



# Sarat Centenary College, Dhaniakhali, Hooghly, WB



## Teacher Profile

<b>Name:</b> Dr. SANJOY MONDAL	
<b>Designation:</b> Assistant Professor	
<b>Department:</b> Chemistry	
<b>Academic Qualifications:</b> M.Sc., Ph.D.	
<b>Contact information:</b> sanjoy.iacs.ind@gmail.com	

<b>Date of joining</b>	11 <sup>th</sup> November, 2020
<b>Specialization</b>	Polymer Chemistry & Energy Application
<b>Teaching Interest</b>	Organic Chemistry, Physical Chemistry, Polymer Chemistry
<b>Research Experience</b>	i) Indian Association for the Cultivation of Science (IACS), (Ph.D., 5 years) ii) National Institute for Materials Science, JAPAN (Postdoc, 3 years+) iii) Sunchan National University, South Korea (Postdoc, 2 months) iv) IIT Bhubaneswar (Research Associate, 6 months)
<b>Award/Fellowship</b>	a) CSIR-2011 (JRF and SRF) award (All India Rank: CSIR-37) b) GATE-201111 c) Best poster award in MACRO-13, IISc. Bangalore
<b>Membership</b>	Chemical Society of Japan (CSJ), Society of Polymer Science Japan (SPSJ)

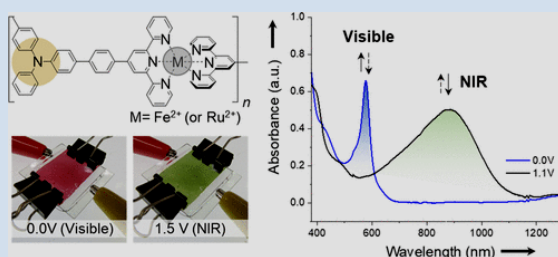
**Research Interest:** (1) Conducting Polymer for Energy storage,  
(2) Metallo-supramolecular Polymer for Electrochromism

**Research Experience:** 5 (Ph.D.) +3 (Postdoc) years

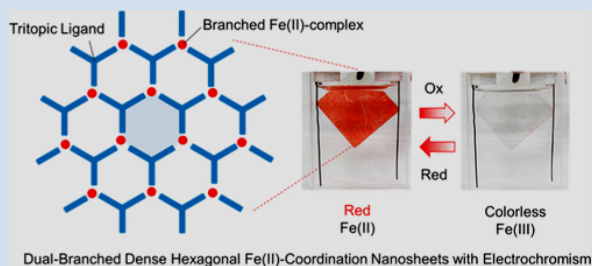
<b>Seminar/ workshop participation</b>	<b>Presented paper</b>		<b>Attended</b>		<b>Chair Session</b>	
	<b>National</b>	<b>International</b>	<b>National</b>	<b>International</b>	<b>National</b>	<b>International</b>
	03	21	03	21		
<b>Publications</b>	<b>Journal Articles</b>		<b>Book/Book Chapter</b>			
	19		4			

### List of Selected Publication

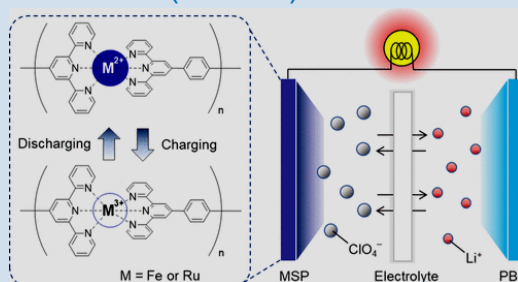
[1] Sanjoy Mondal, D. C. Santra, Y. Ninomiya, T. Yoshida, and M. Higuchi, "Dual-Redox System of Metallo-Supramolecular Polymers for Visible-to-Near-IR Modulable Electrochromism and Durable Device Fabrication", *ACS Appl. Mater. Interfaces* **2020**, *12*, 58277–58286, (IF= 8.75)



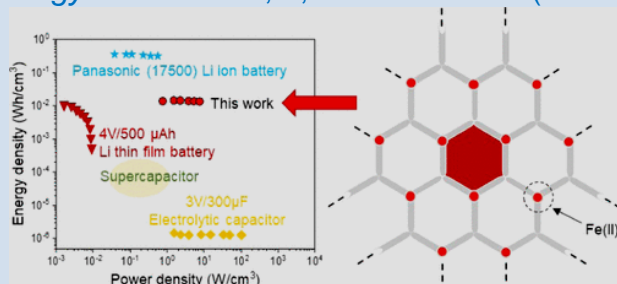
- [2] [Sanjoy Mondal](#), Y. Ninomiya, T. Yoshida, T. Mori, M. K. Bera, K. Ariga, and M. Higuchi, "Dual-Branched Dense Hexagonal Fe(II)-Based Coordination Nanosheets with Red-to-Colorless Electrochromism and Durable Device Fabrication", *ACS Appl. Mater. Interfaces* **2020**, *12*, 31896–31903. (IF= 8.75).



