

Partha Sarathi Mukherjee

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Present position: Professor, Inorganic & Physical Chemistry Dept., Indian Institute of Science, Bangalore

Research fields: Supramolecular materials, Organic nanomaterials, Catalysis in nanocages.

Summary:

- 18 years inorganic chemistry research in academia
- 13 years teaching experience in chemistry at honours/PG level
- Co-author of 147 publications in peer-reviewed journals

Educational Qualifications:

- * **09/1998–01/2002** Doctor of Philosophy (Chemistry), Indian Association for the Cultivation of Science, Kolkata, India. *Thesis title:* “*Synthesis, crystal structure and low temperature magnetic behaviour of Cu(II) polynuclear complexes of amines and their derivatives using different bridging ligands*”. Supervisor: **Prof. Nirmalendu Ray Chaudhuri**
- * **1996-1998** Master of Science with specialization in **Inorganic Chemistry** (class 1), Jadavpur University, Kolkata, India.
- * **1992-1995** Bachelor of Science (Honours in Chemistry, class 1), The University of Burdwan, India.

Awards and Fellowships:

- *2016 Selected for *Shanti Swarup Bhatnagar* Prize in Chemical Sciences for the year 2016
- *2016 Editorial Advisory Board Member of “*Inorganic Chemistry Frontiers*”, a journal published by the Royal Society of Chemistry (U. K.)
- *2016 Associate Editor, *Inorganic Chemistry* (ACS-Journal) with effect from July, 2016
- *2015 Member of Editorial Advisory Board of “*Inorganic Chemistry*” (a journal published by the American Chemical Society)
- *2016 Chemical Research Society of India Bronze Medal
- *2014 Fellow, Royal Society of Chemistry (FRSC)
- *2014 Member of the Editorial board of *Scientific Reports*, a journal of the Nature publishing group
- *2014 JSPS visiting scientist, University of Kyoto (October-November, 2014)
- *2014 AvH visiting scientist at the University of Heidelberg (May-July 2014)
- *2012 Swarnajayanti Fellowship in Chemical Sciences from the Govt. of India
- *2012 NASI-SCOPUS Young Scientist Award-2011 in Chemistry
- *2011 Young Affiliate Fellowship of the World Academy of Science (TWAS), Trieste
- *2010 Visiting Professorship from Ulsan University, Korea for two months
- *2009 IUPAC Young Scientist award
- *2008 Microsoft Research (MSR) India Outstanding Young Faculty Award
- * 2008 Indian National Science Academy Medal for the Young Scientists
- * 2007 Young Associate of the Indian Academy of Sciences, Bangalore

- * **2004** Alexander von Humboldt Fellowship, Bonn, Germany.
- * **2004** Marie-Curie International Fellowship (selected).
- * **1997** National Merit Scholarship for the performance at undergraduate level.

Poster awards by group members:

- 1) A poster on “functional discrete supramolecules” by S. Shanmugamraju and P. S. Mukherjee was selected for poster award in 13th CRSI annual meeting held in Bhuvanewar, Feb 2011.
- 2) A poster by A. K. Bar and P. S. Mukherjee on “Self-sorting in coordination self-assembly” was selected for poster award in an international conference “Frontiers in inorganic chemistry” held in Kolkata, Dec 2010.
- 3) A poster by A. K. Bar and P. S. Mukherjee on “Porphyrin functionalized molecular barrels” was selected for best poster award in the annual meeting of CRSI, India, in Feb 2009.
- 4) A poster by K. C. Mondal and P. S. Mukherjee on “Mn₉ single molecule magnets” was selected for best poster award in “Modern Trends in Inorganic Chemistry conference” held in Dec 2007 at IIT-Chennai.
- 5) A poster on “Covalent marriage of two interlocked molecular cages and their easy separation” was selected for best prize in an international conference on Molecules and materials held in Calcutta, December 2014.

Work Experience:

- * **3/2016-present:** Professor, Inorganic &Physical Chemistry Dept., Indian Institute of Science, Bangalore-560012.
- ***3/2010-2/2016:** Associate Professor, Inorganic &Physical Chemistry Dept., Indian Institute of Science, Bangalore-560012.
- * **7/2005-2/2010:** Assistant Professor, Inorganic &Physical Chemistry Dept., Indian Institute of Science, Bangalore-560012.

