



SZAB Kémiai Szakbizottság

leköszönő elnök: Erdőhelyi András; megválasztott új elnök: Tóth Ágota

Anyagtudományi Munkabizottság

leköszönő elnök: Berkó András; új elnök: Hernádi Klára

Tisztelettel meghívjuk Önt és Munkatársait

a SZAB Anyagtudományi Munkabizottság **2017. június 21.-én (szerda) 11:00 órakor**
kezdődő rendezvényére.

Helyszín: **SZAB Székház I. em. 110. terem, Szeged, Somogyi u. 7.**

Előadás:

Dr. Seema Garg:

„Bismuth oxyhalides and their composites for photocatalytic applications”

Department of Chemistry, Amity Institute of Applied Science
Amity University
Noida, Uttar Pradesh,
India

Vendéglátó intézmény:

SZTE, TTIK, Kémiai Intézet, Alkalmazott és Környezeti Kémiai Tanszék

Dr. Hernádi Klára *egyetemi tanár, kutatócsoport vezető*

Tisztelettel kérjük, hogy részvételével járuljon hozzá az AT-MB eredményes munkájához, és szíveskedjék a Doktori Iskolák ösztöndíjait az előadás meghallgatására bízgatni.

Szeged, 2017. június 12.

Curriculum Vitae / Dr. (Mrs.) Seema Garg

Present Profile

Working at Department of Chemistry, Amity Institute of Applied Sciences, Amity University as a Programme leader, Bc(H) Chemistry and faculty since June 2011 with total experience of 16 years.

Working as a Principal Investigator from India side for Indo-Hungarian Joint Research Project by Indo-Hungarian Strategic Research Fund (IHSRF), being supported by DST, Governments of India and Government of Hungary.

DST Sponsored International Collaborative Project

Indo-Hungarian Inter-Governmental Science & Technology Cooperation Programme, project number DST/INT//HUN/P-6/16. "Green synthesis of novel BiOX (X = Cl, Br, I) and BiOXs composites, their immobilization on activated carbon fibers/ceramic paper and their applications as recyclable photocatalysts"

Submitted Projects:

DST Nanomission: "A Novel Green Approach to Develop a Visible Light Active Heterostructured Core/Shell BiVO₄/BiOX (X=Cl, Br, I) p-n Junction Photocatalysts "

SBIRI: "Combinatorial process for the degradation of organic pollutants using photocatalytic and biological process"

Research work

Physico-chemical investigation of groundwater of Agra district with special reference to fluoride ion contamination and its removal.

Green nano-silver: its synthesis, characterization and therapeutic applications.

Green BiOX, and their composites - their synthesis, characterization and photocatalytic applications.

Professional responsibilities

Programme leader, BSc(H) Chemistry

Coordinator, International Conference – ICRTMD 2013 & 2015

Education

◆ 2002 Ph.D.

"Physico-Chemical Investigation of Groundwater of Agra District with Special Reference to Fluoride Ion Contamination and its Removal"

Research Papers

1. Chandra A and Garg S (2015) "Effect of varying concentration of herbal extract of *Nyctanthes arbor-trisitis* leaf on synthesis of silver nanoparticles and its evaluation "International Journal of Pharmacy and Pharmaceutical Sciences" Scopus indexed Journal. Vol 7(7): 143-147.

2. Garg S. et al.(2014) Green synthesis of silver nanoparticles using *Arnebia nobilis* root extract and wound healing potential of its hydrogel. Asian journal of pharmaceutics, Scopus indexed journal. Vol. 8(2):95-101
3. Garg S. et al. (2014) Analgesic potential of hydrogels of silver nanoparticles using aqueous extract of *Saraca indica* bark. IJPSR Vol. 5(1): 240-45 covered with Elsevier & Pubmed indexed.
4. Garg S. (2013) Microwave-assisted rapid green synthesis of silver nanoparticles using *Saraca indica* leaf extract and their antibacterial potential. IJPSR Vol. 4(9): 3615-3619, covered with Elsevier & Pubmed indexed.
5. Kumar R, Chandra A. & Garg S (2012) Formulation and in vitro evaluation of sustained release gastroretentive tablets of metformin hydrochloride . International Journal of Therapeutic.Applications Vol 7, 13-17
6. Garg S. & Chandra A., (2012) Biosynthesis and anthelmintic activity of silver nanoparticles using aqueous extract of *Saraca indica* leaves . International Journal of Therapeutic.Applications , Vol 7, 9-12
7. Garg S. (2012).Rapid biogenic synthesis of silver nano particles using black pepper (*piper nigrum*) corn extract. International Journal of Innovations in Biological and Chemical Sciences.,Vol 3: 5-10, 2012
8. Garg, S. and Singh, M. (2011) Fluorosis: A health prespective study. International Journal of Innovations in Biological and Chemical Sciences, Vol. 1, 7-11
9. Garg S. (2011) Prevalence of fluorosis among children and adult. International Journal of Pharmaceutical Resaearch And Innovation Vol.4, 25-31.

