Mr. D. RAKESH Email : rakeshd81@gmail.com



CAREER OBJECTIVE:

To work and excel in a Academic and progressive environment, which is challenging and rewarding, which gives me scope to explore my knowledge and to serve the organization to the best of my abilities and skills.

EDUCATIONAL PROFILE:

- > M.Tech. in Nano Technology from JNTUH Hyderabad, Telangana.
- **B.Tech.** in **Electronics and Instrumentation** from V.R.E.C Nizamabad affiliated to JNTUH, Hyderabad, Telangana.
- Post Graduate Diploma in computer applications from yuvashakti institute of self employment sponsored by yuvashakti educational society, Nizamabad, Telangana.
- Intermediate in Mathematics, Physics and Chemistry from Narayana Junior College, Hyderabad, Telangana.
- S.S.C from Sarveshwar Vidya Mandir, E/M Bhainsa Mandal, Nirmal District, Telangana.

TECHNICAL PROFILE:

Operating Systems	: Windows /XP/Vista
Packages	: MS Office
Software	: Origin, Argus, MATLab, Verilog HDL, Nano-HuB

AREA OF INTEREST AND SUBJECTS TAUGHT:

- Synthesis and Properties of Nanomaterials.
- Nanomaterials Characterization Techniques.
- Photonics (Quantum Confined Materials).
- > Industrial trends and Applications of Nanotechnology.
- Selection of Nanomaterials for Energy storage
- Nano Composites Design and Synthesis
- Lithographic Techniques
- Applications of Nanotechnology

LABORATORY HANDLED:

- ♦ Synthesis of Nanomaterials Lab
- ♦ Fabrication and Characterization of Nanomaterials Lab
- ♦ Nanostructured material application lab
- Simulation Lab (Argus Lab, MAT Lab, Nano-Hub)

PARTICIPATION IN WORKSHOPS, CONFERENCES, SEMINARS, TRAINING ROGRAMMES:

- Participated as one of the organizing committee member in the workshop on "Introduction to Nanoscience, Nanotechnology & Applications" organized by Centre for Nano science and Technology, Institute of Science and Technology, JNTU Hyderabad during 3rd and 4th September, 2010.
- Participated as one of the organizing committee member in "A.P. Science Congress and annual convention of APAS, 18-20, November, 2010" organized by JNTUH Hyderabad and ANDHRA PRADESH AKADEMI OF SCIENCES (APAS).
- Participated in "18th orientation course" from 20-10-2010 to 18-11-2010 organized by UGC-HRDC, JNTUH Hyderabad and obtained Grade "A".
- Presented an oral talk on "FePt Magnetic Nanoparticles" at the National Conference on "Nanobiotechnology: Emerging Trends an Applications in Microbiology" organized by school of Microbiology, Mahatma Gandhi National Institute of Research and social action from 4th-6th February 2011.
- Participated as one of the organizing committee member in "NCONSEA-2012 National conference on Nanoscience Engineering and Applications" held organized by Centre for Nano science and Technology, Institute of Science and Technology, JNTU Hyderabad during April 27th and 28th, 2012.
- Participated in "International Conference On Advances in Biohydrogen Production and Application" ICABHPA-2012" held at organized by Institute of Science and Technology, JNTU Hyderabad during 14-15 December 2012.
- Participated in "one-week short term course on "Applications of Nano Technology" held from 10- 06-2013 to 15-06-2013, organized by UGC Academic Staff College, JNTUH Hyderabad.
- Participated as one of the organizing committee member in "ICONSEA-2014 International conference on Nanoscience Engineering and Applications" organized by Centre for Nano science and Technology, Institute of Science and Technology, JNTU Hyderabad during June 26th, 27th and 28th 2014.
- Presented a poster presentation on "Effect of Variable Oxidizer to Fuel Ratio on Nano crystalline zinc oxide in International Conference On Nano Science and Engineering Applications-2014" (ICONSEA-2104), Centre for Nano science and Technology, Institute of Science and Technology, JNTU Hyderabad.
- Participated in "One-week short term course on Bio-Nanotechnology" held from 22-09-2014 to 27- 09-2014, organised by UGC Academic staff college, JNTUH Hyderabad.
- Participated in "National workshop on Recent Advances in Science and Technology" held on 5th March 2014, organized by JNTUH Hyderabad.
- Participated in "Workshop on Quality Initiatives in Technical & Higher Educational Institutionals (In compliance with NBA & NAAC Accreditation)" 10-12 March 2015, organized by Engineering staff college of India, Hyderabad.
- Participated in Workshop on "Synthesis and Characterization of Nanomaterials (SCNM-2016)" organized by Centre for Nano science and Technology, Institute of Science and Technology, JNTU Hyderabad during March 14-18, 2016.
- Participated as a delegate in "Recent Advancements for Bloom of Youth in Pharma and Nano" held on 17th and 18th June 2016 organized by Centre for Nano science and Technology, Institute of Science and Technology, JNTUH Hyderabad.
- Participated in one day work shop on "Recent Trends in Material science and its Applications" (RTMSA-2016), organized by Department of Physics, JNTUH Hyderabad on 29th July 2016.