- * **2004-2005:** **Alexander von Humboldt Fellow** at the Institute of Inorganic Chemistry, University of Goettingen, Germany. (**Host: Prof. Herbert W. Roesky**). Main group chemistry.
- * **2003-/2004:** Post-doctoral Fellow, Department of Chemistry, University of Utah, USA. Supervisor: **Prof. Peter J. Stang**. Supramolecular chemistry and crystal engineering.
- * **09/1998-12/2002:** Research student, Department of Inorganic Chemistry, Indian Association for the Cultivation of Science, Kolkata, India (Supervisor: **Prof. N. Ray Chaudhuri**).

Teaching: Taught Inorganic Chemistry-1 during 2005-08 and Inorganic Chemistry Lab course during 2009-12 for Int. PhD students. Teaching inorganic chemistry for 4-yr BS (UG) students since 2013.

Students mentored: Ten students have completed Ph.D. thesis and eight students are working currently for Ph.D. Mentored 11 postdocs. Four students have received MS degree from IISc working with me. Supervised seven external M.Sc. students and a M.Phil student for their M.Sc and M.Phil theses, respectively. Eight Ph.D. students and four postdoctoral fellows are working under my direct guidance. Supervised 37 short-term students/teachers in last few years.

Complete list of publications

(111 Papers from the top are from Indian Institute of Science, Bangalore)

Citation Data: Total Citations: **6,401**; Average Citations per paper: **44.45**; Average Citations per Year: **376.44**

h-index: 46

(**Publications from IISc.: Total number = 115, h-index = 35, Citations: 4252**)

- A) American Chemical Society's journals: **Total publications: 51 (IC-28, JOC-4, JACS-8, Orgmet-7, Chem. Rev. 1, Acc. Chem. Res. 1, Cryst Growth & Des. 2)**

- B) Royal Society's journals: **Total publications: 50** (Chem. Sci. 1, ChemComm: 17, Dalton Trans: 24, NJC: 3, J. Mater. Chem: 1, RSC Adv.: 2, Cryst Engg Com: 1, OBC: 1)
- C) Elsevier's journals: **Total Publications: 18** (ICActa: 10, IC Comm: 3, Tet. Lett: 1, Polyhedron: 3, J. Orgmet. Chem: 1)
- D) Willey's journals: **Total Publications: 21** (Angew Chem: 2, Chem. Eur. J: 15, Eur J IC: 3, ChemPlusChem: 1)
- E) Indian Journals: **Total Publications: 05** (Ind. J. Chem: 03, J. Chem. Sci. 1, PNAS India: 1)
- F) Other journals: **Total publications: 04**
149. Building block dependent morphology modulation of cage nanoparticles and detection of nitroaromatics
K. Acharyya, A. Chowdhury, B. Mondal, S. Chakraborty, **P. S. Mukherjee**
Chem. Eur. J. **2017**, *23*, under revision.
148. Versatility of diimidazole building blocks in coordination self-assembly
B. Roy, R. Saha, A. K. Ghosh, Y. Patil, **P. S. Mukherjee**
Inorg. Chem. **2017**, *56*, Accepted
147. Carboxylatopillar[n]arenes: A versatile class of water soluble synthetic receptors
S. Dasgupta and P. S. Mukherjee
Org. Biomol. Chem. **2017**, *15*, 762.
146. Self-assembly of discrete Ru₈ molecular cages and their in-vitro anticancer study
A. A. Ademeyo, A. Shettar, I. A. Bhat, P. Kondaiah, **P. S. Mukherjee**
Inorg. Chem. **2017**, *56*, 608.
145. Vinylanthracene based compounds as electron rich sensors
A. Chowdhury and **P. S. Mukherjee**
ChemPlusChem, **2016**, *82*,1360.
144. Face and edge directed self-assembly Pd₁₂ tetrahedral nanocages and their self-sorting
P. Howlader and P. S. Mukherjee
Chem. Sci. **2016**, *7*, 5893.
143. Aggregation induced emission of Pt(II) metallacycles and their nitro-aromatics detection

