

RAJIV GANDHI UNIVERSITY OF KNOWLEDGE TECHNOLOGIES

(A.P Government Act 18 of 2008)

Established by the Govt. of Andhra Pradesh. Act 18 of 2008 and recognized as per Section 2(f), 12(B) of UGC Act, 1956

Srikakulam, Andhra Pradesh-532402

Dr. Ravi Gedela

Assistant Professor

Dean, Students' Welfare

Former Associate Dean of Students' Welfare

Former Associate Dean of Academic

Former Head of the Department

Department of Biosciences

Rajiv Gandhi University of Knowledge Technologies (RGUKT)

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1. Experience

Experienced academic with over 12.9 years of teaching and 11 years in academic administration, with research expertise in bioprocess engineering, biochemical engineering and microbial biotechnology. Proven leadership in student welfare, curriculum development, and interdisciplinary initiatives. Published in high-impact journals and organized national/international conferences.

2. Education

• Ph.D. in Biosciences and Bioengineering, 2025

Indian Institute of Technology Guwahati (IITG), Guwahati, India.

Title of Thesis: Studies on the production of lipids, carotenoids, and β -carotene by the oleaginous yeast *Rhodotorula mucilaginosa*

• M.Tech. in Biotechnology, 2011

Indian Institute of Technology Guwahati (IITG), Guwahati, India.

Title of Thesis: Studies on the heterokaryon incompatibility in *Neurospora crassa*

• M. Sc. in Biochemistry, 2008

Science & Technology College, Andhra University, A.P., India.

• B. Sc. in Biochemistry, Zoology and Chemistry, 2006

Andhra Pradesh Residential Degree College (APRDC), Silver Jubilee Govt. College, Kurnool, Sri Krishnadevaraya University (SKU), A.P., India.

3. Academic Positions Held

i. Dean, Students' Welfare (28.11.2022 to till date): Rajiv Gandhi University of Knowledge Technologies (RGUKT), Nuzvid & Srikakulam, Andhra Pradesh, India

Responsibilities: All policy matters concerning student welfare, including counseling services, maintaining student discipline, and ensuring the provision of basic amenities in hostels; maintaining hygiene standards in hostels; overseeing and guiding the upkeep of hostel rooms, common areas, toilets, and surroundings through coordination with the Electrical Maintenance Division, Civil Works Division, and IT Team. Providing guidance to Associate Deans, Wardens, and Caretakers, as well as supervising and monitoring caretakers, including preparing their duty schedules. Conducting meetings with Associate Deans, Wardens, Caretakers, and Students to address and resolve issues related to hostel life. Supervising and monitoring the process for granting outing permissions to students and arranging/deputing students to participate in external events/programmes. Maintaining communication with guardians as needed. Reporting, updating, and informing the Director and Administrative Officer on relevant matters. Organizing student-centered events such as cultural festivals, technical fests, sports meets, science days, and similar programs.

Acting as Chairperson of the disciplinary committees for students, handling disciplinary matters, and reviewing the student code of conduct.

ii. Head (27.12.2022 to 16.11.2024): Department of Biosciences, Rajiv Gandhi University of Knowledge Technologies (RGUKT), Nuzvid & Srikakulam.

Responsibilities: Planning and execution of all departmental activities; monitoring the teaching-learning process; ensuring the development and enhancement of laboratories; organizing interactive sessions between students and faculty members; implementing specific strategies to achieve both short-term and long-term goals, including space expansion; inviting eminent scientists for seminars and interactive sessions with students; preparing agenda items and conducting departmental faculty meetings; providing counseling to students to enhance their academic performance; representing the department in meetings with the Academic Dean and other administrative bodies; coordinating the procurement and maintenance of instruments and related equipment.

iii. Co-Founder, Student Development and Campus Activities Cell (SDCAC) RGUKT - Nuzvid (01.07. 2013 to 01.07.2022) & Founder and Chairman, Student Gymkhana Center (SGC) RGUKT - Srikakulam (29.10. 2022 to till date).

