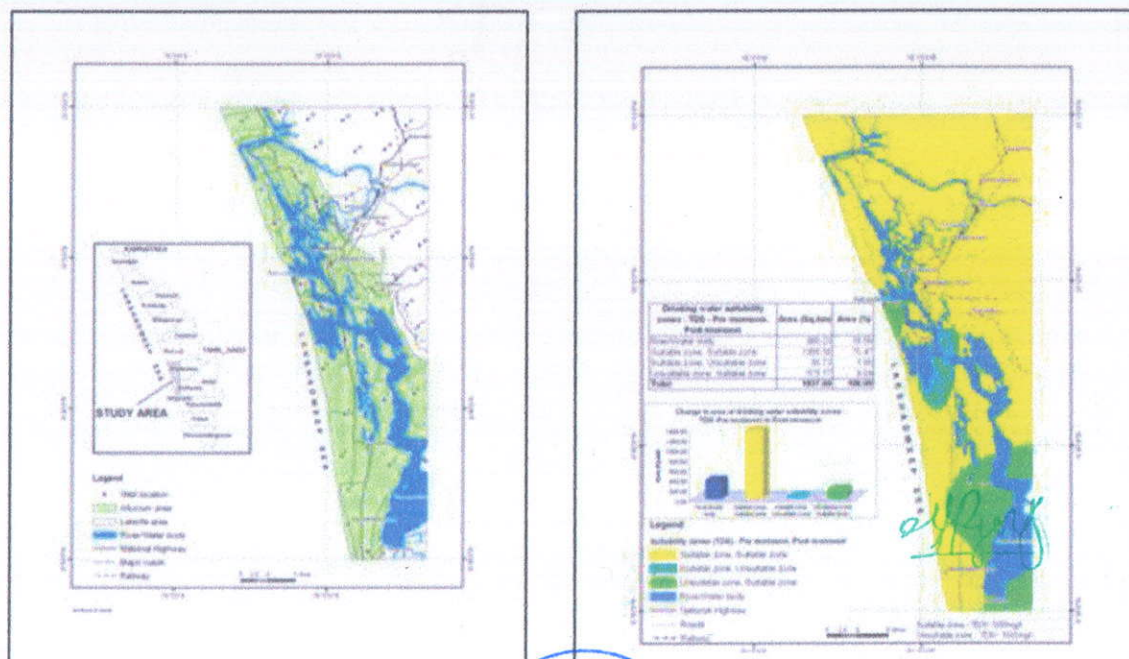


Handwritten signature



Fr. Dr. Jolly Andrews
 Assistant Professor-
 In-charge of Principal
 Christ College (Autonomous)
 Irinjalakuda

- [3] Aravindan, S.(1999), Integrated hydrogeological studies in hard rocks aquifer system of Gadilam river basin, Tamil Nadu, India, Ph.D thesis, Bharathidasan University, p.110.
- [4] Edmund Merem and Yaw Twumasi.(2007), The Applications of GIS and Remote Sensing In The Conservation of Watershed: The Case of Pearl River Watershed In Mississippi,USDA-CRESS Water Conference Savannah, GA.
- [5] Goodchild, M.E.(1993), Environmental modelling with GIS. Oxford Univ. Press, New York. pp. 8-15.
- [6] Indian standard methods of sampling and test (Physical and Chemical) methods for water used in industry, (1983), 122p.
- [7] Kelly, W.R. and Wilson, S.D.(2003), Temporal changes in shallow groundwater quality in Northeastern Illinois. Proceedings of the 12th Annual Illinois Groundwater Consortium Conference, Makanda, IL.
- [8] Khan, M.A. and Moharana, P.C.(2002), Use of remote sensing and Geographical Information System in the delineation and characterization of groundwater prospect zone. J. Indian Soc. Remote Sensing, v. 31 (3), pp. 131-141.
- [9] Lenores, E., Arnold, E., Greenberg, R. and Trussell.(1989), Standard Methods for the Examination of Water and Waster Water, 17th Ed. Pub., American Public Health Association, Washington, D.C.2005.
- [10] Lloyd, J.W. and Heathcote, J.A.(1985), Natural inorganic hydrochemistry in relation to ground water. An Introduction, Clarendon Press Oxford, 296p.
- [11] Matt Butler, Janae Wallace, and Mike Lowe.(2002), Ground-Water Quality Classification Using GIS Contouring Methods for Cedar Valley, Iron County, Utah-Digital Mapping Techniques. Workshop Proceedings-U.S. Geological Survey Open-File Report 02-370.
- [12] S. S. Asadi, Padmaja Vuppala and M. Anji Reddy. (2007),Remote Sensing and GIS Techniques for Evaluation of Groundwater Quality in Municipal Corporation of Hyderabad (Zone-V), India. Int. J. Environ. Res. Public Health 2007, 4(1), 45-52.
- [13] Sameena, M., Ranganna, G., Krishnamurthy, Mukund Rao and Jayaraman, V.(2000). Targeting Groundwater Zones And Artificial Recharge sets using Remote Sensing and GIS techniques. Abs. 12th Convention IGC. pp. 113-114. M.L. Sukhadia University, Udaipur, India.
- [14] Sanjay K. Jain, Rathore, D.S. and Sharma, K.D.(2004), Remote sensing and GIS applications in the management of water resources development. Indian Society of Geomatics News letter, special issue on Water Resources, v. 10, n. 1, pp. 15-23.
- [15] Saraf, A.K. and Choudhury P. R.(1998), Integrated remote sensing and GIS for groundwater exploration and identification of artificial recharge sites International Journal of Remote Sensing, v. 19, n. 10, pp. 1825-1841(17).
- [16] Sarkar, B.C., Deota, B.S., Raju, P.L.N. and Jugran, D.K.(2001), A Geographical Information System Approach to evaluation of groundwater potentiality of Shamri Micro-Watershed in the Shimla Taluk Himachal Pradesh. J. Indian Soc. Remote Sensing, v. 29 (3), pp. 151-164.
- [17] Srinivasa Vittala, S., Govindaiah, S. and Homme Gowda, H.(2004), Morphometric Analysis of Subwater sheds in the Pavagada Area of Tumkur District, south India Using Remote Sensing and GIS techniques, j. Indian Soc Remote Sensing, v. 32 (4), pp. 351-362.
- [18] Venugopal, T.N.(1998), Hydrogeological investigation in the Arkavathi river basin – A tributary of Cauvery river, Karnataka, Ph.D Thesis, Mysore University, p. 224.
- [19] World Health Organisation (WHO). (1984) Guidelines for drinking water quality, V.I. Recommendations, Geneva.



