



Annexure A2

Dated: April 26, 2018

Advertisement for a Postdoctoral Position

Applications are invited from motivated and eligible candidates for a postdoctoral position in the research project “*Synthesis characterization and reactivity of transition metal complexes with multiple NHC donor ligands*”.

Pincer ligands have been extensively investigated due to the ease by which their steric and electronic properties can be tuned. One of the most important features of pincer metal complexes is their robustness, which renders them excellent candidates for a wide variety of applications such as catalysis, medicinal chemistry, and chemical sensing. The easy tunability of NHCs facilitates systematic modifications of steric and electronic properties and their integration in tripodal or pincer-type ligand architectures seems beneficial due to the already established robustness of such ligand systems. The development of tripodal and pincer type N-heterocyclic carbene ligands thus can result in complexes with distinct beneficial synthetic, electronic, and steric properties over these previously known ligand systems.

The aim of this project is to develop new transition metal complexes with pincer backbone and having multiple N-heterocyclic carbene (NHC) donors. These new ligands, upon metalation, will generate complexes with distinct reactivity due to multiple NHC donors. One part of the activity under this project will involve design and synthesis of new ligands and their transition metal complexes, followed by complete spectroscopic characterization as well as structure determination. Further, reactivity studies of new ligands and their transition metal complexes as well as potential application as catalysts for the multi-electron reduction of small molecules will be the major research activity of this project.

Eligibility: Ph.D. in Chemistry.

Stipend:

Postdoctoral Fellow will be paid consolidated salary based on the following salary structure of the DST for Research Associate.

Category	Emoluments per month
Research Associate-I	Rs. 36,000/-
Research Associate-II	Rs. 38,000/-
Research Associate-III	Rs. 40,000/-

The category will be decided/recommended by the selection committee based on the qualification/Experience/Performance in the interview of the candidate.

Service conditions:

(i) DA: Postdoctoral Fellow will not be entitled to DA.

(ii) House Rent Allowance (HRA): All Postdoctoral Fellow may be provided accommodation based on availability and those residing in accommodation provided by the institute will not be eligible for drawing HRA. Wherever provision of hostel accommodation is not possible, HRA may be allowed to Postdoctoral Fellow as per Government norms applicable in the city/location where they are working. The fellowship amount may be taken as basic for calculating the HRA.

(iii) Medical Benefits: The Postdoctoral Fellow will be entitled for medical allowance as per institute policy.

(iv) The travel entitlement for Postdoctoral Fellow for participation in scientific events/workshops in India will continue to be as per institute norms.

Duration: The appointment is for one year.

Interested candidates are requested to submit a detailed CV to **Dr. Amrendra K. Singh** via email to **aks@iiti.ac.in** by May 3, 2018.

Only shortlisted candidates will be intimated by email for an interview. No TA/DA will be paid for appearing in the interview.