- A. Chowdhury, P. Howlader, **P. S. Mukherjee**
Chem. Eur. J. **2016**, *22*, 7486 (HOT PAPER).
142. Self-assembly of a redox active water soluble Pd₆ “Molecular Dice”
B. Roy, E. Zangrando, **P. S. Mukherjee**
Chem. Commun. **2016**, *52*, 4489.
141. High loading of Pd nanoparticles by interior functionalization of molecular pockets for heterogeneous
B. Gole, U. Sanyal, R. Banerjee, **P. S. Mukherjee**
Inorg. Chem. **2016**, *55*, 2345.
140. Urea functionalized self-assembled molecular prism for heterogeneous catalysis in water
P. Howlader, P. Das, E. Zangrando, **P. S. Mukherjee**
J. Am. Chem. Soc. **2016**, *138*, 1668.
139. Covalent Post-Assembly Modification and Water-Adsorption of Pd₃ Self-Assembled Trinuclear Barrels
D. Samanta, A. Chowdhury, **P. S. Mukherjee**
Inorg. Chem. **2016**, *55*, 1562.
138. Molecular cage impregnated Pd nanoparticles: Efficient additive-free heterogeneous catalysts for cyanation of aryl halides
B. Mondal, K. Acharyya, P. Howlader, **P. S. Mukherjee**
J. Am. Chem. Soc. **2016**, *138*, 1709.
137. Crystallization induced emission enhancement of mechano-fluorochromic Pt(II) luminogen and its application for cysteine detection
A. Chowdhury, P. Howlader, **P. S. Mukherjee**
Chem. Eur. J. **2016**, *22*, 1424 (HOT PAPER).
136. Conformation-selective coordination-driven self-assembly of a ditopic donor with Pd^{II} acceptors
P. Howlader, S. Mukherjee, R. Saha, **P. S. Mukherjee**
Dalton Trans. **2015**, 20493.
135. Template-free coordination-driven self-assembly of discrete hexanuclear prismatic cages employing half-sandwich octahedral Ru^{II}₂ acceptors and triimidazole donors
A. Adeyemo, S. Shanmugaraju, D. Samanta, **P. S. Mukherjee**
Inorg. Chim. Acta. **2016**, *440*, 62.
134. π -electron rich small molecule sensors for the recognition of nitro-aromatics
S. Shanmugaraju and P. S. Mukherjee
Chem. Commun. **2015**, *51*, 16014.

133. Binding of carboxylatopillar[5]arene with alkyl and aryl ammonium salts in aqueous medium
S. Dasgupta, A. Chowdhury and P. S. Mukherjee
RSC. Adv., **2015**, 85791.
132. Self-assembly of Metallamacrocycles Employing a New Benzil Based Organometallic Bisplatinum (II) Acceptor
B. Roy, S. Shanmugaraju, R. Saha and **P. S. Mukherjee**
CHIMIA, **2015**, 69, 541. (Invited article for a special issue on self-assembly)
131. A Pd₈ Tetrafacial Molecular Barrel as Carrier for Water Insoluble Fluorophore
B. Roy, A. K. Ghosh, S. Srivastava, P. D'Silva and **P. S. Mukherjee**
J. Am. Chem. Soc. **2015**, 137, 11916.
130. A Pd₂₄ Pregnant Molecular Nanoball: Self-Templated Stellation by Precise Mapping of Coordination Sites
I. Bhat, D. Samanta and **P. S. Mukherjee**
J. Am. Chem. Soc. **2015**, 137, 9497.
129. Electron rich triphenylamine based sensors
A. Chowdhury and **P. S. Mukherjee**
J. Org. Chem. **2015**, 80, 4064.
128. Post-synthetic exterior decoration of an organic cage by copper(I) catalysed A³-coupling
K. Acharyya and **P. S. Mukherjee**
Chem. Eur. J. **2015**, 21, 6823.
127. A smart approach to achieve exceptionally high loading of metal nanoparticles supported by functionalized extended frameworks for efficient catalysis
B. Gole, U. Sanyal and **P. S. Mukherjee**
Chem. Commun. **2015**, 51, 4872.
126. Shape and size directed self-selection in organic cage formation
K. Acharyya and **P. S. Mukherjee**
Chem. Commun. **2015**, 51, 4241.
125. Self-assembling discrete molecules for sensing
S. Shanmugaraju and **P. S. Mukherjee**
Chem. Eur. J. **2015**, 21, 6656.
124. Sunlight induced molecular covalent marriage of two triply interlocked Pd₆ cages and their facile thermal separation
D. Samanta and **P. S. Mukherjee**
J. Am. Chem. Soc. **2014**, 136, 17006.