Fr. Dr. Jolly Andrews
 Assistant Professor-
 In-charge of Principal
 Christ College (Autonomous)
 Irinjalakuda

value ranges from 26mg/l to 228mg/l. But in the case of the coastal belt, the values are pretty high in many wells and ranges from 80mg/l to 3425 mg/l. According to Venugopal (1998) and Aravindan (1999) the TDS values are higher during pre monsoon than the post monsoon season. In the present study also this feature is very evident. This can be attributed to the dilution resulting from the rainfall. Groundwater with TDS levels greater than 1500 mg/l is considered too saline to be a good source of drinking water. (Kelly and Wilson, 2003). Concentrations in 5 wells exceeded 500 mg/l. The well located at a place called Chellanam in the study area shows a high TDS value of 3424mg/l and here salt water intrusion has been reported earlier by many authors. This value is well above the I.S.I standard of 1500mg/l. Groundwater at 4 locations belongs to brackish water type as per the TDS classification (Twart et al. 1974). All these locations fall in the coastal belt. Rainwater is relatively pure distilled type water with very low TDS As rain water comes in contact with earth materials (soils, sediments and bedrock), soluble minerals are dissolved and carried in solution with the water during surface water flow or groundwater flow. Therefore TDS levels tend to increase in the downstream direction of surface flow and in the down gradient direction in the groundwater flow. From the analysis of EC and TDS values it can be safely inferred that wells in the crystalline terrain of the study area are much suitable for drinking purposes than those in the coastal belt. The drinking water suitability map for TDS is given in fig.2. From the overlay map it is evident that 70.47% remains in the suitability zone in both the seasons, 1.9 % changes from suitable to unsuitable and 9.04 % changes from unsuitable to suitable zone.

Bacteriological analysis carried out in the study area indicates the presence of e.coli in the groundwater in most of the locations. Coliforms are naturally present in the environment. E.coli comes only from human and animal faecal waste. During rainfall e.coli may be washed into rivers, streams or ground water. When this untreated water is used as a source of drinking water e.coli may end up in drinking water. The suitability map for e.coli in the study area is given in fig.3. The suitability range has been taken as low to medium e.coli and high e.coli has been taken as unsuitable. 24.88% of the area falls in the suitable range in both the seasons, 6.25% changes from suitable to unsuitable and 5.57% changes from unsuitable to suitable zone.

