

Name : Dr. R. Dilip

Designation : Assistant Professor

Department : Physics

Qualification : M.Sc., Ph.D.

Experience : Teaching: 2 Years 10 Months Research: 5 Years

Area of Specialization(s): Nano Technology, Magnetic materials and Photovoltaic Cells

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Academic Qualifications

Degree	Branch	Institution/UniversityName	Yearof Graduation
Ph.D.	Physics – Nano Technology	Sri Ramakrishna Mission Vidyalaya College of Arts and Science, Coimbatore	2021
M. Sc.	Physics	Sri Ramakrishna Mission Vidyalaya College of Arts and Science, Coimbatore	2014
B. Sc.	Physics	Sri Ramakrishna Mission Vidyalaya College of Arts and Science, Coimbatore	2012

Additional Qualifications

Diploma/ Vocational /Certification	Area of Specialization	Institution/University/Agency Name	Year
UGC-NRC	Nano Technology	University of Hyderabad	2017
Online Certificate	Selection of Nanomaterials for Energy Harvesting and Storage Application	NPTEL	2019

Research Publications (Indexed)

International:

- 1) Dilip, R., & Jayaprakash, R. (2021). Supremacy of Magnetic Behaviour in n-Heptane Based M Doped Barium Ferrite (BaFe_2O_4) Nanoparticles (M: Co, Ni and Mn). *Journal of Inorganic and Organometallic Polymers and Materials*, 31(7), 3154-3163.
- 2) Dilip, R., & Jayaprakash, R. (2020). Requisite of Surfactant (CTAB, n-Heptane, and Tri-

sodium Citrate) Levels on Enhancement of Magnetic Property and Morphology Changes of Barium Ferrite (BaFe_2O_4) Nanoparticles. *Journal of Superconductivity and Novel Magnetism*, 33(12), 3799-3808.

- 3) Ravikumar, N., Dilip, R., & Elango, P. (2020). Gas sensing nature and characterization of Zr doped TiO_2 films prepared by automated nebulizer spray pyrolysis technique. *Optik*, 206, 164347.
- 4) Somasundaram, G., Rajan, J., Sangaiya, P., & Dilip, R. (2019). Phytochemicals and morphological influence of aloe barbadensis miller extract capped biosynthesis of CdO nanosticks. *Journal of Inorganic and Organometallic Polymers and Materials*, 29(6), 1862-1873.
- 5) Dilip, R., & Jayaprakash, R. (2018). Effect of barium on morphological transition and magnetic and dielectric properties in ferrite nanoparticles. *Journal of Superconductivity and Novel Magnetism*, 31(6), 1741-1750.
- 6) Mohanraj, V., Jayaprakash, R., Sangaiya, P., Gopi, S., Dilip, R., & Suresh, R. (2017). Study of photocatalytic activity and inherent property of surfactant (PVA) on CdS nanoparticles by ultrasonic wave irradiation method. *International Journal of Hydrogen Energy*, 42(47), 28266-28277.

Presentations in Conference

- 1) Dilip, R., Jayaprakash, R., Sangaiya, P., & Gopi, S. (2020). The magnetic property alterations due to transition from barium ferrite (BaFe_2O_4) nano rods to barium carbonate (BaCO_3) quantum dots. *Results in Materials*, 7, 100121. International Conference on Recent Advances in Materials Science, National college, Tiruchirappalli, 04-Feb-2019 to 06-Feb-2019.
- 2) Somasundaram, G., Rajan, J., Sangaiya, P., & Dilip, R. (2019). Hydrothermal synthesis of CdO nanoparticles for photocatalytic and antimicrobial activities. *Results in Materials*, 4, 100044. International Conference on Recent Advances in Materials Science, National college, Tiruchirappalli, 04-Feb-2019 to 06-Feb-2019.
- 3) Dilip, R., & Jayaprakash, R. (2018). Synthesis and characterization of BaFe_2O_4 nano-ferrites for gas sensor applications. *Energy, Ecology and Environment*, 3(4), 237-241. International Conference on the 11th Asia Pacific Conference on Sustainable Energy and Environmental Technologies, B. R. Ambedkar Bihar University, Bihar, 06-Mar-2017 to 10-Mar-

2017.

