

**Allegato alla domanda di partecipazione**  
**Curriculum formativo, didattico, scientifico e professionale del candidato**

**Dichiarazione sostitutiva di certificazioni**

(Art. 46, D.P.R. 28 dicembre 2000 n. 445)

**Dichiarazione sostitutiva dell'atto di notorietà**

(da sottoscrivere davanti all'impiegato addetto o da presentare o spedire con la fotocopia di un documento di identità)  
 (Art. 47, D.P.R. 28 dicembre 2000 n. 445)

Estremi del bando di selezione	AREA 02 - SCIENZE FISICHE S.C. 02/D1-FISICA APPLICATA, DIDATTICA E STORIA DELLA FISICA – S.S.D. FIS/07 TITOLO DEL PROGETTO: “REALIZZAZIONE DI UNA APPLICAZIONE WEB PER LA PREDIZIONE DI STRUTTURE DI COMPLESSI PROTEINA-MOLECOLA DI INTERESSE BIOMEDICO” RESPONSABILE SCIENTIFICO: DOTT. ATILIO VITTORIO VARGIU – CODICE SELEZIONE: 32A_22
Informazioni aggiornate al	
Nome e Cognome	Arpita Srivastava
Data di nascita	26/05/1992

Si raccomanda di indicare con precisione tutti gli elementi valutabili ai sensi del bando di selezione (aggiungere o togliere righe secondo necessità).

**Esperienza professionale**

Periodo	Ente	Principali attività e responsabilità
Feb 2021-Dec 2021	Postdoctoral researcher	Investigating the self-assembly behaviours and porosity of colloidal particles relevant to tissue engineering scaffolds using molecular dynamics simulations
Oct 2020-Feb 2021	Project Scientist	Derived all-atom and coarse-grained models for pluronic chains for capturing the experimentally observed phases in water at variable concentrations and temperatures and investigating the thermodynamic origins of different supra-structures

**Istruzione, formazione (es. titoli di studio, certificazioni professionali/linguistiche/informatiche)**

Data	Titolo / Principali tematiche	Ente
29/06/2013	BSc (H) Chemistry	Dautalram College, University of Delhi, India
29/06/2015	MSc Chemistry	Jamia Millia Islamia, India
19/12/2021	PhD Chemistry (computational chemistry)	Indian Institute of Technology, Jodhpur, India

## Pubblicazioni / Convegni

### Publications:

- 1) Mangesh Bhendale, **Arpita Srivastava** and Jayant K. Singh (2022) Insights into the phase diagram of pluronic L64 using coarse-grained molecular dynamics simulations, *Journal of Physical Chemistry B*, 126: 4731.
- 2) **Arpita Srivastava**, Bruno C. Rocha and Harish Vashisth (2022) Self-assembly in Mixtures of Charged Lobed Particles, *Frontiers in Physics*. (Accepted, doi: 10.3389/fphy.2022.936385).
- 3) **Arpita Srivastava** and Ananya Debnath (2020) Asymmetry and rippling in mixed surfactant bilayers from all-atom and coarse-grained simulations: Interdigitation and per chain entropy, *Journal of Physical Chemistry B*, 124: 6420.
- 4) **Arpita Srivastava**, Avinash Garg, Debapratim Das and Ananya Debnath (2020) Molecular dynamics simulations of a stacked  $\pi$ -conjugated soft material: binding energy and preferential geometry for self-assembly, *Bulletin of Materials Science* (Invited for Thematic issue on Soft Materials), 43:1
- 5) **Arpita Srivastava** and Ananya Debnath (2019) Cylindrical to Spherical Shape transformations of Micelles using All-Atom and Coarse-Grained Molecular Dynamics Simulations, *AIP Conference Proceedings*, 2142: 130004.
- 6) Nilotpal Singha, **Arpita Srivastava**, Bapan Pramanik, Sahnawaz Ahmed, Payel Dowari, Sumit Chowdhuri, Basab Kanti Das, Ananya Debnath and Debapratim Das (2019) Unusual confinement properties of a water insoluble small peptide hydrogel, *Chemical Science*, 10: 5920.
- 7) Sahnawaz Ahmed, Bapan Pramanik, K. N. Amba Sankar, Abhinav Srivastava, Nilotpal Singha, Payel Dowari, **Arpita Srivastava**, Kallol Mohanta, Ananya Debnath and Debapratim Das (2017), Solvent Assisted Tuning of Morphology of a Peptide-Perylenediimide Conjugate: Helical Fibers to Nano-Rings and their Differential Semiconductivity, *Scientific Reports*, 9485: 1.
- 8) Raju Lunkad, **Arpita Srivastava** and Ananya Debnath (2017) Influence of water concentrations on the phase transformation of a model surfactant/co- surfactant/water system, *Chemical Physics*, 483-484: 103.

### Conferences:

- 1) Industry Day Poster Symposium, IIT Jodhpur, January 2020.
- 2) Theoretical Chemistry Symposia (TCS), BITS Pilani, February 2019.
- 3) International Conference on Advances in Basic Sciences (ICABS), Bahal, Haryana, February 2019.
- 4) International Conference on Complex and Functional Materials (ICCFM), SNBNCBS, Kolkata, December 2018.
- 5) International Conference on Complex Fluids and Soft Matter, (CompFlu), IIT Roorkee, December 2018.
- 6) Annual Meeting of the Indian Biophysical Society (IBS), IISER Pune, March 2018.
- 7) Asia Pacific Conference on Theoretical and Computational Chemistry (APCTCC), IIT Mumbai,

December 2017.

8) Recent Advances in Chemistry (RAC), Jamia Millia Islamia, March 2015.

9) Recent Advances in Chemistry (RAC), Jamia Millia Islamia, March 2014.

**Altre attività scientifiche**

**Ulteriori informazioni pertinenti**

**No**

Luogo, data e firma