V. Conclusions

Although the present study aims to develop a comprehensive database of the coastal belt using GIS, taking into consideration prominent laterite outcrops in the study area, a drinking water quality map of the lateritic terrain was also prepared (shown in fig.5), along with the coastal area water quality map fig.4. These two drinking water suitability maps were prepared by an overlay operation of all the quality parameters using GIS. The water quality maps act as clear pointers of the water quality in the study area and helps in a comparative analysis of the coastal belt with the crystallines. The present study reveals the inferior quality of groundwater in the coastal alluvium of the study area compared to the hard rock terrain. Analysis of the drinking water suitability map shows that 13.42% of the lateritic terrain falls in the good zone, 83.71% in the moderate and 2.88% in the poor water quality zone. From the drinking water suitability map of the coastal belt it is clear that 97.8% (888.9 Sq.Km) falls in the 'poor' zone. Only 2.2% (19.3 sq.km) of the alluvium falls in the 'good' zone. These zones are located away from the coast towards east and are also not influenced by tidal inlets. In the study area the flow is from east to west and thus increase in heavy precipitation events are likely to flush more contaminants and sediments into the coastal areas, degrading water quality. Where uptake of agricultural chemicals and other non-point sources could be aggravated, steps to limit water pollution are likely to be needed. In some regions, however, higher average flows may dilute pollutants and, thus, improve water quality. In the coastal regions where river flows are reduced, this could result in increased salinity. The quality of ground water in the coastal belt is being diminished by a variety of factors, including chemical contamination. Salt-water intrusion is another key ground-water quality concern in the coastal belt where changes in fresh-water flows and increases in sea level occur. Rampant sand mining in many river beds of the study area, especially Periyar leads to stagnation of tidal water which can lead to increased salinity in many parts of the study area.

VI. Future Outlook

The potential of Geographic Information Systems, although in use for some time, has not been fully exploited and this tool in conjunction with conventional techniques like geophysical prospecting offers tremendous scope for further contributing to the existing knowledge on groundwater. The integrated study using GIS is proved to be an efficient and scientific method for groundwater management. Hence it is recommended that integrated study using GIS may be taken up in the Cadastral scale so as to generate an accurate database.

References

- [1] Anon.(1998), Standard Analytical Procedures for Water Analysis, Laboratory Manual, Hydrology Project, CSMRS Building, floor, Olof Palme Marg, New Delhi-16.
- [2] American Public Health Association (APHA). (1985), Standard Methods for the Analysis of Water and Waste Water (16th edn.), American Public Health Association, Washington. D.C.

by Sanjay K. Jain, Rathore, and Sharma, K.D. (2004). Edmund Merem and Yaw Twumasi, (2007) utilized GIS and Remote Sensing in the Conservation of Pearl River watershed in Mississippi. Asadi et al., (2007) evaluated the groundwater quality in the Municipal Corporation of Hyderabad, India using GIS. Ground-Water Quality Classification was done using GIS Contouring Methods for Cedar Valley, Iron County, Utah by Matt Butler, Janae Wallace, and Mike Lowe (2002). In the present study GIS has been utilized in deriving a comprehensive user friendly database of the area which can be used for the integrated water resources management of the area in future.

The city of Kochi falls in the study area (fig.1) and there are more than 20 major industries on the eastern outskirts and most of these industries depend on the river Periyar for their water requirements. Even then, there are a number of bore wells in the industrial areas. Effluents from these industries affect water quality and scope for further study in this field is vast. Another major problem of the area is the saline water intrusion through the river Periyar, especially when the daily flow rate through the river is less.

Groundwater is the main source of drinking water supply except in Kochi city and some major towns, and there is vast potential to develop groundwater in these areas for domestic and irrigation purposes. Proper development and management techniques are absolutely essential in the use of groundwater for agricultural purposes. The study area also offers a platform for a comparative analysis of the characteristics of the coastal area with the corresponding crystallines. The present study area has been selected as it provides immense scope to contribute to the existing knowledge and practices elsewhere in the coast.

The potential of Geographic Information Systems, although in use for some time, has not been fully exploited and this tool in conjunction with conventional techniques like geophysical prospecting offers tremendous scope for further contributing to the existing knowledge on groundwater.

II. Environmental Setting

The study area lies in the Ernakulam, Alleppey and Trichur districts of Kerala (India). Coastal tracts of Kerala are formed by several drainage systems. Thick pile of semi-consolidated and consolidated sediments from Tertiary to Recent age underlies it. These sediments comprise phreatic and confined aquifer systems. The corresponding hard rock terrain is encountered with laterites and underlain by the Precambrian metamorphic rocks. Supply of water from hard rock terrain is rather limited. This may be due to the small pore size, low degree of interconnectivity and low extent of weathering of the country rocks. The groundwater storage is mostly controlled by the thickness and hydrological properties of the weathered zone and the aquifer geometry.

III. Materials and methods

Sample collection was carried out following the well laid out procedures in Standard Methods for the Examination of Water and Waste Water (APHA 1985) Sampling was done covering both pre monsoon (April) and post monsoon (December) periods. Groundwater samples were collected from 41 dug wells from the study area. The well locations are shown in the location map, fig.1 which also shows the coastal and crystalline belts separately. The well locations were selected in such a way that a comparative account of the coastal belt and the crystallines could be made. For bacteriological analysis the samples were collected aseptically in sterilized bottles and transported to the laboratory in icebox maintaining the temperature at 40 C. Coliform tests were done within 12 hours of sampling. The samples were analyzed following the standard procedure of water analysis (ISI, 1964), standard methods for the examination of water and waste water (Lenores et al., 1989) and standard analytical procedures for water analysis (Anon, 1998). GIS has been used to create spatial distribution of each element and also for its overlay analysis to generate zonation maps and spatial overlay maps. Zonation maps of each element, which are accurate and user friendly gives the areal extent of each element as also the variation between the two seasons (premonsoon and postmonsoon). We also calculated the land-surface-area percentage of each ground-water class category by building the polygon coverage in ArcInfo and calculating the corresponding areas. Spatial overlay maps were prepared to know the change in the zonation area of each element between the premonsoon and postmonsoon periods. Suitability maps of each element as per drinking water standards prescribed by WHO and the overlay showing variations between the two seasons were prepared. Range as per WHO standards were input in Arc Map and suitability zones for each element delineated. Premonsoon and postmonsoon maps were overlain for suitability. An overlay operation of all the drinking water suitability maps resulted in the final water quality map. In the present study the water quality map has been prepared separately for the coastal alluvium and lateritic terrain which outcrops as the most important feature in the crystallines.