Responsibilities: The goal is to ensure that education and skill development are equally accessible to all students within educational institutions, facilitating a smooth transition from academia to industry. The Student Gymkhana Center (SGC) is dedicated to empowering students with diverse interests by providing a platform to explore, grow, and excel. At its core, the SGC comprises 19 vibrant student clubs, ranging from Arts & Crafts to Robotics, each offering students a unique opportunity to pursue their passions. In addition to extracurricular engagement, the SGC emphasizes leadership development, skill enhancement, and meaningful social interaction,

enabling students to flourish both academically and personally. A key aspect of the SGC's mission is to advocate for student welfare and represent their interests in all extracurricular affairs.

4. Research Interests

- Bioprocessing Engineering
- Biochemical Engineering
- Microbial Biotechnology

5. Publications

i. Peer-reviewed journal Articles

- **1. Gedela, R.,** Venkata Dasu, V., & Pakshirajan, K. (2025). Exploring the impact of sodium acetate on lipid and carotenoid production in *Rhodotorula mucilaginosa*. *Preparative Biochemistry* & *Biotechnology*, 55(5), 590–605.
- **2. Gedela, R.,** Sharma, S., Prabhu, A. A., Pakshirajan, K., & Veeranki, V. D. (2025). Elevated production of lipids and carotenoids from Rhodotorula mucilaginosa using raw dairy wastewater as crude renewable substrate: a waste to wealth transformation approach. *Chemical Papers*, 1-16.
- **3. Gedela, R.,** Venkata Dasu, V., & Pakshirajan, K. (2024). A comparative evaluation of batch and fed-batch cultures for enhanced lipid, carotenoid, and β-carotene production by *Rhodotorula mucilaginosa*. *Preparative Biochemistry* & *Biotechnology*, 55(5), 606–619.
- **4. Gedela, R.,** Prabhu, A., Veeranki, V. D., & Kannan, P. (2023). High yield production of lipid and carotenoids in a newly isolated *Rhodotorula mucilaginosa* by adapting process optimization approach. *Biofuels*, *14*(5), 509–520.
- **5.** Prabhu, A.A., **Gedela, R.,** Bharali, B., Deshavath, N.N., & Veeranki, V.D. (2019). Development of high biomass and lipid yielding medium for newly isolated *Rhodotorula mucilaginosa*. Fuel, 239, 874-885.

ii. Journal Articles

- 1. **Gedela, R.,** Naidu, R. T., Rachakonda, S., & Naidu, A. (2017). Madhuca Longifolia Flowers for High Yields of Bio-Ethanol Feedstock Production. International Journal of Applied Sciences and Biotechnology, 4(4), 525-528.
- 2. **Gedela, R.** (2016) The Carbon sink Decreasing in the Eastern Ghats of Andhra Pradesh in India. International Journal of Environment, Agriculture and Biotechnology, 1(4).
- 3. **Gedela, R.** (2015). A Carbohydrate Hydrolysis Enzymes encoding Genes in Neurospora crassa. Journal of advances in biotechnology, 5(3), 711-727.
- 4. **Gedela, R.** (2015). A role of environmental factors on calcium signaling genes in Neurospora crassa. Journal of advances in Biotechnology, 5(3), 699-710.
- 5. **Gedela, R.,** Makke, N. S. B., & Karra, D.(2015). A Metagenomics Analysis of β-Carotene Synthesis in Neurospora Crassa. International Journal of Applied Sciences and Biotechnology, 3(3), 490-503.

- 6. **Gedela, R.** and Tamuli, R.(2015). A Role of Calcium Signaling Genes in Heterokaryon Incompatibility in Neurospora crassa. International Journal of Applied Sciences and Biotechnology, 3(4), 668-679.
- 7. **Gedela, R.,** Naidu, S., & Ranjan, Tamuli, R.(2015). Heterokaryon Incompatibility System in Neurospora crassa insilico. International Journal of Biological & Pharmaceutical Research. 6(4): 298-307

