

CURRICULUM VITAE

Dr. ANINDITA CHAKRABORTY



Professional Experiences

Sept. 2021-Present	Assistant Professor (INSPIRE FACULTY) , Department of Chemistry, Central University of Haryana, Mahendergarh, Haryana, India.
2018 - 2020	Postdoctoral Research Fellow (Newton International Fellowship) , University of Sussex and University of Manchester, UK.
2017- 2018	Postdoctoral Research Fellow , University of St Andrews, UK.

Academic Profile

2012-2017	Ph.D. , Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Bangalore.
2009-2012	MS (Materials Science) (CGPA 7.04 out of 8) , JNCASR, Bangalore.
2006-2009	BSc, Chemistry Honours (70.9%) , Presidency College, Kolkata, West Bengal.
2006	Higher Secondary Examination (10+2), (92.4%) , West Bengal Council of Higher Secondary Education, West Bengal.
2004	Secondary Examination, (86.4%) , West Bengal Board of Secondary Education, West Bengal.

Awards

- ✚ **DST INSPIRE Faculty Fellowship** to carry out independent research, awarded by the Department of Science and Technology (DST), India in July 2021
- ✚ **Newton International Fellowship** (success rate ~8%) awarded by the Royal Society, UK and Science and Engineering Research Board (SERB), India in November 2017
- ✚ **Foreign Travel Grant** from SERB, India for attending "42nd International Conference on Coordination Chemistry" held in July 2016 in France
- ✚ **Best Poster Award**, In-House Symposium, Silver Jubilee Celebration, 2013 at JNCASR, Bangalore
- ✚ **Best MS Thesis Award**, Bapu Narayanaswamy award for the best MS thesis of the centre for the year 2011-2012, awarded by JNCASR, Bangalore
- ✚ **Best Poster Award**, In-House Symposium, 2011 at JNCASR, Bangalore

Research Experience

- ✚ **Synthesis and characterization of mesoporous silica (SBA-15) and mesoporous carbon (CMK-3)**: January-February 2010, Winter project at JNCASR, Bangalore
- ✚ **Synthesis and properties of molecular magnetic materials**: December 2010-April 2012, MS thesis at JNCASR, Bangalore
- ✚ **Functional metal-organic frameworks (MOFs), nanoscale MOFs, MOF nanocomposites**: 2012-2016, as Ph.D. student at JNCASR, Bangalore
- ✚ **Industrial scale synthesis and biomedical applications of MOFs**: 2017-2018, as a Research Fellow at University of St Andrews, UK
- ✚ **Organometallic single-molecule magnets**: 2018-2020, as a Newton International Fellow at University of Manchester and University of Sussex, UK

Experimental and Instrumental Skills

- ✚ **Synthesis**:
 - Metal-organic framework (MOF) and its composites
 - Expertise in synthesizing air-sensitive inorganic compounds using Schlenk Line and Glove Boxes
- ✚ Expertise in mounting and data collection of single-crystals in diffractometers

- ✚ Expertise in handling several adsorption instruments: (i) Breakthrough separation instrument with Gas Chromatography (GC) and Mass Flow Controller (MFC) for gas separation; (ii) BELSORP-aqua-3 volumetric adsorption instrument; (iii) QUANTACHROME autosorb IQ, low pressure gas sorption analyzer with JULABO calibration bath; (iv) QUANTACHROME QUADRASORB-SI analyzer, low pressure gas adsorption apparatus
- ✚ Expertise in handling NMR, PXRD instruments, GCMS analyzer, UV-PL instruments, IR instrument

Software Proficiency

- ✚ Expertise in analyzing magnetic data and fitting of the data using Origin software
- ✚ Expertise in several crystallographic softwares: (i) WinGX-program for solving crystal structures, (ii) PLATON for analysis of crystal structures, (iii) Mercury, Discovery Studio, Diamond, Crysfire, etc. for viewing and analyzing molecular structures
- ✚ Experience of working with various databases: sciFinder, Reaxys, webCSD, CCDC (Cambridge structural database)
- ✚ Microsoft Word, Microsoft Powerpoint, Microsoft Excel, Adobe Photoshop, Adobe Illustrator