IV. Results and Discussion

The total concentration (TDS) of dissolved minerals in water is a general indication of its suitability for any particular purpose. Groundwater with a TDS value of less than 300 mg/l can be considered as excellent for drinking purpose according to WHO (1984). The TDS values for the crystallines fall well below 300mg/l.

Water Quality Mapping of Coastal Aquifers in Central Part of Peninsular India Using Geographic Information System

Subin K Jose¹, R. V. Rajan¹, R. Santhosh Kumar²,

¹Geology and Environment science, Christ college, Irinjalakuda

²Centre for Earth Research and Environment Management, Kochi

Abstract: The coastal tract of central Kerala, India comprises of Tertiary sediments and the phreatic aquifer here acts as an important source of drinking water. The most important climatic feature in the region is the monsoon, which has great influence on the quality of the groundwater. Water samples were collected during pre-monsoon and post-monsoon seasons from open wells and quality analyses including bacteriological studies were carried out. Groundwater quality maps were prepared based on GIS. The groundwater quality classification maps of the study area reflect the areal extent of each zone accurately and the variations in each parameter. Application of GIS further helped in delineating the potential potable groundwater zones of the area. The study revealed the inferior quality of groundwater in most of the coastal belt and also prevalence of *E. coli* in drinking water.

Keywords: coastal aquifer, groundwater quality, GIS

I. Introduction

Groundwater is one of the most important natural resources necessary for humanity. It is vital for the existence of mankind but faces acute shortage. Groundwater is that invisible supply of water that seeps beneath the surface of the ground, collects in natural underground reservoirs known as aquifers, and is the source of water in springs and wells. It provides almost a third of all freshwater on earth. It is threatened, however, by pollution, water mismanagement and exploding populations just as the world's remaining sources of freshwater are endangered. Groundwater resources are dynamic in nature as they grow with the expansion of irrigation activities, industrialization, urbanization etc. As it is the largest available source of fresh water lying beneath the ground it has become crucial not only for targeting of groundwater potential zones, but also monitoring and conserving this important resource. The expenditure and labour incurred in developing surface water is much more compared to groundwater, hence more emphasis is placed on the utilization of groundwater, which can be developed within a short time. Besides targeting groundwater potential zones it is also important to identify suitable sites for artificial recharge usage cycle. When the recharge rate cannot meet the demand for water, the balance is disturbed and hence calls for artificial recharge on a country wise basis (Sameena et. al. 2000). With the world's population explosion, increasing pollution and wide-scale mismanagement of freshwater supplies, a critical water shortage may occur within the next 50 years and hence counter-measures are essential. The slow penetration of pollutants has been called a "chemical time bomb." It threatens humankind. Another danger is that of saltwater intrusion: the displacement of fresh water in coastal aquifers by seawater. The problem is acute in some coastal regions and for small islands. India with its long coastline also faces this problem. Another important aspect is water quality. Improvements in existing strategies and the innovation of new techniques resting on a strong science and technology base will be needed to eliminate the pollution of surface and ground water resources, to improve water quality and to step up the recycling and re-use of water. Science and technology and training have also important roles to play in water resources development in general. Water is one of the most crucial elements in developmental planning. As the country prepares itself to enter the 21st century, efforts to develop, conserve, utilize and manage this important resource have to be guided by national perspectives.

The problems faced by the coastal zone of Kerala, where the present study area falls, are unique among all other states of India mainly due to its high density of population and peculiar geological setting. The hydrogeological environment along this 560 km long coast with its backwater, lagoons, estuaries and barrier islands is complex in nature. The groundwater development along the coast has been increased many fold during the last four decades to meet the increase in requirements as a result of population growth, industrial development and change in lifestyle.

