# MEMORANDUM OF UNDERSTANDING (MoU)

For Academic Exchange and Co-operation

Between

# Research Culture Society, declesions

India, Canada, USA, EU.



www.researchculturesociety.org

Nanasaheb Yashwantrao Narayanrao Chavan Arts, Science and

Commerce College, Chalisgaon

K.B.C. North Maharashtra University, Jalgaon (Maharashtra), India

PIN: 424 101

Email: rashtriyacollege@rediffmail.com

gbs\_csn@rediffmail.com



Date : 08/07/2021

Place : Chalisgaon

## MEMORANDUM OF UNDERSTANDING (Mou)

For Academic Exchange and Co-operation

Between

#### **Research Culture Society**

8

Nanasaheb Yashwantrao Narayanrao Chavan Arts, Science and Commerce College, Chalisgaon,

Affiliated to K.B.C. North Maharashtra University, Jalgaon (Maharashtra), India, Pin Code: 424 101

'Research Culture Society' and Nanasaheb Yashwantrao Narayanrao Chavan Arts, Science and Commerce College, Chalisgaon, Affiliated to K.B.C. North Maharashtra University, Jalgaon (Maharashtra), India desire to develop academic exchange and cooperation in education and research between the organizations and have agreed to sign and enter into MoU as follows:-

#### 1. Objectives:-

a. To provide a common forum for exchange of ideas and views regarding designing and/or execution of curriculum/programs/workshops/seminars between following departments & 'Research Culture Society'. (Add your exact Department - Faculty and University / Institution name below, here are some example as ......)

i. Departments under Faculty of Science:

Department of Chemistry / Physics / Maths / Computer Science / Information Technology /
Botany / Zoology / Microbiology

ii. Department under Faculty of Commerce and Management: Dept. of Commerce / Management

iii. Faculty of Social Sciences
Department of Geography / History / Politics / Economics

iv. Faculty of Arts and Humanities.

Department of Marathi / Hindi / English / Education

- b. To use and share Libraries, database, documentation and instrumental related-infrastructure facilities of each other.
- c. To exchange information and arrange joint conference/seminars/workshops/FDP etc. educational programs for students and teachers with interested outer participants.

#### 2. Activities and Programs:-

The organizations based upon the principle of respect for each other's independence and of mutual benefit, will carry out the following activities (20) avid to principle activi

- i. Exchange of publications and information.
- ii. Exchange of faculty as: Trainer, Visiting Lecturer, Guest of honor, Keynote Speaker.
- iii. Designing and execution of conferences, seminars, workshops, Symposiums/FDP, etc.
- iv. Exchange of research and development activities as per available free sources.

#### 3. Formulation of Plan:-

In order to carry out the above activities, detailed plans shall be formulated after consultation between the two organizations from time to time depending on the nature and need of specific activity, availability of funds and convenience of both the organizations. However, the basic principle shall be mutual cooperation and academic benefit of students and individuals of both the organizations.

#### 4. Financial Terms and Mode of Payment, if any

The requirement of funds for programs shall be worked and through mutual consent between the 'Research Culture Society' and Nanasaheb Yashwantrao Narayanrao Chavan Arts, Science and Commerce College, Chalisgaon, Affiliated to K.B.C. North Maharashtra University, Jalgaon (Maharashtra), India. The 'Research Culture Society's' members can be appointed as a speaker, guest of honor or as an expert trainer/lecturer for conference, seminar, symposium and workshop. For such appointed member's collaborator university/ institute/ organization need to provide full fledge residential, food and prior traveling (to & fro) accommodations. In publication of conference, seminar, workshop, symposium collaborator - university / institute/ organization need to sign agreement and pay the deposit and prior publication amount (before publication) as per norms of society's publication committee. From society side as a co-sponsor there will be 30% to 40% concession in publication of online special / proceedings issue. 'Research Culture Society's' runs 5 international level referred, peer-reviewed journals with ISSN (Online) and a book publication with ISBN (Online / Print).

#### 5. Dissemination of Data and Information:-

'Research Culture Society' and Nanasaheb Yashwantrao Narayanrao Chavan Arts, Science and Commerce College, Chalisgaon, Affiliated to K.B.C. North Maharashtra University, Jalgaon (Maharashtra), India shall work out the modalities for dissemination of research data of joint projects to any third party keeping in mind the mutual interest However, both parties shall fulfill their obligation of disseminating the data to national databanks, as required by the-concerned funding agencies.

#### 6. Co-ordination Committee:-

A Joint Co-ordination Committee for smooth and effective execution of activities and programs under this MoU may be formed by mutual consent.

