

# FORMAT FOR DETAILS OF INDIVIDUAL TEACHERS ACHARYA NAGARJUNA UNIVERSITY

1. Name : Prof. Kokkanti Mallikarjuna
2. Designation : Professor
3. Department : Botany and Microbiology
5. Qualifications : M.Sc., PhD.
6. Date of Birth : 05-02-1975
7. Date of Joining : 17-10-2006
8. Phones: (off):\_\_\_\_\_ (Cell): 9866402962
9. Email ID : mallikarjunaanu@gmail.com
10. Academic Qualifications: I worked as RA at Tata Institute of Fundamental Research (TIFR), Mumbai and at National Institute of Plant Genome Research (NIPGR), New Delhi.
11. Title of Ph.D. Thesis :

Title of Thesis	University from which PhDs awarded	Awarded Year
Studies on micropropagation of <i>Holarrhena antidysenterica</i> Wall- an important medicinal plant.	SV University, Tirupathi.	2004

## 12. Professional Career:

- Teaching Experience: 17 years
- Administrative Experience: 02 years as coordinator of ANU-TOCIC center.
- Research Experience: 19 years.

## 13. Academic Activities :

### Research Interests

- Understanding the mechanism and regulation of CO<sub>2</sub>-concentrating mechanism in *Chlamydomonas reinhardtii*.
- *In vitro* propagation, phytochemical and pharmacological screening of rare, endangered and endemic medicinal and mangrove plants.
- Enumeration and validation of ancient ayurvedic information enshrined in palm-leaf manuscript.
- Generation and characterization of high CO<sub>2</sub>requiring plants; and transgenic plants against stress.
- Isolation and characterization of marine, and fresh water algae, bacteria, fungi and actinobacteria for novel biological activities and molecules.

### Reviewer for International Journals

- Journal of Ethnopharmacology
- Journal of Biosciences

- 3Biotech
- Physiology and Molecular Biology of Plants
- Plant Cell Biotechnology and Molecular Biology
- Pharmaceutical Biology
- Forestry and Ecology
- International Journal of Pharma and Biosciences
- Journal of Medicinal Plants Research
- Universal Journal of Plant Sciences
- Journal of Medical Education and Training

#### Awards and Fellowships:

- **First prize with certificate of merit** for publishing paper in International Journal, Plant Molecular Biology by ANU Vice-Chancellor on the occasion of 38<sup>th</sup> Foundation-day, 11<sup>th</sup> Sept, 2014.
- **Visiting Scientist Fellowship Award 2019 (VSP 2019) from Indian National Science Academy (INSA), Government of India for working at Bhabha Atomic Research Center (BARC), Mumbai.**

#### 14. Research Students Information (Awarded):

Guided Successfully		Presently Guiding	
Ph.D	M.Phil/M.Tech	Ph.D	M.Phil/M.Tech
12	03	08	NIL

#### 15. Professional Achievements:

##### Workshop, FDP and Symposium organized (04)

- **As Convener organized** National workshop on “Regulatory Mechanisms, Transgenic Technology and Applications in Plants (RMTTAP)” in collaboration with Indian Institute for Science Education and Research (IISER), Tirupati on 2<sup>nd</sup> and 3<sup>rd</sup> of August, 2018 at Acharya Nagarjuna University, Guntur, Andhra Pradesh, India.
- **A Special issue was published by Indian Academy of Sciences, Bangalore, J Biosciences as “Genetic Intervention in Plants: Mechanisms and Benefits” on the above RMTTAP Workshop.**<https://www.ias.ac.in/listing/articles/jbsc/045/00/Genetic%20Intervention%20in%20Plants:%20Mechanisms%20and%20Benefits>.
- **As a Director,** organized an International Webinar-cum-Symposium on “**Plant Developmental Plasticity: A Molecular Perspective(PDPAMP-2021)**”in collaboration with Indian Institute for Science Education and Research (IISER), Tirupati from 27.09.2021 to 29.09.2021 at Acharya Nagarjuna University, Guntur, Andhra Pradesh, India.
- **As Director,** organized a “**National Faculty Developmental Program on Innovations and IPRs**” in collaboration with CSIR-IMMT of Bhubaneswar from December 6<sup>th</sup> to 12<sup>th</sup> , 2021.
- **As a Director and Co-coordinator of DSIR-TOCIC of ANU,** organized a Webinar on “**Government of India PRISM (Promoting Innovations in Individuals, Startups,**

and MSMEs) programme and the role of ANU-TOCIC in supporting innovations” on 12-12-2020.