Teaching Experience

Teaching Assistant for "Advanced Inorganic Chemistry" course in JNCASR (2012-2013)

Participation in Conferences

1. **Flash Talk:** Lanthanide Cyclobutadienyl Sandwich Complexes@ UK-Spain Organometallic Chemistry Symposium, September 2019, Spain.
2. **Talk:** Lanthanide Cyclobutadienyl Sandwich Complexes@ 5th EuChemS Inorganic Chemistry Conference, June 2019, Moscow, Russia.
3. **Participation** in the RSC Dalton Southern Regional Meeting, September 2018, London, UK.
4. **Participation** in the Dalton 2018 conference, April 2018, Coventry, UK.
5. **Talk:** CO₂ Capture, Separation and Chemical Fixation in Rigid and Flexible MOF-Aminoclay Composites@ In-House Symposium, November 2016, JNCASR, Bangalore.
6. **Poster:** Growth and stabilization of flexible MOF nanocrystals on aminoclay matrix towards novel MOF@clay nanohybrids@ International Conference on Coordination Chemistry (ICCC 2016) conference, July 2016, Brest, France.
7. **Poster:** A cation exchangeable MOF for catalysis and heavy metal capture@ Eurasia Conference on Chemical Science, December 2014, IISc, Bangalore.
8. **Poster:** A cation exchangeable MOF for catalysis and heavy metal capture@ JNC Research Conference on Chemistry of Materials, October 2014, Kerala.
9. **Poster:** A cation exchangeable metal-organic framework for catalysis and second harmonic generation@ International Conference on Metal-Organic Frameworks and Open Framework Compounds, MOF 2014, October 2014, Kobe, Japan.
10. **Poster:** An anionic metal-Organic Framework: adsorption study and cation exchange leading to versatile applications@ CRSI National Symposium in Chemistry, February 2014, IIT Bombay.
11. **Poster:** An anionic metal-organic framework: adsorption study and cation exchange leading to versatile applications@ In-House Symposium, November 2013, JNCASR, Bangalore.
12. **Talk:** Novel homo/heterometallic cluster to extended assembly: magneto-structural correlations@ Unit Day, Chemistry and Physics Materials Unit, March 2013, JNCASR, Bangalore.
13. **Poster:** Molecule based magnetic materials: homo and heterometallic clusters@ CFM conference: Frontiers in Chemistry, August 2012, Goa.
14. **Poster:** Bifunctional Co(II)-Ag(I) and Ni(II)-Ag(I) frameworks: tuning of canted antiferromagnetism and CO₂ selectivity based on pillar module@ In-House Symposium, November 2012, JNCASR, India.
15. **Poster:** Dimensionality modulation based on blocking amine stoichiometry in Cu-azido system: synthesis and magneto-structural correlation@ In-House Symposium, November 2011, JNCASR, India.

