

## Resume (CV)

1. Name and full correspondence address: Harekrushna Sahoo, Professor, Department of Chemistry, NIT Rourkela, Rourkela-769008, India
2. Email(s) and contact number(s): [sahooh@nitrkl.ac.in](mailto:sahooh@nitrkl.ac.in) and +918249074243
3. Institution: National Institute of Technology (NIT), Rourkela (India)
4. Date of Birth: 24/01/1977
5. Gender (M/F/T): M
6. Category Gen/SC/ST/OBC: General
7. Whether differently abled (Yes/No): No
8. Academic Qualification (Undergraduate Onwards)

|   | Degree                       | Year | Subject                                                                           | University/Institution                                               |
|---|------------------------------|------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------|
| 1 | PhD                          | 2007 | Biophysical Chemistry                                                             | Jacobs University Bremen (Currently, Constructor University) Germany |
| 2 | Master of Technology (MTech) | 2002 | Corrosion Science & Technology                                                    | Burdwan University/NIT Durgapur                                      |
| 3 | Master of Science (MSc)      | 2000 | Physical and Nuclear Chemistry (Hons.), Organic, Inorganic & Analytical Chemistry | Utkal University, Bhubaneswar (India)                                |
| 4 | Bachelor of Science (BSc)    | 1998 | Chemistry (H), Physics, Maths                                                     | Utkal University, Bhubaneswar (India)                                |
| 5 | Pre-university               | 1995 | Chemistry, Biology, Physics, & Mathematics                                        | Utkal University, Bhubaneswar (India)                                |

9. Ph.D thesis title, Guide's Name, Institute/Organization/University, Year of Award

Title: Investigation of Structure, Dynamics and Conformation of Polypeptides by Fluorescence-Based Methods

Guide's Name: Prof. Werner M Nau

Institute: International University Bremen (Jacobs University Bremen), Germany

Year of Award: 2007

10. Work experience (in chronological order).

| S. No. | Positions held      | Name of the Institute                            | From    | To      |
|--------|---------------------|--------------------------------------------------|---------|---------|
| 1      | Professor           | NIT Rourkela, India                              | 07/2024 | present |
| 2      | Visiting Scientist  | Wroclaw University (Poland)                      | 07/2023 | 12/2023 |
| 3      | Visiting Scientist  | Heinrich Heine University, Duesseldorf (Germany) | 01/2023 | 04/2023 |
| 4      | Associate Professor | NIT Rourkela, India                              | 02/2020 | 06/2024 |
| 5      | Visiting Scientist  | Jacobs University (Bremen, Germany)              | 12/2021 | 12/2021 |
| 6      | Assistant Professor | NIT Rourkela, India                              | 05/2012 | 02/2020 |
| 7      | Guest Scientist     | MBC Dresden, Germany                             | 01/2012 | 05/2012 |
| 8      | Postdoctoral Fellow | Technical University Dresden (Germany)           | 01/2010 | 12/2011 |
| 9      | Postdoctoral Fellow | University of Massachusetts-Amherst (USA)        | 04/2007 | 12/2009 |

11. Professional Recognition/ Award/ Prize/ Certificate, Fellowship received by the applicant.

|   | Name of Award                                              | Awarding Agency          | Year             |
|---|------------------------------------------------------------|--------------------------|------------------|
| 1 | Ulam fellowship                                            | NAWA (Poland)            | 2023             |
| 2 | International visiting scientist                           | ICMR-DHR (India)         | 2022             |
| 3 | Appeared in top 2% influential scientists across the world | Stanford University, USA | 2021, 2022, 2023 |
| 4 | Research Stay Program                                      | DAAD (Germany)           | 2021             |
| 5 | Materials Research Program                                 | DAAD (Germany)           | 2017             |

**Patents:**

1..Dr. Jitendra Kumar Sahoo, Dr. Diptikanta Acharya, Dr. Duryodhan Sahu, Mr. Ashrumochan Mohanty, Mrs. Juhi Rath, and Dr. HAREKRUSHNA Sahoo, Solar Powered Bore Well Water Purification System, 2023, Application No. 389205-001, 28/06/2023. (Design patent, Accepted)

2. Dr. Harekrushna Sahoo, Dr. Monalisa Mishra, Dr. Jitendra Kumar Sahoo, Mr. Ravi Tamira, and Mr. Lokanath Mishra, Improved and Efficient Process for Preparation of Daptomycin by Novel Solid Phase Peptide Synthesis Route and its Antimicrobial Activity, 2023, Application no. 42/2023, 20/10/2023 (Published)

**Selected Publications (Last 5 years):**

1. DP Behera, S Subadini, U Freudenberg, and H Sahoo, Sulfation of hyaluronic acid reconfigures the mechanistic pathway of bone morphogenetic protein-2 aggregation, International Journal of Biological Macromolecules 2024, 263, <https://doi.org/10.1016/j.ijbiomac.2024.130128>

2. PR Hota, DP Behera and H Sahoo, Interaction between Ammonium based Ionic Liquids and CRABP I Protein: A microenvironmental Spectroscopic Analysis, Journal of Molecular Liquids, 2024, 405, <https://doi.org/10.1016/j.molliq.2024.125017>

3. L. Satish, S. Santra, M. Jana, M. Tsurkan, C. Werner, & H. Sahoo, Conformational changes of GDNF-derived peptide induced by heparin, heparan sulfate, and sulfated hyaluronic acid – Analysis by circular dichroism spectroscopy and molecular dynamics simulation, International Journal of Biological Macromolecules, 2021, Volume 182, 1 July 2021, Pages 2144-2150

4. S. Subadini. K. Bera, J. Hritz, & H. Sahoo, Polyethylene glycol perturbs the unfolding of CRABP I: A correlation between experimental and theoretical approach, Colloids and Surfaces B: Interfaces, 2021, <https://doi.org/10.1016/j.colsurfb.2021.111696>

5. M. Konar and H. Sahoo, Tyrosine mediated conformational change in bone morphogenetic protein – 2: Biophysical implications of protein – phytoestrogen interaction, International Journal of Biological Macromolecules, 2020, 150, 727-736.

6. M. Konar, JK Sahoo, and H. Sahoo, Impact of Bone Extracellular Matrix Mineral based nanoparticles on structure and stability of purified Bone Morphogenetic Protein 2 (BMP 2), Journal of Photochemistry and Photobiology B, 2019, [doi.org/10.1016/j.jphotobiol.2019.111563](https://doi.org/10.1016/j.jphotobiol.2019.111563).

7. M. Konar and H. Sahoo, Phosphate and sulphate-mediated structure and stability of Bone Morphogenetic Protein - 2 (BMP - 2): A Spectroscopy enabled investigation, International Journal of Biological Macromolecules, 2019, DOI:10.1016/j.ijbiomac.2019.06.015.

**Research Articles: 75 Books: 02 (edited) Book Chapters: 10**

**PhD Thesis: 06 guided and 09 ongoing**