Patents

1. Herbal nano silver using black pepper for acne treatment - Appl. No. 943/DEL/2012
2. Targeted drug delivery system using ferrite nano particles - Appl. No.1193/DEL/2012
3. Synthesis of silver nano particles from The Bark of Ashoka Tree- Appl. No. 1238/DEL/2012
4. Herbal nano silver using ratanjot for wound and burn treatment - Appl. No. 1320/DEL/2012
5. Herbal nano silver particles synthesized & stabilized by the extract of *Saraca indica* leaves. - Appl. No. 1556/DEL/2012
6. Microwave assisted green synthesis of silver nanoparticles *Nyctanthes arbor-tristis* plant extract - Appl. No. 2771/DEL/2013
7. Synthesis and photocatalytic applications of novel green BiOBr nanoparticles foe waste water treatment- Appl. No. 2546/DEL/2014.
8. Enhanced photocatalytic applications of novel green composites of semiconductor Bismuth oxyhalides (BiOXs) Appl. No. 201611025631.

Presentation of Research Papers in Conferences:

Paper presentation at International conference, Amity Inst. Of Pharmacy, Amity Univ. Noida, India, 2015.

Paper presentation at National conference, Sharda University. Noida, India, 2015.

Paper presentation at International conference, Amity University Noida, UP, India (ICRTMD-2013).

Paper presentation at National symposium. On “Chemistry and Environment” Delhi University, 2013.

Paper presentation at National academy of sciences in India,2012

Paper presentation at Quality Pharmaceutical Education And Research: Association of pharmacy professional, 2012

Paper presentation at International convention, Bhopal,2012 (Best oral presentation award).

Paper presentation at Amity Institute of Pharmacy, International conference, Noida, 2012.

Paper presentation at Indian Science congress, India, 2012

Paper presentation at Manglayatan University,Aligarh,2012

Paper presentation at Indian Science Congress, Delhi Chapter, Delhi, 2012

Paper presentation at Association of pharmacy professional ,Globus College of Pharmacy, Bhopal ,2011(Conference)

Paper presentation at Association of pharmacy professional, Globus College of Pharmacy, Bhopal, 2011(Seminar)

Paper presentation at The National Academy of Sciences, India, 2010

Paper presentation at National Seminar on Quality Education: Role of Teacher, Technology & Management, 2010

Paper presentation at The National Academy of Sciences, India, 2001

Paper presentation at The National Academy of Sciences, India, 2002

Paper presentation at Indian Science Congress, India, 2002

Invited speaker

Indian science congress Association (Delhi Chapter) 2012

Eshan college of Engg. , Mathura, 2014

Dept of Chemistry, Sam Higginbottom Institute of Agriculture, Technology and Sciences, Allahabad, 2016

Book

Transdermal drug delivery : A Challenge (Lap Lambert, Academic publishing)

Editorial Board Member

1.Asian Journal of Pharmaceutical Research & Development

2. International journal of therapeutic applications
3. Bio info publications (Nanotechnology and Nanoscience)
4. Whites Science (Int. J. of Innov. in Biol. and Chem. Sci.,UK)

Reviewer

1. EDTA-modified hydrothermal synthesis of a novel four-leaf clover-shape BiOBr microstructure. Materials and letters (Elsevier), 2013.
2. Melanin mediated synthesis of gold nanoparticles using *Yarrowia lypolytica*. Materials and letters (Elsevier),2012
- 3 Relative prevalence, incidence and severity of two viruses infecting cultivated pepper in the western highlands of Cameroon. ARJ,2013
4. Env. Science book (Pearsons) 2013
5. "Nanotechnology-Based Drug Delivery Systems And Herbal Medicines - A Review" International journal of Nanomedicine (Dove press) 2013.
6. "How much exposure to silver nanoparticles should be concerned hepatotoxicity in rats" IJBSR, 2014.
7. The prevalence of human intestinal helminthes and the efficacy of anthelmintic drugs in Abak local government area of Nigeria. Basic research Journals.2013.
8. Synthesis of silver nanoparticle from *annona squamosa* (l.) leaf extract and assessment of its antimicrobial activity, IJPPS, 2015.
9. Biofabrication of silver nanoparticles using aqueous leaf extract of *melia dubia*, characterization and antifungal activity, IJPPS, 2015.

Ph.D. SUPERVISOR

1. Amity University, Noida,UP
2. Shri Jagdishprasad Jhabarmal Tibrewala University, Rajasthan
3. Noida International University, Noida, UP

MEMBERSHIP OF SCIENTIFIC BODIES:

International Association of Advanced Materials, Sweden

The Indian Science Congress Association