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# Institutional Human **Ethics** Committee (IHEC)

# ताळगांव पठार.

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फोन : +९१-८६६९६०९०४८

फॅक्स : +०९१-८३२-२४५११८४/२४५२८८९

Taleigao Plateau, Goa-403 206 Tel

+91-8669609048 +091-832-2451184/2452889 registrar@unigoa.ac.in www.unigoa.ac.in

Goa University



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Directorate of Research & Development and Resource Mobilization (DRDRM)

Fax

E-mail

Website

# Office of the Director, DRDRM, Goa University

Date: 27th September 2021

Ref. No: GU-DRDRM/IHEC-Cert/2021/02/

# To whomsoever it may concern

Sub: Approval from the Institutional Human Ethics Committee (IHEC), Goa University

This is to certify that the application for ethics clearance submitted by Prof. Rahul Tripathi and Dr. Alaknanda Shringare for the project proposal titled "ECI - Knowledge, Attitude and Practices (KAP) Baseline Survey 2021" has been reviewed by the Institutional Human Ethics Committee(IHEC), Goa University on the above mentioned date in compliance with the guidelines on academic ethics of Goa University for research work involving Human Participants.

The Ethical clearance has been granted to carry out this research work. This clearance is valid for carrying out the above research work as per the objectives and methodology mentioned in the research proposal dated 15th September 2021 bearing reference no. GU-IHEC/2021/02/Alaknanda-Shringare submitted to DRDRM requesting for post-facto ethical clearance for the duration of the research proposal from 1<sup>st</sup> September 2021 to 30<sup>th</sup> September 2021.

The IHEC committee wishes Prof. Rahul Tripathi and Dr. Alaknanda Shringare best wishes in their work and would be pleased to receive a copy of the summary of this Survey findings.

(Prof. Jyoti D. Pawar)

IHEC Coordinator, Goa University

(Prof. Raghurama G.)

IHEC Chairperson, Goa University

(Prof. Rajendra S. Gad) Director, DRDRM, Goa University

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# गोंय विद्यापीठ

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फॅक्स : +०९१-८३२-२४५११८४/२४५२८८९

Goa University

Taleigao Plateau, Goa-403 206 +91-8669609048 +091-832-2451184/2452889

> registrar@unigoa.ac.in www.unigoa.ac.in



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Directorate of Research & Development and Resource Mobilization (DRDRM)

Office of the Director, DRDRM, Goa University

Date: 27th September 2021

Ref. No: GU-DRDRM/IHEC-Cert/2021/03/

# To whomsoever it may concern

Sub: Approval from the Institutional Human Ethics Committee (IHEC), Goa University

This is to certify that the application for ethics clearance submitted by *Dr. Geetanjali C. Achrekar* for the research proposal titled "Assessing hesitancy, confidence, literacy, and uptake of COVID-19 vaccine among Indian population: A Nation-wide cross-sectional analysis" has been reviewed by the Institutional Human Ethics Committee(IHEC), Goa University on the above mentioned date in compliance with the guidelines on academic ethics of Goa University for research work involving Human Participants.

The Ethical clearance has been granted to carry out this research work. This clearance is valid for carrying out the above research work as per the objectives and methodology mentioned in the research proposal dated 16<sup>th</sup> September 2021 bearing reference no. GU-IHEC/2021/03/Geetanjali-Achrekar submitted to DRDRM requesting for ethical approval for the duration of the research proposal from 1<sup>st</sup> October 2021 to 31<sup>st</sup> October 2022.

The IHEC committee wishes *Dr. Geetanjali C. Achrekar* best wishes in her research and would be pleased to receive a copy of the summary of this research findings.

(Prof. Jyoti D. Pawar)

IHEC Coordinator, Goa University

(Prof. Raghurama G.)

IHEC Chairperson, Goa University

(Prof. Rajendra S. Gad)
Director, DRDRM, Goa University

DIRECTOR

SEARCH DEVELOPMENT AND

RESOURCES MOBILISATION (D-RDRM)

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# **GOA UNIVERSITY**

Taleigao Plateau, Goa 403 206

# MINUTES

of the Meeting of the

Goa University IHEC Sub-Committee

Day & Date

Tuesday, 14<sup>th</sup> March, 2022

<u>Time</u>

2.00 p.m.

Veneu:

Block D, Directorates Building Goa University Minutes of the Goa University Institutional Human Ethics Committee (GU-IHEC) Sub-Committee, held on 14<sup>th</sup> March 2023 at Directorates Building from 2.00 p.m to 3.00 p.m to discuss the following agenda items:

- 1. To analyse the project proposals submitted and presented by Dr. Narayan Vetrekar.
- 2. If proposal found satisfactory then approve the same and placed before IHEC Committee for approval.

# The following Members attended the meeting:

1. Prof. Jyoti Pawar, Dean, Goa Business School

- Coordinator

2. Prof. R. S. Gad, Director, D-RDRM

- Secretary

3. Prof. Savita Kerkar, Dean,

- Ex-officio Member

School of Biological Sciences& Biotechnology

- Ex-officio Member

4. Prof. Koshy Tharakan, Dean,

- Ex-officio Member

School of Sanskrit, Philosophy and Indic Studies

5. Ms. Scarlet Ava Fernandes, Assistant Professor,

- Member

Shenoi Goembab School of Languages and Literature.

# The following members were not able to attend the meeting:

- 1. Director, DI3P, Goa University
- 2. R. Nirmala, Goa Business School
- 3. Dr. J. S. Parab, Electronics, School Physical and Applied Sciences
- 4. Dr. Alaknanda Sringare, D. D. Kosambi School of Social Sciences and Behavioral Studies

Prof. Jyoti Pawar, Coordinator of IHEC Sub-Committee welcomed all the members to the meeting and informed everyone about the agenda of the meeting.

Brief summary of the suggestions given to Dr. Narayan Vetrekar by the IHEC Sub-Committee screening committee Coordinator/members are listed below:

# 1st Proposal: EEG Authentication and Presentation

- > Age group of data acquisition should be above 18 years
- > Clarifications on EEC cap and its sensor details.
- > Time frame of data acquisition about 2 years



# 2<sup>nd</sup> Proposal: Face and Hand Biometric with 3D ( Depth Map)

- Time frame of data acquisition should be about 2 Years.
- > Details of the data acquisition and its sensor details

Sub-Committee approved the above two proposals to be placed before IHEC Committee for approval as both these proposals are under minimum risk category.

Director-RDRM.

Co-ordinator IHEC - Sub Committee



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# Goa University

Taleigao Plateau, Goa-403 206 +91-8669609048

Tel

Fax

E-mail

+091-832-2451184/2452889 registrar@unigoa.ac.in



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Directorate of Research & Development and Resource Mobilization (DRDRM)

Office of the Director, DRDRM, Goa University

Date: 29/03/2023

Ref. No: GU-DRDRM/IHEC-Cert/2023/168

To whomsoever it may concern

Sub: Approval from the Institutional Human Ethics Committee (IHEC), Goa University

This is to certify that the application for ethics clearance submitted by <u>Dr. Narayan T. Vetrekar, Dr. Aniketh Gaonkar and Prof. Rajendra S. Gad</u> for the research proposal titled <u>Face and Hand Biometric using depth-map (3D) images</u> has been reviewed by the Institutional Human Ethics Committee(IHEC), Goa University on <u>March 29, 2023</u> in compliance with the guidelines on academic ethics of Goa University for research work involving Human Participants.

The Ethical clearance has been granted to carry out this research work. This clearance is strictly valid for carrying out the above research work as per the objectives and methodology mentioned in the research proposal dated March 29, 2023 bearing reference no. **GU-DRDRM/IHEC-Cert/2023/168** submitted to DRDRM requesting for ethical approval for the research proposal from April 01, 2023 to March 31, 2025.

The IHEC committee wishes <u>Dr. Narayan T. Vetrekar</u>, <u>Dr. Aniketh Gaonkar and Prof.</u>
Rajendra S. Gad best wishes in their research endeavours

(Prof. Jyoti D. Pawar) IHEC Coordinator,

Goa University

(Prof. Rajendra S. Gad) Director, DRDRM, Goa University



ताळगांव पठार. गोंय - ४०३ २०६

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फॅक्स: +०९१—८३२—२४५११८४/२४५२८८९



# Goa University

Tel Fax E-mail Website Taleigao Plateau, Goa-403 206 +91-8669609048 +091-832-2451184/2452889 registrar@unigoa.ac.in www.unigoa.ac.in

(Accredited by NAAC with Grade 'A')

Directorate of Research & Development and Resource Mobilization (DRDRM)

Office of the Director, DRDRM, Goa University

Date: 29/03/2023

Ref. No: GU-DRDRM/IHEC-Cert/2023/169

To whomsoever it may concern

Sub: Approval from the Institutional Human Ethics Committee (IHEC), Goa University

This is to certify that the application for ethics clearance submitted by Dr. Narayan T. Vetrekar and Prof. Rajendra S. Gad for the research proposal titled Cognitive Brainwave signals for biometric authentication and presentation attacks has been reviewed by the Institutional Human Ethics Committee(IHEC), Goa University on March 29, 2023 in compliance with the guidelines on academic ethics of Goa University for research work involving Human Participants.

The Ethical clearance has been granted to carry out this research work. This clearance is strictly valid for carrying out the above research work as per the objectives and methodology mentioned in the research proposal dated March 29, 2023 bearing reference no. GU-DRDRM/IHEC-Cert/2023/169 submitted to DRDRM requesting for ethical approval for the research proposal from April 01, 2023 to March 31, 2025.

The IHEC committee wishes Dr. Narayan T. Vetrekar and Prof. Rajendra S. Gad all the best in all their research endeavours

(Prof. Jyoti D. Pawar) IHEC Coordinator,

**Goa University** 

(Prof. Rajendra S. Gad) Director, DRDRM,

Goa University

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# **Minutes of Meeting**

Meeting: Goa University Institutional Human Ethical Committee (GU - IHEC) Time: 03:00PM Date: March 29, 2023 Mode: Online (GoogleMeet) **Members Present:** -- Chairperson 1. Prof. Ajit Parulekar, Director, Goa Institute of Management(GIM), Sattari, Goa -- Member 2. Dr. Anura Bale, Principal, Bharateeya Sanskriti Probodhini's Gomantak Ayurveda Mahavidyalaya & Research Center, Shiroda-Goa. -- Member 3. Dr. Walter Menezes, School of Sanskrit, Philosophy and Indic Studies, Goa University. -- Member 4. Shri. Damodar Mauzo, Jnanpith Awardee, Goa -- Co-ordinator, IHEC 5. Prof. Jyoti Pawar, Goa Business School, Goa University -- Member Secretary 6. Prof. Rajendra S. Gad, Director of DRDRM, Goa University Members sought leave of absence: -- Member 1. Dr. Gopalkrishna Rao, Principal, Goa College of Pharmacy, Panaji-Goa -- Ex-officio Member 2. Dean, Faculty of Medicine, Goa University -- Ex-officio Member 3. Dean, MPSLGPP, Goa University

### Meeting Agenda:

- I. Welcome Address by Prof. Ajit Parulekar
- II. Briefing on the IHEC Approval Process by Prof. Jyoti D. Pawar
- III. Presentation of the Research Proposals
- IV. Discussion on the IHEC clearance/approval for the two proposals
- V. Plan for the next meeting.

The GU-IHEC meeting was held on March 29, 2023 at 03:00PM in an online mode (GoogleMeet) to discuss the agenda and the details are follows:

#### I. Welcome Address by Prof. Ajit Parulekar

This was the first meeting of newly constituted Institutional Human Ethical Committee (IHEC) of Goa University under the chairmanship of Prof. Ajit Parulekar, Director, Goa Institute of Management, Goa. Prof. Ajit Parulekar introduced all the members of the committee and extended warm greeting to all. In his welcome speech, Prof. Parulekar spoke

about the importance of general ethic principles and issues of social and behavioural science research.

He emphasize on the issues related to the type of content, and sensitive questioners to be shown/asked to the subject. Specifically, he insisted upon the involvement of subject participation in the research, having age of 18 years and above. Further, he stated that awareness workshops shall be encouraged to sensitize the research scholar and faculty members about the ethical principles and issues pertaining to the confidentiality of the sensitive information of the subjects.

# II. Briefing on the IHEC Approval Process by Prof. Jyoti D. Pawar

The coordinator of IHEC, Prof. Jyoti Pawar briefed all the members of newly constituted committee about the procedures and approval process of IHEC. She also mentioned about the existence of IHEC sub-committee which scrutinize the proposal submitted with reference to ICMR guidelines in place and also verifies the checklist before placing the proposal to the committee. Prof. Pawar requested all the members to have next round of meeting in an offline mode at Goa University. Also, she discussed with the members that there is scope to update the IHEC approval form to simply the process.

### III. Presentation of the Research Proposals-1

Dr. Narayan Vetrekar, presented the first proposal 'Cognitive Brainwave signals for biometric authentication and presentation attacks' before the ethical committee for approval.

Dr. Vetrekar presented and described all together eleven protocols which consist of various stimuli spanning over 1-3 minutes. He stated that these protocols will take 55-60 minutes for a subject to complete the data acquisition. He answered all the queries raised by the members. The members appreciated Dr. Vetrekar and his team for carrying out such interesting research in terms of its significance to the scientific community and extended their support to encourage such research work. Dr. Vetrekar briefed the members about the collaboration with Dr. Teresa Ferreira, Head of Neurology, Goa Medical College (GMC), and other teams, so as to carry out the data acquisition for the patients of Goa Medical College and hospital.

While discussing on the first proposal presented by Dr. Vetrekar, the committee was concerned if the EEG system and the content that being shown to the participants in form of stimuli's during data acquisition process, whether will have a negative and long-lasting effect on the subject, especially children and people suffering from some unknown mental disorders. They also asked about whether the EEG device was certified and approved for research. Dr. Narayan Vetrekar cleared all the concerns of the committee members. Dr. Vetrekar agreed to show the content to the members of IHEC and to the doctor of GMC for



feedback, although these contents are well used for research purpose in EEG based data collection across nation and world-wide.

Dr. Vetrekar was asked to elaborate and update the checklist and consent form in local language as well, on why there is no risk involved in participating in the experiment.

Committee observed that the research study proposed is in minimal risk category as per ICMR guidelines. Dr. Narayan Vetrekar was advised to take appropriate measures to maintain the confidentiality of the participants by randomizing and codifying the datasets and to use the data solely for research purpose.

#### IV. Presentation of the Research Proposals-2

Dr. Narayan Vetrekar, presented the second proposal 'Face and Hand Biometric using depth-map (3D) images' before the ethical committee for approval.

Dr. Vetrekar presented above proposal for 3D images of Face and hand for various orientation/pose. He stated that the acquisition will be through iPhone 12 Pro LIDAR sensor. It was mentioned that the database for the subjects will be collected during various sessions spread over a period of 2 years. All the queries of the committee were answered by Dr. Vetrekar.

Dr. Vetrekar was asked to elaborate and update the checklist and consent form in local language as well, on why there is no risk involved in participating in the experiment.

Committee observed that the research study proposed is within minimal risk as per ICMR guidelines. Dr. Narayan Vetrekar was advised to take appropriate measures to maintain the confidentiality of the participants by randomizing and codifying the datasets and to use the data solely for research purpose.

The meeting ended with thanks to the chair and all the members.

#### V. Plan for the next meeting.

The committee agreed to conduct the next IHEC meeting in the offline mode in April/May considering availability of majority of members.