- 4) SYNTHESIS AND CHARACTERIZATION OF SDS BASED BaFe_2O_4 NANO FERRITES FOR GAS SENSOR: Dr. R JAYAPRAKASH, International Conference on Renewable Energy and Environment (ICREE-2016), Sri Ramakrishna Mission Vidyalaya College of Arts and Science, Coimbatore, 15-Dec-2016 to 16-Dec-2016.

Participation in Conference

International:

- 1) International Virtual Conference on Advances in Nanomaterials and Its Recent Applications (ANMRA – 2020), Dr.N.G.P. Arts and Science College, Coimbatore, 15-17 July, 2020.
- 2) International Conference on Arid Land-III, B.R. Ambedkar University, Puducherry, 12-Mar-2018 to 16-Mar-2018.
- 3) International Conference on Latest developments in the applications of laser technology, PSGR Krishnammal College for Women, Coimbatore, 07-Dec-2015.

Participation in Seminars

- 1) National seminar on x-ray crystallography, Madurai Kamaraj University, Madurai, 29-Sep-2014 to 01-Oct-2014.

Participation in Workshop

- 1) Phase Identification of Polycrystalline Materials using XRD data in Soft wares organized by Department of Physics, Dr. NGP Arts and Science College, Coimbatore-641 048, 25th September, 2021.
- 2) Two Days International Virtual Workshop on Astrophotography organized by The New College, Chennai-600 014, 24-25th September, 2021.
- 3) Advanced instrumental methods for engineering materials, Bannari Amman Institute of Technology, Erode, 18-Oct-2014 to 19-Oct-2014.

Participation Faculty Development Programme

- 1) AICTE Training And Learning (ATAL) Academy Online Elementary FDP on " Nanoscience for Novel Materials" from 20/09/2021 to 24/09/2021 at Manakula Vinayagar Institute of Technology.
- 2) AICTE Training And Learning (ATAL) Academy Online Elementary FDP on " Novel Materials" from 23-Aug-21 to 27-Aug-21 at SRM Institute of Management and Technology.

- 3) Online faculty development programme on Research methodology and pedagogy for tertiary education (IQAC), Dr.N.G.P. Arts and Science College, Coimbatore,15-21 June, 2021.
- 4) One week FDP on “Advanced Materials Research” organized by BIET & Indian Ceramic Society from 15th June – 19th June, 2020. Organized by BHARAT institute of engineering and technology.
- 5) One week FDP on Quality initiatives in higher education (online, 2020), Dr.N.G.P. Arts and Science College, Coimbatore,13-20April, 2020.
- 6) One week online FDP on Digital teaching techniques (2020) organized by ICT academy from 10-15 Aug 2020.
- 7) One week FDP on NAAC revised accreditation framework & OBE assessment methodology, Dr.N.G.P. Arts and Science College, Coimbatore,27-May-19to2-Jun-19.
- 8) **NAAC Online Certification Course**, Selection of Nanomaterials for Energy Harvesting and Storage Application, Jul-Aug-19 (4 Week Course).

Participation in Webinar

- 1) Webinar on “Lasers and Nano-optics”, NITT-OSA & NITT-SPIE student chapters, NIT Trichy, Tamil Nadu on 25.08.2020.
- 2) Webinar on “National education policy 2020”, Session-II, NIT, Andhra Pradesh on 29.09.2020.
- 3) Webinar on “Opportunities in Indo-german bilateral funding programmes”, Session-I, NIT, Andhra Pradesh on 22.07.2020.
- 4) Webinar on “Smart Engineering Materials and Application”, P.T.Lee Chengalvaraya naicker college of engineering and technology on 12.07.2020.
- 5) Webinar on “Innovation, IPR, Entrepreneurship and Start-ups among HEI”, MHRD’s innovation cell on 28.04.2020 to 22.05.2020.
- 6) Webinar on “India first leadership talk”, MHRD’s innovation cell on 02.05.2020.

Membership in Professional Bodies

Name of the Professional Body	Nature of membership	Duration
Indian Association for Crystal Growth (IACG)	Life member	Life-time

Awards/Honors

Awards/Honors	Agency/Institute	Year of Award
Best Mentor award	Dr.NGP ASC ACHIEVERS DAY AWARD, Dr. N.G.P. Arts and Science College, Coimbatore.	2020