#### 7. Period and Revision of MoU:-

This Memorandum of understanding comes in to effect from the date of its signing and will remain in force initially for **Five (05) Years**. Its validity may be extended by mutual agreement between the two institutes/ organization.

#### 8. Promotion - Advertisement of Activities:

On the society website flyers, brochure will be uploaded and also will be shared to social media groups and contacts. Both party individuals can handle responsibilities.

#### 9. Non-Exclusive Nature of this MoU:-

The MoU between the 'Research Culture Society' and Nanasaheb Yashwantrao Narayanrao Chavan Arts, Science and Commerce College, Chalisgaon, Affiliated to K.B.C. North Maharashtra University, Jalgaon (Maharashtra), India shall not come in the way of either partner from collaboration with the third party.

#### 10. Acknowledgement and No claim policy:-

As this MoU is purely considered as not-for-profit based academic exchange and cooperation. Both parties agree to increase knowledge sharing, research, development and innovations activities for each other's individuals, and also agree for not to claim on each other in any dispute or loss or damage matter.

In witness thereof, both the institution their authorized representatives i.e. Registrar/V.C. /Principal/ Dean/ HoD/President/Director of this date.

Date: 09/07/2021 Place: Chalisgaon Sign and Stamp:

> Principal Dr. S. R. Jadhav

Nanasaheb Yashwantrao Narayanrao Chavan A. S. C. College, Chalisgaon K.B.C. N. M. U. Jalgaon (Maharshtra) India President / Director (Dr. C. M. Patel)

Research Culture Society
www.researchculturesociety.org

Culture & Contract of the Cont

Note: if any suggestions, feel free to send by email to us at: director@researchculturesociety.org

rashtriyacollege@rediffmail.com / gbs\_csn@rediffmail.com

#### **Research Culture Society**

This MoU is signed for Academic exchange and cooperation with following objectives:

- i. Exchange of publications and information.
- ii. Exchange of faculty as: Trainer, Visiting Lecturer, Guest of honor, Keynote Speaker.
- iii. Designing and execution of conferences, seminars, workshops, Symposiums/FDP etc.
- iv. Exchange of research and development activities as per available free sources.

During last five years following activities were conducted

- 1. Abstract book of Organized Two Day International (Web) Conference on New Vistas in Aquatic and Terrestrial Biology and Environment during Current Pandemic (ATBE- 2021) during March 26-27, 2021
- 2. Awards by Scientific fraternity for Prof. Dr. G. B. Shelke.



# RESEARCH CULTURE SOCIETY'S INTERNATIONAL AWARDS OF EXCELLENCE. 2022

Reg. No.: 24D0024215 International Scientific Research Organization







#### Certificate of Award & Honour

Lifetime Achievement in Educational Field
(2022)

Presented to

## Prof. Gunvantrao Baburao Shelke

For his contribution and dedication in the education field.



President / Director Research Culture Society



Recognizing Excellence with Honours

Ref. No: RCS-2022-AA-LAE-001



researchculturesociety@yahoo.com



WWW.RESEARCHCULTURESOCIETY.ORG



# International Journal for Innovative Research in Multidisciplinary Field

(ISSN: 2455-0620) (Scientific Journal Impact Factor: 6.719)
Monthly Peer-Reviewed, Refereed, Indexed Research Journal

Index Copernicus International - IC Value: 86.87

## **Special Issue of**

A Two-Day International (Web) Conference On "New Vistas in Aquatic & Terrestrial Biology and Environment during Current Pandemic" (ATBE-2021)

# Organized by **Department of Zoology**

R. S. S. P. Mandal's Nanasaheb Y. N. Chavan Arts, Science & Commerce College, Chalisgaon, Dist. Jalgaon (M.S.) India

#### In Joint Collaboration with

Nepal Aquaculture Society, Nepal, Glocal Environment and Social Association (GESA), New Delhi

March 26 & 27, 2021



**Conference Special Issue - 23** 

March - 2021



#### **RESEARCH CULTURE SOCIETY & PUBLICATION**

Email: rcsjournals@gmail.com
Web Email: editor@ijirmf.com
WWW.IJIRMF.COM



# A Two-Day International (Web) Conference On "New Vistas in Aquatic & Terrestrial Biology and Environment during Current Pandemic"

(ATBE-2021)

Date: 26 & 27 March, 2021

#### Organized by

Department of Zoology, R. S. S. P. Mandal's Nanasaheb Y. N. Chavan Arts, Science and Commerce College, Chalisgaon, Dist. Jalgaon (M.S.) India.