Prof. R. S. Gad

Member Secretary

Prof. Jyoti Pawar

IHEC Co-ordinator

Prof. Ajit Parulekar

Chairperson, IHEC

#### **RDRM Cell**

# **IHEC Subcommitee**

# Goa University

The meeting of the IHEC Subcommittee for ethical approval was conveyed on 28<sup>th</sup> August 2023 at 2:30pm. The following members attended the meeting:

1) Prof. Jyoti Pawar

Chairperson, Sub-Committee IHEC

2) Prof. Rajendra Gad

Secretary, Director RDRM

3) Prof. Bernand Rodrigues

Dean, SBSB

4) Prof. Koshy Tharakan

Dean, SSPIS

5) Prof. Sandeep Garg

Director, DI3P

6) Dr. Jivan Parab

Member

7) Ms. Scarlet Fernandes

Member •

8) Dr. Alaknanda Shringare

Member Secretary

Following members could not attend meeting.

1) Dr.R. Nirmala

Member

Chairpeson welcome all the members and requested member secretary to go ahead with the agenda.

Agenda 1: Proposal Title: Puzzle pedagogy for historical reasoning, using social media.

Principal Investigator(PI)/Guide Details: Dr. Irene Silveira (Discipline of French and Francophone Studies-ShenoiGoembab School of Languages and Literature- Goa University, Goa).

The purpose of this research is to understand how puzzle pedagogy through social media can play a role in improving historical reasoning and learner engagement. Research of this nature is not well documented at the higher education level. Participants will include Goa University students studying Optional course Representations of French History in Visual Art and literature. Those students who wish to participate in the research and willingly give consent will be onboarded on the social media platform where the puzzle activity will take place. Students will be informed about the general purpose of the study, participation is voluntary, and they can withdraw at anytime. Informed consent will be taken at the beginning of the study; anonymization of data before analysis and in any publication will be done to address ethical issues. There will be no monetary compensation. Students will be informed of benefits for participants such as increased interest and engagement in course content, better retention

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of concepts, exposure to an environment conducive to the development of historical reasoning, critical thinking, peer learning. Participation in the study poses no risks to participants. The mixed method study will involve pre-intervention test and post-intervention test. Puzzles would be posted throughout the duration of the French History course, on social media and online learning platforms. Data would also include surveys and interviews to ascertain participant impressions and reflections on their learning process. Assessment marks, screen capture logs, data from dashboard on social media platform will also be part of data.

# Suggestions/observations by the committee:

i) It was recommended that the below declaration be obtained from all students taking the course on Representations of French History in visual art and literature.

# **DECLARATION**

I am aware that there is a likelihood of benefits of improved performance in the course 'Representation of French History in Visual Art and literature'. associated with participation in Puzzle pedagogy activities on Social Media.

# Student's name

#### Signature

- ii) It was recommended that the sample size be increased to a minimum of 12 participants. Since the number of students taking the course in A.Y. 2023-2024 was less than 12, the study may be made longitudinal and conducted over 3 years (2023-2026) to ensure a larger number of participants.
- iii) It was suggested by the committee to comply with the "DIGITAL PERSONAL DATA PROTECTION ACT, 2023"

Agenda 2: Proposal Title: Longitudinal Study on the Impact of AI-powered written corrective feedback on participants' foreign language writing skills. Principal Investigator (PI)/Guide Details: Principle Investigator (PI): Dr. Natasha Gomes(Discipline of French and Francophone Studies-ShenoiGoembab School of Languages and Literature-Goa University, Goa) and Co-PI: Irene Silveira, Ms. Daisy Wadhwa & Dr. Anita Deshmukh

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The aim of the study was to investigate perception and engagement of various types of feedback (AI powered and human) on foreign language writing skills. The objective of the study is

- To measure the learner engagement (behaviorally, cognitively, and affectively) with types of feedback during the writing process
- To identify different types of learners' (non-native, heritage speakers etc) perception on types of feedback
- To record instructors' perception on types of feedback

The recruitment and selection criteria of participants for the study were discussed along with the means that will be taken to address ethical issues and types of data to be collected and the longitudinal nature of the study.

# Suggestions/observations by the committee:

It was suggested by the committee to comply with the "DIGITAL PERSONAL DATA PROTECTION ACT, 2023"

The sub-committee recommended that while collecting data of screen captures of usage of tools by participants, their personal devices should not be used and instead PI should make devices available to the participants. This is done to safeguard the privacy of participants

Agenda 3: Proposal Title: Towards Exploring Biometric Traits for Secure
Authentication. Principal Investigator (PI)/Guide Details: Dr. Narayan T. Vetrekar
(Physical and Applied Sciences (SPAS) and Co-Project Investigator (C-PI): Prof. Rajendra S. Gad.

Dr. Vetrekar presented the major objective of his project which are as follows:

- Explore physiological and behavioral biometric traits for secure authentication.
- Biometric data collection for range of 100-1000 subjects in age group of 18 and above for following modalities/traits:
  - Physiological traits face, fingerprint, hand (palm and dorsal), Iris and Ear
  - Behavioral traits Voice, Gait, Sign Language

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- Employing Multi-spectral imaging, (2D & Depth)smartphone and using DSLR camera in the data acquisition
- Finally to explore the vulnerability of these biometric traits against the presentation attack.

# Suggestions/observations by the committee:

IHEC member requested the PI to randomize the acquired biometric data so as to take care of privacy issue. The members recommended to **comply with the "DIGITAL PERSONAL DATA PROTECTION ACT, 2023"**. PI also informed the members that the data will be used only for the research purpose, however, researcher can avail the data strictly for the research purpose only if it opens for the researcher community in future upon signing the valid agreement document from their institutes. PI further stated that this procedure of sharing data to the researcher upon signing a valid agreement document is followed across the world wide by the institutes.

Meeting concluded with thanks to chair.

Member Secretary

IHEC Sub-Committee

Secretary

IHEC- Southon

Chairperson

IHEC - Sal Committee



(Accredited by NAAC)

Ialeigao Plateau, Goa-403 206 +91-8669609048

Email: registrar@unigoa.ac.in

Website:

www.unigoa.ac.in



# Directorate of Research and Development and Resource Mobilization (DRDRM) Office of the Director, DRDRM, Goa University

Dated: 03/10/2023

#### Ref. No.: GU-DRDRM/IHEC-Cert/26

Sub: Approval from the Institutional Human Ethics Committee (IHEC), Goa University

This is to certify that the application for ethical clearance submitted by Dr. Irene Silveira for the project proposal titled, "Puzzle Pedagogy for Historical Reasoning, Using Social Media" has been reviewed by the Institutional Human Ethics Committee (IHEC), Goa University on the above-mentioned date in compliance with the guidelines on academic ethics of Goa University for research work involving Human Participants.

The Ethical clearance has been granted to carry out this research work. This clearance is valid for carrying out the above research work as per the objectives and methodology mentioned in the research proposal dated 26th July 2023 bearing reference no. GU-IHEC/2023/26/Irene-Silveira submitted to DRDRM requesting ethical clearance for the duration of the research proposal from July 2023 to December 2026.

The IHEC committee wishes Dr. Irene Silveira the best wishes in his research work and would be pleased to receive a copy of the summary of this research findings.

(Prof. Jyoti Pawar)

IHEC Coordinator, Goa University

(Prof. Rajendra Gad)

Director, DRDRM, Goa University

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Email: registrar@unigoa.ac.in

Vebsite: www.unigoa.ac.in

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# Directorate of Research and Development and Resource Mobilization (DRDRM)

# Office of the Director, DRDRM, Goa University

Dated: 03/10/2023

# Ref. No.: GU-DRDRM/IHEC-Cert/58

Sub: Approval from the Institutional Human Ethics Committee (IHEC), Goa University

This is to certify that the application for ethical clearance submitted by Dr. Natasha Gomes for the project proposal titled, "Longitudinal Study on the Impact of AI-powered Written Corrective Feedback on Participants" has been reviewed by the Institutional Human Ethics Committee (IHEC), Goa University on the above-mentioned date in compliance with the guidelines on academic ethics of Goa University for research work involving Human Participants.

The Ethical clearance has been granted to carry out this research work. This clearance is valid for carrying out the above research work as per the objectives and methodology mentioned in the research proposal dated 10<sup>th</sup> August 2023 bearing reference no. GU-IHEC/2023/58/Natasha- Gomes submitted to DRDRM requesting ethical clearance for the duration of the research proposal from September 2023 to September 2026.

The IHEC committee wishes Dr. Natasha Gomes the best wishes in his research work and would be pleased to receive a copy of the summary of this research findings.

(Prof. Jyoti Pawar)

IHEC Coordinator, Goa University

(Prof. Rajendra Gad)

Director, DRDRM, Goa University

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Taleigao Plateau, Goa-403 206

Tel +91-8669609048

Email: registrar@unigoa.ac.in Website:

www.unigoa.ac.in

# Directorate of Research and Development and Resource Mobilization (DRDRM) Office of the Director, DRDRM, Goa University

Dated: 03/10/2023

# Ref. No.: GU-DRDRM/IHEC-Cert/68

Sub: Approval from the Institutional Human Ethics Committee (IHEC), Goa University

This is to certify that the application for ethical clearance submitted by Dr. Narayan T. Vetrekar and Prof. Rajendra S. Gad for the project proposal titled, "Towards Exploring Biometric Traits for Secure Authentication" has been reviewed by the Institutional Human Ethics Committee (IHEC), Goa University on the above-mentioned date in compliance with the guidelines on academic ethics of Goa University for research work involving Human Participants.

The Ethical clearance has been granted to carry out this research work. This clearance is valid for carrying out the above research work as per the objectives and methodology mentioned in the research proposal dated 16th August 2023 bearing reference no. GU-IHEC/2023/68/ Narayan-Vetrekar-&-Rajendra-Gad submitted to DRDRM requesting ethical clearance for the duration of the research proposal from September 2023 to September 2025.

The IHEC committee wishes Dr. Narayan T. Vetrekar and Prof. Rajendra Gad best wishes in his research work and would be pleased to receive a copy of the summary of this research findings.

(Prof. Jyoti Pawar)

IHEC Coordinator, Goa University

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(Prof. Rajendra Gad)

Director, DRDRM, Goa University

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# **Minutes of Meeting**

Meeting: Goa University Institutional Human Ethical Committee (GU - IHEC) Date: November 16, 2023 Mode: Online (GoogleMeet) Time: 11:00AM **Members Present:** 1. Prof. Ajit Parulekar, -- Chairperson Director, Goa Institute of Management(GIM), Sattari, Goa 2. Dr. Anura Bale, -- Member Principal, Bharateeya Sanskriti Probodhini's Gomantak Ayurveda Mahavidyalaya & Research Center, Shiroda-Goa. 3. Dr. Walter Menezes. -- Member School of Sanskrit, Philosophy and Indic Studies, Goa University. 4. Shri. Damodar Mauzo. -- Member Jnanpith Awardee, Goa 5. Dean MPSLGPP (On Sabbatical) -- Member 6. Prof. Jyoti Pawar, -- Co-ordinator, IHEC Goa Business School, Goa University 7. Prof. Rajendra S. Gad, -- Member Secretary Director of DRDRM, Goa University Members sought leave of absence: Dean, Faculty of Medicine, Goa University 1. - Ex-officio Member

# 2. Dr. Gopalkrishna Rao,

Principal, Goa College of Pharmacy, Panaji-Goa

# **Meeting Agenda:**

- I. Welcome Address by Prof. Ajit Parulekar
- II. Briefing on the IHEC Approval Process by Prof. Jyoti D. Pawar
- III. Presentation of the three Research Proposals received.
- IV. Discussion on the IHEC clearance/approval for the three proposals
- V. Plan for the next meeting.

# I. Welcome Address by Prof. Aiit Parulekar

This was the second meeting of Institutional Human Ethical Committee (IHEC) of Goa University under the chairmanship of Prof. Ajit Parulekar, Director, Goa Institute of Management, Goa. Prof. Ajit Parulekar introduced all the members of the committee and extended warm greeting to all. In his welcome speech, Prof. Parulekar spoke about the importance of general ethic principles and issues of social and behavioural science research and said there is a need to encourage researchers for Ethical clearance.

He further emphasizes on the issues related to the type of content, and sensitive questioners to be shown/asked to the subject in this vast neurodiverse world.

# II. Briefing on the IHEC Approval Process by Prof. Jyoti D. Pawar

The coordinator of IHEC, Prof. Jyoti Pawar briefed all the members of committee about the procedures and approval process of IHEC. She also mentioned about the existence of IHEC sub-committee which scrutinize the proposal submitted with reference to ICMR guidelines to be placed before IHEC committee.

# III. Presentation of the Research Proposals-1

Dr. Irene Silveira presented the proposal "Puzzle pedagogy for historical reasoning, using social media" (PI: Dr. Irene Silveira, Co-PI: Dr. Ajita Deshmukh) before the ethical committee for approval. She presented the aims and objectives of the study, participant recruitment, methods and data collection pertaining to the study. Sample questions for survey were also presented. She answered all the questions raised by the members. While discussing the proposal, the committee was concerned about the wording of the Declaration to be obtained from participating students taking the course where the study was to be conducted, and recommended the following wording "I am aware that there is a likelihood of an impact on performance in the course

'Representation of French History in Visual Art and literature' associated with participation in Puzzle pedagogy activities on social media".

The committee observed that the study proposed by Dr. Irene Silveira involved no risk to participants and no issues with Ethics. The Committee appreciated Dr. Silveira's effort in creating many puzzles, and the study's implications on teaching methods.

# IV. Presentation of the Research Proposals-2

Dr. Natasha Gomes, presented the second proposal 'Longitudinal Study on the Impact of Al-powered written corrective feedback on participants' on foreign language writing skills. Co-Pls of the project are Dr. Irene C. Silveira, Ms. Daisy Wadhwa, Dr. Ajita Deshmukh.

After preceding the aim of the study on investigate perception and engagement of various types of feedback (Al-powered and human) on foreign language writing skills, Dr. Gomes presented the recruitment and selection criteria of participants. The steps that will be taken to address ethical issues and types of data to be collected were also presented. The recommendations given by the sub-committee on collection of screen captures data of participants were incorporated.

The committee observed that the research study proposed has no risk to participants as per the ethics guidelines.

# V. Presentation of the Research Proposals-3

Dr. Narayan Vetrekar, presented the third proposal 'Towards Exploring Biometric Traits for Secure Authentication.'

Principal Investigator (PI)/Guide Details: Dr. Narayan T. Vetrekar (Physical and Applied Sciences (SPAS) and Co-Project Investigator (C-PI): Prof. Rajendra S. Gad.

Dr. Vetrekar presented the major objective of his project which are as follows:

- Explore physiological and behavioural biometric traits for secure authentication.
- Biometric data collection for range of 100-1000 subjects in age group of 18 and above for following modalities/traits:
  - Physiological traits face, fingerprint, hand (palm and dorsal), Iris and Ear
  - Behavioural traits Voice, Gait, Sign Language
- Employing multi-spectral imaging sensors (2D & Depth), smartphone and using DSLR camera in the data acquisition

 Finally, to explore the vulnerability of these biometric traits against the presentation attack.

Committee observed that the research study proposed is within minimal risk as per ICMR guidelines. Dr. Narayan Vetrekar was advised to take appropriate measures to maintain the confidentiality of the participants by randomizing and codifying the datasets and to use the data solely for research purpose only.

The meeting ended with thanks to the chair and all the members.

# VI. Plan for the next meeting.

The committee agreed to conduct the IHEC meeting in the offline mode in January considering availability of majority of members.

Prof. R. S. Gad

Member Secretary

Prof. Jyoti Pawar

IHEC Co-ordinator

Prof. Ajit Parulekar

Chairperson, IHEC



# Online GU IHEC Meeting on 16thNov. @ 11.00AM

Created by: Mr. R.S. Gad

Time

11am - 1pm (India Standard Time - Kolkata)

Date

Thu Nov 16, 2023

Description Dear All,

Kindly find the summary of the three research proposals which will be presented by the following researchers on IHEC meeting on 16th November 2023 from 11 am - 01.00 pm, to obtain Ethical Clearance from the IHEC committee, Goa University.

