S.D.V.S.Sangh's

S. S. Arts College & T. P. Science Institute, Sankeshwar

Tal. Hukkeri Dist. Belgaum

Accredited at "B^{++}" Level by NAAC

DEPARTMENT OF CHEMISTRY

Student's Paper Presentation

in

One Day State Level Student Seminar

on

"NANO PARTICLES"

19.09.2019

Karnatatka Lingayat Education Society's

SCP ARTS, SCIENCE AND DDS COMMERCE COLLEGE

MAHALINGPUR – 587 312

(Accredited at B++ Level with 2.81 CGPA)

TQ: MUDHOL DIST: BAGALKOT

IQAC INITIATIVE

DEPARTMENT OF CHEMISTRY

Organizes

ONE DAY STATE LEVEL STUDENT SEMINAR

On

"Nano Particles"

(Nano materials for sensors and bio sensors, nano particles in drug delivery and drug development, nano materials for bio engineering, smart nano materials, nano research in science and technology)

DATE: 19-09-2019 THURSDAY 10:30 A.M.

Venue: Auditorium

APPEAL

Dear Sir / Madam,

We are pleased to inform you that our college is going to organize **One Day State Level Student Seminar on thursday, 19th September 2019**. The seminar aims at providing a platform to the young minds to deliberate on the given topic. Hence, we request you to depute four students from your college.

Three Best Paper Presenters will get Cash Prizes instituted by our Alumni

I – Prize: Rs.3000/-, II – Prize: Rs.2000/- & III-Prize: Rs.1000/-

ATTENTION

- Nominal Registration Fee per student is Rs.100/-.
- All UG & PG students can participate (Bsc, Msc).
- Working lunch will be provided and No TA/DA will be given.
- Letter from the Principal of the participating college and identity card must be produced.
- Soft copy of the paper should be submitted to Organizing Committee on or before Monday, 16-09-2019, 3:00 P.M.
- Format for paper: Word doc, Times New Roman font, 12 font size, 1.5 line spacing.

Organizing Secretary

Dept. of Chemistry..1. Smt. J. R. Patil – +917760641525 – jayapatil03@gmail.com

For more details contact -8867865154,7204246348

Estd : 1967 ☎: (08333)-273316 Fax : (08333) 274206

ಶ್ರೀ ದು.ವಿ.ಸಂ.ಸಂಘದ

ಶ್ರೀ ಶಿವರುದ್ರೇಶ್ವರ ಕಲಾ ಹಾಗೂ ಪಟ್ಟಣ ಪಂಚಾಯತ ವಿಜ್ಞಾನ ಮಹಾವಿದ್ಯಾಲಯ. ಸಂಕೇಶ್ವರ.-591 313

ತಾ: ಹುಕ್ಕೇರಿ ಜಿ. ಬೆಳಗಾವಿ (ಕರ್ನಾಟಕ)

S.D.V.S. SANGH'S

S. S. ARTS COLLEGE & T. P. SCIENCE INSTITUTE, SANKESHWAR- 591 313

Tal.: Hukkeri Dist.: Belagavi (Karnataka State)

Accredited at B++ Level by NAAC

E-Mail-aascskv@rediffmail.com www.sstpsnk.edu.in

Ref No._____ Date : 18.09.2019

To

The Principal

K.L.E Society's

SCP Arts, Science & DDS Commerce

College, Mahalingpur

Sir,

I am deputing three students along with a faculty of our college for paper presentation in One Day State Level Student Seminar On **"Nano Particles"** on 19.09.2019. The names of the students are as follows.

Sl. No.	Name of students	Subject
01	Miss. Shruthika Patil, B.Sc V sem	Role of Gold nanoparticle on targeted drug delivery in cancer treatment
02	Miss. Shilpa Teli B.Sc V sem	Folate-Conjugated Hollow Gold Nanoparticles loaded with cisplatin Drug delivery systems for Cancer therapy
03	Miss. Vishala Patil B.Sc V sem	Role of carbon nanotube as biomaterial in tissue engineering of bone regeneration

Thanking you,

Yours faithfully

Principal

Title: ROLE OF CARBON NANOTUBE AS BIOMATERIAL IN TISSUE ENGINEERING OF BONE REGENERATION

Vishala Patil[a], Suraj Dadannavar,[b] Dr. Honnur Krishna[c]