In Joint Collaboration with
Nepal Aquaculture Society (NEAQUAS) Kathmandu, Nepal
Glocal Environment and Social Association, New Delhi (GESA)

# A Two-Day International (Web) Conference On "New Vistas in Aquatic & Terrestrial Biology and Environment during Current



#### Organized by

**Department of Zoology** 

R. S. S. P. Mandal's Nanasaheb Y. N. Chavan Arts, Science & Commerce College, Chalisgaon, Dist. Jalgaon (M.S.) India March 26 & 27, 2021



In Joint Collaboration with



Nepal Aquaculture Society Kathmandu, Nepal (NEAQUAS)



Glocal Environment and Social Association, New Delhi (GESA)

Conference Special Issue Editorial Body - IJIRMF

#### The Managing Editor:

#### Dr. Chirag M. Patel

(Research Culture Society and

**Publication – IJIRMF)** 

#### The Executive Editor:

#### Prof. Ajit T. Kalse

Head, PG Department of Zoology, Nanasaheb Y. N. Chavan Arts, Science and Commerce College, Chalisgaon, Dist. Jalgaon, M.S., India

#### **Editor:**

#### Dr. S. R. Jadhay

Principal, Nanasaheb Y. N. Chavan Arts, Science and Commerce College, Chalisgaon, Dist. Jalgaon.

#### **Associate Editors:**

**Dr. V. R. Lakwal,** PG Department of Zoology, Nanasaheb Y. N. Chavan Arts, Science and Commerce College, Chalisgaon, Dist. Jalgaon, M.S., India.

**Dr. S. D. Gulbhile,** Department of Zoology, Vaishnavi Mahavidyalaya, Wadwani, Dist. Beed India.

**Dr. P. P. Joshi**, Department of Zoology, Adarsh Education Society's, Arts, Commerce and Science College, Hingoli, M.S., India **Dr. R. S. Kale,** Head, Department of

Zoology, MGVS Arts, Commerce and Science College, Manmad, M.S., India

#### **Co- Editors:**

#### Dr. Y. M. Bhosale,

PG Department of Zoology, Nanasaheb Y. N. Chavan Arts, Science and Commerce College, Chalisgaon, Dist. Jalgaon, M.S., India

#### Dr. Rajkumar T. Pawar,

Department of Zoology, Sunderrao Solanke Mahavidyalaya, Majalgaon, Dist. Beed, India.

#### **Peer Review Committee:**

**Prof. T. S.V Naidu,** Ex. Principal, Department of Zoology, Shri M. Mohata Science College, Nagpur, (M.S.), India.

Prof. S. P. Zambre, Ex. Director, BCUD,

Dr. B. A. M. University, Aurangabad, M.S., India

**Prof. C. J. Hiware**, Department of Zoology,

Dr. B. A. M. University, Aurangabad, M.S., India

Prof. R. J. Chavan, Department of Zoology,

Dr. B. A. M. University, Aurangabad, M.S., India

A Two-Day International (Web) Conference On "New Vistas in Aquatic & Terrestrial Biology and Environment during Current Pandemic (ATBE-2021)"

Organized by

Department of Zoology, R. S. S. P. Mandal's Nanasaheb Y. N. Chavan Arts, Science and Commerce College, Chalisgaon, Dist. Jalgaon (M.S.) India. In Joint Collaboration with

Nepal Aquaculture Society (NEAQUAS) Kathmandu, Nepal Glocal Environment and Social Association (GESA), New Delhi

### (Conference Special Issue)

**Copyright:** © The research work as a theory with other contents, images, tables, charts in full papers are subject to copyright taken by R. S. S. P. Mandal's Nanasaheb Y. N. Chavan Arts, Science and Commerce College, Chalisgaon, Dist. Jalgaon (M.S.) India. Executive Editors, Editors, Co-editors and Authors of this Conference issue.

**Disclaimer:** The author/authors are solely responsible for the content of the papers compiled in this conference special issue. The publisher or editors does not take any responsibility for the same in any manner. No part of this publication may be reproduced or transmitted in any form by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the copyright owner.