- 1. Dr. Irene Silveria, Assistant Professor, French Discipline, Shenoi Goembab School of Languages and Literature, Goa University.
- 2. Dr. Natasha Gomes, Assistant Professor, French Discipline, Shenoi Goembab School of Languages and Literature, Goa University.
- 3. Dr. Narayan Vetrekar, Assistant Professor, Electronics Discipline, School of Physical and Applied Sciences (SPAS), Goa University.

We have attached herewith the minutes of the IHEC Sub-committee held on August 28, 2023 for your perusal.

You may refer to the following on how we classify the proposals under different Risk Categories while giving Ethical Clearance https://www.unigoa.ac.

#### Guests

✓ Mr. R.S. Gad ajitp@gim.ac.in Assistant Registrar (Public Relations) baleanura@rediffmail.com dymauzo@gmail.com gkfadnis@gmail.com Irene Silveira Jyoti Pawar Walter Menezes Natasha Maria Gomes RDRM Cell University Shaila Desouza Shashikant Arjun Morajkar shivabandekar@gmail.com Vetrekar Narayan in/uploads/confg\_docs/20201229. 073748~ICMR\_2017\_GENERAL\_ETHICAL\_ISSUE S.pdf

The Agenda for the meeting will be as follows -

- 1) Welcome by Prof. Ajit Parulekar, Chairperson, IHEC, Goa University (5 to 10 minutes)
- Briefing on the IHEC Approval Process by Prof. Jyoti D. Pawar, IHEC Co-ordinator, Goa University ( 5 minutes)
- 3) Presentation of the Research Proposals emphasizing on the Objectives, Human Intervention Points and care taken to minimize discomfort/risk to the Human Subjects/Participants, Informed Consent Process, etc., --- 5 to 10 minutes per proposal followed by Question-Answer Session of 5 to 10 minutes for each proposal. (30 to 40 minutes)
- 4) Discussion on the IHEC clearance/approval for the three proposals and
- 5) Plan for the next meeting.

Thanks and Best Regards, Jyoti

My Notes

# RDRM Cell

# **IHEC Sub-committee**

# Goa University

The meeting of the IHEC Sub-committee for ethical approval was held on 17th January 2024, at 2:30 pm in the Professors Room, Directorate Building, Goa University. The following members attended the meeting:

1) Prof. Jyoti Pawar

Chairperson, Sub-Committee IHEC

2) Prof. Rajendra Gad

Secretary, Director RDRM

3) Prof. Bernard F. Rodrigues

Dean, SBSB

4) Prof. Koshy Tharakan

Dean, SSPIS

7) Ms. Scarlet Fernandes

Member

8) Dr. Alaknanda Shringare

Member Secretary

The following members could not attend the meeting.

1) Dr. R. Nirmala

Member

2) Prof. Sandeep Garg

Director, DISP

Dr. Jivan Parab

Member

The chairperson welcomed all the members and requested the member secretary to go ahead with the agenda.

# Agenda 1;

Proposal Title: Evaluation of the Beti Bachao, Beti Padhao Scheme in Goa Principal Investigator (PI)/Guide Details: Dr. Aparna P. Lolayekar (Discipline of Women's Studies, MPSPPG, and Co-PI: Dr. Kajal Rivankar and Ms. Avina Kauthankar, MPSPPG, Goa University, Goa).

The study's main aim is to analyze the implementation of the *Beti Bachao*, *Beti Padhao* Scheme in Goa to address the issues of decline in the Child Sex Ratio and Sex Ratio at Birth in Goa. A rigorous assessment of the reach and socio-economic impact of the scheme will be carried out in the proposed study. Quantitative and qualitative research approaches will be adopted in this study to provide a complete analysis of its implementation.

# Suggestions/observations by the committee:

- 1) The committee suggested that the questionnaire be translated into Konkani, Marathi, and Hindi so as to facilitate the respondents to follow the questions asked and respond accordingly.
- 2) The committee also suggested that there is a need to define the methodology to be followed.
- 3) It was suggested that the presentation should incorporate the checklist that has been used while preparing the research proposal.

# Agenda 2:

Proposal Title: The Concept of Body: A Phenomenological Study

Principal Investigator (PI)/Guide Details: Principle Investigator (PI): Ms. Elizabeth Bara (Ph.D. Research Scholar under the guidance of Prof. Koshy Tharakan)

Phenomenology is a methodology that looks into the first person's lived experiences. Here, a pre-reflective, pre-theoretical understanding of the phenomenon is the key. Prior to the establishment of the law-like generalizations and standards borrowed from the natural sciences, the episteme of understanding experiences and human actions was inspired by the "personalistic attitude" (Husserl, 1970.) Things are known to us because of some categorizations and associations that objects have attached to them. The sciences are the result of "mathematization of nature" and "idealizations," an abstraction of reality from the "lifeworld." To understand human-social phenomena, one has to pay attention to the manner in which the same is perceived. Thus, unlike "positivism," subjective experiences have a crucial role in interpretive social sciences. Further, a similar idea is also discussed in the work of Alfred Schutz in The Phenomenology of the Social World, as Schutz exposits the ideas of Weber and Husserl to find a consistent theory of meaning to human action. (1967).

The research will try to highlight the neglect of the body in mainstream Philosophy and Sociology. Further, establishing that phenomenology is a way forward to capture the real essence of the body, doing phenomenology allows one to look through a lens that points at a perspective. This subjective experience can help build and add to the body of knowledge in the relatively new area of sociology known as "Carnal Sociology" (Wacquant, 2009).

The study on "manifestations of the body" which will explicate the subtleties of various felt dimensions of experience. The researcher plans to apply "microphenomenology," similar to the "in-depth interview" method. It's a systematic and controlled activity. The methodology empowers the interviewer to help the interviewee evoke the moment and get to the experience. Researcher has received training from Prof. Claire Petitmengin from Ecole Normale Superiere, Paris (Petitmengin et al., 2019.)

# Suggestions/observations by the committee:

- 1) The committee enquired about the Paradigm under which the researcher is conducting the study.
- 2) Regarding whether the researcher will conduct a survey, she replied that she will take 12 respondents from pregnant women, physically disabled persons, and performing artists/sports persons.
- 3) The committee also enquired whether there are any effects on persons with disability and how it will help them. The researcher replied that she had undergone training to conduct this kind of research and there would not be any negative impact on the respondent.
- 4) The committee also tried to look into some of the positive effects of the methodology.

The meeting concluded with thanks to the chair.

Member Secretary

IHEC

Secretary

**IHEC** 

Chairperson

IHEC

#### RDRM Cell

#### **IHEC Sub-committee**

# Goa University

The meeting of the IHEC Sub-committee for ethical approval was held on 19th February 2024, at 4:00 pm in the DIQA Office, Directorate Building, Goa University. The following members attended the meeting:

1) Prof. Jyoti Pawar

Chairperson, Sub-Committee IHEC

2) Prof. Rajendra Gad

Secretary, Director RDRM

3) Prof. Bernard F. Rodrigues

Dean, SBSB

4) Prof. Koshy Tharakan

Dean, SSPIS

5) Dr. R. Nirmala

Member

6) Ms. Scarlet Fernandes

Member

7) Dr. Alaknanda Shringare

Member Secretary

The following members could not attend the meeting.

1) Prof. Sandeep Garg

Director, DISP

2) Dr. Jivan Parab

Member

The chairperson welcomed all the members and requested the member secretary to go ahead with the agenda.

#### Agenda 1:

Proposal Title: Goa Fisher Women's Community Wellbeing and Adaptation to Climate

Change

Guide Details: Ms. Sulochana Pednekar

Research Personnel Detail: MS. Anuka Upadhye, U.S. Fullbright-Nehru Student

Researcher

Name of the student (Discipline of Women's Studies, MPSPPG)

# Brief description of the work:

Recent studies have shown that climate change is already affecting Goa with torrential rainfall, extreme heat waves, rising sea levels, and disastrous flooding. These events are heavily disrupting the fisheries sector. Over the last three years, declining fishing income has

forced many to abandon the occupation and find other ways to support themselves and their families. To add, climate change disproportionately impacts marginalized communities. In Goa, women who work in the fishing industry experience exclusion and marginalization. Women's labour is not considered "real fishing activity". As climate change induced disruptions increase the institutional need for comprehensive adaption plans and economic relief, the invisibility of women's labour in this industry may exclude them from fisheries adaption strategies unless there is data that specifically demonstrate the value of their contributions, their knowledge of fishing, and the way that climate change is affecting their livelihoods. Therefore, this research project aims to provide more gender-disaggregated fisheries and climate change in Goa, with a focus mainly on how men and women in the fishing industry are adapting to climate change.

Hypothesis: Fisherwomen's wellbeing has been holistically negatively affected by climate change impacts, and current adaptation plans and welfare programs do not support their wellbeing advancement.

# Suggestions/observations by the committee:

- 1) The sub-committee noted that the questionnaire is incomplete
- 2) The sub-committee also observed that the questionnaire requires modifications to align with the research topic.
- 3) The Sub-committee suggested that the researcher should revise the questionnaire and resubmit it for the approval.

The meeting concluded with thanks to the chair.

Member Secretary

**IHEC** 

Secretary

**IHEC** 

Chairperson

IHEC

# Goa University RDRM Cell

# IHEC Sub-committee Meeting

The meeting of the IHEC Sub-committee for ethical approval was held on 3<sup>rd</sup> April 2024, at 4:00 pm in the DIQA Office, Directorate Building at Professors Room, Goa University. The following members attended the meeting:

| 1) Prof. Jyoti Pawar          | Chairperson, Sub-Committee IHEC      |
|-------------------------------|--------------------------------------|
| 2) Prof. Rajendra Gad         | Director RDRM                        |
| 3) Prof. Bernard F. Rodrigues | Dean, SBSB                           |
| 4) Prof. Koshy Tharakan       | Dean, SSPIS                          |
| 6) Ms. Scarlet Fernandes      | Member                               |
| 7) Dr. Alaknanda Shringare    | Member Secretary, Sub Committee IHEC |

The following members could not attend the meeting.

| 1) | Prof. Sandeep Garg | Director, DISP |
|----|--------------------|----------------|
| 2) | Dr. Jivan Parab    | Member         |
| 3) | Dr. R. Nirmala     | Member         |

The chairperson welcomed all the members and requested the member secretary to go ahead with the agenda.

# Agenda 1:

**Proposal Title:** Social Media and India's Foreign Policy: A Case Study of X Diplomacy during the COVID-19 Pandemic.

Principal Investigator (PI)/Guide Detail: Dr. Mukund V. Narvenkar, Assistant Professor, SIAS, Goa University

Brief description of the work: Social media platforms have become integral tools in the conduct of foreign policy for many nations, including India. The proposed study investigates the impact of social media on India's foreign policy, focusing on 'X' diplomacy, earlier known as Twitter diplomacy. Through a case study analysis of India's use of Twitter or 'X' during the COVID-19 pandemic, the study explores the role of social media in shaping India's foreign policy, diplomatic strategies, and public perceptions of 'X' diplomacy. The study also underscores the opportunities and challenges of employing 'X' diplomacy in India's foreign policy.

**Hypothesis:** 1. India's effective use of 'X' diplomacy positively impacts public perception of India's foreign policy effectiveness.

**Hypothesis:** 2. India's adept use of 'X' diplomacy during the COVID-19 pandemic enhances its ability to effectively manage and respond to the crisis.

The researcher plans to gather data from 500 respondents through online Google Forms. The data tabulation in tables, pie charts, and graphs would be analyzed, and findings would be placed for publication.

# Suggestions/observations of the committee:

The committee suggested changes in some questions and reducing the number of questions. The suggestions were taken positively, and necessary action are to be taken by the researcher before presenting before the main IHEC Committee.

#### Agenda 2:

Proposal Title: Informal Employment In Goa

Guide Detail: Prof. B.P. Sarath Chandran, Goa Business School, Goa University

Research Personnel Detail: Ms. Gaouri K. Manekar, Research Scholar, GBS, Goa

University

# Brief description of the work:

Despite Goa being a developed state, a significant portion of its workforce is engaged in informal employment. Understanding the drivers behind this trend is crucial. Previous research suggests that socio-demographic factors and workplace characteristics are essential in individuals opting for informal employment. Additionally, the COVID-19 pandemic and subsequent lockdowns have exacerbated the challenges faced by these informal workers. This research aims to explain the reasons for the surge in informal employment in Goa's labour market and assess the impact of COVID-19 lockdowns on informal workers. The study will gather insights from informal workers operating in both formal and informal sectors within Goa.

#### Suggestions/observations of the committee:

The researcher was able to answer the queries raised by the committee members. It was suggested by the committee to take the consent of the respondents as per the Informed Consent form of the IHEC, Goa University. The form to be available in Konkani language also besides English.

### Agenda 3:

**Proposed Title:** Analysis of Selected Environmental Factors and Their Role in Nephrotoxicity in Canacona, South Goa.

**Principal Investigator (PI)/Guide Detail:** Dr. Avelyno D'Costa, Assistant Professor – Zoology. School of Biological Sciences and Biotechnology, Goa University

Research Personnel Detail: Ms. Kandukuri Sravya, Research Scholar, SBSB, Goa University

# Brief description of the work:

The multifaceted nature of the environment, including its physical, social, economic, cultural, historical, and political dimensions, consistently emerges as a pivotal factor in shaping health outcomes. Contaminated food sources and environmental matrices like water and soil host a spectrum of environmental pollutants like heavy metals, industrial chemicals, fertilizers, and pesticides, coupled with the interplay of socioeconomic, genetic, lifestyle, and demographic factors collectively impacting renal health. The complex interplay among multiple factors is implicated in developing and transitioning diseases like Chronic Kidney Disease (CKD), Nephrolithiasis, Acute Kidney Injury (AKI), and Polycystic kidney disease, among others. Canacona taluka is situated in the southernmost part of Goa. From an administrative perspective, Agonda, Cola, Cotigao, Gaondogrem, Loliem-Polem, Poinguinin, and Shristhal fall under the jurisdiction of Canacona taluka. Renal issues like kidney stones and CKD cases without any traditional factors have been reported from Canacona taluka of South Goa. Given endemic CKD, environmental factors such as ochratoxin, arsenic, and cadmium were assessed by a joint study group of NIOH (National Institute of Occupational-Health), ICMR (Indian Council of Medical-Research) and Department of Preventive and Social Medicine of Goa Medical hospital in the year 2005 with no conclusive evidence. In a recent study conducted in Ponsulem and Chaudi of Canacona, silica, and borderline lead concentrations were found from the groundwater analysis. Lead concentrations were also found in the human subjects falling under CKDu criteria, which was conducted in the same study. The study also suggested that the use of non-steroidal anti-inflammatory drugs (NSAID) leading to indirect renal damage could be the potential cause of CKDu in this region.

The study aims to investigate the association between selected environmental factors and nephrotoxicity in the Canacona region of South Goa. Epidemiological understanding of hypothesized CKDu cases in Canacona is not well established; therefore, this study aims to contribute valuable knowledge and information to address this gap. To understand and evaluate the exposure of selected environmental factors in the local context, i.e., in Canacona, an epidemiological study will use a field-based survey employing a structured questionnaire. The questionnaire, randomly administered to a representative population, will assess socioeconomic determinants like education, income, and healthcare access and demographic factors such as age, gender, and ethnicity. It will also explore environmental and occupational exposure determinants by identifying high-risk occupations and their contributions to community health, especially renal health. Additionally, the survey will identify health conditions like diabetes and kidney stones. The questionnaire aims to reveal correlations between socioeconomic, demographic, and occupational factors while ensuring informed consent and maintaining confidentiality.