List of Publications

Total Number of Publications: 24

Average Impact Factor: 5.0

h-index: 13

1. A. Chakraborty, B. M. Day, J. P. Durrant, M. He, J. Tang, R. A. Layfield, *Organometallics*, 2020, 39, 8-12. (IF: 4.1)
2. S. Laha, A. Chakraborty, T. K. Maji, *Inorg. Chem.*, 2020, 59, 3775-3782. (IF: 4.9)
3. A. Chakraborty, P. Sutar, P. Yadav, M. Eswaramoorthy, T. K. Maji, *Inorg. Chem.*, 2018, 57, 14480-14483. (IF: 4.9)
4. S. Bhattacharyya, A. Chakraborty, A. Hazra, T. K. Maji, *ACS Omega.*, 2018, 3 (2), 2018-2026. (IF: 3.5)
5. A. Chakraborty, S. Roy, M. Eswaramoorthy, T. K. Maji, *J. Mater. Chem. A*, 2017, 5, 8423-8430. (IF: 11.3)
6. A. Chakraborty, S. Laha, K. Kamali, C. Narayana, M. Eswaramoorthy, T. K. Maji, *Inorg. Chem.*, 2017, 56, 9426-9435. (IF: 4.9)
7. P. Kanoo, R. Haldar, P. Sutar, A. Chakraborty, T. K. Maji, *Royal Society of Chemistry*, Chapter 12, 2017, 412-453. (IF: NA)
8. A. Chakraborty, A. Achari, M. Eswaramoorthy, T. K. Maji, *Chem. Commun.*, 2016, 52, 11378-11381. (IF: 5.9)
9. A. Chakraborty, S. Bhattacharyya, A. Hazra, A. C. Ghosh, T. K. Maji, *Chem. Commun.*, 2016, 52, 2831-2834. (Highlighted in "Atlas of Science" in May 2016). (IF: 5.9)
10. A. Chakraborty, A. Escuer, J. Ribas, T. K. Maji, *Dalton Trans.*, 2016, 45, 15523-15531. (IF: 4.1)
11. P. Ghorai, A. Chakraborty, A. Panja, T. K. Mondal, A. Saha, *RSC Adv.*, 2016, 6, 36020-36030. (IF: 3.0)
12. S. A. Adalikwu, A. Chakraborty, A. Hazra, D. Ghosh, S. K. Pati, T. K. Maji, *Polyhedron*, 2016, 115, 276-281. (IF: 2.3)
13. A. Chakraborty, S. R. Lingampalli, A. Kumari, J. Ribas, J. R. Arino, T. K. Maji, *Inorg. Chem.*, 2014, 53, 11991-12001. (IF: 4.9)
14. A. Chakraborty, T. K. Maji, *APL Mat.*, 2014, 2, 124107. (IF: 4.3)
15. A. Chakraborty, K. K. Ramachandran, S.S.R.K.C. Yamijala, S. K. Pati, T. K. Maji, *RSC Adv.*, 2014, 4, 35167-35170. (IF: 3.0)
16. A. Chakraborty, T. K. Maji, *Proc. Natl. Acad. Sci., Indian Section A*, 2014, 84, 243-249. (IF: 0.7)
17. A. Chakraborty, T. K. Maji, *Journal of the Indian Institute of Science*, 2014, 94, 1. (IF: 0.9)
18. S. Bhattacharyya, A. Chakraborty, K. Jayaramulu, A. Hazra, *Chem. Commun.*, 2014, 50, 13567-13570. (IF: 5.9)
19. S. Roy, A. Chakraborty, T. K. Maji, *Coord. Chem. Rev.*, 2014, 273-274, 139-164 (Equal contribution from the first two authors). (IF: 15.4)
20. A. Chakraborty, R. Haldar, T. K. Maji, *Cryst. Growth Des.*, 2013, 13, 4968-4976. (IF: 4.2)
21. A. Chakraborty, S. R. Lingampalli, A. K. Manna, S. K. Pati, J. Ribas, T. K. Maji, *Dalton Trans.*, 2013, 42, 10707-10714. (Highlighted in inside Cover Page of the journal). (IF: 4.1)
22. S. Mohapatra, B. Rajeswaran, A. Chakraborty, A. Sundaresan, T. K. Maji, *Chem. Mater.*, 2013, 25, 1673-1679. (IF: 9.6)
23. A. Chakraborty, K. L. Gurunatha, A. Muthulakshmi, S. Dutta, S. K. Pati, T. K. Maji, *Dalton Trans.*, 2012, 41, 5879-5888. (IF: 4.1)
24. A. Chakraborty, B. K. Ghosh, J. R. Arino, J. Ribas, T. K. Maji, *Inorg. Chem.*, 2012, 51, 6440-6442. (IF: 4.9)

References

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