### Invited lectures

- As a resource person of Refresher Course, gave talk on “ **The Role of MADS-box genes in flower development and evolution**” on 29<sup>th</sup> August 2022 at UGC-HRDC of Guru Ghasidas Vishwavidyalaya (Central University of Chhattisgarh), Bilaspur, through online mode.
- Delivered a talk on “**Molecular Architecture of Plant Flower Development**” at RC on Environmental Sciences at UGC-HRDC of SV University, Tirupathi on 28-10-2021.
- As a resource person gave lecture on **MADS Box genes: Molecular Architects of Flower Development** at UGC-HRDC of Guru Ghasidas Vishwavidyalaya (Central University of Chhattisgarh), Bilaspur, Refresher Course: Winter School on Novel Insights in Life Sciences Research on 18th Feb, 2021.
- Delivered invited lecture on **Molecular Biology-Molecular Basis of Inheritance** in connection with orientation programme conducted by department of intermediate education to Andhra Pradesh government junior lecturers on 23-9-2015 at MAR convention hall, Guntur.
- Delivered a talk (Webinar) on **MADS – BOX and Flowers** to Government Degree and PG College Lectures on 22<sup>nd</sup> July, 2020.

### Academic achievements

- **Research collaboration: International Center for Genetic Engineering and Biotechnology, New Delhi** for developing transgenic rice against abiotic stress.
- **Research collaboration: Central Drug Research Institute, Lucknow** for developing sustainable technologies to antidiabetic drug development (DBT project).
- **Research collaboration: Mumbai based Bhabha Atomic Research Center (BARC)** for developing high CO<sub>2</sub> requiring plants.
- **MOU with National Institute of Technology (NIT), Durgapur, India:** for working on on *Arabidopsis* project.
- **MOU with AgriBiotech Foundation and TriMurti Plant Sciences of Hyderabad, India** for working on breeding, biotechnology and genetic engineering of agricultural crops.
- **Established MOU with University Kelanthan, Malaysia** for developing drugs from microbes and plants.
- Established MOU with **CSIR IMMT, Bhubaneswar** for R&D collaborations with ANU.

### Administrative achievements:

**Instrumental in establishing ANU center for Innovation and IPRs.**

As DSIR-TOCIC coordinator, **established MOUs with 5 industries and 15 big local colleges** to popularize the need of innovations and IPRs.

Published wall posters and hand pamphlets on TOCIC center activities.

Conducted ‘**National Webinar on Government of India PRISM Program (Promoting Innovations in Individuals, Startups and MSMEs)**’.

Organized one week long ‘**National Faculty Development Program on Innovations and IPRs**’ in collaboration with CSIR IMMT, Bhubaneswar.

As chairperson of BOS, prepared syllabus for newly inducted PG Vocational M.Sc course (Horticulture and Landscape Gardening).

**16. No. of books published : 01; Book Chapters 03.**

**17. No. of research articles published/presented since the inception:**

Journals		Conferences	
National	International	National	International
05	40	15	10

**18. Details Major/Minor Research Projects held/holding:**

Title and Sanction Order Particulars	Date of Project Sanctioned	Major/Minor and Funding Agency	Amount in Lakhs
Unraveling the regulation of Carbonic Anhydrase-3, an essential component of Carbon dioxide Concentration Mechanism in <i>Chlamydomonas</i> . No. 38(1429)/17/EMR-II, dated 25-05-2017.	25-05-2017.	CSIR, New Delhi.	30,00000
<i>In vitro</i> propagation and conservation, antimicrobial screening and genetic diversity analysis of a critically endangered medicinal plant, <i>Strychnos wallichiana</i> Steud Ex DC. No.SB/FT/LS-287/2012, Dated 02-05-2013.	02-05-2013	DST-SERB  SERB Young Scientist Project	2,092,000.
<i>In vitro</i> propagation and conservation, antimicrobial screening and genetic diversity analysis of an endangered mangrove medicinal plant, <i>Xylocarpus granatum</i> . No.42-949/2013 (SR), Dated 14-03-2013.	14-03-2013	UGC-MRP	305,000

**19. Research Collaboration with the faculty of foreign Universities:** I have worked in collaboration with UCSI University of Malaysia and published two papers. Presently, I am working in collaboration with Universiti Malaysia Kelantan (UMK) after establishing MOU.

**20. Visiting/ Adjunct/ Guest Faculty of other Universities: -----**

**20. Patents: ----**

## **21. Professional Memberships:**

- Life Member, Indian Botanical Society, Bareilly, India
- Life Member, Medicinal and Aromatic Plants Association of India,
- Member, Directorate of Medicinal and Aromatic Plants Research-ICAR, Gujarat, India
- Member, Society for Plant Biochemistry and Biotechnology (NRC on Plant Biotechnology) IARI, New Delhi, India
- Life Member, Association for the Promotion of DNA Fingerprinting and other DNA Technologies (ADNAT), CCMB, Hyderabad, India
- Member, Indian Society for Developmental Biologists, India
- Associate Fellow, Andhra Pradesh Akademy of Sciences, Hyderabad, India
- Member editorial board, Horizon research publishing corporation USA, Universal Journal of Plant Sciences, India
- Member, The Science Advisory Board, Arlington, USA.

## **22. Academic Council/ BOS/Other Committee Members:**

Presently, I am working as a Chairman, Board of Studies in M.Sc Botany, M.Sc Microbiology and M.Sc Horticulture and Landscape Gardening (Voc). I am involved in lot of administrative and academic committees related to ANU.

**Signature of the Teacher**