S.D.V.S. Sangh's, S.S. Arts College & T.P. Science Institute, Sankeshwar – 591313. Dist. Belgaum (Karnataka)

[a] Final year B.Sc student, V semester

[b,c] Assistant professor in Chemistry

Email- vishalapatil1122@gmail.com, krishnachem08@gmail.com

Abstracts

Carbon is the main component of biomolecules, and this makes Carbon nanotubes (CNT) to be considered as a biocompatible material which has proven remarkable advancements in artificial biomaterials. Recent research studies show that CNTs both SWCNT & MWCNT are used as local drug-delivery systems or scaffolds to promote and guide bone-tissue regeneration because of their outstanding physical and chemical properties suitable for bio-engineering applications.

The highlights of the paper are importance of the metal free CNT which is considered as the model nanomaterials as substitutes for treating bone loss or defects. A brief introduction about the bone compositions, different synthetic routes of CNTs for nanocomposites preparations and its uses as bio-mimetic bones in bio-medical applications have been discussed.

Keywords: Carbon nanotubes, Bio mimetic, Bio-compatible, Bone-tissue, Bioengineering

Abbreviations: CNT, Carbon nanotube, SWCNT, Singled walled carbon nanotube; MWCNT, Multiwalled carbon nanotube;

Title: Role of Gold nanoparticle on targeted drug delivery in cancer treatment

Shrutika Patil[a], Suraj Dadannavar,[b] Dr. Honnur Krishna[c]

S.D.V.S. Sangh's, S.S. Arts College & T.P. Science Institute, Sankeshwar – 591313. Dist. Belgaum (Karnataka)

[a] Final year B.Sc student, V semester

[b,c] Assistant professor in Chemistry

Email- shruthipatil888@gmail.com, krishnachem08@gmail.com

Abstract

Around the world wide, Cancer is one of the most leading causes to death. Chemotherapeutics are used to treat cancer cells but it brings out toxicity to healthy cells, which leads to severe side effect in patients. Therefore, a new better method necessitates targeting tumor cells and should decrease in side effects. Inorganic nanoparticles such as gold nanoparticles (AuNP) have been explored and exploited for various biotechnological applications because of their unique physical and chemical properties along with biocompatibility, less cytotoxicity, Surface Plasmon Resonance phenomenon, and quantum confinement effect, associated with it. As a result of these properties, AuNPs not only can easily penetrate blood vessels and other tissue barriers into tumor foci and burst out the tumor cell but also compatible for conjugation with targeted drug delivery with simple chemical approach as more effective nano drug carrier with great merits compared to other metal based nanomaterials.

AuNPs possess a unique combination of properties which allow them to act as highly multifunctional anticancer agents at physiological pH without affecting the normal cells. They can serve as scaffolds for increasingly potent cancer drug delivery, as transfection agents for selective gene therapy, and as intrinsic antineoplastic agents. In this paper, we briefly explain the various roles of AuNPs; it's one of the synthetic approach, properties and mainly concentrates on its significant role in targeted drug delivery. Further, we discuss the applications of AuNPs in surface modification, targeting strategy, and safety considerations also.

Keywords: AuNPs; Surface Plasmon resonance; quantum confinement effect, targeted drug delivery; Anticancer nanocareer

Title: Folate-Conjugated Hollow Gold Nanoparticles loaded with cisplatin Drug delivery systems for Cancer therapy

Shilpa Teli[a], Suraj Dadannavar,[b] Dr. Honnur Krishna[c]

S.D.V.S. Sangh's, S.S.Arts College & T.P.Science Institute, Sankeshwar – 591313. Dist. Belgaum (Karnataka)