123. A fluorescent organic cage for nitro-phenol detection
K. Acharyya and **P. S. Mukherjee**
Chem. Commun. **2014**, *50*, 15788.
122. Cu^{II}-Azide polynuclear complexes of three different building clusters with the same Schiff-base co-ligand: magnetic behavior and DFT studies
S. Mukherjee and **P. S. Mukherjee**
Cryst. Growth & Des. **2014**, *14*, 4177.
121. Multicomponent assembly of fluorescent tag functionalized ligands in coordination frameworks for sensing
B. Gole, A. K. Bar and **P. S. Mukherjee**
Chem. Eur. J. **2014**, *20*, 13321.
120. Component selection in self-assembly of Pd(II) nanocages and cage-to-cage transformation
D. Samanta and **P. S. Mukherjee**
Chem. Eur. J. **2014**, *20*, 12483.
119. Explosive sensing using electron rich supramolecular polymers: Role of intermolecular H-bonding in significant enhancement of sensitivity
B. Gole, W. Song, M. Lackinger and **P. S. Mukherjee**
Chem. Eur. J. **2014**, *20*, 13662.
118. Self-assembly of chloro-bridged arene-ruthenium based rectangle: Synthesis, structural characterization and Sensing study
S. Shanmugaraju, H. Jadhav and **P. S. Mukherjee**
Proc. Ind. Nat. Sc. Acad. **2014**, *84*, 197 (invited article)
117. Tuning nuclearity of clusters by positional change of functional group: Synthesis of polynuclear clusters, crystal structures and magnetic properties
B. Gole, K. C. Mondal, and **P. S. Mukherjee**
Inorg. Chim. Acta. **2014**, *415*, 151.
116. Self-assembled multicomponent Pd₆ aggregates showing low-humidity proton conduction
D. Samanta and **P. S. Mukherjee**
Chem. Commun. **2014**, *50*, 1595.
115. Template free multicomponent self-assembly of Pd/Pt molecular cages
S. Mukherjee and **P. S. Mukherjee**
Chem. Commun. **2014**, *50*, 2239.
114. Structural diversity in multinuclear Pd(II)-assemblies: Potential materials for low-humidity proton conduction

- D. Samanta and **P. S. Mukherjee**
Chem. Eur. J. **2014**, *20*, 5649.
113. Modification of Extended Open Frameworks with Fluorescent Tags for Sensing Explosives: Competition Between Size Selectivity and Electron Deficiency
B. Gole, A. K. Bar and **P. S. Mukherjee**
Chem. Eur. J. **2014**, *20*, 2276.
112. H-bond driven controlled molecular marriage in covalent cages
K. Acharyya and **P. S. Mukherjee**
Chem. Eur. J. **2014**, *20*, 1646.
111. Self-assembly of discrete metallamacrocycles employing half sandwich octahedral diruthenium building units and imidazole based ligands
D. Samanta, S. Shanmugaraju, A. Adeyemo, and **P. S. Mukherjee**
J. Orgmet. Chem. **2014**, 703. (Invited article for a special issue)
110. A Series of 3d Metal Complexes with Isomeric Phenylenediacetates and 1,3,5-tris(1-imidazolyl)benzene Ligand: Synthesis, Structures, Magnetic and Luminescence Properties
S. Mukherjee, D. Samanta and **P. S. Mukherjee**
Cryst. Growth & Des. **2013**, 5335.
109. Pt^{II}₆ Nanoscopic molecular cages with organometallic backbone as sensors
D. Samanta and **P. S. Mukherjee**
Dalton Trans. **2013**, *42*, 16784.
108. Role of dicarboxylate linkers in Mn(III)-salicylaloximate based extended molecular magnets
S. Mukherjee and **P. S. Mukherjee**
Chem. Eur. J. **2013**, *19*, 17064.
107. Sr²⁺ and Cd²⁺ Coordination polymers: Effect of different coordinating behaviour of a newly designed tricarboxylic acid
B. Roy, S. Mukherjee and **P. S. Mukherjee**
Cryst. Engg. Comm. **2013**, 9596. (Invited article)
106. Naphthalene carbohydrazone based dizinc(II) chemosensor for pyrophosphate ion and its DNA assessment application in PCR products
S. Anbu, S. Kamalraj, C. Jayabhaskaran and **P. S. Mukherjee**
Inorg. Chem. **2013**, *52*, 8294.
105. Solvent-Templated Supramolecular Isomerism in 2D Coordination Polymer Constructed by Ni^{II}₂Co^{II} Node and Dicyanamido Spacer: Drastic Change in

Magnetic Behaviors

S. Ghosh, S. Mukherjee, P. Seth, A. Ghosh and **P. S. Mukherjee**

Dalton Trans. **2013**, 42,13554.