GIS is an effective tool for the integration of various data and hence has multifarious uses in geological studies. The GIS offers unique opportunities to integrate spatial data from different sources with the natural resources management models (Goodchild, 1993). GIS has been put to effective use in delineating groundwater potential zones in many earlier studies, Saraf and Chondhary, (1998); Sarkar et al., (2001); Khan and Moharana, (2002); Srinivasa et al., (2004). Application of GIS for groundwater resource assessment has also been reported



Since : 1960

QUILON SOCIAL SERVICE SOCIETY (Q.S.S.S)

(Reg No. Q137/60)

Fatima Road, Kollam- 691 013, Kerala


Certificate of Completion

This is to certify that SIYA SHABU CHRIST COLLEGE IRINJALAKUDA

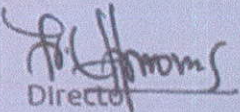
..... THRISSEUR *has successfully completed the Concurrent Field Work / Block Placement*

for 20 *days at this Organization from* 02-12-2019 *to* 27-12-2019

Date... 27/12/2019


Agency Supervisor




Director





Fr. Dr. Jolly An
Assistant Prof
In-charge of Pr
Christ College (Aut
Irinjalakuda



National Service Scheme
Thiruvananthapuram



Govt. of India
Ministry of Youth Affairs and Sports



NEHRU YUVA KENDRA
Thiruvananthapuram

Certificate of Participation

This is to certify that Mr./ Ms./ Mrs.

Ansil Gafoor

has participated the webinar on **National Youth Parliament Festival 2020 - 21** jointly organized
by **Nehru Yuva Kendra Thiruvananthapuram** and **National Service Scheme
Thiruvananthapuram** held on 28th December 2020.

Dr. ANZER R L
District Programme Officer
National Service Scheme
Thiruvananthapuram, Kerala

28/12/2020

Issued on

B ALI SABRIN
District Youth Officer
Nehru Yuva Kendra
Thiruvananthapuram, Kerala

Made for free with Certify'em



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

Spectral Domain Modeling of the Effect of Film Purity for Superconducting Slotline

Jolly Andrews*, Sreedevi P. Chakyar†, Joseph V.P.‡ and Vincent Mathew§

*†‡ Department of Physics, Christ College (Autonomous), Irinjalakuda-680125, University of Calicut, Kerala, India

§ Department of Physics, Central University of Kerala, Kasargod, Kerala, India

Email: * jmalieckkal123@gmail.com, † sreedevip2008@gmail.com, ‡ drvpjo@gmail.com, § vincentmathew@ieee.org

Abstract—A computation technique is presented to analyse the electromagnetic response of High Temperature Superconducting (HTS) film purity using a slotline. The complex conductivity of HTS films for three different material purity is modeled using Coffey-Clem (CC) unified theory. By using the surface impedance calculated by CC model, the dyadic Green's functions in Spectral Domain Method (SDM) are formulated for the slotline. The Galerkin's procedure is employed for the computation of the propagation parameters when HTS slotlines of different purities are guiding a fixed frequency microwave signal. Changes in the propagation parameters are analyzed for the variation of the film thickness at different working temperatures. The paper presents a modeling method for studying the microwave response of the HTS film purity.

Index Terms—Electromagnetic propagation, Green's function methods, Transmission lines, High Temperature Superconductors.

I. INTRODUCTION

The High Temperature Superconducting (HTS) films of different purity are manufactured using various techniques and are reported in the literature [1], [2]. Material purity of the HTS film used as the thin strip on inhomogeneous transmission lines significantly changes the complex conductivity and the propagation parameters [3]. Based on the experimental data regarding purity, YBCO thin films can be broadly classified into three types [3]. The high purity films, the medium purity films, and the low purity films are differentiated based on the phenomenological description of complex penetration depth. In this paper we present a modeling methodology to study the relationship between HTS film purity with electromagnetic wave propagation using a slotline for a wide range of temperature and strip thickness.

The modeling of HTS transmission lines without considering the vortex effects when no dc magnetic field is applied may appear straight forward [3]. But HTS films like YBCO are extreme type II materials and they will be in mixed state even at very low magnetic field values [4]. The microwave signal itself may make them in vortex state. At liquid nitrogen temperatures, the HTS films will have significant vortex activities like flux creep and flux flow [5]. For the accurate computation of conductivity of the HTS films and the propagation parameters of the slotline we need to employ a theory which takes into account the fields due to microwave signal, applied dc field and vortex generated fields [5]–[7]. Accordingly, the modeling of inhomogeneous HTS

transmission lines are quite challenging. Again, the inhomogeneous structure of striplines make their field derivations and formulation of dyadic Green's functions mathematically complicated [8]–[13]. The HTS contribution of the slotline have to be properly incorporated into the dyadic Green's functions for making the HTS film purity analysis accurate [14].

The HTS microstrip line, resonator, slotline and Coplanar waveguide have been modeled and their propagation parameters have been analyzed in our earlier works [9], [10], [12]–[15]. In this work we study the impact of HTS film purity on the microwave signal propagation by incorporating flux dynamics which include creep effect, flux flow phenomenon and vortex pinning and present a computation technique to specifically analyse this film purity effect on the wave propagation. We take a slotline with HTS material of varying film purity on a substrate like sapphire and place it in an applied dc magnetic field. For the sake of simplicity, we neglect the anisotropic natures of the permittivity of the substrate and the conductivity of the HTS material.