# Suggestions/observations of the committee:

- For the questionnaire, water drinking habit frequency and suggestive measures on a particular socioeconomic variable were suggested.
- The committee expressed satisfaction with the time frame suggested in the methodology.

The committee suggested approving the ethical clearance only for the first objective, as mentioned in the proposal.

Agenda 4:

Proposal Title: Goa Fisher Women's Community Wellbeing and Adaptation to Climate

Change

Guide Details: Ms. Sulochana Pednekar, Assistant Professor, MPSLGPP, Goa University Research Personnel Detail: Ms. Anuka Upadhye, U.S. Fullbright-Nehru Student Researcher

Scholarship (Discipline of Women's Studies, MPSPPG)

In its meeting held on 19th February 2024, the sub-committee noted that the questionnaire was incomplete and suggested that the researcher revise the questionnaire and resubmit it for approval. The researcher has revised and resubmitted the questionnaire.

# Suggestions/observations by the committee:

1) The committee approved the modified questionnaire submitted by the researcher.

The meeting concluded with thanks to the chair.

Member Secretary

Chairperson IHEC Sub-committee **IHEC Sub-committee** 

Secretary

Director, RDRM

# **Minutes of Meeting**

# Meeting: Goa University Institutional Human Ethical Committee (GU - IHEC)

Date: May 06, 2024

Mode: Physical

Time: 10:00AM

#### **Members Present:**

| 1. | Prof. Ajit Parulekar,                                    | Chairperson        |
|----|--|--------------------|
|    | Director, Goa Institute of Management(GIM), Sattari, Goa |                    |
| 2. | Dr. Gopalkrishna Rao,                                    | Member             |
|    | Principal, Goa College of Pharmacy, Panaji-Goa           |                    |
| 3. | Dr. Anura Bale,  | Member             |
|    | Principal, Bharateeya Sanskriti Probodhini's Gomantak    |                    |
|    | Ayurveda Mahavidyalaya & Research Center, Shiroda-Goa.   |                    |
| 4. | Prof. Rajendra S. Gad,                                   | Member Secretary & |
|    | Director of DRDRM, Goa University                        | Dean MPSLGPP       |

# Members sought leave of absence:

| 1. | Shri. Damodar Mauzo,                                   | Member             |
|----|--|--------------------|
|    | Jnanpith Awardee, Goa                                  |                    |
| 2. | Dean, Faculty of Medicine, Goa University              | Member             |
| 3. | Prof. Jyoti Pawar, Dean GBS                            | Co-ordinator, IHEC |
| 4. | Dr. Walter Menezes, School of Sanskrit, Philosophy and | Ex-officio Member  |
|    | Indic Studies, Goa University.                         | (Election Duty)    |

# Other Subcommittee and faculty members

- 1) Prof. B. F. Rodrigues, Dean SSBS
- 2) Prof. Koshy Tarakan, Dean, SSPIS
- 3) Ms. Scarlet Fernandes
- 4) Prof. Sarath Chandra
- 5) Dr. Aparna Lolayekar
- 6) Dr. Alaknanda Shringare
- 7) Dr. Sulochana Pednekar
- 8) Ms. Elizabeth Bara
- 9) Mr. Ravaji Gaunkar

# **Meeting Agenda:**

- I. Welcome Address
- II. Briefing on the IHEC Approval Process by Prof. Rajendra S. Gad
- III. Presentation of the Research Proposals
- IV. Plan for the next meeting.

The GU-IHEC meeting was held on May 06, 2024 at 10:00AM in an physical mode in the VRPP Hall, Directorate Building, Goa University; to discuss the agenda and the details are follows:

The chairperson welcomed all the members and requested the member secretary to go ahead with the agenda.

# Welcome Address

Prof. R. S. Gad, informed the house about the various proposal being presented for IHEC clearance. He stated that these proposals were scrutinized by the IHEC sub-committee of the Goa University for preliminary verifications as per ICMR guidelines in place. Also, he mentioned that the minutes of the sub-committee were circulated to the IHEC members for their information. Prof. Ajit Parulekar introduced all the members of the committee and extended warm greeting to all. In his welcome speech, Prof. Parulekar spoke about the importance of general ethic principles and issues of social and behavioural science research. He informed the members that committee should look into the ethical aspects of the proposal rather than objectives.

# Presentation of the Research Proposals-1

Proposal Title: Goa Fisher Women's Community Wellbeing and Adaptation to Climate

Research Student's Detail: Ms. Anuka Upadhye, U.S. Fullbright-Nehru Student Researcher Change Scholarship (Discipline of Women's Studies, MPSPPG)

Guide Details: Ms. Sulochana Pednekar made presentation before the committee

Ms. Sulochana presented the work for two objectives i.e. wellbeing of fisher folk community and climate changes. She informed that the database will be collected for 36 respondents over three villages of Tiswadi taluka.

The committee raised question related to how the research is going to deal with two different aspects i.e. wellbeing and climate change in the study. They suggested to develop two different objectives related to each of these aspects so as to classify the questionnaire into two categories. The committee also suggested for few changes in the questionnaire to maintain the anonymity of the respondent's name and caste.

# Presentation of the Research Proposals-2 III.

Proposal Title: Informal Employment in Goa

Research Personnel Detail: Ms. Gaouri K. Manekar, Research Scholar, GBS, Goa University

Guide Detail: Prof. B.P. Sarath Chandran, Goa Business School, Goa University, made presentation before the committee.

Prof. B.P. Sarath Chandran presented the research work related to informal employment and the impact on the labourers during the Covid-19.

The committee members raised questions related to sample size. He was suggested to used Hindi, Konkani and Marathi language for questionnaires as informal employment labours are pooled from neighbouring states of Maharastra, Rajasthan, Karnataka, Bihar, UP and Andra Pradesh. Also, committee made some suggestions to keep ethical considerations.

#### IV. Presentation of the Research Proposals-3

Proposal Title: The Concept of Body: A Phenomenological Study

Research Personnel Detail:: Ms. Elizabeth Bara Ph.D. Research Scholar made the

presentation

Guide Detail: Prof. Koshy Tharakan, Dean, SSPIS, Goa University

Ms. Elizabeth Bara presented the proposal. She stated that she will be collecting 12 subjects per each class of subjects i.e. Sport/Performer, disabled and pregnant women.

The committee suggested that, while interviewing the pregnant women, it should be done in three phases i.e. trimesters; of their pregnancy period to see how the responses are coming differently as women go through hormonal and bodily changes. Also, regarding the disabled subjects committee suggested to authenticate the questionnaires through Goa State Commission for Persons with Disabilities, GoG. To maintain the anonymity of the respondents the committee suggested not to mention the name of the respondent in the report.

#### V. Presentation of the Research Proposals-4

Proposal Title: Evaluation of the Beti Bachao, Beti Padhao Scheme in Goa

**Principal Investigator (PI)**: Dr. Aparna P. Lolayekar (Discipline of Women's Studies, MPSPPG, made the presentation before the committee members.

Co-PI: Dr. Kajal Rivankar and Ms. Avina Kauthankar, MPSPPG, Goa University, Goa.

Dr. Aparna Lolayekar, presented the work on the proposal. She explained in details the objectives, stakeholders and sample size (2400 households) of her respondent.

Committee suggested the PI to randomized the database collected.

#### VI. Presentation of the Research Proposals-5

**Proposal Title:** Social Media and India's Foreign Policy: A Case Study of X Diplomacy during the COVID-19 Pandemic.

Principal Investigator (PI)/Guide Detail: Dr. Mukund V. Narvenkar, Assistant Professor, SIAS, Goa University

As the Principal Investigator was on election duty, on behalf of him his colleague Mr. Ravaji Gaunkar made presentation. He presented questionnaire corresponding to all the seven objectives in detailed. Committee observed that the questionnaires are too lengthy and suggested to check whether it can be covered between 20 to 25 minutes for authentic information as respondent loos interest as duration of questionnaires will hamper the truthiness of responses.

#### VII. Presentation of the Research Proposals-6

**Proposed Title:** Analysis of Selected Environmental Factors and Their Role in Nephrotoxicity in Canacona, South Goa.

Guide Detail: Dr. Avelyno D'Costa, Assistant Professor – Zoology. School of Biological Sciences and Biotechnology, Goa University

Research Personnel Detail: Ms. Kandukuri Sravya, Research Scholar, SBSB, Goa University.

Due to election duty Dr. Avelyno D'Costa was not able to make the presentation. Prof. Gad suggested as this proposal is related to renal failure problem in Canacona and its on priority mode. He requested committee to give special consideration towards the proposal. He also mentioned that the proposal has objectives that are Socio-economic in nature rather than Subjects interventions. The Committee agreed to approve the proposal through circulation over mail; however, the Chairperson suggested elaborate discussion of proposal over the meeting if members need more clarifications.

The proposal was approved by circulation over email. Committee suggested the PI to randomized the database collected.

#### VIII. Discussion on the IHEC clearance/approval for the two proposals

Committee observed that all the presented proposal were research proposal of Social Sciences related to socioeconomics nature generating responses from the respondent. All said proposal were of minimal risk category and hence were approved for IHEC certificated.

#### IX. Plan for the next meeting.

The committee agreed to conduct the next IHEC meeting in the month of June/July 2024 considering availability of majority of members.

The meeting ended with the thanks to the chair.

Prof. R. S. Gad

Prof. Jyoti Pawar

Prof. Ajit Parulekar

**Member Secretary** 

[Could not attend the meeting]

Chairperson, IHEC

ताळगांव पठार, गोंय –४०३ २०६

फोन : +९१-८६६९६०९०४८



(Accredited by NAAC)

## **Goa University**

Taleigao Plateau, Goa-403 206  $\varepsilon$ 

ALMANIREMAN ENARAT SIMAYAMPURNA GOA

Tel : +91-8669609048

Email: registrar@unigoa.ac.in Website: www.unigoa.ac.in

# Directorate of Research and Development and Resource Mobilization (DRDRM)

Office of the Director, DRDRM, Goa University

Dated:06-05-2024

Ref. No.: GU-DRDRM/IHEC-Cert/257

Sub: Approval from the Institutional Human Ethics Committee (IHEC), Goa University

This is to certify that the application for ethical clearance submitted by Prof. Koshy Tharakan for the project proposal titled, "The Concept of Body: A Phenomenological Study" has been reviewed by the Institutional Human Ethics Committee (IHEC), Goa University on the above mentioned date in compliance with the guidelines on academic ethics of Goa University for research work involving Human Participants.

The Ethical clearance has been granted to carry out this research work. This clearance is valid for carrying out the above research work as per the objectives and methodology mentioned in the research proposal dated 20-11-2023 bearing reference no.GU-IHEC/2023/257 by Prof. Koshy Tharakan submitted to D-RDRM requesting ethical clearance for the duration of the research proposal from January 2024 to December 2025.

The IHEC committee wishes Prof. Koshy Tharakan best wishes in his research work and would be pleased to receive a copy of the summary of this research findings.

(Prof. Jyoti Pawar)

IHEC Coordinator, Goa University

28/6/24

(Prof. Rajendra Gad)

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फोन : +९१-८६६९६०९०४८



(Accredited by NAAC)

# Goa University

Taleigao Plateau, Goa-403 206

+91-8669609048

Email: registrar@unigoa.ac.in Website:

www.unigoa.ac.in

# Directorate of Research and Development and Resource Mobilization (DRDRM)

Office of the Director, DRDRM, Goa University

Dated:06-05-2024

Ref. No.: GU-DRDRM/IHEC-Cert/388

Sub: Approval from the Institutional Human Ethics Committee (IHEC), Goa University

This is to certify that the application for ethical clearance submitted by Dr. Aparna P. Lolayekar for the project proposal titled, "Evaluation of the Beti Bachao, Beti Padhao Scheme in Goa" has been reviewed by the Institutional Human Ethics Committee (IHEC), Goa University on the above mentioned date in compliance with the guidelines on academic ethics of Goa University for research work involving Human Participants.

The Ethical clearance has been granted to carry out this research work. This clearance is valid for carrying out the above research work as per the objectives and methodology mentioned in the research proposal dated 16-01-2024 bearing reference no. GU-IHEC/2023/388 by Dr. Aparna Lolayekar submitted to D-RDRM requesting ethical clearance for the duration of the research proposal from 7<sup>th</sup> September 2023 to March 2024.

The IHEC committee wishes Dr. Aparna P. Lolayekar best wishes in her research work and would be pleased to receive a copy of the summary of this research findings.

(Prof. Jyoti Pawar)

IHEC Coordinator, Goa University

Prof. Rajendra Gad)

ताळगांव पठार, गोंय -४०३ २०६

फोन : +९१-८६६९६०९०४८



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# AMERIBIAR BHARAT

## **Goa University**

Taleigao Plateau, Goa-403 206

Tel : +91-8669609048

Email: registrar@unigoa.ac.in Website: www.unigoa.ac.in

#### Directorate of Research and Development and Resource Mobilization (DRDRM)

Office of the Director, DRDRM, Goa University

Dated:06-05-2024

Ref. No.: GU-DRDRM/IHEC-Cert/427

Sub: Approval from the Institutional Human Ethics Committee (IHEC), Goa University

This is to certify that the application for ethical clearance submitted by Dr. Avelyno D'Costa for the project proposal titled, "Analysis of Selected Environmental Factors and their role in Nephrotoxicity in Canacona, South Goa" has been reviewed by the Institutional Human Ethics Committee (IHEC), Goa University on the above mentioned date in compliance with the guidelines on academic ethics of Goa University for research work involving Human Participants.

The Ethical clearance has been granted to carry out this research work. This clearance is valid for carrying out the above research work as per the objectives and methodology mentioned in the research proposal dated 14-03-2024 bearing reference no. GU-IHEC/2023/427 by Dr. Avelyno D'Costa submitted to D-RDRM requesting ethical clearance for the duration of the research proposal from May 2024 to May 2026.

The IHEC committee wishes Dr. Avelyno D'Costa best wishes in his research work and would be pleased to receive a copy of the summary of this research findings.

(Prof. Jyoti Pawar)

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IHEC Coordinator, Goa University

(Prof. Rajendra Gad)

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(Accredited by NAAC)

**Goa University** 

Taleigao Plateau, Goa-403 206

+91-8669609048

Email: registrar@unigoa.ac.in Website:

www.unigoa.ac.in

## Directorate of Research and Development and Resource Mobilization (DRDRM) Office of the Director, DRDRM, Goa University

Dated: 06-05-2024

Ref. No.: GU-DRDRM/IHEC-Cert/436

Sub: Approval from the Institutional Human Ethics Committee (IHEC), Goa University

This is to certify that the application for ethical clearance submitted by Dr. Mukund V. Narvenkar for the project proposal titled, "Social Media and India's Foreign Policy: A Case Study of X Diplomacy during the COVID-19 Pandemic" has been reviewed by the Institutional Human Ethics Committee (IHEC), Goa University on the above mentioned date in compliance with the guidelines on academic ethics of Goa University for research work involving Human Participants.

The Ethical clearance has been granted to carry out this research work. This clearance is valid for carrying out the above research work as per the objectives and methodology mentioned in the research proposal dated 01-04-2024 bearing reference no. GU-IHEC/2023/436 by Dr. Mukund Narvenkar submitted to D-RDRM requesting ethical clearance for the duration of the research proposal from 1<sup>st</sup> May 2024 to 30<sup>th</sup> April 2025.

The IHEC committee wishes Dr. Mukund V. Narvenkar best wishes in his research work and would be pleased to receive a copy of the summary of this research findings.