[a] Final year B.Sc student, V semester

[b,c] Assistant professor in Chemistry

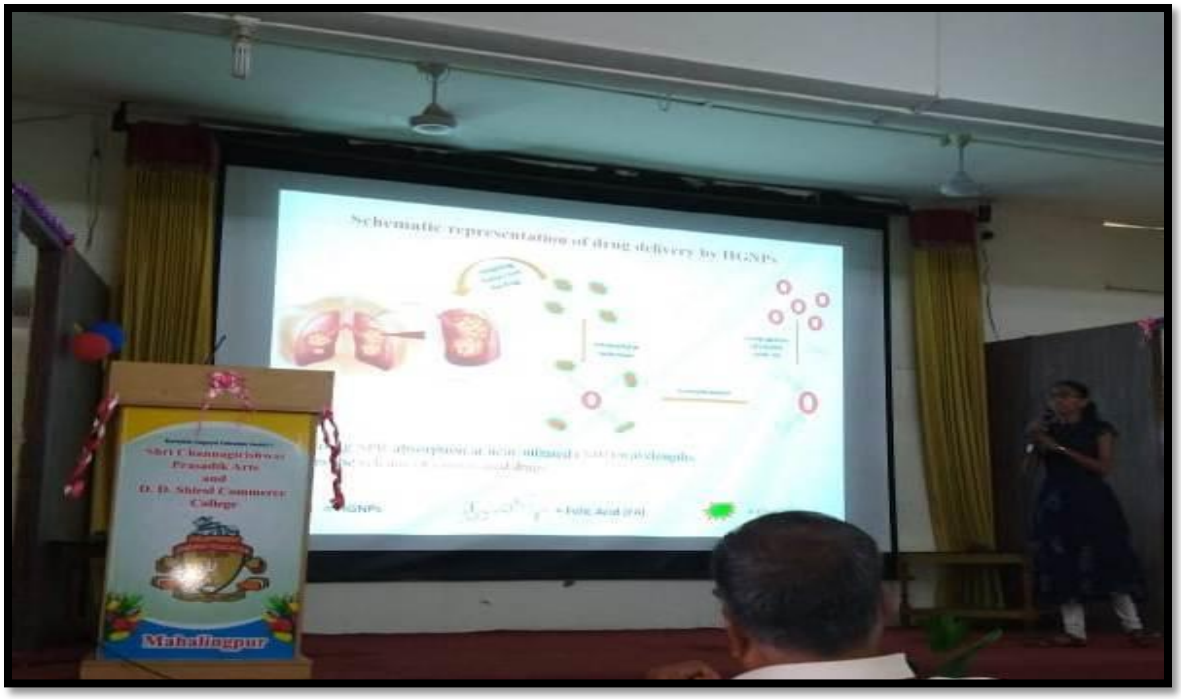
Email- shilpateli123@gmail.com, krishnachem08@gmail.com

Abstract

The standardized definition of nanoparticles (NPs) is that it has a spherical shape whose size is considered 1–100 nm with a surrounding interfacial layer. Nanotechnology is fundamental for drug delivery with many latent applications in clinical medicine and research. It is also used for cancer detection, biomedical imaging and disease monitoring. Cisplatin is a simple inorganic molecule and a potent drug, which has a therapeutic effect against various types of tumours, for example, breast cancer, ovarian cancer, bladder cancer, cervix carcinoma, prostate carcinoma, endometrial cancer, head and neck cancer and lung cancer etc. Folate-conjugated hollow gold nanoparticles loaded with cisplatin and the release of drug from nanoparticle was quantified by using the inductively coupled plasma mass spectroscopy.

The Cisplatin-conjugated gold nanoparticles (CG-GNPs) showed efficient penetration into tumor cells and similar cellular toxicity as cisplatin alone. Combined with radiation, CG-GNPs led to greater tumor reduction than that of radiation alone. The CG-GNPs also demonstrated efficient tumor imaging capabilities. CG-GNPs have a great potential to increase antitumor effect, overcome resistance to chemotherapeutics and radiation, and allow imaging-guided therapy. There are numerous nano-delivery systems are developed for Cisplatin.