**Published By:** 

INTERNATIONAL JOURNAL FOR INNOVATIVE RESEARCH IN MULTIDISCIPLINARY FIELD

(ISSN: 2455 - 0620)

**Research Culture Society and Publication.** 

(Reg. International ISBN Books and ISSN Journals Publisher)

Email: editor@ijirmf.com / rcsjournals@gmail.com

WWW.IJIRMF.COM

#### **About Organizers:**

Nanasaheb Yashvantrao Narayanrao Chavan Arts, Science and Commerce College, Chalisgaon, Dist. Jalgaon (M.S.), India:

Nanasaheb Yashvantrao Narayanrao Chavan Arts, Science and Commerce College, Chalisgaon, Dist. Jalgaon (M.S.) is a branch of the huge tree of the Rashtriya Sahakari Shikshan Prasarak Mandal Limited, Chalisgaon established in 1984, under the tenure of Shikshan Maharshi Shri. Nanasaheb Yashwantrao Narayanrao Chavan with his noble mission "Saa Vidya Ya Vimuktaye". The College runs 20 departments of the U.G. courses along with post-graduation in the subjects of Zoology, Computer science, Botany, and Geography. The college also runs effectively the courses viz. BCA, BBM, MCM and 21 COP courses viz. Certificate, Diploma and Advanced Diploma. Research facilities are also available in the department of Zoology, Geography, English and Chemistry respectively. The department of Zoology of the college has rich heritage of Dr. B. M. Murhar pioneering contribution towards research in Helminthology.

Nanasaheb Yahvantrao Narayanrao Chavan Arts, Science and Commerce College is affiliated to Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon, (M.S.), India and is recognized under section 2(f) & 12 (b) of the UGC Act 1956. National Assessment and Accreditation Council (NAAC), Bangalore has re-accredited the college in II<sup>nd</sup> Cycle with A grade (CGPA 3.10) in 2014 and in III<sup>rd</sup> Cycle with B<sup>++</sup> grade (CGPA 2.77) in 2019. The college is the recipient of Best College Awardee of KBCNMU, Jalgaon.

#### Glocal Environment and Social Association (GESA), New Delhi:

In order to serve a bit, the Nature and Society for better future, the Glocal Environment & Social Association (GESA) is constituted. Its headquarter is located in New Delhi. Its main aim is to develop and promote 'global thought and local action' ideology to save the nature. It organizes the seminars; workshops etc. to aware and educate the people on blazing environmental and social issues. The GESA felicitates the persons and organizations for their outstanding services rendered in various fields of agriculture, arts, biodiversity conservation, commerce, culture, education, environment, healthcare, humanities, literature, mass communication, music, patriotism, peace and harmony, science, sports, technological innovations and other social services.

#### **About Conference:**

The COVID-19 outbreak is a global financial and public health crisis. Economic growth has shown a steep drop and is predicted to continue the same considerably in the near future to a great extent on a long term basis. COVID-19 has raised the alarm and given us the warning signal that scientific cooperation is an important key when dealing with global public health issues.

The Theme- "New Vistas in Aquatic & Terrestrial Biology and Environment during Current Pandemic (ATBE-2021)" is appropriate in the present scenario as the world's population is growing fast and natural resources are becoming limited. With a projected increase in global population by 2050, food production must double. Innovation in biological sciences will play an important role in the future success of animal agriculture, aquaculture, biodiversity, food safety and rural economy.

The research in biological sciences is necessary in order to continue providing safe and abundant food supplies for the growing global community with sustainable approach so as to protect our natural resources.

Aquaculture is the fastest-growing food sector worldwide. Aquaculture refers to raising and breeding aquatic animals (fish, shrimp, crab, shellfish, etc.) for economic purpose by the use of ponds, reservoirs, lakes, rivers and other inland waterways which play an important role. With an increasing global population and improving perception of fish food in diet, aquaculture must ensure that production yields are optimized.

The main aim of the present International conference is to bring together leading academic scientists, researchers, academicians and research scholars to exchange and share their experiences and research results on all aspects of biological sciences, aquaculture and environmental issues across the world. It will also provide a premier interdisciplinary platform for researchers, participants and educators to present and discuss the most recent advances/innovations, trends and concerns in the various fields.

#### **Conference Committee:**

#### **Chief Patrons:**

Hon. Dr. Murlidhar Bhivrav Patil

Chairman, Rashtriya Sahakari Shikshan Prasarak Mandals, Limited, Chalisgaon

Hon. Shri Vrukshamitra Arun Bhimrav Nikam

Secretary, Rashtriya Sahakari Shikshan Prasarak Mandals, Limited, Chalisgaon

#### **Patrtons:**

**Prof. S. N. Labh**, Tribhuvan University, Kathmandu, Nepal and Founder President of Nepal Aquaculture Society, Kathmandu, Nepal

**Dr. A. K. Verma**, Head, Department of Zoology, Govt. PG College Saidabad-Prayagraj (U.P.), India and Editor in Chief, International Journal of Biological Innovations (IJBI)

#### **Organizers:**

Dr. S. R. Jadhav,

Principal, Nanasaheb Y. N. Chavan Arts, Science and Commerce College, Chalisgaon, Dist. Jalgaon, India