II. MODELING TECHNIQUE

In Spectral Domain Method (SDM), by matching the electromagnetic boundary conditions of the different interfaces of the slotline, we obtain the fourier transformed coupled equation as $[\tilde{\mathbf{Y}}][\tilde{\mathbf{E}}] = [\tilde{\mathbf{J}}]$ where $\tilde{\mathbf{Y}}$'s are the admittance elements, $\tilde{\mathbf{E}}$'s are the unknown electric fields and $\tilde{\mathbf{J}}$'s are the strip currents. The detailed discussion of the method is available elsewhere [8]. To incorporate the HTS contribution, we expand the unknown electric field as $\tilde{\mathbf{E}} = \tilde{\mathbf{E}}^e + Z_s \tilde{\mathbf{J}}$ where $\tilde{\mathbf{E}}^e$ is the Electric field distribution at the interface excluding the region of the strip, Z_s is the surface impedance due to HTS material and $\tilde{\mathbf{J}}$ represent the strip current. Accordingly, our algebraic equation will be modified as $[\tilde{\mathbf{Y}}'][\tilde{\mathbf{E}}] = [\tilde{\mathbf{J}}]$ where $\tilde{\mathbf{Y}}'$'s are the modified admittance Green's functions [10]. The propagation parameters are computed using Galerkin procedure.

The Coffey-Clem (CC) model gives a self-consistently determined penetration depth $\tilde{\lambda}(\omega, B, T)$ in terms of field dependent penetration depth λ , normal fluid skin depth δ_{nf} and the complex effective skin depth $\tilde{\delta}_{vc}$ [5] as

$$\tilde{\lambda}(\omega, B, T) = \left(\frac{\lambda^2 - (i/2)\tilde{\delta}_{vc}^2}{1 + 2i\lambda^2\tilde{\delta}_{nf}^{-2}} \right)^{1/2} \quad (1)$$

Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

GERIZIM REHABILITATION TRUST

(Registered under Karnataka Charitable Act. Regn. No. : 321 / 1990 – 91 dt.23.08.1990)

Head Office:

24th "D" Cross, Ejipura
Viveknagar, Bangalore –5600 47
Karnataka State, South India



Tel: 080- 2571 2015, 2571 3201

E-Mail: gerizimhelp@gmail.com

Web Site: www.gerizimhome.com

A Charitable Institution

FOUNDER: G.J. Yesudian M.A., B.Ed., D.S.S.D.H.

TREASURER / PRINCIPAL: Indira Yesudian B.A., M.Ed., D.S.E.

DIRECTOR: Joseph Ponraj

SECRETARY: S. Geetha Bai B.Com

Date: 21st December 2019

To,
The Head of the Department
Department of Social Work
Christ College (Autonomous) Irinjalakuda
Irinjalakuda North, Thrissur Dist., Kerala - 680 125.

Exposure - Interns - Department of Social Work - Christ College (Autonomous) Certificate - Active Involvement - Sani Simon - Final Year BSW

This does serve to inform you kindly that your bonafide students (final year BSW) – **Sani Simon**, has undergone his field work training at our Institution from 2nd December 2019 to 21st December 2019 for 20 days as required of them.

During the course of their practical exposure, they have involved to fulfill their objectives to an extent.

01. Opportunities provided to practice their spoken English.
02. Chances given to develop their communication skill to express their mind in words/actions to be an effective social work.
03. Dealt directly with the mentally challenged children in our organization.
04. Learnt to adjust with the existing situation while reaching out to needy people around on social service.
05. Engaged keenly to improve upon their personality.

As a part of the program, they took time to understand the mindset/background of the special children, occupied them to refresh their minds & target them simple domestic skills.

They cooperated well with our management & their rapport with our staff was congenial. We wish him well for bright career.


Joseph Ponraj
Director




Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

International Conference On Employment Opportunities in the field of Social Science



SAROVARAM
Center for Promotion of
National Integration and
Community Development



NEHRU YUVA KENDRA
Ministry of Youth Affairs and Sports



DEPT. OF SOCIOLOGY
UNIVERSITY OF KERALA
Thiruvananthapuram

CERTIFICATE OF PARTICIPATION

This is to certify that Prof./ Dr./ Mr./ Ms./ Mrs.

Ann Pona Supriyan

has participated in the *International Conference On Employment Opportunities in the field of Social Science* jointly organized by **Sarovaram** Center for the Promotion of National Integration and Community Development, **Nehru Yuva Kendra**, Thiruvananthapuram and **Dept. of Sociology**, University of Kerala Thiruvananthapuram, held on 13, 14, 15 and 16 February 2021.

Chairperson
SAROVARAM, Kerala

District Youth Officer
Nehru Yuva Kendra, Thiruvananthapuram,
Kerala

Organising Secretary
Dept. of Sociology,
University of Kerala.