iii. Conferences Presented

- 1. **Gedela, R.,** Venkata Dasu, V., & Pakshirajan, K. (2019) Production of lipid, Carotenoids, -Carotene from Rhodotorula mucilaginosa in a Batch and Fed-Batch bioreactor. 7th Bioprocessing India conference (BPI2019) was on Advances in bioprocessing of agri-food resources at CSIR-Central Food Technological Research Institute (CFTRI) organized with the Association of Food Scientists and Technologists India (AFSTI) and DRDO- Defence Food Research Laboratory (DFRL), Ministry of Defence, Govt. of India held at Mysuru on 14th-16th December.
- 2. **Gedela, R.,** Venkata Dasu, V., & Pakshirajan, K. (2019) Optimization of culture conditions for enhanced biomass, and production of lipids, Carotenoids and β-Carotene from *Rhodotorula mucilaginosa*. Biological Engineering Society India Annual Meeting and Conference 2019(BESCON 2019), IIT Madras, India, 18-19 of October.
- 3. **Gedela, R.,** Venkata Dasu, V., & Pakshirajan, K. (2018) Lipids, Carotenoids and β-Carotene production from the yeast Rhodotorula mucilaginosa by using dairy wastewater feed with Sodium Acetate. The 8th International Conference on Sustainable Waste Management, International Society of Waste Management Air and Water (ISWMAW) held at Acharya Nagarjuna University, Guntur, AP, India, 22nd -24 th of November.
- 4. **Gedela, R.,** Prabh A, A., Goswami, L., Mandal, B., Arun, S., Venkata Dasu, V., & Pakshirajan, K. (2017) Dairy wastewater as a cheap substrate for production of Lipids and β-Carotene using Rhodotorula mucilaginosa., Bioprocessing of India2017 Recent Trends in Bioprocessing for Healthcare, Energy and Environment a International conference held at IIT Guwahati on 9th-11th December.
- 5. **Gedela, R.,** Sai, V., & Chandrasekhar, G. (2016) Water quality studies on Krishna River and Kolleru Lake of A.P, India; International conference on New approaches in agricultural, food & environmental sciences held at Andhra Loyola College, Vijayawada, A.P. 22nd-24th, December.
- 6. **Gedela, R.** (2016) Carbon sink decreasing order in the Eastern Ghats of Andhra Pradesh, India, poster presentation at Andhra Pradesh Academi of Science (APAS-2016) held at Sri Venkateswara University, Tirupati, India., 21st -23rd January
- 7. **Gedela, R.** (2015) A Metagenomic Approach on Carbohydrate Enzymatic hydrolysis encode Genes in Neurospora crassa. Poster presentation at International Conference on Recent Advances in Bioscience and applications of Engineering in production

- Biopharmaceuticals (RABAEB-2015), held at KLU University, Guntur, India., 14th -16th December
- 8. **Gedela, R.,** Udai, K, A., NagaSai B, M., Dinesh, K., & Asiri, N. (2015) A Comparison of Multiple Metagenomes of β-Carotene in Bacteria, Fungi, and Plants. Poster presentation in 6th Indian Youth Science Congress, held at Acharya Nagarjuna University, Guntur, India., 20-22 January.
- 9. **Gedela, R.,** NagaSai B, M., Dinesh, K., (2013) A computational analysis on β-Carotene in Neurospora crassa. Oral presentation in Third International Conference on Bioinformatics (IFIP), held at MANIT, Bhopal, India., 23-26 September.
- 10. **Gedela, R.,** Udai, K, A., NagaSai B, M., Dinesh, K., (2013) In silico studies on transcriptional and functional analysis of heterokaryon incompatibility in Neurospora crassa. Oral presentation in Third International Conference on Bioinformatics (IFIP), held at MANIT, Bhopal, India., 23-26 September.
- 11. **Gedela, R.** and Tamuli, R. (2013). Physicochemical parameters effect on Calcium signaling proteins in Neurospora crassa. Oral presentation in international conference on Bio-Engineering (ICBE2013), A special focus on Bioproducts for disease management, held at Chennai, India., 02-04 January.
- 12. **Gedela, R.** and Tamuli, R. (2012). A Computational Analysis on Heterokaryon Incompatibility System in Neurospora crassa.4th Meeting of the Asian Forum of Chromosome and Chromatin Biology Epigenetic Mechanisms in Development and Disease', held at Centre for Cellular and Molecular Biology, Hyderabad, India., 22-24 November
- 13. **Gedela, R.,** Rekha, D., & Tamuli, R. (2011). Role of calcium signaling genes in heterokaryon incompatibility in Neurospora crassa. International Symposium on Genomics and Biodiversity, held at Centre for Cellular and Molecular Biology, Hyderabad, India., 23-25 February
- 14. Rekha, D., Ravi, K., **Gedela, R.,** Upasana, S., Dhruv, A, S., & Tamuli, R. (2011). Calcium signaling in Neurospora crassa. Oral presentation in Cell Signaling Net works2011, held at Merida, Yucatan, Mexico., 22nd 27th October
- 15. Rekha, D., Ravi, K., **Gedela, R.,** & Tamuli, R. (2011). Investigating cellular functions of the calcium signaling genes in Neurospora crassa. Oral presentation in 6th World Congress on Biotechnology held at HICC, Hyderabad, India., 21-23 March
- 16. Rekha, D., Upasana, S., Dhruv A, S., Ravi, K., **Gedela, R.,** & Tamuli,R., (2011). Understanding the calcium signaling machinery of the Neurospora crassa. Oral presentation in 7th International conference on yeast biology, held at Indian Institute of Technology Bombay, Powai, India.,10-13 December.