(Prof. Jyoti Pawar)

IHEC Coordinator, Goa University

Manufet Joseph

(Prof. Rajendra Gad)

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(Accredited by NAAC)

### ATMANIRBHAR BHARAT SHAYAMPURNA GOA

## **Goa University**

Taleigao Plateau, Goa-403 206 +91-8669609048

Email : registrar@unigoa.ac.in

Website: www.unigoa.ac.in

# Directorate of Research and Development and Resource Mobilization (DRDRM)

Office of the Director, DRDRM, Goa University

Dated: 06-05-2024

Ref. No.: GU-DRDRM/IHEC-Cert/413

Sub: Approval from the Institutional Human Ethics Committee (IHEC), Goa University

This is to certify that the application for ethical clearance submitted by Ms. Sulochana Pednekar for the project proposal titled, "Current State of Wellbeing in Goan Fishing Communities" has been reviewed by the Institutional Human Ethics Committee (IHEC), Goa University on the above mentioned date in compliance with the guidelines on academic ethics of Goa University for research work involving Human Participants.

The Ethical clearance has been granted to carry out this research work. This clearance is valid for carrying out the above research work as per the objectives and methodology mentioned in the research proposal dated 24-01-2024 bearing reference no. GU-IHEC/2023/413 by Ms. Sulochana Pednekar submitted to D-RDRM requesting ethical clearance for the duration of the research proposal from 1<sup>st</sup> January 2024 to 15<sup>th</sup> June, 2024.

The IHEC committee wishes Ms. Sulochana Pednekar best wishes in her research work and would be pleased to receive a copy of the summary of this research findings.

(Prof. Jyoti Pawar)

IHEC Coordinator, Goa University

(Prof. Rajendra Gad)

Director, D-RDRM, Goa University

Received to some

#### **RDRM Cell**

### **IHEC Sub-committee**

#### Goa University

The meeting of the IHEC Sub-committee for ethical approval was held on 21st May 2024, at 10:30am in the Professor room, DIQA Office, Directorate Building, Goa University.

The following members attended the meeting:

1) Prof. Jyoti Pawar

Chairperson, Sub-Committee IHEC

2) Prof. Sanjeev Ghadi

Director RDRM

3) Prof. Bernard F. Rodrigues

Dean, SBSB

4) Prof. Koshy Tharakan

Dean, SSPIS

5) Prof. Sandeep Garg

Director, DISP

6) Dr. Jivan Parab

Member

7) Ms. Scarlet Fernandes

Member

8) Dr. Alaknanda Shringare

Member Secretary

The following members could not attend the meeting.

1) Dr. R. Nirmala

Member

The chairperson welcomed all the members and requested the member secretary to go ahead with the agenda.

#### Agenda 1:



Proposal Title: Isolation of compatible solute and their applications

Guide Details: Prof. Savita Kerkar, Biotechnology, School of Biological Sciences and Biotechnology

Research Personnel Detail: Ms. Noha Inam Ameen, Research Scholar in Biotechnology, School of Biological Sciences and Biotechnology, and Ms. Nabila Kamal, M.Sc. Biotechnology student Brief description of the work:

The research work involves the isolation of compatible solutes from salt pan bacteria and its application in a skin cream.

Bacteria have been isolated from edible natural salt from the salt pans of Goa.

The bacteria in the salt pans are known as hypersaline as they can tolerate very high concentrations of salinity (0-300 PSU).

These moisturising metabolites produced by these halophilic bacteria have been used for various applications in biotechnology, the highest use being as a moisturiser in skin creams which PI is trying to explore

# Suggestions/observations by the committee:

The sub-committee members made certain observations and suggested,

- 1) to take the informed consent form singed from all the participants,
- 2) to conduct the allergy test and
- 3) to make modifications in the Ethical clearance form as per the observations made by the committee members.

The meeting concluded with thanks to the chair.

Member Secretary
IHEC Sub-committee

Director RDRM

Chairperson,

IHEC sub-committee

# Institutional Animal **Ethics** Committee (IAEC)

## MINUTES OF THE MEETING OF THE IAEC HELD ON $26^{TH}$ JULY, 2021 AT 11.00 HRS.

#### DEPARTMENT OF ZOOLOGY, GOA UNIVERSITY

#### Members Present:

- 1. Prof. Varun Sahni, Vice Chancellor, Goa University, (Chairman, IAEC)
- 2. Prof. E. Chandrashekar, Karwar Institute of Medical Science (CPCSEA main nominee)
- 3. Dr. Indrajeet D. Gonjari, Pharmacy College, Ratnagiri (CPCSEA Link nominee)
- Dr. Vishnu Kangralkar, Scientist from outside of the Institute (CPCSEA nominee)
- 5. Mr. Johnson Stephen, (CPCSEA nominee)
- 6. Dr. Nitio S. Sawant, Department of Zoology, (member)
- 7. Prof. Sanjeev Ghadi, Professor of Biotechnology Department, (member)
- 8. Dr. Lakshangi Charya, Department of Microbiology, (member)
- 9. Prof. R. Roy, HOD Zoology (member Secretary)

#### Special Invitees

- 1. Dr. Shanti N. Desai, Department of Zoology, Goa University.
- 2. Dr. Shamshad M. Shaikh, Department of Zoology, Goa University.

#### Members absent

1. Dr. Gustavo Pinto, Veterinarian (member)

Chairman welcomed all the members of IAEC, both internal members as well as nominated members by CPCSEA.

The Various agendas were discussed as follows:

1. All the following researchers briefed the members about their research proposal, where they would like to use live animals.

2.

| Name of the<br>Researchers/Guide | Proposal No.          | Title of the<br>Project         | Funded by                |
|----------------------------------|-----------------------|---------------------------------|--------------------------|
| Dr. Shamshad<br>Shaikh           | GUZ/IAEC/20-<br>21/N1 | Evaluating the effect of Carbon | Dept. of<br>Zoology, Goa |
|                                  |                       | Black<br>Nanoparticles          | University (M Sc.        |
|                                  |                       | on Mus<br>musculus              | Dissertation)            |

| Dr. Nitin Sawant        | GUZ/IAEC/20-<br>21/R1 | Diversity of<br>Herpetofauna<br>of Goa,<br>Maharashtra<br>and Karnataka  | MoEF, Govt<br>of Goa<br>Renewal                                  |
|-------------------------|-----------------------|--|--|
| Mr. Dipak Bowaikar      | GUZ/IAEC/20-<br>21/N2 | Ecology studies<br>of Anurans in<br>few selected<br>lateritic rocky<br>outcrops along<br>central Western<br>Ghats in the<br>State of Goa | Self funded<br>(PhD work)  |
| Ms. Mithali<br>Halankar | GUZ/IAEC/20-<br>21/N3 | Autecology of Cerebrus Rhyncops on central west coast  | Self funded<br>(PhD work)  |
| Dr. Shanti Dessai       | GUZ/IAEC/20-<br>21/N4 | Study of<br>CPEB4 and<br>FMR1 gene<br>expression in<br>Chick embryo<br>brain   | Dept. of<br>Zoology, Goa<br>University<br>(M Sc.<br>Dissertation |
| Dr. Shanti Dessai       | GUZ/IAEC/20-<br>21/N5 | Developmental<br>Neurogenesis:<br>qRT-PCR<br>profiles of<br>mRNA<br>expression   | Seed Money<br>grants, Goa<br>University                          |

- 3. CPCSEA members raised some queries against the research proposal submitted by Dr. Nitin Sawant and Dr. Shanti Desai to which the proposers gave the answer to which the members were satisfied.
- 4. CPCSEA members suggested to Dr. Shamshad Shaikh to make the proposal for one year and reduce the mice from 12 to 08 in each group.
- 5. CPCSEA members suggested to Miss Mithila to take care of the necessary safety measures while handling with the live snakes. They have recommended to keep prophylatic drugs with them.
- 6. CPCSEA members suggested to Mr. Dipak to take some training for flushing the stomach content in live anurans.

7. CPCSEA approval to the proposal made by Mithali and Dipak are subjected to the clearance from competent authorities for collecting wildlife for their research work.

Meeting ended with the vote of thanks given by Member Secretary.

Member Secretary (IAEC) 27.7.2021

chardeshelak

CPCSEA main Nominee

Chairman (IAEC) Goa University

VICE CHANCELLOR GOA UNIVERSITY

Date: 28 07 2021

# MINUTES OF THE MEETING HELD OF THE IAEC HELD ON $12^{\text{TH}}$ MAY 2022 AT 11.30 HRS DEPARTMENT OF ZOOLOGY, GOA UNIVERSITY

#### **Members Present:**

- 1. Prof. Harilal .B. Menon , Vice Chancellor, Goa University, (Chairman, IAEC)
- 2. Dr. Nitin S. Sawant, Department of Zoology, Goa University (Member)
- 3. Prof. Sanjeev Ghadi, Professor of Biotechnology Department (Member)
- 4. Dr. Gustav Pinto, Veterinarian (Member)
- 5. Dr. Lakshangi Charya, Department of Microbiology (Member)
- 6. Prof. Savita Kerker, HOD Zoology (Member Secretary)

#### **Special Invitees:**

1. Dr. Shanti N. Dessai, Department of Zoology, Goa University.

#### Members Absent:

Nil

Chairman welcomed all the members of internal IAEC and readout the names of the new constituted committee members as Ex-Officio Chairperson and Ex-Officio Member Secretary.

Dr. Shanti Dessai was invited for the meeting as Special invitee and the Member Secretary requested the committee to include her name as an additional member in a newly constituted committee.

With respect to the guidelines of CPCSEA, the Biodata and consent forms of the newly constituted members need to be uploaded on CPCSEA website, which will be complied

Meeting ended with vote of thanks by Chairperson.

Member Secretary (IAEC)

Members

1. Santahorhar 12/5/22

2. Journally (1)

Date: 12/05/2022

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# MINUTES OF THE MEETING HELD OF THE IAEC HELD ON $12^{\text{TH}}$ MAY 2022 AT 11.30 HRS DEPARTMENT OF ZOOLOGY, GOA UNIVERSITY

#### Members Present:

- 1. Prof. Harilal .B. Menon, Vice Chancellor, Goa University, (Chairman, IAEC)
- 2. Dr. Nitin S. Sawant, Department of Zoology, Goa University (Member)
- 3. Prof. Sanjeev Ghadi, Professor of Biotechnology Department (Member)
- 4. Dr. Gustav Pinto, Veterinarian (Member)
- 5. Prof. Savita Kerker, HOD, Zoology (Member Secretary)

#### **Special Invitees**

1. Dr. Shanti N. Dessai, Department of Zoology, Goa University.

#### Members Absent

Nil

Chairman welcomed all the members of internal IAEC and readout the names of the new constituted committee members as Ex-Officio Chairperson and Ex-Officio Member Secretary.

Dr. Shanti Dessai was invited for the meeting as Special invitee and the Member Secretary requested the committee to include her name as an additional member in a newly constituted committee.

With respect to the guidelines of CPCSEA, the Biodata and consent forms of the newly constituted members need to be uploaded on CPCSEA website, which will be complied.

Meeting ended with vote of thanks by Chairperson.

#### Members of IAEC

| Sr. No | Name of the member  | Designation 1                                  | Designation 2    | Signature   |
|--------|---------------------|--|------------------|-------------|
| 1      | Dr. Harilal B Menon | Scientist from different biological discipline | Chairperson      | Apaild-B.M. |
| 2      | Dr. Savita Kerkar   | Biological Scientist                           | Member secretary | santahehan  |
| 3      | Dr. Gustav Pinto    | Veterinarian                                   | NA               | X           |
| 4      | Dr. Nitin Sawant    | Scientist Incharge of Animal house facility    | NA               | Davoan      |
| 5      | Dr. Sanjeev Ghadi   | Scientist from different biological discipline | NA               | Culudi      |

Date: 12/05/2022

# MINUTES OF THE MEETING HELD OF THE IAEC HELD ON $12^{\text{TH}}$ MAY 2022 AT 11.30 HRS DEPARTMENT OF ZOOLOGY, GOA UNIVERSITY

#### Members Present:

- 1. Prof. Harilal .B. Menon , Vice Chancellor, Goa University, (Chairman, IAEC)
- 2. Dr. Nitin S. Sawant, Department of Zoology, Goa University (Member)
- 3. Prof. Sanjeev Ghadi, Professor of Biotechnology Department (Member)
- 4. Dr. Gustav Pinto, Veterinarian (Member)
- 5. Dr. Lakshangi Charya, Department of Microbiology (Member)
- 6. Prof. Savita Kerker, HOD Zoology (Member Secretary)

#### Special Invitees:

1. Dr. Shanti N. Dessai, Department of Zoology, Goa University.

#### Members Absent:

Mil

Chairman welcomed all the members of internal IAEC and readout the names of the new constituted committee members as Ex-Officio Chairperson and Ex-Officio Member Secretary.

Dr. Shanti Dessai was invited for the meeting as Special invitee and the Member Secretary requested the committee to include her name as an additional member in a newly constituted committee.

With respect to the guidelines of CPCSEA, the Biodata and consent forms of the newly constituted members need to be uploaded on CPCSEA website, which will be complied

Meeting ended with vote of thanks by Chairperson.

Member Secretary (IAEC)

Members

1. Santahorhar 12/5/22

3. South

Date: 12/05/2022

## Minutes of the meeting of the IAEC held on 12th September, 2023 at 11:00 AM Zoology Discipline, School of Biological Sciences and Biotechnology, Goa University

#### **Members Present**

Prof. Harilal B. Menon, Vice Chancellor, Goa University (Chairman, IAEC)

Prof Savita Kerkar, (Member Secretary IAEC)

Prof. Sanjeev Ghadi, Scientist from different biological discipline (Biotechnology discipline)

Dr. Lakshangy Charya, Scientist from different biological discipline (Microbiology discipline)

Dr. Gustav Pinto, Veterinarian

Dr. Nitin Sawant, Scientist incharge of Animal House facility

Dr Indrajeet D Gonjari, Pharmacy College, Ratnagiri (CCSEA link Nominee)

Shri. Vishnu A Kangralkar, Scientist from outside of the institute (CCSEA nominee)

Mr. Johnson Stephen, CCSEA socially aware nominee

Members absent

Dr. Chandrashekar K. (CCSEA main nominee)

Chairman welcomed all the members of IAEC, both internal members as well as members nominated by CCSEA.

Dr. Indrajeet D. Gonjari attended the meeting through the Google meet-link that was shared.

