

# Gaurav Pandey

✉ gaurav.pandey789@gmail.com

🐦 @gauravpandey789

🌐 <http://pandey-gaurav.github.io/>

🌐 <http://https://in.linkedin.com/in/gaurav-pandey-35131a27/>



## Education

- 2013 – present    📌 **Ph.D. Student, IIT Guwahati, India** in Biosciences and Bioengineering. (Cumulative Grade Point 9/10)  
Thesis title: *Effects of Physical and Chemical Perturbants on Aggregation and Nano-Scale Self-Assembly of Peptides*. Under the Supervision of Dr. Vibin Ramakrishnan and Dr. Nitin Chaudhary.
- 2011 – 2013    📌 **M.Tech. Bioinformatics, University of Hyderabad, India** (Cumulative Grade Points Average 9.31/10).  
Thesis title: *Meta-Analysis of Epigenetic and Gene Expression Signatures Identifies Novel Regulators of Embryonic Stem Cell Identity*. Under the Supervision of Dr. Sailu Yellabolina (CR Rao AIMSCS). *First Class with Distinction*.
- 2007 – 2011    📌 **B.Tech. Biotechnology, Gautam Buddha Technical University, India.**  
*First Class with Distinction (81.060%)*.
- 2005 – 2007    📌 **Senior Secondary (Grade 10 + 2), First Class with Distinction (87.775%).**  
Indian School Certificate
- 2004 – 2005    📌 **Higher Secondary (Grade 10), First Class with Distinction (85.400%).** In-  
dian Certificate of Secondary Education

## Research Interests

- 📌 Peptide Self-Assembly and Amyloid aggregates, Peptide Based Drug Design and Development, Peptide Based Bio-Nano Assemblies and Functional Peptide Design.

## Research Publications

- 1) Gaurav Pandey, Jahnu Saikia, Sajitha Sasidharan, Deep C. Joshi, Subhash Thota, Harshal B. Nemade, Nitin Chaudhary, and Vibin Ramakrishnan.  
**Modulation of Peptide Based Nano-Assemblies with Electric and Magnetic Fields.** *Scientific Reports*. doi:10.1038/s41598-017-02609-z

## Patents Filed

- 1) **Inventors:** Vibin Ramakrishnan, Gaurav Pandey, Harshal B. Nemade, Jahnu Saikia, Sajitha S, and Nitin Chaudhary.  
**Patent No.** TEMP/E-1/25296/2017-KOL. Dated 13.07.2017  
**Office:** Controller of Patents, Kolkata.
- 2) **Inventors:** Vibin Ramakrishnan, Sajitha S, Nitin Chaudhary and Gaurav Pandey.  
**Patent No.** 243/KOL/2015. Dated 09.03.2015  
**Office:** Controller of Patents, Kolkata.

**3) Inventors:** Vibin Ramakrishnan, Sajitha S, Nitin Chaudhary and Gaurav Pandey.  
**Patent No.** TPatent No. 201631011471 Dated 31.03.2016  
**Office:** Controller of Patents, Kolkata.

## Bioinformatics Skills

Languages	<div> <div></div> C,Python*, R*, Perl, <math>\text{\LaTeX}</math>.  <i>*Elementary Proficiency</i> </div>
Operating Systems	<div> <div></div> Windows, Linux, Mac. </div>
Public Domain Knowledge	<div> <div></div> NCBI, RCSB, PDB-SUM, Swiss-Prot. </div>
Sequence Analysis Softwares	<div> <div></div> BLAST, FASTA, Clustal W, Sequin </div>
Molecular Dynamics Simulation	<div> <div></div> Gromacs.  <div></div> Docking and QSAR Studies] Gold, SybylX.  <div></div> Molecular modeling and visualization] Swiss-Modeller, Py-mol, Rasmol, Avogadro, Chimera, Discovery Studio, Material Studio. </div>
Web Dev	<div> <div></div> HTML, CSS. </div>
Misc. Softwares	<div> <div></div> Chemsketch, ProCheck, RAST, Cytoscape, Pross, Ribosome. </div>

## Technical Skills

Organic Synthesis	<div> <div></div> Solid Phase Peptide Synthesis. </div>
Biophysical Techniques	<div> <div></div> Spectroscopy (UV-Vis, Fluorescence, IR, CD, Raman), HPLC, AFM, Powder XRD, ITC. </div>

## Miscellaneous Experience

### Presentations/Conferences/Workshops Attended

- 2017
  - Poster Presented**, at National Workshop on Fluorescence and Raman Spectroscopy, IIT Guwahati.
  - Oral Presentation**, at International Conference on Advances in Biological Systems and Materials Science in NanoWorld, IIT BHU.
- 2016
  - Poster Presented**, at Research Conclave, IIT Guwahati.
  - Workshop Attended**, National Workshop on Advanced Probing Techniques in TEM, IIT Guwahati.
- 2015
  - Workshop Attended**, IuCr Workshop on X-Ray Diffraction Systems and Related Applications, IIT Guwahati.
- 2013
  - Poster Presented**, at UoH-Academia Sinica Joint Workshop on Frontiers in Biological Sciences, University of Hyderabad.
- 2012
  - Poster Presented**, at Indo-German Symposium on Systems Biology, University of Hyderabad.
  - Poster Presented**, Association of DNA Fingerprinting and Associated Technologies (ADNAT) Convention, CR Rao AIMSCS.