6. Teaching Experience

• **Assistant Professor** (01.07. 2022 to till date), Department of Bio-Sciences, Rajiv Gandhi University of Knowledge Technologies (RGUKT), Srikakulam, AP, India.

- Assistant Professor (15.10.2012 to 30.06.2022), Department of Bio-Sciences, Rajiv Gandhi University of Knowledge Technologies (RGUKT), Nuzvid, AP, India.
- Assistant Professor (14.07.2012 to 14.10.2012), Department of Bio-Science, Rajiv Gandhi University of Knowledge Technologies (RGUKT), Basara, Telangana, India
- **Junior Research Fellow** (28.08.2011 to 10.07.2012) (JRF), supported by the Department of Science and Technology (DST) Govt.of India at Dept. of Biotechnology, Indian Institute of Technology, Guwahati (IIT G), India.

7. Academic Achievements/Awards

- GATE, AIR3052 (Graduate Aptitude Test of Engineering, conducted by the Department of Higher Education, Ministry of Human Resource Development (MHRD), Govt. of India) -XL in 2009.
- Qualified for the Andhra Pradesh state eligibility test (SLET-2012) for Assistant Professor/Lectureship held on 27th July 2012.
- Received Scholarship for **Master of Technology** in IIT Guwahati by Minister of Human Resources and Development (MHRD), Govt. of India, 2009-2011.
- **Junior Research Fellow** in the Department of Biotechnology at IIT Guwahati sponsored by the Department of Science and Technology, Govt. of India, 2011-2012.
- Received Scholarship for **Master of Science** in Andhra University by Minister of Human Resources and Development (MHRD), Govt. of Andhra Pradesh, 2006-2008.
- Received Scholarship for Bachelor of Science in Sri Krishnadevaraya University by Minister of Human Resources and Development (MHRD), Govt. of Andhra Pradesh, 2003-2006. Best organizing faculty Coordinator award for ROBOZEST- 2014, National workshop cum competition at RGUKT Nuzvid; association with RoboSpecies Technologies Pvt. Ltd and IIT Bombay on 27th -28th February.
- Excellence in Academics Felicitation by Union Minister of Panchayati Raj and Tribal Affairs, Mr. Vyricherla Kishore Chandra Suryanarayana Deo, Award ceremony was held at Seethampeta, Andhra Pradesh (23.01.2013).

8. Academic leadership positions held

- Dean of Students Welfare, RGUKT -Srikakulam campus from 28.11.2022 to till date
- Associate Dean of Students Welfare, RGUKT Nuzvid campus from 23.8.2018 to 26.02.2021
- Associate Dean of Academics, RGUKT Srikakulam campus from 09.09.2022 to 28.11.2022
- **Head of the Department**, Department of Biology & Biosciences, RGUKT Srikakulam campus from 27.12.2022 to 16.11.2024
- **Head of the Department**, Department of Biosciences, RGUKT Nuzvid campus from 18.02.2021 to 27.04.2022.