The agenda discussed was as follows:

| SR.<br>NO | NAME OF THE<br>PI/RESEARCH<br>SCHOLAR | Proposal<br>No.       | TITLE  | Funded by                              |
|-----------|---------------------------------------|-----------------------|--|--|
| 1.        | Mrs. Pearl Pinto                      | GUZ/IAEC/<br>23-24/N1 | Ameliorative Effect of Bioactive components of <i>Murraya Koenigii</i> (curry leaf) on Clozapine induced Hyperlipidemia in Wistar rats | Self funded.                           |
| 2.        | Dr. Avelyno D'Costa                   | GUZ/IAEC/2<br>3-24/N2 | Silver/manganese nanoparticles (Ag/MnNPs) induced toxicity, histopathological and biochemical  | Self-funded<br>(M.Sc.<br>Dissertation) |

|     |                                      |                        | changes in Swiss albino mice, in vivo  |  |
|-----|--------------------------------------|------------------------|--|--|
| }.  | Dr. Avelyno D'Costa                  | GUZ/IAEC/2<br>3-24/N3  | Chronic toxicity evaluation of Orally Administered Nylon (Polyamide) and Polyester Micro/Nanoplastics in mice, Mus                         | Self-funded<br>(M.Sc.<br>Dissertation) |
| 4.  | Dr. Avelyno D'Costa                  | GUZ/LAEC/2<br>3-24/N4  | Genotoxic and Neurotoxic effects<br>of MW CNT's on <i>Mus musculus</i> :<br>Assessment and detoxification<br>strategies                    | Self-funded<br>(M.Sc.<br>Dissertation) |
| 5.  | Dr. Shanti Dessai                    | GUZ/IAEC/2<br>3-24/N5  | Combined effects of Caffeine and<br>Aspartame on the Female<br>Reproductive System of Mouse<br>(Mus musculus                               | Self-funded<br>(M.Sc.<br>Dissertation) |
| 6.  | Dr. Shanti Dessai                    | GUZ/IAEC/2<br>3-24/N6  | Neurodevelopmental Consequences<br>of MSG: Amino Acid Profile Changes<br>in Chick Embryo Brains  | Self-funded<br>(M.Sc.<br>Dissertation) |
| 7.  | Dr. Shanti Dessai                    | GUZ/IAEC/2<br>3-24/N7  | Assessing the Developmental<br>Impact of Virgin Coconut Oil on<br>Chick Embryo   | Self-funded<br>(M.Sc.<br>Dissertation) |
| 8.  | Dr. Shanti Dessai                    | GUZ/IAEC/2<br>3-24/N8  | In Ovo Exposure of Paracetamol:<br>Investigating Changes in Vitelline<br>Circulation of Chick Embryo                                       | Self-funded<br>(M.Sc.<br>Dissertation) |
| 9.  | Dr. Shanti Dessai                    | GUZ/IAEC/2<br>3-24/N9  | Karyological Investigations of<br>Three Fishes from the Goan<br>Aquatic Environment  | Self-funded<br>(M.Sc.<br>Dissertation) |
| 10. | Dr. Karingada Kochu<br>Therisa Beena | GUZ/IAEC/2<br>3-24/N10 | Seasonal study of bioindicator species of a molluscan and a crustacean from Zuari Estuary correlating with the pollution status of Goa     | DBT                                    |
| 11. | Dr. Trupti Jadhav                    | GUZ/IAEC/2<br>3-24/N11 | Freshwater Fish Diversity in<br>Protected Areas of Goa   | Goa State<br>Forest<br>Department      |
| 12. | Dr Bhakti Balkrishna<br>Salgaonkar   | GUZ/IAEC/<br>23-24/R5  | Development of a fish feed product prototype using prebiotics and vitamins supplement from non-pathogenic, gut-friendly halophilic archaea | DST-SERB                               |
| 13. | Dr. Samantha Fernandes<br>D'Mello    | GUZ/IAEC/2<br>3-24/N12 | Evaluating the toxicity and  | Self-funded<br>(M.Sc.<br>Dissertation) |
| 14. | Dr. Samantha Fernandes<br>D'Mello    | GUZ/IAEC/2<br>3-24/N13 | Study of immunostimulants for Xiphphorous helleri  | Self-funded<br>(M.Sc.<br>Dissertation) |
| 15. | Ms. Dviti Mapari                     | GUZ/IAEC/2<br>3-24/N14 | Bioactive molecules from the gut-<br>associated microbiota of Grey   | Self-funded<br>(M.Sc.                  |

|     |   |                        | Mullet (Fish) from Goa  | Dissertation)                          |
|-----|---|------------------------|---|--|
| 16. | Ms. Dviti Mapari                            | GUZ/1AEC/2<br>3-24/N15 | Studies of heavy metals accumulation on crustaceans from  | Self-funded<br>(M.Sc.<br>Dissertation) |
| 17. | Dr. Avelyno D'Costa<br>and Mr. Ankit Sinha  | GUZ/IAEC/2<br>3-24/N16 | In vivo toxicity studies of selected microplastics in tilapia (Oreochromis mossambicus)   | Self-funded<br>(Ph.D. work)            |
| 18. | Dr. Avelyno D'Costa<br>and Mrs. Shweta Moye | GUZ/IAEC/2<br>3-24/N17 | In – Vivo Assessment of<br>Chlorpyrifos and Microplastic<br>toxicity in Mangrove clam,<br>Polymesoda erosa (Solander,<br>1786)  | Self-funded<br>(Ph.D. work)            |
| 19. | Dr. Avelyno D'Costa                         | GUZ/IAEC/2<br>3-24/N18 | Assessment of microplastic accumulation and toxicity in whiteleg shrimp ( <i>Litopenaeus vannamei</i> ) from sluice gates of harvest sites in North Goa (Marcaim, Cundaim & Kumbharjua) | Self-funded<br>(M.Sc.<br>Dissertation) |
| 20. | Dr. Avelyno D'Costa                         | GUZ/IAEC/2<br>3-24/N19 | Toxicity of polyethylene microplastics in tilapia (Oreochromis mossambicus)   | Self-funded<br>(M.Sc.<br>Dissertation) |
| 21. | Dr. Avelyno D'Costa                         | GUZ/IAEC/2<br>3-24/N20 | In vivo toxicity of Polystyrene microplastics in Fresh Water Tilapia (Oreochromis mossambicus)  | Self-funded<br>(M.Sc.<br>Dissertation) |
| 22. | Dr. Avelyno D'Costa                         | GUZ/IAEC/2<br>3-24/N21 | Recuperative effect of the combined extracts of Justicia adhatoda, Coleus amboinicus and Artemisia parviflora in Tilapia (Oreochromis mossambicus) after sub-lethal exposure to Cadmium | Self-funded<br>(M.Sc.<br>Dissertation) |
| 23. | Dr. Avelyno D'Costa                         | GUZ/IAEC/2<br>3-24/N22 | Assessment of the toxicity of Cobalt oxide Nanoparticle (CoON) in the Estuarine clam  | Self-funded<br>(M.Sc.<br>Dissertation) |
| 24. | Mrs. Santoshi Narvekar                      | GUZ/IAEC/2<br>3-24/N23 | Fish muscle Protein Hydrolysate<br>and its effects on the brain of<br>Alzheimer's disease mouse model   | Self-funded<br>(Ph.D. work)            |
| 25. | Ms. Sasha Viegas                            | GUZ/IAEC/2<br>3-24/N24 | Optimization and Characterization of Shrimp Gill and Muscle cell cultures and their Validation for Virus Susceptibility and Toxicological Tests   | Self-funded<br>(Ph.D. work)            |
| 26. | Ms Shreya<br>Khorjuvekar                    | GUZ/IAFC/2<br>3-24/N25 | Selected Autism Spectrum Disorder- Risk Gene Expression   | Self-funded<br>(Ph.D. work             |

|     | Dr. Shamshad Shaikh<br>and Mrs. Bhakti Dafale | GUZ/IAEC/2<br>3-24/N26 | Establishment of cell culture from<br>Scylla olivacea for pathogenic<br>susceptibility screening.   | Self-funded<br>(Ph.D. work)            |
|-----|---|------------------------|---|--|
| 28. | Dr. Preeti Pereira                            | GUZ/IAEC/2<br>3-24/N27 | Studies on sea anemones of Goan coast- potential of Secondary metabolites   | Self-funded<br>(M.Sc.<br>Dissertation) |
| 29. | Dr. Preeti Pereira                            | GUZ/IAEC/2<br>3-24/N28 | Studies LWR and diet preferences of selected local fishes   | Self-funded<br>(M.Sc.<br>Dissertation) |
| 30. | Dr. Preeti Pereira                            | GUZ/IAEC/2<br>3-24/N29 | Studies on Hermit crabs of Goan coast and their shell selection behavior  | Self-funded<br>(M.Sc.<br>Dissertation) |
| 31. | Dr. Preeti Periera                            | GUZ/IAEC/2<br>3-24/N30 | Study on Aranae in Agro<br>Ecosystem of Amona, Goa  | Self-funded<br>(M.Sc.<br>Dissertation) |
| 32. | Dr. Preeti Pereira                            | GUZ/IAEC/2<br>3-24/N31 | Larvicidal potential of the secondary metabolites of Opisthobranchs   | Self-funded<br>(M.Sc.<br>Dissertation) |
| 33. | Dr. Preeti Pereira                            | GUZ/IAEC/2<br>3-24/N32 | Studies on Barnacles along Goan<br>Coast  | Self-funded (M.Sc. Dissertation)       |
| 34. | Dr. Preeti Pereira                            | GUZ/IAEC/2<br>3-24/N33 | Taxonomy, regional-scale<br>diversity and geographical<br>distribution of marine sponges<br>(Phylum Porifera) from the West<br>coast (Maharashtra, Goa and<br>Karnataka) of India   | SERB-TARE                              |
| 35. | Ms. Gandhita<br>Kundaikar                     | GUZ/IAEC/2<br>3-24/N34 | Effect Of Andrographis paniculata<br>on Colour Enhancement, Caudal<br>Fin Regeneration in Guppy fish<br>(Poecilia reticulata)   | Self-funded<br>(M.Sc.<br>Dissertation) |
| 36. | Ms. Gandhita<br>Kundaikar                     | GUZ/IAEC/2<br>3-24/N35 | Dietary Analysis of Selected Plant-based Ingredients and their Effect on Growth and Biochemical Parameters of Economically Important Cultured Fish  | Self-funded<br>(Ph.D. work)            |
| 37. | Ms. Gandhita<br>Kundaikar                     | GUZ/IAEC/2<br>3-24/N36 | Stomach content analysis and<br>some aspects of the reproductive<br>biology of Scylla serrata from<br>Borim, Goa  | Self-funded<br>(M.Sc.<br>Dissertation) |
| 38. | Ms. Gandhita<br>Kundaikar                     | GUZ/IAEC/2<br>3-24/N37 | Quality assessment of fish by sensory and biochemical methods.  | Self-funded<br>(M.Sc.<br>Dissertation) |
| 39. | Ms. Gandhita<br>Kundaikar                     | GUZ/IAEC/2<br>3-24/N38 | Analysis of histological,<br>biochemical and antioxidant<br>enzyme activity in <i>Oreochromis</i><br>mossambicus (Mozambique<br>Tilapia) exposed to acute toxicity<br>of anionic surfactant Sodium<br>Lauryl Sulphate (SLS) | Self-funded<br>(M.Sc.<br>Dissertation) |

| 48. | Mr. Mouvin Fernandes                                | GUZ/IAEC/2<br>3-24/N43 | Plastic in Sea Food/ A case study   | Self funded                            |
|-----|---|------------------------|---|--|
| 47. | Dr. Nitin S. Sawant<br>and Vaishnavi Bharati        | GUZ/IAEC/2<br>3-24/N42 | A study on Eco-ethology of<br>Austruca annulipes (H.Milne<br>Edwards, 1837) from Goa, India   | Self-funded<br>(M.Sc.<br>Dissertation  |
| 46. | Dr. Nitin S. Sawant<br>and Ms. Tanya Gosavi         | GUZ/IAEC/2<br>3-24/N41 | Host Plant Mediated Butterfly-<br>plant interaction   | Self-funded<br>(M.Sc.<br>Dissertation) |
| 45. | Dr. Nitin S. Sawant<br>and Mr. Shubham<br>Rane      | GUZ/IAEC/2<br>3-24/R4  | Ecology of genus <i>Nyctibatrachus</i> in the Western ghats region of Goa.  | Self-Funded<br>(Ph.D work)             |
| 44. | Dr. Nitin S. Sawant                                 | GUZ/IAEC/2<br>3-24/N40 | Impact of Climate Change on Ichthyofauna along the coastline of Goa, India.   | GSBB, Goa,<br>Goa, DSTE                |
| 43. | Dr. Nitin S. Sawant                                 | GUZ/IAEC/2<br>3-24/R3  | Diversity of Herpetofauna of Goa, Maharashtra and Karnataka.  | MOES, GOI                              |
| 42. | Dr. Nitin S. Sawant<br>and Mr. Mayur Mohan<br>Gawas | GUZ/IAEC/2<br>3-24/R2  | A Study on ecology of amphibians along the Western Ghats of Goa, India  | Self-Funded<br>(Ph. D.<br>work)        |
| 41. | Dr. Nitin S. Sawant<br>and Mr. Dipak<br>Bowalkar    | GUZ/14EC/2<br>3-24/R1  | Ecological studies of Anurans in<br>few selected lateritic rocky<br>outcrops along central Western<br>Ghats in the State of Goa.  | Self-Funded<br>(Ph.D. work)            |
| 40. | Ms. Gandhita<br>Kundaikar                           | GUZ/IAEC/2<br>3-24/N39 | Landings of Guitarfish at North<br>Goa with some insights into its<br>age reproductive and feeding<br>biology   | Self-funded<br>(M.Sc.<br>Dissertation) |
| 39. | Ms. Gandhita<br>Kundaikar                           | GUZ/IAEC/2<br>3-24/N38 | Analysis of histological,<br>biochemical and antioxidant<br>enzyme activity in <i>Oreochromis</i><br>mossambicus (Mozambique<br>Tilapia) exposed to acute toxicity<br>of anionic surfactant Sodium<br>Lauryl Sulphate (SLS) | Self-funded<br>(M.Sc.<br>Dissertation) |

- CCSEA members raised some queries regarding the number of mice to be used by Dr. Avelyno D'Costa, who later provided the breakup for each test and the members were satisfied. He was permitted to use 15 mice for nano studies, 15 for toxicity evaluation and 30 for geno and neurotoxic studies
- CCSLA members approved the use of fish % specimens of 4 different species for Mrs. Santoshi Narvekar to prepare the hydrosylates but not the experiments on mice at the moment for which she would apply for the following year.
- CCSEA members suggested to Dr. Preeti Pereira to reduce the number of Sea anemones from 30 to 25 specimens.

- Ms Sasha Viegas proposed to use 125 P. monodon and P. vannami, however she was permitted to
  use 25 of each species.
- Ms Gandhita was permitted to use 40 guppies for her experiment and 50 Mackerels and 50 shrimps.
- Rest of the project proposals were approved as presented and mentioned in the proposals.

AOB: The Member Secretary informed the members that the main nominee, Dr Chandrashekar K was not cooperative and was not available to hold the meeting of the IAEC and was very rude during telephonic conversation. Therefore his authoritative approach was so stressful to schedule the meeting. The situation was that there were 48 proposals which include the work of dissertation as a part of successful completion of post graduate degree as well as PhD and R&D projects. Additionally the chairperson (VC) was going out of the country for a fortnight. Hence, inspite of explaining all the above the main nominee was non cooperative. However, the link-nominee, Dr Indrajeet Gonjari was later kind enough to be present online and thus the meeting could be scheduled and needful could be done. The members thus felt that there was a need to change the Main Nominee as he was not cooperative, rude in his behavior and inordinate delay in attending all the previous meetings. Thereafter he arrived after most of the proposals were already presented. The meeting ended with vote of thanks to the chair.

Sanitaherheu Member Secretary (IAEC) Prof. Savita Kerkar

Dr. Indrajeet D. Gonjari

Goa University

Prof. Harilal B. Menon

#### Minutes of (7th Meeting)... IAEC Meeting

Name and address of establishment: Goa University

Registration number of establishment: 2104/GO/Re/S/20/CPCSEA date 10/08/2020

Date and Time of the IAEC Meeting: 23/7/2024 at 5.00 hrs

Venue: Vice Chancellors meeting Room Goa University

Minutes of the Meeting:

The Chairperson welcomed all the members of internal IAEC

As per the agenda of the meeting 'Reconstitution of the Member Secretary" the Chairperson recommended Prof S. Krishnan, Senior Professor of Botany and Vice Dean of SBSB, Goa University to be the new member secretary for IAEC, Goa University, as the current Member Secretary Prof. Savita Kerkar is superannuating by 31/07/2024.

All the other members gave their consent for the same.

The meeting ended with vote of thanks by Chairperson.

