CURRICULUM VITAE

SHALINI SINGH

Present Status

Assistant Professor (Zoology), M. K.R. Govt. Degree College, Ghaziabad

Educational Qualifications

PhD from National Physical Lab., New Delhi and A.M.U , Aligarh
 (Interdisciplinary)

- M.Phil. (Zoology) from A.M.U, Aligarh (80%)
- M.Sc. (Zoology) from A.M.U, Aligarh (69%)
- B.Sc. Hons (Zoology) from A.M.U, Aligarh (61%)

Experience

- > 2001-04, Research experience in the field of Zoology
- ➤ 2004-06, Experience in the field of Scientific Editing and Publishing at National Institute of Science communication And Information Resources (CSIR), New Delhi.
- 2006-10, Research experience in the interdisciplinary area (Biology/ Nanotechnology)
- 2010-till date, Assistant Professor, Department of Zoology, M. K.R. Govt. Degree College, Ghaziabad

Title of Thesis (PhD): Attachment of biomolecules on porous silicon for biosensor application.

- Formation of Nanostructured porous silicon, nanoparticles and Si nanowires
- Functionalization of nanostructured Si surfaces.
- Attachment of biomolecules to modified nanostructured silicon Surfaces.
- Techniques used for surface characterization and quantification:
 Photoluminescence, FTIR, XPS, SEM, Contact Angle Measurement,
 I-V (current-voltage) and Nanodrop
- Performed research work at Laboratory for surface modification, Rutgers, The State University of New Jersey, USA under the supervision of Prof. Yves J. Chabal,

Awards/Fellowships

- Visiting Fellow at Laboratory for Surface Modification, Rutgers, The State University of New Jersey, USA
- Senior Research Fellow (Council for Scientific & Industrial Research).
- > Diamond Jubilee Research Intern Award (CSIR).
- Scholarship from Raja Man Singh Smarak Shikha Trust

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Publication

- Abidi S.F., Khan M.A., Firduas S., Ahmed I. & Singh S. (2004), Nutritional richness of locally available feed ingredients for developing fish feeds. *Journal of Aquaculture in the Tropics* (M.Phil work)
- ➤ **Singh Shalini** & Khan M.A. (2007), Dietary arginine requirement of hybrid *Clarias* (*C. macrocephalus* × *C gariepinus*), *Aquaculture* Research (M.Phil work)
- Shalini Singh, Jyoti Zack, Dinesh Kumar, Govind, Sanjay K. Srivastava, Daman Saluja, Mukhtar A. Khan and P. K. Singh (2010). DNA hybridization on silicon nanowires. *Thin Solid Film*.
- Shalini Singh, Norman Lapin, P.K. Singh, Mukhtar A. Khan and Yves Chabal (2009). Attachment of streptavidin-biotin on 3- aminopropyl triethoxy- silane (APTES) modified porous silicon surfaces. American Institute of Physics proc.
- Shalini Singh, Shailesh N. Sharma, Govind, Mukhtar A. Khan and P.K. Singh (2009) Hydrosilylation of 1-dodecene on nanostructured porous silicon surface: Role of Current Density and Stabilizing Agent. *American Institute of Physics proc.*
- ➤ Shalini Singh, Shailesh N. Sharma, Govind, S.M.Shivaprasad, Mohan Lal and Mukhtar A. Khan (2008). Role of nanoporous silicon for the detection of Immunoglobulin for its potential application in biosensors. *International Journal of Environmental Analytical Chemistry*.
- ➤ Shalini Singh, Shailesh N. Sharma, Govind, S.M. Shivaprasad, Mohan Lal and Mukhtar A. Khan, Nanostructured (2008) Porous Silicon as functionalized material for biosensor application, *Journal of Materials Science- Materials in Medicine*
- Shalini Singh, Jyoti Zack, Govind, Shailesh N Sharma, Daman Saluja, Mukhtar A. Khan and P. K. Singh (2009). Enhanced DNA hybridization on nanostructured silicon surfaces. *Talanta (Ms. Ref. No.: TAL-D-09-01367 Under process)*.
- Shalini Singh, Dinesh Kumar, Sanjay K. Srivastava, Mukhtar A. Khan and P. K. Singh (2009). Attachment of streptavidin-biotin on modified flat and silicon nanowires surfaces. J. of Material Science & Engg.(Under process)
- Fatima T., Abidi A, and Singh Shalini. Detection of Fasciola gigantica infection by using nanostructure porous silicon (*Under process*)

Workshops/Conferences Attended

- International Interdisciplinary Science Conference on Nanobiotechnology: An Interface between Physics and Biology. Centre for Interdisciplinary Research in Basic Sciences, Jamia Milia Islamia, New Delhi. Dec. 2-4, 2010 (Oral presentation)
- India-Japan Workshop on Biomolecular Electronics & Organic Nanotechnology for Environment Preservation, 17th to 20th of Dec 2009, National Physical laboratory, New Delhi
- An International Conference on Transport and Optical Properties of Nanomaterials, January 5-8, 2009 at University of Allahabad, Allahabad, India.
- ➤ The International Conference for Nanotechnology Industries the Leading Technology of 21st Century" 5-7 April, 2009, Riyadh, Saudi Arabia (Oral presentation).
- 9th International Conference on Atomically Controlled Surfaces, Interfaces and Nanostructures (November 11 - 15, 2007) at Komaba Research Campus, The University of Tokyo, Tokyo, Japan
- International Conference cum Workshop on Nanoscience & Nanotechnology, December 17-21, 2007 at Ansal Institute of Technology, Gurgaon.
- The 8th Workshop on Biosensors and Bioanalytical μ-Techniques in Environmental and Clinical Analysis (International Association of Environmental Analytical Chemistry), October 3-6, 2007 at BITS Pilani, Goa, India (Oral presentation).
- International Union of Materials Research Societies International Conference on Advanced Materials (IUMRS-ICAM), Bangalore, India -October 8-13, 2007.
- ➤ 18th Annual General Meeting of MRSI "A Theme Symposium on Materials for Energy Generation, Conservation and Storage" held from February 12-14, 2007 at National Physical Laboratory, New Delhi India.
- ➤ Recent Trends in Bioinformatics with Special Reference to Biotechnology Resources", Ministry of Science & Technology, Govt. of India sponsored workshop (2003).
- ➤ Aligarh Summer University "T-cell immunity & Health Disease" at A.M.U. (2000).

Extra Curricular Activities

- > State level Badminton player.
- > Won several prizes in painting.
- > Edit and review various national and international articles.
- "General Course on Intellectual Property" course offered by World Intellectual Property Organization

Languages known

- > English-Good
- ➤ Hindi-Good
- Urdu-Fair