

## Dr. SANCHARI PAL

Assistant Professor

M.Sc (Chemistry); PhD (Chemistry)

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### Date of appointment to the present job:

15<sup>th</sup> July, 2020

### Academic background:

Dr. Sanchari Pal has completed her Bachelor's Degree in Chemistry (Hons) in 2008 and Master's Degree with specialization in Inorganic Chemistry in 2010, both from Jadavpur University and awarded University Medal in M.Sc. in 2010. She has qualified CSIR-NET in December 2009 (AIR 113) and engaged herself in research work at IIT Kanpur. She obtained her Ph.D degree in 2017 with thesis entitled "*Coordination Polymers: Non-covalent Interactions, Structural Chemistry, Photophysical Properties and Synthesis and Studies of Macrobicyclic Cryptands*". Then she joined IACS Kolkata in 2017 as National Post Doctoral Fellow (SERB Project) working on the project entitled "*Designing Principle of Polymer Based Anion Responsive Receptors*".

### Information about M Phil/Ph D etc.:

- ❑ **PhD Topic:** *Coordination Polymers: Non-covalent Interactions, Structural Chemistry, Photophysical Properties and Synthesis and Studies of Macrobicyclic Cryptands.*

(Web link:

[https://drive.google.com/file/d/1XuGGXFGlaZDPTyKAqVz4lZBSQ8\\_uT8Ym/view?usp=sharing](https://drive.google.com/file/d/1XuGGXFGlaZDPTyKAqVz4lZBSQ8_uT8Ym/view?usp=sharing))

### Area of present academic/ Research interest/Research Projects& Schemes and Collaborations:

- ❑ **Research interest:**

- Design and Synthesis of Coordination Polymers and Study their Structural and Photophysical Properties and Applications
- Synthesis of Ion Responsive Receptors

### Publications:

- ❑ Pal S., Chatterjee N., and Bharadwaj P. K. 2014. Selectively sensing first-row transition metal ions through fluorescence enhancement. *RSC Adv.* 4: 26585-26620.  
(Web link: <https://pubs.rsc.org/en/content/articlelanding/2014/ra/c4ra02054e#!divAbstract>)
- ❑ Pal S., Pal T. K., and Bharadwaj P. K. 2016. Solvothermal synthesis of coordination polymers at different temperatures and their luminescence studies. *CrystEngComm.* 18: 1825-1831.  
(Web link: <https://pubs.rsc.org/en/content/articlelanding/2016/ce/c5ce02540k#!divAbstract>)
- ❑ Pal S., and Bharadwaj P. K. 2016. A luminescent Terbium MOF containing hydroxyl groups exhibits selective sensing of nitroaromatic compounds and Fe(III) ions. *Cryst. Growth Des.* 16: 5852-5858.  
(Web link: <https://pubs.acs.org/doi/abs/10.1021/acs.cgd.6b00930>)
- ❑ Pal S., Ghosh T. K., Ghosh R., Mondal S., and Ghosh P. 2020. Recent Advances in Recognition, Sensing and Extraction of Phosphates: 2015 Onwards. *Coordination Chemistry Reviews.* 405: 213128-213185.  
(Web link: <https://www.sciencedirect.com/science/article/abs/pii/S0010854519304539>)
- ❑ Gupta M., De D., Pal S., Pal T. K., and Tomar K. 2017. A porous two-dimensional Zn(II)-coordination polymer exhibiting SC-SC transmetalation with Cu(II): efficient heterogeneous catalysis for the Henry reaction and detection of nitro explosives. *Dalton Trans.* 46: 7619-7627.  
(Web link: <https://pubs.rsc.org/en/content/articlelanding/2017/dt/c7dt01074e#!divAbstract>)