#### Attendance Sheet of the IAEC Members present in the meeting:

| S.  | Name                 | Designation in IAEC                            | Signature with Date             |
|-----|----------------------|--|---------------------------------|
| No. |                      |  | (The Minutes should be signed   |
|     |                      | ,  | with ink. Scanned signature and |
| -   |                      |  | date shall not be accepted.)    |
| 101 | Dr. Harilal B. Menon | Chairperson                                    | Homil. A. B. Menn               |
| 2.  | Dr. Sanjeev Ghadi    | Scientist from different biological Discipline | (white 23/7/24                  |
| 3.  | Dr. Lakshangy Charya | Scientist from different biological Discipline | (V)hary 23/07/224               |
| 4.  | Dr. Nitin Sawant     | Scientist Incharge of Animal House             | Dawan 124                       |
| 5.  | Dr. Gustavo Pinto    | Veterinarian                                   | 23/01                           |
| 6.  | Dr. Savita Kerkar    | Biological Scientist (Member Secretary)        | Sonitaherhan                    |

Sanitaherhan Member Secretary (IAEC) Asi A. B. Menn Chairperson (IAEC) 23/09

#### Minutes of (8th Meeting)...IAEC Meeting

Name and address of establishment: Goa University

Registration number of establishment: 2104/GO/Re/S/20/CPCSEA date 10/08/2020

Date and Time of the IAEC Meeting: 8th August 2024, 3.00 pm

Venue: Vice Chancellors meeting Room, Goa University

**Decision/ Recommendation of IAEC** Minutes of the Meeting:

The Chairperson welcomed all the members of internal IAEC

As per the agenda of the meeting 'Reconstitution of IAEC Committee" the IAEC recommended Dr. Nitin S. Sawant, Assistant professor and Programme Director of Zoology discipline, School of Biological Sciences and Biotechnology, Goa University (Existing IAEC member) as the new Member Secretary for IAEC, Goa University, as Prof. Savita Kerkar the erstwhile member secretary has superannuated on 31/07/2024. Moreover, Dr. Shamshad Bi M. Shaikh, Assistant Professor, Zoology, Goa University, is identified as the Scientist incharge of the IAEC,

All the other members gave their consent for the same

The meeting ended with vote of thanks to Chairperson.

#### Attendance Sheet of the IAEC Members present in the meeting:

| SR.No | Name                 | Designation in IAEC                            | Signature with Date (The Minutes should be signed with ink. Scanned signature and date shall not be accepted.) |
|-------|----------------------|--|--|
| 1     | Dr. Harilal B. Menon | Chairperson                                    | Haril. B. Mem  |
| 2     | Dr. Sanjeev Ghadi    | Scientist from different biological Discipline | (AUX 18171-  |
| 3     | Dr. Lakshangy Charya | Scientist from different biological Discipline | (Vhory os pos rory   |
| 4     | Dr. Nitin Sawant     | Scientist Incharge of Animal<br>House          |  |
| 5     | Dr. Gustavo Pinto    | Veterinarian                                   | B  |

Professor (HAG) Harilal B. Menon

Chairperson (IAEC)

#### Minutes of (9th) ....IAEC Meeting

Name and address of establishment: Goa University, Taleigao Plateau, Goa

Registration number of establishment: 2104 /Re /S /20 /CPCSEA

Date and Time of the IAEC Meeting: 2nd September 2024

Venue: Goa University

#### Minutes of the Meeting:

The Chairman welcomed all the members of the committee.

As per the agenda of the meeting twenty new proposals were scrutinized during the meeting and discussed among the members. CCSEA and other IAEC members deliberated on all the proposals and accordingly decision was taken.

#### Decision/ Recommendation of IAEC on New Research Protocols:

| Sr.<br>No. | Title of the Protocol  | Protocol No.   | Species<br>proposed                              | Total<br>Housing<br>capacity<br>for<br>Species<br>proposed | Number<br>of<br>animals<br>proposed   | Number<br>of<br>animals<br>recomme<br>nded by<br>IAEC | Approved /<br>Rejected/<br>Deferred /<br>Any other<br>remark/<br>Observation_<br>of IAEC |
|------------|--|----------------|--|--|---------------------------------------|---|--|
| 1.         | Effect of Sargassum on the growth and biochemical parameters of <i>Oreochromis mossambicus</i> (Mozambique Tilapia)                                  | GUZ/IAEC/24/N1 | Oreochromis<br>mossambicus                       | 300  | 72                                    | 72  | Approved   |
| 2          | A short -term study to<br>understand the effect of selected<br>abiotic factors on the diversity of<br>freshwater fishes of the Valvanti<br>River,Goa | GUZ/IAEC/24/N2 | Pisces   | 200  | 6 individuals<br>from each<br>species | 6 individuals<br>from each<br>species                 | Approved<br>It is diversity<br>based study   |
| 3          | Autism Spectrum Disorder-Risk<br>Gene Expression Dynamics in<br>Brain and Blood of Gallus gallus   | GUZ/IAEC/24/N3 | Fertilized<br>Chicken eggs                       | 300  | 60                                    | 60  | Approved   |
| 4          | Evaluation of Glycyrrhiza glabra<br>in improving neuropathlogical<br>response in Alzheimer's diseases<br>roden model                                 | GUZ/IAEC/24/N4 | Rattus<br>norvegicus,<br>Wistar Albion<br>rat    | 150  | 104                                   | 104   | Approved   |
| 5          | Fish muscle protein Hydrolysate<br>and its effects on the brain of<br>Alzheimer's disease mouse<br>model   | GUZ/IAEC/24/N5 | Mus muscularis<br>and C57BL/6J                   | 200  | 24 each                               | 24 each   | Approved   |
| 6          | Cell culture system from Litopenaeus vannamei: development ,pathological and toxicology evaluation   | GUZ/IAEC/24/N6 | Litopenaeus<br>vannamei<br>(White leg<br>shrimp) | 100  | 25                                    | 25  | Approved   |

|   | 7  | Establishment of cell culture from Scylla olivacea for  | GUZ/IAEC/24/N7  | Scylla olivacea   | 50  | 15  | 15   | Approved                               |
|---|----|---|-----------------|---|-----|---|--|--|
|   |    | pathogenic susceptibility<br>screening  | The second      |   |     |   |  |  |
|   | 8  | Development of primary Cell cultures from Sardinella longiceps and Mugli cephalus   | GUZ/IAEC/24/N8  | Sardinella<br>longiceps and<br>Mugli cephalus             | NA  | 12 each   | 12 each  | Approved                               |
|   | 9  | Neem leaf extracts in mitigating<br>the toxic effects of Magnesium<br>oxide nanoparticles in Mice   | GUZ/IAEC/24/N9  | Mouse (Mus<br>musculus)                                   | 200 | 41  | 41   | Approved                               |
|   | 10 | Amelelioative effect of curry<br>leaves and Pomegranate Peel on<br>Cadmium induced toxicity in<br>Meretrix casta  | GUZ/IAEC/24/N10 | Meretrix casta  | 200 | 66  | 66   | Approved                               |
|   | 11 | Protective effects of Crossandra<br>influndibuliformis against<br>cadmium Oxide Nanoparticle<br>Toxicity  | GUZ/IAEC/24/N11 | Swiss Albino<br>mice                                      | 200 | 41  | 41   | Approved                               |
| - | 12 | Assessment of hexavalent<br>Chromium in Clams   | GUZ/IAEC/24/N12 | Paphia<br>malabarica/<br>Memetrin casta                   | 100 | 50  | 50   | Approved                               |
|   | 13 | Evaluating Cucumin as a Mitigant for Cadmium Exposure in Oreochromis mossambicus: Comparative Analysis of Pre-Exposure, Concurrent and post – Exposure Administration | GUZ/IAEC/24/N13 | Oreochromis<br>mossambicus                                | 300 | 60  | 60   | Approved                               |
|   | 14 | In vitro toxicity studies of selected microplastics in tilapias (Oreochromis mossambicus)   | GUZ/IAEC/24/N14 | Oreochromis<br>mossambicus                                | 300 | 112   | 112  | Approved                               |
|   | 15 | To Assess PVC microplastic<br>Toxicity in <i>Tilapia (O mossambicus)</i>  | GUZ/IAEC/24/N15 | Oreochromis<br>mossambicus                                | 300 | 60  | 60   | Approved                               |
|   | 16 | Combination effects of<br>Bisphenol A and microplastic on<br>tilapia ( <i>Oreochromis</i><br>mossambicus)   | GUZ/IAEC/24/N16 | Oreochromis<br>mossambicus/<br>oreochromis<br>niloticus   |     | 60  | 60   | Approved                               |
|   | 17 | Ecological studies of Anurans in<br>few selected lateritic rocky<br>outcrops along central western<br>Ghats in the states of Goa                                      | GUZ/IAEC/24/N17 | Anurans   | 50  | NA  | NA   | Approved<br>It is field based<br>study |
|   | 18 | Undertaking the spatial and functional dimesions of Epigeal spide community (Arachnida – Araneae) across elevation gradients of Western Ghats, Goa                    | GUZ/IAEC/24/N18 | Arachnida –<br>Araneae<br>(Epigeal<br>spiders)            | 100 | 50  | 50   | Approved<br>It is field based<br>study |
|   | 19 | Ecology of genus Nyctibatrachus<br>in the Western Ghats region of<br>Goa  | GUZ/IAEC/24/N19 | Nyctibatrachus<br>species                                 | 50  | Maximum<br>three<br>specimens per<br>population | Maximum<br>three<br>specimens<br>per<br>population | Approved<br>It is field based<br>study |
|   | 20 | A Study on ecology of<br>amphibians along the Western<br>Ghats of Goa,India.  | GUZ/IAEC/24/N20 | All terrestrial<br>amphibians<br>within the study<br>area | NA  | 3 male and 3 female of each species             | 3 male and 3<br>female of<br>each species          | Approved It is field based study       |

Meeting ended with the vote of thanks by Member Secretary.

Attendance Sheet of the IAEC Members present in the meeting:

| S.No. | Na<br>me                  | Designation in IAEC                            | Signature with Date (The Minutes should be signed with ink Scanned signature and date shall not  Defaccepted 1/ |
|-------|---------------------------|--|---|
| 1     | Prof. Harilal.B.Menon     | Chairman                                       | toril. b. Slew  |
| 2     | Prof. K. Chandrashekar    | Main Nominee                                   | Chandolata. 1- 2/9/24   |
| 3     | Dr. Indrajeet D.Gonjari   | Link Nominee                                   |   |
| 4     | Shri. Vishnu A Kangralkar | Scientist from outside the institute           | 1 am 2/3/24   |
| 5     | Mr. Johnson Stephen       | Socially Aware Nominee                         | Normson 219124  |
| 6     | Dr. Gustavo Pinto         | Veterinarian                                   |   |
| 7     | Prof. Sanjeev_Ghadi       | Scientist from different biological discipline | Celud 219124  |
| 8     | Dr. Lakshangi Charya      | Scientist from different discipline            | (Vhange oxf09) 2024   |
| 9     | Dr. Shamshad Bi M. Shaikh | Scientist In-charge of Animal House Facility   | Marora.   |
| 10    | Dr. Nitin Sawant          | Biological Scientist, Member<br>Secretary      | Dawant  |

Dr. Nitin Sawant Member Secretary

Prof. Harilal B. Menon

#### Minutes of (Xth Meeting) IAEC Meeting

Name and address of establishment: Goa University

Registration number of establishment: 2104 /Re /S /20 /CPCSEA

Date and Time of the IAEC Meeting: 27th September 2024

Venue: Goa University

Minutes of the Meeting:

The Chairman welcomed all the members of the Committee

As per the agenda of the meeting twenty-three new protocols were reviewed and discussed by the members. The CPCSEA and other IAEC members deliberated on each proposal, leading to informed decisions.

Dr. Chandrashekar expressed a concern regarding the inclusion of proposals related to fish, while other members felt that discussing these proposals could be beneficial. Dr. Indrajeet suggested that the discussions could help inform a more thoughtful decision.

Dr. Chandashekar requested the veterinarian's opinion on proposals numbered 3, 4, 6, 7, and 8. The said protocols were placed before Dr. Gustav Pinto, after examining the veterinarian, provided consent and approval for these proposals.

Regarding Proposal No. 11, which pertained to a workshop, Dr. Chandashekar advised that a veterinarian should be present during the handling of animals by participants to ensure precautionary measures are taken. Dr. Pinto agreed with this recommendation.

During the discussion of proposals Serial Number 17, 18, 19, and 20, Dr. Nitin, the Member Secretary, recused himself, as there were protocols pertaining to students working with his guidance. Dr. Chandashekar raised concerns about proposals 18 and 19, which involved insects and spiders, emphasizing the need for proper training for students and the provision of precautionary medication, as advised by the veterinarian. Dr. Pinto clarified that no injections are necessary for handling spiders and insects.

Dr. Nitin Sawant confirmed his commitment to providing proper training and overseeing the handling of animals by students. Ultimately, all proposals were approved as presented.

#### Decision/ Recommendation of IAEC on New Research Protocols:

| S.No | Title of the<br>Protocol   | Protocol No. | proposed                           | Total<br>Housing<br>capacity<br>for<br>Species<br>proposed | Number of<br>animals<br>proposed | Number of<br>animals<br>recommende<br>d by IAEC | Approved / Rejected/ Deferred / Any other remark/ observation of IAEC |
|------|--|--------------|------------------------------------|--|----------------------------------|---|---|
|      | Dietary Analysis of<br>Selected Plant-based<br>ingredients and their | _            | (Etroplus suratensis) (Pearl Spot) | 200  | 180                              | 180   | Approved  |

|   | effect on Growth ar<br>Biochemical<br>Parameters of Pea<br>Spot (Etroph<br>suratensis)  | rl                    |  |     |       |       |          |
|---|---|-----------------------|--|-----|-------|-------|----------|
| , | 2 Compartive Study of Malachite Green and Beetroot Dye on Histological Changes and Antioxidant Enzyme Activity in Freshwater Ornamental Fish. | GUZ/IAEC/24/N2<br>2   | 2 Haludaria<br>fasciata<br>(Melon barb)        | 200 | 70    | 70    | Approved |
|   | 3 Swarnaprashan,an<br>Ayurvedic<br>Herbometalloformula<br>on effects in chick<br>embryo   | GUZ/IAEC/24/N2<br>3   | 2 Gallus gallus                                | 300 | 30    | 30    | Approved |
|   | 4 Investigating the impact of Ondansetror on Chick Embryo Brain Development   | GUZ/IAEC/24/N2<br>4   | Gallus gallus                                  | 300 | 54    | 54    | Approved |
|   | 5 Primary Cell Culture<br>of <i>Polymesoda erosa</i><br>(Mud clam/Mangrove<br>clam) mantle cells  | GUZ/IAEC/24/N2<br>5   | Polymesoda<br>erosa                            | 200 | 10    | 10    | Approved |
|   | 6 Smartphone –Electromagnetic Fiel effects on chick embryo brain  | GUZ/IAEC/24/N2<br>d 6 | . Gallus gallus                                | 300 | 30    | 30    | Approved |
|   | 7 Neurodevelopmental<br>Consequences of<br>Cadmium on the brain<br>of the chick Embryo  | GUZ/IAEC/24/N2<br>7   | Gallus gallus                                  | 300 | 42    | 42    | Approved |
|   | 8 Comparative<br>evaluation of Anti-<br>angiogenic properties<br>of Vit B6 and<br>Quercetin using Chick<br>embryo                             |                       |  | 300 | 60    | 60    | Approved |
|   | 9 Synthesis of Green<br>Nanostructures and<br>Evaluation of their<br>Hepatoprotective<br>Potential  | GUZ/IAEC/24/N2<br>9   | 8  | 200 | 144   | 144   | Approved |
| 1 | 10 Effects of crude extraction from Soursop fruit pulp on neural development of chick embryo  | tGUZ/IAEC/24/N3<br>0  | Fertilized<br>chicken eggs of<br>Gallus gallus | 300 | 90    | 90    | Approved |
| 1 | Workshop on Animal<br>Ethics, Hands-On<br>Animal Handling, and  | 1                     | 1.Mus<br>Musculus<br>(Mice),                   | 200 | 1. 03 | 1. 03 | Approved |