- Chairman, Student Disciplinary Committee, RGUKT Srikakulam campus from 28.11.2022 to till date
- **Head of the Department Convener**, Academic Certificate Verification Committee (2023), for the Recruitment of Biology & Biosciences Contract Faculty to RGUKT Srikakulam, on 09-06-2023
- **Head of the Department Convener**, Academic Certificate Verification Committee (2022), for the Recruitment of Biology & Biosciences Contract Faculty to RGUKT Srikakulam, on 02-03-2022
- **Founder**, and **Chairman**, Student Gymkhana Center (SGC), RGUKT Srikakulam on 29.10. 2022 till date.
- **Co-founder** and **Faculty Coordinator**, Student Development and Campus Activities Cell (SDCAC), RGUKT Nuzvid on 01.07. 2013.
- **Head of the Department Member**, Certificate Verification Committee (2021), for the Recruitment of Contract Faculty to RGUKT, on 02-03-2021
- **Associate Public Relations Officer**, RGUKT Nuzvid campus from 30.10.2018 to 09.03.2019
- Faculty In-Charge, Dining Halls for the messes, RGUKT Nuzvid campus from 01.03.2019 to 05.02.2021
- **BOS Member**, Department of Biosciences at RGUKT- Nuzvid from 02.03.2017 to 28.02.2021
- **Associate/Deputy warden**, i-1 Boys hostel at RGUKT- Nuzvid from 02.12.2016 to 10.1.2018
- **Chairman**, Housekeeping & Security committee at RGUKT Nuzvid from 03.02.2016 to 21.8.2018
- **Convener** the disposal committee of waste materials in the entire campus of RGUKT Nuzvid from 27.03.2017 to 19.11.2019
- Chairman, Student Development and Campus Activities Cell (SDCAC)committee, RGUKT- Nuzvid from 08.09.2014 to 01.07.2017
- Chairman, TechExo-2K15 on the eve of Convocation for Two days, organized by Student Development and Campus Activities Cell (SDCAC), RGUKT Nuzvid on 20th -23rd December 2015.
- **Convenor**, Board of Studies (BOS) of the Department of Biosciences, RGUKT Nuzvid, from 18-02-2021 to 27.04.2022
- **Draft Sub-Committee member** in making of Student Affairs/Section-Roles and responsibilities at RGUKT Nuzvid on 20.10.2017
- **Faculty Member**, Sports & Cultural committee at RGUKT -Nuzvid, from 25.02.2017 to 01.09.2019
- **Faculty Member**, disciplinary/Anti-ragging committee at RGUKT-Nuzvid, from 28.01.2017 to 26.02.2021

- **Faculty Member**, Housekeeping & Security committee at RGUKT Nuzvid, 02.09.2014 to 13.02.2016
- Faculty Member, Waste Management Committee for RGUKT- Nuzvid, from 28.03.2016 to 19.10.2019
- **Faculty Member**, RGUKT Nuzvid, for Evaluated requirement of manpower (Nonteaching) Committee in various sections/Departments on 19.04.2016
- National Service Scheme (NSS) program officer Unit-6 of Central Sector Scheme of Government of India, Ministry of Youth Affairs & Sports as an additional responsibility at RGUKT Nuzvid, from 10.02.2020- 30.06.2022.