- ❑ Sharma V., De D., Pal S., Sahaand P., and Bharadwaj P. K. 2017. Unusual SC-SC transformation of a 2D coordination network to a 3D MOF, aqueous phase detection of nitro explosives and heterogeneous catalysis of Baylis-Hillman reactions . *Inorg. Chem.* 56: 8847–8855.  
(Web link: <https://pubs.acs.org/doi/10.1021/acs.inorgchem.7b00777>)
- ❑ Maji S., Chowdhury B., Pal S., and Ghosh P. 2018. An Indolium Ion Functionalized Naphthalimide Chemodosimeter for Detection of Cyanide in Aqueous Medium. *Inorganica Chimica Acta.* 483: 321–328.  
(Web link: <https://www.sciencedirect.com/science/article/abs/pii/S0020169318310260>)
- ❑ Ghosh T. K., Dutta R., Maji S., Pal S. and Ghosh P. 2019. Removal of Phosphate in Presence of Interfering Sulphate and Arsenate by a Tripodal Thiourea Receptor by Precipitation through Crystallization in Semi-Aqueous Medium. *Polyhedron.* 172: 74–79.  
(Web link: <https://www.sciencedirect.com/science/article/abs/pii/S0277538719301986>)

#### Seminars, Webinars and Conferences attended:

- ❑ Pal S. “*National Symposium on Advances in Chemistry*” Participation at Jadavpur University, Kolkata, WB, India. November 5, 2008.  
(Web link: [https://drive.google.com/file/d/16YtG000-wKMxxBJRCgU6PksYFYfHZ4\\_D/view?usp=sharing](https://drive.google.com/file/d/16YtG000-wKMxxBJRCgU6PksYFYfHZ4_D/view?usp=sharing))
- ❑ Pal S. “*Living Current Trends of Chemical Research (CRSI Kolkata Chapter)*.” Participation at Ramkrishna Mission Residential College, Kolkata, WB, India. August 8, 2009.  
(Web link: <https://drive.google.com/file/d/16bwJop2eySLkNpv7w2PpzXKzKo91RQzI/view?usp=sharing>)
- ❑ Pal S. “*International Symposium on Frontiers in Inorganic Chemistry*.” Participation at IACS Kolkata, WB, India. December 11-13, 2010.  
(Web link: [https://drive.google.com/file/d/172-eihhHY4\\_LGMUudANB-ZgJcm4iZXEA/view?usp=sharing](https://drive.google.com/file/d/172-eihhHY4_LGMUudANB-ZgJcm4iZXEA/view?usp=sharing))
- ❑ Pal S. “*3<sup>rd</sup> Asian Conference on Coordination Chemistry*.” Participation at New Delhi, India. October 17-20, 2011.  
(Web link: <https://drive.google.com/file/d/16cwVB1yosKp10jDmgCXju0sp5iSCF6eB/view?usp=sharing>)
- ❑ Pal S. “*Recent Trends in Inorganic and Supramolecular Chemistry (RTISC): A Mini-Symposium*.” Participation at IIT Kanpur, UP, India. October 26, 2016.  
(Web link: <https://drive.google.com/file/d/16epkUNv4HDMhVuCQGdkziEQ8U3demvZ/view?usp=sharing>)

#### Awards:

- ❑ Awarded First position in the order of merit at the Master of Science Examination in Chemistry, 2010.  
(Web link: [https://drive.google.com/file/d/1pNGQIq9k8YUk\\_SxYQ6xOj0DCYXNeI0Mq/view?usp=sharing](https://drive.google.com/file/d/1pNGQIq9k8YUk_SxYQ6xOj0DCYXNeI0Mq/view?usp=sharing))
- ❑ Awarded Junior Research Fellowship through National Eligibility Test from Council of Scientific & Industrial Research in 2009.  
(Web link: <https://drive.google.com/file/d/1rxznXk13H5-kIwbm20PI0K0dcFEv3u0T/view?usp=sharing>)
- ❑ Awarded National Post Doctoral Fellowship from Science and Engineering Research Board in 2017.  
(Web link: <https://drive.google.com/file/d/165vx07OBMq-GNoyolUzQGBg5YJSD0En4/view?usp=sharing>)

**Special Interest:** Cooking, playing guitar etc.