104. Electron rich porous extended framework as heterogeneous catalyst for Diels-Alder reaction
B. Gole, A. K. Bar, A. Mallick, R. Banerjee and **P. S. Mukherjee**
Chem. Commun. **2013**, 49, 7439.
103. Versatility of azide in serendipitous assembly of Cu(II) magnetic polyclusters
S. Mukherjee and **P. S. Mukherjee**
Acc. Chem. Res. **2013**, 46, 2556.
102. Electron rich supramolecular polymers as fluorescent sensors
S. Shanmugaraju, H. Jadhav, R. Karthik, and **P. S. Mukherjee**
RSC. Advances, **2013**, 3, 4940.
101. Fluorescent tris-imidazolium sensors for picric acid explosives
B. Roy, A. K. Bar, B. Gole and **P. S. Mukherjee**
J. Org. Chem. **2013**, 78, 1306.
100. Molecular marriage through partner preferences in covalent cage formation and cage-to-cage transformation
K. Acharyya, S. Mukherjee and **P. S. Mukherjee**
J. Am. Chem. Soc. **2013**, 135, 554.
99. Multicomponent self-sorting of a Pd₇ boat and its use in catalytic Knoevenagel condensation
D. Samanta and **P. S. Mukherjee**
Chem. Commun. **2013**, 4307.
(Invited contribution for the special “Emerging investigators’ issue 2013”)
98. Cu(II)-Azide polynuclear complexes of Cu₄ building clusters with Schiff base co-ligands: synthesis, structures, magnetic and DFT studies
S. Mukherjee and **P. S. Mukherjee**
Dalton Trans. **2013**, 42, 4019.
97. Coordination assembly of Pt₄ macrocycles with organometallic backbone for sensing of acyclic dicarboxylic acids
S. Shanmugaraju, Arun K. Bar, D. Moon, **P. S. Mukherjee**
Dalton Trans., **2013**, 2998.
96. Self-assembly of an octanuclear Pt(II) tetragonal prism from a new Pt₄ organometallic building unit and its nitroaromatic explosives sensing

- S. Shanmugaraju, H. Jadhav, Y. Patil, **P. S. Mukherjee**
Inorg. Chem. **2012**, *51*, 13072.
95. Naphthylhydrazone based selective and sensitive chemosensors for Cu(II)
S. Anbu, S. Shanmugaraju, R. Ravishankaran, A. Karanda, **P. S. Mukherjee**
Dalton Trans. **2012**, *41*, 13330.
94. A phenanthrene based highly selective fluorogenic and visual sensor for Cu(II)
with nanomolar detection limit
S. Anbu, S. Shanmugaraju, R. Ravishankaran, A. Karanda, **P. S. Mukherjee**
Inorg. Chem. Comm. **2012**, *25*, 26.
93. Self-assembled Pd₆ cage with triimidazole walls and use of its confined
nanospace for catalytic Knoevenagel and Diels-Alder reactions in aqueous
medium
D. Samanta, S. Mukherjee, Y. Patil, **P. S. Mukherjee**
Chem. Eur. J. **2012**, *18*, 12322.
92. A series of Pd₆ trifacial molecular barrels with porphyrin walls
A. K. Bar, S. Mohapatra, **P. S. Mukherjee**
Chem. Eur. J. **2012**, *18*, 9571.
91. Novel heterometallic chains featuring Mn(III) and Na(I) ions in trigonal
prismatic geometries alternately linked to Mn(IV) octahedral ions: Synthesis,
structures and detail magnetic study
S. Mukherjee, Y. Patil, **P. S. Mukherjee**
Inorg. Chem. **2012**, *51*, 4888.
90. Coordination driven self-assembly of 2D metallacycles from a new carbazole
based 90° dipyriddy donor: Synthesis, characterization, and C₆₀ binding
S. Shanmugaraju, V. Vajpayee, K. Chi, P. J. Stang, **P. S. Mukherjee**
Inorg. Chem. **2012**, *51*, 4817.
89. Self-assembly of Ru₄ and Ru₈ assemblies using Ru₂ organometallic precursors:
Synthesis, characterization and properties
S. Shanmugaraju, D. amanta, **P. S. Mukherjee**
Beilstein J. Org. Chem. **2012**, *8*, 313.
88. Pillar height dependent unprecedented Pd₈ molecular swing and Pd₆ molecular
boat via multicomponent and C₆₀ binding
D. Samanta, S. Shanmugaraju, Y. Patil, M. Nethaji, **P. S. Mukherjee**
Chem. Commun. **2012**, *48*, 2298.
87. Cu-Azido polymers with various molar equivalents of blocking amines:
Synthesis, structures and magnetic properties with DFT
S. Mukherjee, Y. P. Patil, **P. S. Mukherjee**