- Participated in Workshop on "Applications of Advanced Analytical techniques in Pharamaceutical sciences and Nano Technology" during 16th and 17 Sep 2016 organized by Centre for Pharamaceutical sciences & Centre for Nanoscience and Technology, JNTUH Hyderabad.
- Participated in Two Day National Conference on "Emerging Trends and Innovations in Pharamaceutical sciences" ETIPS-2017 during 12th -13th October 2017 organized by Centre for Pharamaceutical sciences, Institute of Science and Technology, JNTUH Hyderabad.
- Participated in One day Workshop on "Emerging Trends in Patents and IPR & Future Implications" organized by Centre for Biotechnology, Institute of Science and Technology, JNTUH Hyderabad held on 24th April 2018.
- Participated in One day Workshop on "NPTEL" held on 24th August 2018 organized by Centre for Nano science and Technology, Institute of Science and Technology, JNTUH Hyderabad.
- Participated in Workshop on One day international Pre-conference workshop on "Nano Instrumentation and characterization Techniques" held during 03-10-2018, organized by Centre for Nano science and Technology, Institute of Science and Technology, JNTUH Hyderabad.
- Participated as one of the organizing committee member in 2nd International Conference on "Nano Science & Engineering Applications (ICONSEA-2018)" organized by Centre for Nano science and Technology, Institute of Science and Technology, JNTUH Hyderabad, during 04-10-2018 to 06-10-2018.
- Participated in Five days GIAN course on "Energy Materials and Innovative challenges and Its applications" organized by JNTUH Hyderabad and MHRD, during 06-10-2018-11-10-2018.
- Participated in Two Day Workshop on "3D Printer Technology and Its Fabrication" held on 15th -16th March, 2019" organized by Centre for Nano science and Technology, Institute of Science and Technology, JNTUH Hyderabad.
- Participated in Short term course on "surface area and porous material characterization" held on 13th March 2019, organized by Anton paar and Centre for Nano science and Technology, Institute of Science and Technology, JNTUH Hyderabad.
- Participated in One day workshop on "Present Day Trends of Science Technology the Bloom of Youth (Tech Fest-2019" held on 8th -10th April 2019, organized by Institute of Science and Technology, JNTUH Hyderabad.
- Participated in One day workshop On "Energy Storage (ES)" held on 29th April, 2019 JNTUH organized by Centre for Nano science and Technology, Institute of Science and Technology, JNTUH Hyderabad.
- Participated in Two-day national workshop on "NBA -Outcome based Education & SAR Filling" sponsored by TEQIP-III (ATU) held on 24th -25th May 2019 organized by JNTUH Hyderabad and RTU Kota Rajasthan.
- Participated in Five days GIAN course on "Cancer Theranostics" organized by JNTUH Hyderabad and MHRD, during 08-07-2019 to 12-07-2019.
- Participated in Equity action plan A Two-Day Workshop on "Sensitization of Socially Challenged Communities-Higher Education" held on 07th -08th August 2019, organized by Institute of Science and Technology, JNTUH Hyderabad.
- Participated in Three Day Hands on Training on "Analytical Instrumentation (ZETA SIZER, UV, TG-DTA, FTIR, XRD, PARTICLE SIZE ANALYZER)" held on 03rd - 05th October 2019, organized by Centre for Pharamaceutical sciences & Centre for Nanoscience and Technology, JNTUH Hyderabad.