9. Student development positions held

- Convenor, National Techno Management Fest (Techni Verse 2k25) held at RGUKT Srikakulam from 7th- 9th March, 2025.
- Organising secretary, International Conference (Virtual) on Recent Innovations in Chemical and Biological Engineering (RICBE-2K21), jointly organised by the Departments of Chemical Engineering and Biology & Bio-sciences, RGUKT Nuzvid in association with IIChE Amaravati Regional Centre, Guntur, scheduled from 16th-18th September 2021, held at RGUKT Nuzvid campus.
- **Joint-Convener**, Teckzite2020, Three-Day National Level Technical Management Fest organized by Student Development and Campus Activities Cell (SDCAC) held at RGUKT-Nuzvid on (14th-16th of February 2020).
- **Faculty Coordinator,** Mega Book Exhibition organized by Dean Student Welfare, RGUKT-Nuzvid on 7th -8th December 2019.
- Coordinator and Founder, Undergraduate Research Conclave 2k18-"Inculcating Scientific Temper" One day National Conference organized by RGUKT Nuzvid; association with all departments of RGUKT Nuzvid on the eve of 3rd convocation RGUKT on August 3, 2018.
- **Faculty Member**, SIGNUS 2k17 Three-day cultural fest organized by RGUKT Nuzvid cultural and sports committee on 22-24 th April 2017.
- **Faculty Member,** SIGNUS 2k16 Three-day cultural fest organized by RGUKT Nuzvid cultural and sports committee on April 18-20, 2017.
- Convener, TECHZITE-2k15, two days National level techno-management fest organized by Student Development and Campus Activities Cell (SDCAC), RGUKT Nuzvid on 29th -30th March, 2015.
- **Coordinator**, COMIENZO- 2015, One day an Intra University Technical event organized by RGUKT Nuzvid on 26th January 2015
- **Coordinator**, ROBOZEST- 2014, Two days National workshop/competition organized by RGUKT Nuzvid; association with RoboSpecies Technologies Pvt. Ltd on 27th -28th February 2014.

- Convener, TECHZITE-2k14, two days Intra University level techno-management fest organized by Student Development and Campus Activities Cell (SDCAC), RGUKT Nuzvid on 13th -14th April 2014.
- **Coordinator**, COMIENZO- 2014, One day, an intra-university technical event, RGUKT Nuzvid, on 26th January.

10. Professional affiliations

- Faculty Member in Indian Youth Science Congress Association (IYSCA), INDIA
- Member of the Society of Biological Chemists, Indian Institute of Science, INDIA.
- Member of Indian Science Congress Association (ISCA), INDIA.

11. Workshops & FDPS

- Faculty development programme (FDP) participated in the Royal Society of Chemistry Yusuf Hamied Inspirational Chemistry Programme (28th to 29th April 2019) organized at RGUKT Nuzvid.
- Faculty development programme (FDP) participated in the Instructional Design and Delivery System (26th to 31st December 2018) by the National Institute of Technical Teachers Training and Research (NITTR) organized at RGUKT Nuzvid.
- Faculty development programme (FDP) participated in the Internet of Things (IoT), a five-day workshop (19th to 23rd November 2019) organized by RGUKT at RGUKT Nuzvid.
- Faculty development programme (FDP) participated in "Contemporary advances in Bionanotechnology" FDP programme being organized for four days (02.11.2020 to 06.11.2020) by the Department of Biotechnology, NIT Andhra Pradesh, Andhra Pradesh
- Faculty development programme (FDP) participated in the Science leadership workshop for Seven days from June 22 to June 28, 2020, organized online by Central University of Punjab, Bathinda, India.
- Faculty development programme (FDP) participated in the One Day Swachhta Action Plan Online Workshop for Faculty of Higher Education Institutions in Krishna District, Andhra Pradesh, organized by Mahatma Gandhi National Council of Rural Education in collaboration with National Service Scheme, India, on 6th June 2020.
- Faculty development programme (FDP) participated in the Three-Day National Level Webinar & Faculty Development Programme on English Studies in the New Millennium: Adapting to New Texts and New Perspectives organized by Maris Stella College of Vijayawada affiliated to Krishna University, on 11th, 12th & 13th June 2020.
- Faculty development programme (FDP) participated on AICTE Incorporating Universal Human Values in Technical Education (An AICTE Initiative) a five days' workshop (10. 08. 2020 to 14.08.2020) organized by All India Council of Technical Education (AICTE), New Delhi.

12. References

Prof. Veeranki Venkata Dasu

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Declaration

I do hereby declare that the above particulars of facts and information stated are true, correct, and complete to the best of my belief and knowledge.

Rose

(Ravi Gedela)