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

Drought Vulnerability Detection and Mapping in Attapadi, A Part of Southern Western Ghats, India- Using Geoinformation Science and Technology

Subin K. Jose³, Mahesh Jayakumar², Shijila N³

^{1,3}Geology and Environmental Science, Christ College, Irinjalakuda

²Kerala University of Fisheries and Ocean Studies (KUFOS)

Abstract: Drought is an insidious hazard of nature which is considered by many to be the most complex but least understood of all natural hazards. It is among the natural disaster that causes damages and affects many people's life in many part of the world. Drought can be divided into four categories of meteorological, hydrological, agricultural and social-economic. Drought vulnerability is a concept which shows the likelihood of damages from hazard in a particular place by focusing on the system status prior to the disaster. Drought vulnerability has been viewed as a potential for losses in the region due to water deficiency at the time of drought. In this study the vulnerability of drought in Attapadi province in Palakkad district is investigated by providing vulnerability maps which demonstrates spatial characteristics of drought vulnerability. Modern technology has made substantial contribution in the identification of drought vulnerable area. The modern technology used in present system for drought prone area identification is remote sensing and geographic information system. Drought is one of the climatic, natural disasters, having an impact on both the economy and the society, with its long-standing problems. Drought by nature is a result of inter-related parameters. The study is based on the concept that the severity of the drought is a function of rainfall, hydrological and physical aspects of the landscape, leading to meteorological, hydrological and physical drought. In the present study a Geographic Information Systems (GIS) and remote sensing -based tool for drought vulnerability assessment at a micro level has been developed. The result of this study can be used for preparedness planning and for allocating resources for facing droughts in this region.

Keywords: Drought, Geographic Information System, Remote Sensing, Attapadi, Vulnerability Maps

1. Introduction

Drought is considered by many to be the most complex but least understood of all natural hazards, affecting more people than any other hazard (Abdel Aziz Belal ,2014). Drought risk is a product of a region's exposure to the natural hazard and its vulnerability to extended periods of water shortage (Nishadi,2015). Drought is a period of abnormally dry weather sufficiently for the lack of precipitation to cause a serious hydrological imbalance and carries connotations of a moisture deficiency with respect to man's usage of water. GIS is an information system that is designed to work with data referenced by spatial or geographic coordinates. GIS combined with MCE (Multi-Criteria Evaluation) can achieve measurable evaluation of drought risk. Karamouz *et al*, 2015, introduced Technologies for evaluating agriculture meteorological drought risk with GIS-MCE. The results indicated that technology of GIS-MCE can combine multiple source information associating with agriculture meteorological drought risk and achieve measurable result. Satellite remote sensing provides a synoptic view of the land and a spatial context for measuring drought Impacts, which have proved to be a valuable source of spatially continuous data with improved information for monitoring vegetation dynamics. Sierra-Soler *et al*, 2015 used the newly developed LULC methodology to determine the effects of drought in specific classes with great precision.

According to Jerrod *et al*, 2016, Earth observation satellites could prove useful for the assessment and evaluation of drought effects in forest ecosystems. The objective of his

study were to briefly review the existing sources of remote sensing data and their potential to detect drought damage; to review the remote sensing applications and studies carried out during the last two decades aiming at detecting and quantifying disturbances caused by various stress factors, and especially those causing effects similar to drought. If nations and regions are to make progress in reducing the serious consequences of drought, they must improve their understanding of the hazard and the factors that influence vulnerability. It is critical for drought-prone regions to better understand their drought climatology (i.e., the probability of drought at different levels of intensity and duration) and establish comprehensive and integrated drought information system that incorporate climate, soil, and water supply factors such as precipitation, temperature, soil moisture, snow pack, reservoir and lake levels, ground water levels, and stream flow. All drought prone nations should develop national drought policies and preparedness plans that place emphasis on risk management rather than following the traditional approach of crisis management where the emphasis is on reactive, emergency response measures. Crisis management decreases self-reliance and increase dependence on government and donors. India is predominantly an agrarian country as more than 70% of its population is dependent on agriculture. Due to the vagaries of rainfall more than 68% of the net sown area in the country is drought prone, out of which 50% is severe in nature. The country experiences drought every 2-3 years in one part or other (Jeyaseelan et al., 2003). The states experienced phenomenal drought conditions in the years 1972, 1979 and 1989 (C.S.E, 2001). UNICEF reported that an estimated 130 million people – 15 percent of the population – in more than 70,000 villages and 230 urban

Volume 5 Issue 11, November 2016

www.ijsr.net

Licensed Under Creative Commons Attribution CC BY



Pondicherry Multipurpose Social Service Society

(Regd. No : 6/77)

#81, Laporte Street, Puducherry - 605 001. Ph : 0413-2222928, Fax : 0413-2222982
Email : pmssspondy@hotmail.com, pmssspondy@gmail.com, Web : www.pmsss.org.in
director.pmsss@gmail.com, Mobile No: 9597555211