Dalton Trans. **2012**, 54.

86. Three-component self-assembly of a series of interlocked Pd₁₂ prisms and their non-interlocked analogues
Arun K. Bar, S. Raghothama, D. Moon and **P. S. Mukherjee**
Chem. Eur. J. **2012**, *18*, 3199.
85. Metal-organic framework for sensing
B. Gole, A. K. Bar, **P. S. Mukherjee**
Chem. Commun. **2011**, *47*, 12137.
84. Two new chains of Ni₂Na₂ heterometallic double half-cubane building units: synthesis, structures and magnetic behavior
K. C. Mondal, B. Gole, Y. Song, D. Turner, **P. S. Mukherjee**
J. Chem. Sci. **2011**, 807.
83. Self-assembly using a new new dinuclear organometallic acceptor: synthesis, characterization and sensing study
S. Shanmugamraju, S. A. Joshi, **P. S. Mukherjee**
Inorg. Chem. **2011**, *50*, 11736.
82. Coordination-driven self-assembly of 2D-metallamacrocycles using a shape-selective Pt^{II}₂-organometallic 90° acceptor: design, synthesis and nitroaromatic sensing
S. Shanmugamraju, S. A. Joshi, D. Samanta and **P. S. Mukherjee**
Dalton Trans. **2011**, *40*, 12333.
(Invited Article for a special issue on Molecular Self-Assembly)
81. Supramolecular coordination: Self-assembly of finite 2D and 3D ensembles
R. Chakrabarty, **P. S. Mukherjee**, P. J. Stang
Chem. Rev. **2011**, *111*, 6810.
80. Supramolecular polymer for sensing: role of H-bonding in enhancement of sensitivity in solid state
B. Gole, S. Shanmugaraju, A. K. Bar and **P. S. Mukherjee**
Chem. Commun. **2011**, *47*, 10046.
79. Fluorescence and visual sensing of nitro-aromatic using electron rich discrete fluorophores
S. Shanmugamraju, S. A. Joshi and **P. S. Mukherjee**
J. Mater. Chem. **2011**, 9130.
78. Synthesis, structures and magnetic behavior of a series of Cu^{II}-azide polymers of Cu₄ building clusters and isolation of a new hemiaminal ether as metal complex
S. Mukherjee, B. Gole, Y. Song and **P. S. Mukherjee**