|     | W. | Practical Techniques  |                                       | 2.Oreochrois<br>mossambicus                                   | 300 | 2. 05 | 2. 05      |  |
|-----|----|---|---------------------------------------|---|-----|-------|------------|--|
|     |    |   | 7                                     | (fish),<br>3. Meretrix<br>casta (Bivalve)                     | 200 | 3. 05 | 3. 05      |  |
|     | 12 | In-Vivo Assessment of<br>Chlorpyrifos and<br>microplastic toxicity in<br>Mangrove clam<br>,Polymesoda erosa<br>(Solander,1786)          | 2                                     | Polymesoda<br>erosa   | 200 | 100   | 100        | Approved                               |
|     | 13 | Toxicological evaluation of Rastrelliger Kanagurta  | GUZ/IAEC/24/N3<br>3                   | Rastrelliger<br>Kanagurta                                     | 200 | 180   | 180        | Approved                               |
| 6 A |    | and Penaeus indicus<br>sold in the local<br>markets of North and<br>south Goa   |                                       | Penaeus<br>indicus  | 200 | 180   | 180        |  |
|     | 14 | A study on the toxic effects and natural detoxification of Diammonium phosphate fertilizer in Mozambique tilapia Orechromis mossambicus | GUZ/IAEC/24/N3<br>4                   | Orechromis<br>mossambicus                                     | 300 | 90    | 90         | Approved                               |
|     | 15 | Anatomy and<br>Histology of dead<br>birds found<br>opportunistically.   | GUZ/IAEC/24/N3<br>5                   | Bird species<br>(two or three)<br>found<br>opportunistical    | 30  | 2-3   | 2-3        | Approved                               |
|     | 16 | Studies On the<br>distribution of<br>Microplastics and<br>Associated Bacterial<br>Communities in  | GUZ/IAEC/24/N3<br>6                   | Green mussel<br>(Perna viridis),<br>Clam (Meritrix<br>casta), | 200 | 120   | 120<br>120 | Approved                               |
|     |    | selected marine<br>Habitats   | , , , , , , , , , , , , , , , , , , , | clam (Paphia<br>malabarica)                                   | 200 | 120   | 120        | *,                                     |
|     | 17 | Study of the Nesting<br>Biology &<br>Architecture of Potter<br>wasp & Mud dauber<br>mudnest)  | GUZ/IAEC/24/N3<br>7                   | Potterwasp<br>species and<br>mud dauber<br>species            | NA* | 80    | 80         | Approved<br>It is field based<br>study |
|     | 18 | To study Community<br>Ecology and diversity<br>of <i>Odonata</i> (Insecta) in<br>Nanda Lake,Goa,<br>India.                              | GUZ/IAEC/24/N3<br>8                   | Odonates  | NA  | 80    | 80         | Approved<br>It is field based<br>study |
|     | 19 | Exploring arachnids<br>Diversity, Predation<br>Behaviour and Web<br>Architecture  | GUZ/IAEC/24/N3<br>9                   | spiders   | NA  | 108   | 108        | Approved<br>It is field based<br>study |

| 20  | Study of anurans in       | GUZ/IAEC/24/N4 | Anurans      | NA    | Max 5/ | Max 5/       | Annroyad                   |
|-----|---------------------------|----------------|--------------|-------|--------|--------------|----------------------------|
|     | agroecosystem using       | 0              | 1177017 G/15 | 1171  |        |              | Approved It is field based |
|     | fuctional trait diversity |                |              |       |        | act/sampling | study                      |
|     | and bioacoustics          |                | 2            |       | g      | act sampling | Study                      |
| 21  | A study on the            | GUZ/IAEC/24/N4 | Ants         | NA    | 2500   | 2500         | Approved                   |
|     | diversity, taxonomy       | 1              |              | 1.1.1 | 2500   | 2300         | Approved                   |
|     | and swimming              | '9             |              |       |        |              |                            |
|     | behaviour of Goan ants    |                |              |       |        |              |                            |
|     | (Hymenoptera:             |                |              |       |        |              |                            |
|     | Formicidae).              |                |              |       |        |              |                            |
| 22  | Studies on the            | GUZ/IAEC/24/N4 | Gastropods   | NA    | 80     | 80           | Approved                   |
| V 5 | Mangrove associated       | 2              | 1            |       |        |              | Approved                   |
|     | gastropods at selected    |                |              |       |        |              |                            |
| -   | sites in Goa.             |                |              |       |        |              |                            |
| 23  | Study of Sea              | GUZ/IAEC/24/N4 | Sea anemones | 100   | 56     | 56           | Approved                   |
|     | Anemones on The           | 3              |              |       |        |              | ripproved                  |
|     | Goan Coast -              |                |              |       |        |              |                            |
| )   | Assessment of Its         |                |              |       |        | -            |                            |
|     | Aquarium Potential        |                |              | *     |        |              |                            |

When the Chairperson asked any matter under AOB, Dr. Chandrasekhar proposed establishing a Memorandum of Understanding (MOU) with ICAR, ELA Old Goa, as most animals are sourced from there, the same was agreed

The meeting concluded with a vote of thanks by the Member Secretary.

Member Secretary

Prof. Harilal B. Menon Prof. Harilal B. Menon Prof. Chairperson

# Institutional Chemical **Ethics** Committee (ICEC)

Dt: 25-04-2024

#### Report of the Chemical Ethics Committee of Goa University

#### Background:

Chemical Ethics Committee at Goa University was constituted to ensure that the hazardous waste on site is disposed in sustainable way via proper segregation of the components. The preliminary role of Chemical Ethics Committee is to implement the Guidelines for the disposal of chemical waste and contaminated glassware waste generated on site. All the scientific laboratories of Goa University that use chemicals for their practical and research activities should follow the guidelines mentioned in the hazardous waste disposal policy document 'Segregation and Disposal of Laboratory Waste and Effluents'. Though the Chemical Ethics committee order was issued in April 2024, it was earlier functioning as Environmental Health and Safety committee (EHS) in School of Chemical Sciences, Goa University with the undersigned member as the Chairperson of EHS committee.

#### Activities Undertaken:

A Hazardous waste solvent disposal policy document was drafted and approved in Academic Council of Goa University (Link: 20211206.043622~Segregation Disposal Laboratory Waste Effluents.pdf). Proper segregation of hazardous waste is done in laboratories as Organic Waste, Aqueous Waste and solid chemical waste as per the requirement of the Government approved agency (Ms. Ponda Envocare Ltd.). The approval of Goa State Pollution Control Board (GSPCB) is taken for safe disposal of hazardous chemical waste generated in Scientific laboratories of Goa University. The documents are appended at the end of the report. Proper safety training is provided to students across schools for safe handling of chemicals using proper PPE's (personal protective equipment) and following MSDS (material safety data sheet). This ensures compliance to environmental consideration while performing reactions safely on site at designated laboratories. Proper place is identified for storage of chemical waste and once sufficient waste is generated; it is safely disposed.

#### Future Plan:

The committee would ensure that all laboratories follow the guidelines of hazardous waste disposal. Proper chemical safety training to the new students joining the Schools would be provided. Regular meetings would be conducted to take stock of the hazardous waste generated on site and to implement timelines for its safe disposal.

Chairperson.

**Chemical Ethics Committee** 

#### **Documents appended:**

1) Goa State Pollution Control Board (GSPCB) NOC Certificate for Goa University for disposal of hazardous waste

# GOA STATE POLLUTION CONTROL BOARD गोंय राज्य प्रदूषण नियंत्रण मंडळ

(An ISO 9001-2015, ISO 14001:2015, ISO 45001:2018 Certified Board)

Phone Nos. : 0832-2407700

2407701, 2407702

2407703

Tel/Fax No. : 0832-2407700

Email Ids:

Chairman, GSPCB: chairman-gspcb.goa@nic.in Member Secretary GSPCB: ms-gspcb.goa@nic.in

Office:mail.gspcb@gov.in

No. 1/20/16412/2020-PCB/Tech/3287

Speed Post

Date 27/05/2022

To,
Dr. Bidhan A. Shinkre.
Associates Professor (Organic Chemistry),
School of Chemical Science
Goa University
e-mail: bidhan.shinkre@unigoa.ac.in

Sub: Approval from GSPCB for sending the hazardous waste of the university to Ponda Envocare Limited, whenever it is generated."

Ref: Your e-mail dated 10/12/2021

Sir,

With reference to your e-mail dated 10/12/2021 referred herein above, this is to inform you that the Goa University is hereby accorded permission to handover the hazardous waste to M/s Ponda Envocare Limited, plot No. 5 and 5A, Pissurlem Industrial Estate, Pissurlem, Sattari, Goa, for disposal.

Yours Faithfully,

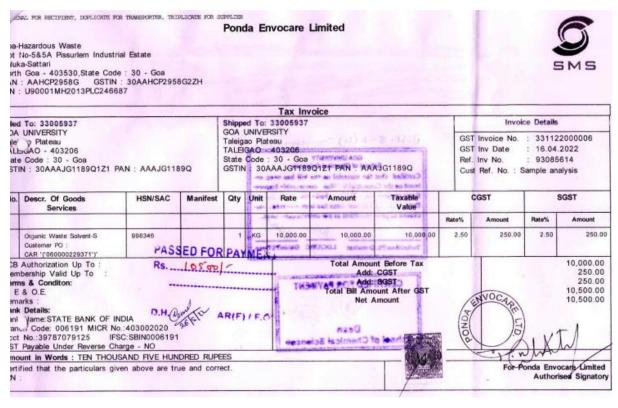
(Dr. Shamila Monteiro) Member Secretary For Goa State Pollution Control Board

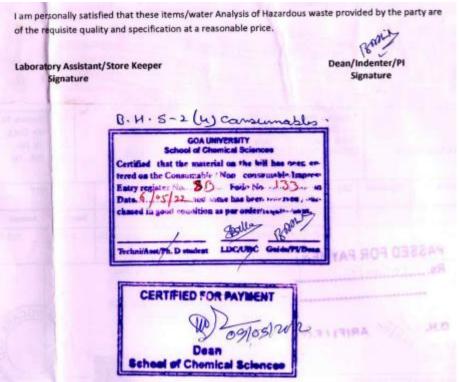
Copy to,

1. Office file

2. Guard file

#### 2) Invoice copy from M/s Ponda Envocare Ltd.





3) Manifest copy for hazardous waste collection by M/s Ponda Envocare

|    |  | FORM - 10   |
|----|--|---|
|    |  | PONDA ENVOCARE LIMITED  |
|    | • MANIFEST   | T FOR HAZARDOUS AND OTHER WASTE   |
| _  |  | [See Rule 19 (1)]   |
| 1. | Sender's Name & Mailing Address<br>(including Phone No. and E-mail):   | 500 of Cherical Frances, Gou Wiscistly<br>bidhan shinkne Cunige a ac in<br>1/20/16412/2020 - PCB/Tech /3287   |
| 2. | Sender's Authorization No.:  | 1/20/16412/2020-PCB/Tech /3287  |
| 3. | Manifest Document No.  | A 00087   |
| 4. | Transporter's Name & Address<br>(including Phone No. & E-mail)   | Ponda Govo cares liquited Plot No. 5 x 5A.<br>Ponsiumen Indestate, Sontary Gon -403530  |
| 5. | Type of Vehicle  | (Truck / Tanker / Special Vehicle)  |
| 6. | Transporter's Registration No.   | 1912021-PCB/1104052/HWM000491   |
| 7. | Vehicle Registration No.   | GAOUT-6341  |
| 8. | Receiver's Name & Mailing Address (including Phone No. and E-mail):  | PONDA ENVOCARE LIMITED Plot No. 5 & 5A, Pissurlem Industrial Estate, Pissurlem, Sattari Goa 403530  |
| 9. | Receiver's authorization No.:  | 4 <del>2/2021-PCB/840027/R0006587</del> /2/2022-PCB/1236739/R00095  |
| 0. | Waste Description  | Category No.  |
|    |  | 1) Organi Waste morMT   |
|    |  | 1) Organ wate morMT 2) Stica Wate morMT   |
|    |  | 3) m³ or MT   |
|    |  | 4) m³ or MT   |
| 2. | No. of Containers:  Physical form:   | Nos. & type   |
| 2  |  | (solid/semi-solid/sludge/oily/tarry/slurry/liquid)  |
| 3. | Special Handling Instructions and<br>Additional Information (2.40.2)   | Use proper PPE  |
|    | Special Handling Instructions and Additional Information Sender's Certification (Control of Control   |   |
|    | Special Handling Instructions and Additional Information 50 10 10 10 10 10 10 10 10 10 10 10 10 10   | Use propert PPE  I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorized; packed, marked and labeled, and are in all respects in proper condition for transport by road according to applicable national government regulations.  Month Day Year   |
|    | Special Handling Instructions and Additional Information Sender's Certification (Control of Control   | Use propert PPE I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorized, packed, marked and labeled, and are in all respects in proper condition for transport by road according to applicable national government regulations.  |
| 4. | Special Handling Instructions and Additional Information Sender's Certification Sender's Certification Signature Sig | Use propert PPE  I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorized; packed, marked and labeled, and are in all respects in proper condition for transport by road according to applicable national government regulations.  Month Day Year   |
| 4. | Special Handling Instructions and Additional Information Sender's Certification Sender's Ce | Use propert PPE  I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorized; packed, marked and labeled, and are in all respects in proper condition for transport by road according to applicable national government regulations.  Month Day Year   |
| 3. | Special Handling Instructions and Additional Information 10 10 10 10 10 10 10 10 10 10 10 10 10  | Use proben PPE I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorized, packed, marked and labeled, and are in all respects in proper condition for transport by road according to applicable national government regulations.    Month   Day Year   D   |
| 4. | Special Handling Instructions and Additional Information 10 10 10 10 10 10 10 10 10 10 10 10 10  | Use proben PPE I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorized, packed, marked and labeled, and are in all respects in proper condition for transport by road according to applicable national government regulations.    Month   Day Year   D   |
| 5. | Special Handling Instructions and Additional Information 10 10 10 10 10 10 10 10 10 10 10 10 10  | Use proben PPE  I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorized, packed, marked and labeled, and are in all respects in proper condition for transport by road according to applicable national government regulations.  Month  Day  Year  D  Month  Day  Year  D  Month  Day  Year  D  Above the proper condition for transport by road according to applicable national government regulations.  Month  Day  Year  D  Month  Day  Year  D  Above the proper condition for transport by road according to applicable national government regulations. |
| 5. | Special Handling Instructions and Additional Information 10 10 10 10 10 10 10 10 10 10 10 10 10  | Use proben PPE  I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorized, packed, marked and labeled, and are in all respects in proper condition for transport by road according to applicable national government regulations.  Month  Day  Year  D  Month  Day  Year  D  Month  Day  Year  D  Above the proper condition for transport by road according to applicable national government regulations.  Month  Day  Year  D  Month  Day  Year  D  Above the proper condition for transport by road according to applicable national government regulations. |
| 5. | Special Handling Instructions and Additional Information 10 10 10 10 10 10 10 10 10 10 10 10 10  | Use proben PPE  I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorized, packed, marked and labeled, and are in all respects in proper condition for transport by road according to applicable national government regulations.  Month  Day  Year  D  Month  Day  Year  D  Month  Day  Year  D  Above the proper condition for transport by road according to applicable national government regulations.  Month  Day  Year  D  Month  Day  Year  D  Above the proper condition for transport by road according to applicable national government regulations. |