Most. Rev. Dr. Antony Anandaryar, D.D., D.C.I.,
President

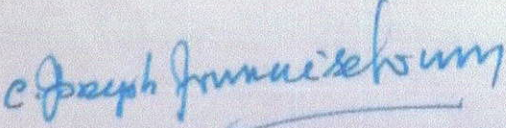
Fr. C. Joseph Arumaiselvam
Secretary / Executive Director

Date: 20.12.2019

CERTIFICATE

This is to certify that **Miss. Revathy. P.M** studying **3rd Year B.S.W** in **Christ College, Irinjalakuda, Thrissur, Kerala** has undergone her Social Work learning and Field Work practices in our Organization (PMSSS) from **02-12-2019 to 21-12-2019**. The Trainee had completed her **learning and practices successfully**. During her Field Work the trainee was **punctual and sincere** in her assignments.

We wish him all the best.


(Fr. C. Joseph Arumaiselvam)
Executive Director.





Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

International Conference On Employment Opportunities in the field of Social Science



SAROVARAM
Center for Promotion of
National Integration and
Community Development



NEHRU YUVA KENDRA
Ministry of Youth Affairs and Sports



DEPT. OF SOCIOLOGY
UNIVERSITY OF KERALA
Thiruvananthapuram

CERTIFICATE OF PARTICIPATION

This is to certify that Prof./ Dr./ Mr./ Ms./ Mrs.

V. Anandhu Ram

has participated in the *International Conference On Employment Opportunities in the field of Social Science* jointly organized by **Sarovaram** Center for the Promotion of National Integration and Community Development, **Nehru Yuva Kendra**, Thiruvananthapuram and **Dept. of Sociology**, University of Kerala Thiruvananthapuram, held on 13, 14, 15 and 16 February 2021.

Chairperson
SAROVARAM, Kerala

District Youth Officer
Nehru Yuva Kendra, Thiruvananthapuram,
Kerala

Organising Secretary
Dept. of Sociology,
University of Kerala.



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

PRATHEEKSHA BHAVAN IRINJALAKUDA

CERTIFICATE

Mr. Sreeraj K.S 3rd year Bachelor of social work student, Christ college Irinjalakuda ,Thrissur (Dist) successfully completed his 20 days concurrent field practicum as a part of his curriculum at **Pratheeksha Bhavan Special school Irinjalakuda** from 1/1/2016 to 1/6/2016

The trainee has also been able to acquire an understanding of the agency and the functioning of it. He has been very effective in carrying out tasks and also responsibilities



Dr. Paul Joseph
PRINCIPAL

Pratheeksha Training Centre
Christ Nagar, Irinjalakuda - 680 125



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda



Pondicherry Multipurpose Social Service Society

(Regd. No : 6/77)

#81, Laporte Street, Puducherry - 605 001. Ph : 0413-2222928, Fax : 0413-2222982
Email : pmssspandy@hotmail.com, pmssspandy@gmail.com, Web : www.pmsss.org.in
director.pmsss@gmail.com, Mobile No: 9597555211

Most. Rev. Dr. Antony Anandaryar, D.D., D.C.I.
President

Fr. C. Joseph Arumaiselvam
Secretary / Executive Director

Date: 20.12.2019

CERTIFICATE

This is to certify that Miss. Renjitha. M.R studying 3rd Year B.S.W in Christ College, Irinjalakuda, Thrissur, Kerala has undergone her Social Work learning and Field Work practices in our Organization (PMSSS) from 02-12-2019 to 21-12-2019. The Trainee had completed her learning and practices successfully. During her Field Work the trainee was punctual and sincere in her assignments.

We wish him all the best.

(Fr. C. Joseph Arumaiselvam)
Executive Director.



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda

International Conference On Employment Opportunities in the field of Social Science



SAROVARAM
Center for Promotion of
National Integration and
Community Development



GOVERNMENT OF INDIA
NEHRU YUVA KENDRA
Ministry of Youth Affairs and Sports



DEPT. OF SOCIOLOGY
UNIVERSITY OF KERALA
Thiruvananthapuram

CERTIFICATE OF PARTICIPATION

This is to certify that Prof./ Dr./ Mr./ Ms./ Mrs.

Aleena Rajan

has participated in the *International Conference On Employment Opportunities in the field of Social Science* jointly organized by **Sarovaram** Center for the Promotion of National Integration and Community Development, **Nehru Yuva Kendra**, Thiruvananthapuram and **Dept. of Sociology**, University of Kerala Thiruvananthapuram, held on 13, 14, 15 and 16 February 2021.

Chairperson
SAROVARAM, Kerala

District Youth Officer
Nehru Yuva Kendra, Thiruvananthapuram,
Kerala

Organising Secretary
Dept. of Sociology,
University of Kerala.



Fr. Dr. Jolly Andrews
Assistant Professor-
In-charge of Principal
Christ College (Autonomous)
Irinjalakuda