- Inorg. Chem.* **2011**, *50*, 3621.
77. Self-assembly of molecular squares using metal based acceptor: synthesis and application in sensing of nitroaromatics
V. Vajpayee, H. Kim, A. Mishra, **P. S. Mukherjee**, P. J. Stang, M. H. Lee, K. W. Chi
Dalton Trans. **2011**, *40*, 3112.
76. Coordination driven self-assembly of metallamacrocycles using ambidentate linkers and self-selection of single linkage isomer
A. K. Bar, R. Chakrabarty and **P. S. Mukherjee**
Inorg. Chim. Acta. **2011**, *372*, 313. (Invited article for a special issue).
75. Constructions of 2D-Metallamacrocycles Using Half-Sandwich Ru^{II}₂ Precursors: Synthesis, Molecular Structures and Self-Selection for a Single Linkage Isomer
S. Shanmugamraju, A. K. Bar, S. Joshi, J. Patil and **P. S. Mukherjee**
Organometallics, **2011**, *30*, 1951.
74. Self-assembly of Pd(II) neutral and cationic rectangles: syntheses, characterizations and nitroaromatics sensing
A. K. Bar, S. Shanmugamraju, K. Chi and **P. S. Mukherjee**
Dalton Trans. **2011**, *40*, 2257. (Invited article for a themed issue: New Talent from Asia).
73. Coordination driven self-assembly of M₃L₂ trigonal cages from preorganized metalloligands containing octahedral metal centers and fluorescent detection of nitroaromatics
W. Ming, V. Vajpayee, S. Shanmugamraju, **P. S. Mukherjee**, K. Chi, and P. J. Stang
Inorg. Chem. **2011**, *50*, 1506.
72. Ru-O bond directed self-assembly of a Ru₈ incomplete prism: Synthesis, structure and shape selective molecular recognition study
S. Shanmugamraju, A. K. Bar and **P. S. Mukherjee**
Inorg. Chem. **2010**, *49*, 10235.
71. A series of Cu-azido polymers of Cu₆ building units and the role of chelating diamine in controlling their dimensionality: Synthesis, structures and magnetic behavior
S. Mukherjee and **P. S. Mukherjee**
Inorg. Chem. **2010**, *49*, 10658.
70. Synthesis, crystal structures and magnetic behavior of two 3D coordination polymers using *N*-(4/3-carboxyphenyl)iminodiacetic acids as bridging ligands
O. Sengupta, B. Gole and **P. S. Mukherjee**
Polyhedron, **2010**, *29*, 2945.

69. A Pd₆ Molecular cage via multicomponent self-assembly incorporating both neutral and anionic linkers
A. K. Bar, G. Mostafa, and **P. S. Mukherjee**
Inorg. Chem. **2010**, *49*, 7647.
68. Tetrazole bridged multiferroic coordination polymers: Synthesis, structures and magnetic behavior
O. Sengupta, and **P. S. Mukherjee**
Inorg. Chem. **2010**, *49*, 8583.
67. Coordination driven self-assembly of metallamacrocycles via a new organometallic building block with 90° geometry and optical sensing of anions
S. Shanmugamraju, A. K. Bar, K-W. Chi and **P. S. Mukherjee**
Organometallics, **2010**, *29*, 2971.
66. Use of 2-pyrimidineamidooxime to generate polynuclear homo-/heteronuclear assemblies: synthesis, structure and magnetism
B. Gole, S. Mukherjee, Y. Song, and **P. S. Mukherjee**
Dalton Trans. **2010**, 9766.
65. A series of transition metal-azido extended complexes with various anionic and neutral co-ligands
O. Sengupta, B. Gole and **P. S. Mukherjee**
Dalton Trans. **2010**, 7451.
64. Synthesis, crystal structures and magnetic behavior of two 3D coordination polymers using N-(4/3-carboxyphenyl)iminodiacetic acids as bridging ligands
O. Sengupta, B. Gole, and **P. S. Mukherjee**
Inorg. Chim. Acta, **2010**, 3093.
63. Cu(II)-azido polymers of Cu₃ and Cu₆ building units: synthesis, structures and magnetic exchange mechanism
S. Mukherjee, B. Gole, R. Chakrabarty, and **P. S. Mukherjee**
Inorg. Chem. **2009**, *48*, 11325.
62. Co(II) and Cr(III) complexes of formate-formamide mixed ligands: synthesis, structures, single crystal-to-single crystal transformation and magnetic behaviour
O. Sengupta, Y. Song, and **P. S. Mukherjee**
Dalton Trans. **2009**, 10343.
61. Self-assembly of a Pd₆ Molecular Double-Square and a Cu₃-TBP cage via a New Tripodal Flexible Ligand
A. K. Bar, R. Chakrabarty, and **P. S. Mukherjee**
Inorg. Chem. **2009**, *48*, 10880.

60. Three-component assembly of a metal-inorganic 3D coordination polymer of Co(II) containing bridging hydrazine: observation of spin-canting behavior
O. Sengupta and **P. S. Mukherjee**
Dalton Trans. **2009**, 7599.
59. Design and synthesis of fluorescent molecular prism via Pt₃ organometallic acceptors and a Pt₂ clip
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