#### Chief Organizer, ATBE-2021

Prof. A.T. Kalse,

Head, PG Department of Zoology, Nanasaheb Y. N. Chavan Arts, Science and Commerce College, Chalisgaon, Dist. Jalgaon, India

#### Convenor, ATBE-2021

Mrs. A.L.Kulkarni,

PG Department of Zoology, Nanasaheb Y. N. Chavan Arts, Science and Commerce College, Chalisgaon, Dist. Jalgaon, India

Dr. V. R. Lakwal,

PG Department of Zoology, Nanasaheb Y. N. Chavan Arts, Science and Commerce College, Chalisgaon, Dist. Jalgaon, India

#### Co-convenor, ATBE-2021

Dr. Y. M. Bhosale,

PG Department of Zoology, Nanasaheb Y. N. Chavan Arts, Science and Commerce College, Chalisgaon, Dist. Jalgaon, India

#### **Organizing Secretary, ATBE-2021**

Dr. S. J. Wagh

#### **Technical Coordinator**

#### **Organizing Committee Members:**

Dr. S. D. Mahajan (VP), Dr. Miss U. R. Magar (VP), Dr. G. D. Deshmukh (VP), Prof. P. J. Parmar, Dr. R. T. Pawar, Dr. S. D. Gulbhile, Mr. A. M. Patil, Dr. Mrs. S. V. Sakhala, Dr. K. B. Bendre, Mr. N. U. Chavan, Mrs. S. K. More, Mrs. Swati Mahajan, Mrs. Sarojini Ghadge, Miss. Kanchan Karda, Miss. Anam Shaikh, Mr. A. B. Suryawanshi (OS)

#### **Eminent Resource Persons:**

#### Prof. Shyam Narayan Labh,

(Gold Medalist) Fulbright Research Scholar (University of Idaho, USA) Ph.D., D. Sc., FNAS, FZSI, FLS (London) Professor & Head (CRC), Amrit Campus, IOST, Tribhuvan University, Kathmandu, Nepal.

**Dr. Umapati Sahay,** Former University Professor and Head, PG Department of Zoology, Ranchi University, Ranchi, Jharkhand, India

**Prof. Kauresh D. Vachhrajani,** Department of Zoology, Faculty of Science, Maharaja Sayajirao University of Baroda, Vadodara, India

**Prof. Sharique A. Ali, Editor-in-Chief, C-52, Housing Board Colony, Kohe-Fiza, Bhopal,** 

Prof. P. Nagaraja Rao, Department of Zoology, Osmania University, Hydrabad, A.P., India

Prof. S. P. Zambre, Ex. Director, BCUD, Dr. B. A. M. University, Aurangabad, M.S., India

Prof. B. B. Waykar, Dean, Faculty of Science, Dr. B. A. M. University, Aurangabad, M.S.

**Prof.** C. J. Hiware, Department of Zoology, Dr. B. A. M. University, Aurangabad, M.S.

**Prof. R. J. Chavan,** Department of Zoology, Dr. B. A. M. University, Aurangabad, M.S.

Dr. Mrs. Hemlata P. Nandurkar, Head, PGDZ, S.G.B. A. University, Amravati, M.S.

Dr. Prasenjit Hazra, Principal Sri Sri Academy, Nabinagar, Aurangabad, Bihar, India

Dr. Ashwini Kumar Dixit, Guru Ghasidas Vishwavidyalaya, Koni, Bilaspur, India

Dr. D. Shroff, CCS Haryana Agricultural University, Hisar, India

Prof. P. S. Lohar, Chairman, BOS in Zoology, KBCNMU, Jalgaon, M.S., India

#### **Benefits to publish in IJIRMF:**

- ❖ IJIRMF is an Open-Access, Scientific, Peer-reviewed, Refereed, Indexed International Journal with wide scope of publication.
- Author Research Guidelines & Support.
- Platform to researchers and scholars of different study field and subject.
- Reliable and Rapidly growing Publication with nominal APC/PPC.
- Prestigious Editorials from different Institutes of the world.
- Communication of authors to get the manuscript status time to time.
- Full text of all articles in the form of PDF format and Digital Object Identification System.
- ❖ Individual copy of "Certificate of Publication" to all Authors of Paper.
- ❖ Indexing of journal in databases like Google Scholar, Academia, Scribd, Mendeley, Internet Archive and others.
- Open Access Journal Database for High visibility and promotion of your article with keyword and abstract.
- Organize Conference / Seminar and publish its papers with ISSN.

# **Published By**



RESEARCH CULTURE SOCIETY & PUBLICATION

Email: rcsjournals@gmail.com

Web Email: editor@ijirmf.com

WWW.IJIRMF.COM