**MISS. PRERNA RAMNATH MODAK**

**Rashtrapita Mahatma Gandhi Arts,**

**Commerce and Science College, Saoli**

**:9822577413**

**Personal Information:**

Full Name: Miss Prerna Ramnath Modak

Date of Birth: 05/10/1979

Address: Rashtrapita Mahatma Gandhi Arts, Commerce and Science

College, Saoli

Mobile Number: 9822577413

Email Address: [prm5101979@gmail.com](mailto:prm5101979@gmail.com)

**Job Details:**

Current Designation: Head department of Physics (Assistant Professor)

Date of Appointment: 29/7/2013

Type of Approval: Regular

Subject for which Approval is

granted by University: Physics

Teaching Experience: 7 Years

**Educational Qualifications:**

Qualification:M.Sc [Physics], NET, Ph.D

Topic of Ph. D: Investigation of Conducting Polymer Graphene

Nanocomposites for Electromagnetic Interference

Shielding

Area of Research: Nanocomposites

**Details of Paper Publications in conferences:**

1. Study On A.C. Electrical Conductivity Of Carbon Nanotube Reinforced Polyaniline Nanocomposites. (From 225-228), Proceeding of national conference on synthesis and applications of Noval Materials (NCSANM-2013)ISSN:2229-4554, P. Modak, D.V. Nandanwar, S.B. Kondawar, S.F. Dhakate
2. Preperation And Charecterisation Of Polianilyne (PANI) In The Form Of Emeraldine/Multiwalled Carbon Nanotube(MWCNT) Nanocomposite.(From 216-218), Proceeding of national conference on synthesis and applications of Noval Materials (NCSANM-2013)ISSN:2229-4554, P. Modak, D.V. Nandanwar,S.B. Kondawar, S.F. Dhakate.
3. EMI Shielding Behaviour of Nanocomposites Based on Intrinsically Conducting Polymers/Graphene, Proceeding of national conference on Advanced Materials(NCAM-2014), P.R.Modak, D. Nandanwar**,**

**Details of Paper Publications in Journals:**

1. Electromagnetic Interference Sheilding Of Multiwalled Carbon Nanotubes/ Polyaniline Nanocomposites. (From 774-782, January 2014, Issue-2, Volume-1), International Journal Of Researches In Biosciences **,** Agriculture And Technology ISSN:2347-517x, **P. Modak**, D.V. Nandanwar, S.B. Kondawar, S.F. Dhakate
2. Synthesis and characterization of conducting polyaniline/graphene nanocomposites for electromagnetic interference shielding, Procedia Materials Science, 10 ( 2015) 588 – 594, [DOI: 10.1016/j.mspro.2015.06.010](../perna/1-s2.0-S2211812815002485-main.pdf), **Prerna Modak**, Subhash B. Kondawar, D.V. Nandanwar.
3. A review on graphene and its derivatives based polymer nanocomposites for electromagnetic interference shielding, International Journal of Advances in Science Engineering and Technology, ISSN: 2321-9009 Special Issue-1, June-2015, 212-214, **Prerna Modak**, D.V. Nandanwar.
4. Study of Specific Capacitance, Electrical Conductivity and Mechanical Strength of Polyaniline–(Derivatives Of) Graphene Nanocomposites, International Journal of Research in Biosciences and Agriculture *Technology*,(2015),ISSUE 2,114-118, 2347-517X, **Prerna Modak**, Deoram Nandanwar, Subhash Kondawar and Dilip Badwaik.
5. Conducting Polypyrrole/Graphene Nanocomposites as Potential Electromagnetic Interference Shielding Materials in the Ku-band, Journal of Physical Science, Vol. 27(3), 137–157, 2016, **Prerna Ramnath Modak**, Deoram Vithoba Nandanwar and Subhash Baburao Kondawar.
6. Improved Transport Properties of Polyaniline/Graphene Nanocomposites, BIONANO FRONTIER Print ISSN 0974-0678, Online : 2320-9593,www.bionanofrontier.org,154-157, **Prerna R. Modak,** Subhash B. Kondawar, Deoram V. Nandanwar.
7. Transport Properties of Polypyrrole/Graphene Nanocomposites, IJSRST | Volume 4 | Issue 3 | Print ISSN: 2395-6011 | Online ISSN: 2395-602X, **Prerna R. Modak,** Subhash B. Kondawar, Deoram V. Nandanwar.
8. Electromagnetic interference shielding performance of polyanilne graphene nanocomposites in ku band, International journal of current engineering and scientific research,vol. 6, issue 1, 604-611, **Prerna R. Modak,** Subhash B. Kondawar, Deoram V. Nandanwar.

# Electromagnetic Interference Shielding Effectiveness of Graphene Based Conducting Polymer Nanocomposites, [Springer Proceedings in Physics](https://link.springer.com/bookseries/361) book series (SPPHY, volume 242)  pp 31-40, Prerna R Modak, Deoram V Nandanwar, Subhash B Kondawar

**Details of Book/Chapter Publications:**

1. Chapter- Theory of EMI Shielding, Elsevier- Materials for Potential EMI Shielding Applications:Processing, Properties and Current Trends, J. Kuruvilla, W.Runcy, G.Gejo, **Prerna R. Modak,** Subhash Kondawar, 2019.
2. Book- Elements of Statistical and Thermodynamic Physics, Sai Jyoti Publication, **Prerna Modak**, Nahid Beig, 2019.

**Details of Paper Presentation:**

# Paper presented- “Electromagnetic Interference Shielding Effectiveness of Graphene Based Conducting Polymer Nanocomposites” in NAC in Taiwan

1. Paper presented- “Investigation of Conducting Polymer Graphene Nanocomposites for Electromagnetic Interference Shielding” in Indo-Japan Workshop organised by National Physical Laboratory, Delhi.

**Extra-curricular Work:**

1. Member in IQAC
2. Member in Cultural Committee
3. NPTEL online Certificate course on structural Analysis of Nanomaterials
4. Joint Chief Supervisor of University Exam