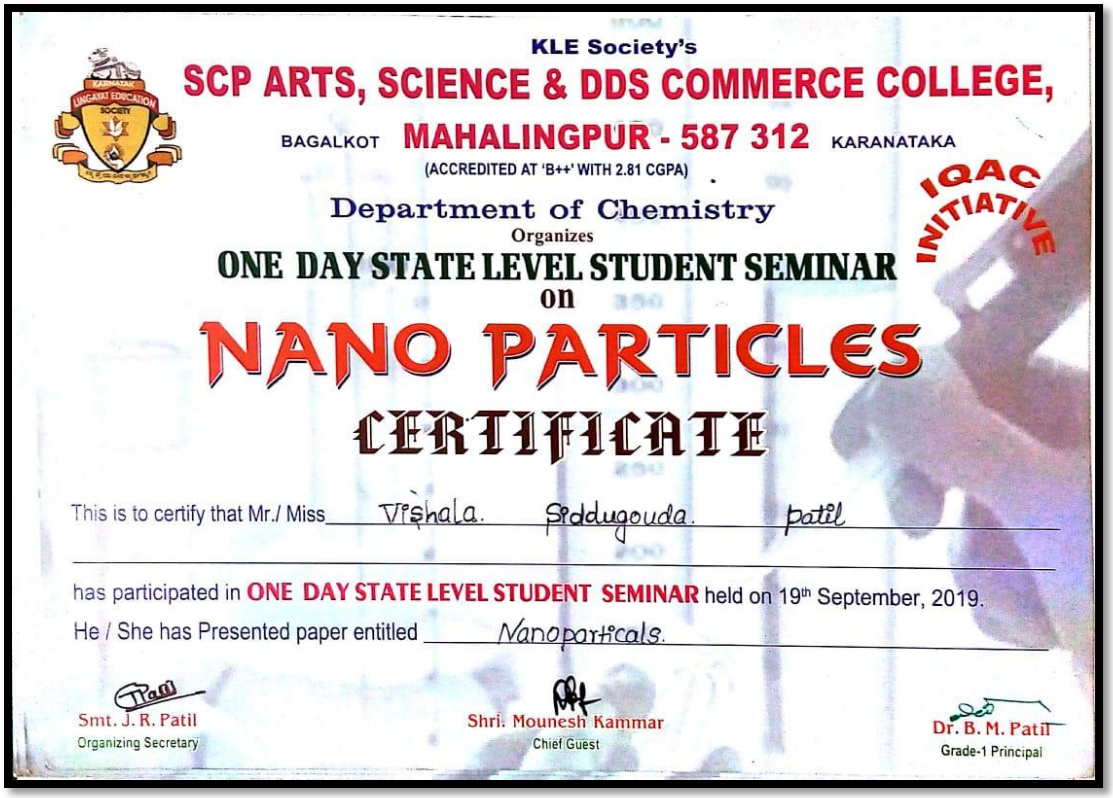
Key Words: Nanoparticles, Cisplatin, Gold nanoparticles, Chemotherapeutic



Paper presentation by Miss Shilpa Teli, BSc V Sem at SCP Arts Science College, Mahalingpur on 19.09.2019

Miss Shrutika Patil secured third place in State Level Student Seminar at SCP Arts Science College, Mahalingpur on 19.09.2019

Paper presentation by Miss Vishala Patil, BSc V Sem at SCP Arts Science College, Mahalingpur on 19.09.2019



KLE Society's

SCP ARTS, SCIENCE & DDS COMMERCE COLLEGE,

BAGALKOT MAHALINGPUR - 587 312 KARANATAKA

(ACCREDITED AT 'B++' WITH 2.81 CGPA)