- Participated in Two-days Online hands-on Workshop on "Technology Enabled Learning MOODLE platform" held on 08th May- 09th May 2020, organized by Institute of Science and Technology, JNTUH Hyderabad.
- Participated in Three-days Online hands-on Workshop on "2nd Technology Enabled Learning MOODLE platform" held on 25thMay -27th May 2020, organized by Institute of Science and Technology, JNTUH Hyderabad.
- Participated in Six Days International Workshop On "Smart Materials Sensor And Energy Devices (SMSED – 2020) held on 25th -30th May 2020, organized by the Department of Electronics & Communication Engineering, SSN College of Engineering, Kalavakkam, Chennai.
- Participated in Three Day International Webinar Series on "Synthesis and Characterization of Nanomaterials and their Novel Applications" held on 17th - 19th August 2020, Organized by Department of Physics, RK Valley, RGUKT, Andhra Pradesh.
- Participated in A One Week AICTE Sponsored Online Short-Term Training Programme (STTP) on "Synthesis, Characterization and its applications of Nanomaterials" held on 24th -29th August 2020, organized by Centre for Nano science and Technology, Institute of Science and Technology, JNTUH Hyderabad.
- Participated in "National Skill India Program on Materials Synthesis and Products for Self Reliant India" held on 28th August 2020 organized by Department of Physics, SRM Institute of science and Technology and CSIR-AMPRI, Bhopal.
- Participated in Online short term course under Technical education quality improvement programme-III on "Nanostructured materials for Energy, Environment and Health care application" held on 09th -13th November 2020, Organized by Department of Chemistry, IIT Delhi.
- Participated in One-week TEQIP-III sponsored STC on "Advanced Nanostructure materials for sustainable energy and environmental remediation – Tiny particles, big effects" held on 18th -22nd December 2020, Organized by Department of Chemical Engineering and Department of Chemistry, Malaviya National Institute of Technology, Jaipur, Rajasthan.
- Participated in TEQIP-III sponsored Faculty Development Program (FDP) on "VLSI and Nanotechnology in Energy, Environment and Neuromorphic computation" held on 21st -23rd December 2020 organized by Centre for advanced electronics (CAE), IIT Indore.
- Participated in Three-day virtual national workshop on "Advanced materials for energy and environment applications" during 21st -23rd December 2020, Organized by Department of Materials science and nanotechnology, Yogi Vemana University, Kadapa.
- Participated in Virtual seminar on "Applications of DFT to calculations of phase diagram, diffusion coefficient and phase field simulation" held on 24th December 2020, Organized by Department of Physics, BIST, BIHER, Chennai.
- Participated in International Virtual Seminar on "Physics and Chemistry of Materials" held on 06th Februray 2021, Organized by Department of Physics, Karpagam Academy of Higher education, Coimbatore.
- Participated in National level webinar on "Recent developments & Future advancements in Nanotechnology" held on 05th May 2021, Organized by Department of science and Humanaties, Nehru Institute of Technology, Coimbatore.

- Participated in Six days Faculty Development Programme on "Recent Developments in Materials Science" held on 16th - 22nd June 2021, Organized by Department of Physics and Chemistry, Sree saraswathi Thygaraja college, Pollachi, Coimbatore.
- Participated in Three Day Online Workshop on Procedures & Preparation of SSR for NAAC held on 21st 23rd April 2022, Organized by IQAC, JNTUH Hyderabad.

PUBLICATIONS AND BOOKS:

- 1. Effect of Variable Oxidizer to Fuel Ratio on Nano Crystalline Zinc Oxide, D. Rakesh Sumair Faisal Ahmed, International Conference on Nano Science & Engineering Application 2014, Hyderabad, India, 2016.
- 2. Adsorption studies and fluoride removal from aqueous solutions by graphene oxide-zinc oxide nanocomposite, CS Chakra, VS Kumar, S Madhuri, P Anusha, TR Kumar, D Rakesh, Digest journal of nanomaterials and biostructures, Vol 14, Issue 1. Pages 183-192.
- 3. Comparative analysis of ZnO nanoparticle's specific capacitance in supercapacitors: The role of agent, Snehasree Reddy Yekkaluria, Shireesha Konda, Surfactant and stabilizing Divya Velpula, Rakesh Kumar Thida, Shilpa Chakra Chidurala, Bala NarsaiahTummaa,Navaneeth, Reddy Namaa, Rakesh Deshmukh, Applied Surface Science Advances, Volume 12, Pages2666-5239, 2022.
- 4. Metal Oxide-based Disposable Sensors for Health Monitoring, Kailasa Saraswathi, M Sai Bhargava Reddy, B Geeta Rani, Kishor Kumar Sadasivuni, Bijandra Kumar, D Rakesh, Rahul Swarup Sharma, K Venkateswara Rao, Disposable Electrochemical Sensors for Healthcare Monitoring Disposable Electrochemical Sensors for Healthcare Monitoring, Pages ,204-231, 2021.
- 5. Synthesis and Characterization of Emerging Nanomaterials, Chidurala Shilpa Chakra, Velpula Divya, Konda Shireesha, Sakaray Madhuri, Thida Rakesh Kumar, Adapa Uday Krishna, Deshmukh Rakesh, Emerging Materials, Page 37-102, 2022.

R&D PROJECT:

- Name of the project: Hybrid Nanostrcutures based chemoresistive gas sensing as a biomarker for Human exhaled breath.
- Name of the Co-Principal Investigator: Dr.K. Venkateswara Rao, Professor of Nanotechnology & Director of Evaluations, JNTUH.
- ▶ Name of the Funding agency: TEQIP-III
- ➢ Year of Award: 2020
- Funds provided (INR in lakhs) :2.00
- Duration of the project: One Year

PERSONAL PROFILE:

Name: Rakesh D Father's Name: Vinayak Rao D Mother's Name: Veena Rani D Date of Birth: 27.06.1986 Language Known: Telugu, English, Hindi Nationality: Indian Office Address: Rakesh D, Assistant Professor (Contract), CNST, UCESTH, JNTUH.