IQAC INITIATIVE

Department of Chemistry

Organizes

ONE DAY STATE LEVEL STUDENT SEMINAR

on

NANO PARTICLES

CERTIFICATE

This is to certify that Mr./ Miss Vishala. Siddugouda. patil

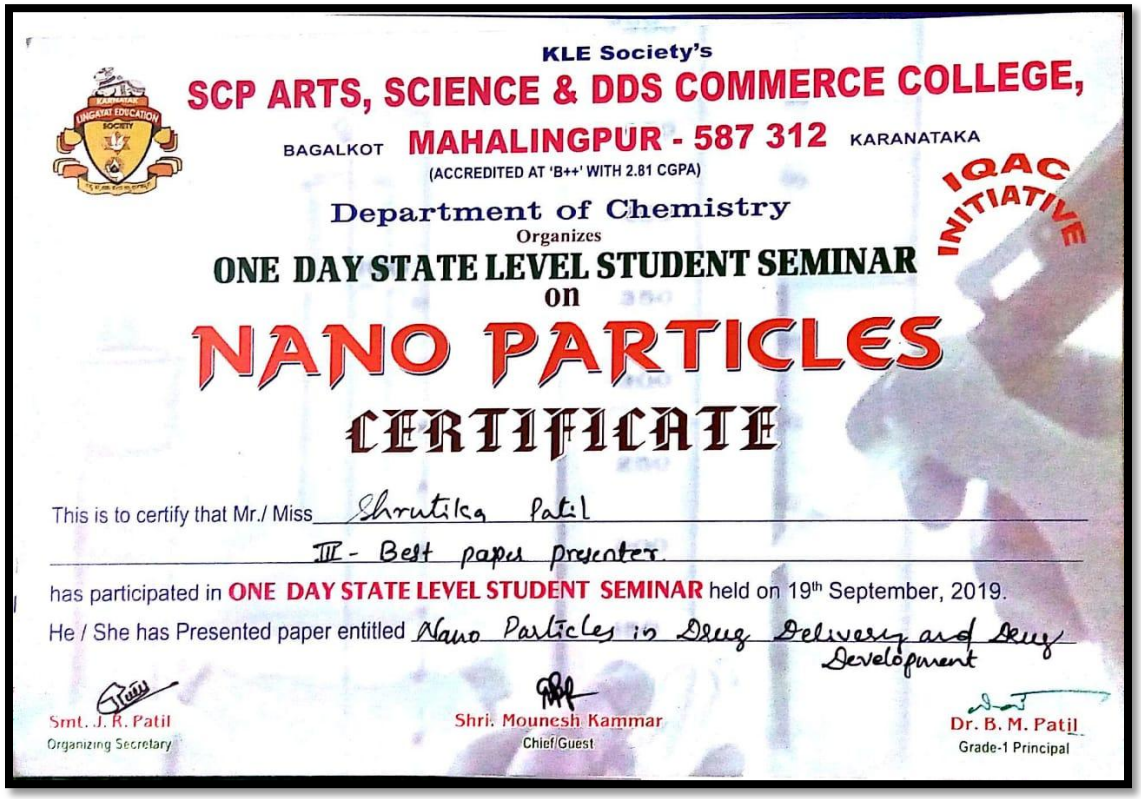
has participated in ONE DAY STATE LEVEL STUDENT SEMINAR held on 19th September, 2019.

He / She has Presented paper entitled Nanoparticals.

Smt. J. R. Patil
Organizing Secretary

Shri. Mounesh Kammar
Chief Guest

Dr. B. M. Patil
Grade-1 Principal



KLE Society's

SCP ARTS, SCIENCE & DDS COMMERCE COLLEGE,

BAGALKOT MAHALINGPUR - 587 312 KARANATAKA

(ACCREDITED AT 'B++' WITH 2.81 CGPA)

IQAC INITIATIVE

Department of Chemistry

Organizes

ONE DAY STATE LEVEL STUDENT SEMINAR

on

NANO PARTICLES

CERTIFICATE

This is to certify that Mr./ Miss Shrutika Patil

III - Best paper presenter.

has participated in ONE DAY STATE LEVEL STUDENT SEMINAR held on 19th September, 2019.

He / She has Presented paper entitled Nano Particles in Drug Delivery and Drug Development

Smt. J. R. Patil
Organizing Secretary

Shri. Mounesh Kammar
Chief Guest

Dr. B. M. Patil
Grade-1 Principal

KLE Society's

SCP ARTS, SCIENCE & DDS COMMERCE COLLEGE,

BAGALKOT **MAHALINGPUR - 587 312** KARANATAKA

(ACCREDITED AT 'B++' WITH 2.81 CGPA)

IQAC INITIATIVE

Department of Chemistry

Organizes

ONE DAY STATE LEVEL STUDENT SEMINAR

on

NANO PARTICLES

CERTIFICATE

This is to certify that ~~Mr.~~/ Miss Shilpa .M. Teli

has participated in **ONE DAY STATE LEVEL STUDENT SEMINAR** held on 19th September, 2019.

He / She has Presented paper entitled Nano particles in drug delivery.

Smt. J. R. Patil
Organizing Secretary

Shri. Mounesh Kammar
Chief Guest

Dr. B. M. Patil
Grade-1 Principal

REPORT

The following are the list of students who had participated and presented a paper in one of the State Level Students Seminar on the topic of "**Nanoparticles**" at KLE degree college, Mahalingpur, Shilpa M Teli, Shrutika Patil, Pooja S Sidnal, & Vishala Patil, under the guidance of Dr. Honnur Krishna, Mr. Suraj Dadannavar, Department of Chemistry, respectively and Dr. Irawwa Gokak, Department of Botany, under Science Association of S. S. Arts College and T. P. Science Institute, Sankeshwar.

Miss Shrutika Patil, a student from **B.Sc V Semester**, secured **third place** in the above seminar competition.