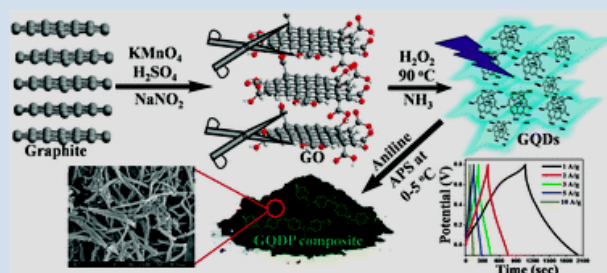
- [3] [Sanjoy Mondal](#), T. Yoshida, S. Maji, K. Ariga, and M. Higuchi, "Transparent Supercapacitor Display with Redox-Active Metallo-Supramolecular Polymer Films", *ACS Appl. Mater. Interfaces* **2020**, *12*, 16342–16349. (IF=8.75)



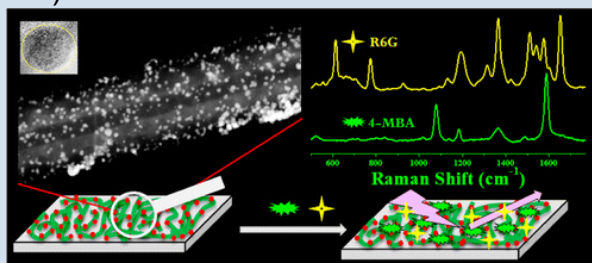
- [4] [Sanjoy Mondal](#), Y. Ninomiya, and M. Higuchi, "Durable Supercapattery Film with Dual-Branched Dense Hexagonal Fe(II)-Based Coordination Nanosheets for Flexible Power Sources", *ACS Appl. Energy Mater.* **2020**, *3*, 10653–10659. (IF=4.47).



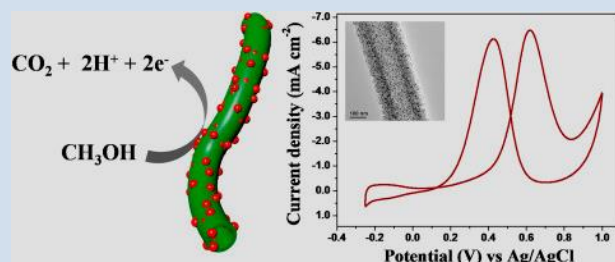
- [5] [Sanjoy Mondal](#), U. Rana and S. Malik, Graphene Quantum Dots doped Polyaniline Nanofiber as High Performance Supercapacitor Electrode Materials, *Chem. Comm.*, **2015**, *51*, 12365. (IF= 5.99) (Hot *Chem. Comm.* articles for June).



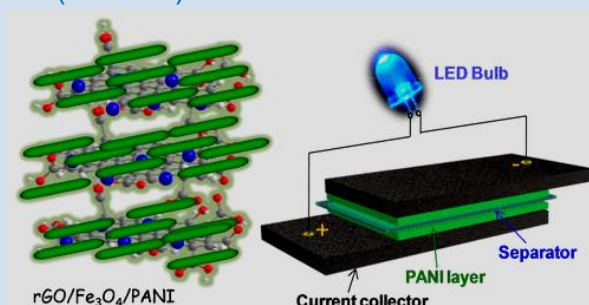
- [6] [Sanjoy Mondal](#), U. Rana and S. Malik, "Facile Decoration of Polyaniline Fiber with Ag Nanoparticles for Recyclable SERS Substrate", *ACS Appl. Mater. Interfaces*, **2015**, *7*, 10457 ISSN: 1944-8252 (IF=8.75).



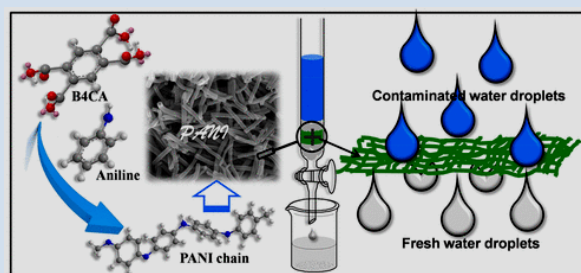
- [7] Sanjoy Mondal and Sudip Malik, "Easy Synthesis Approach of Pt-nanoparticles on Polyaniline Surface: An Efficient Electro-catalyst for Methanol Oxidation Reaction", *J. Power Sources*, **2016**, 328, 271. (IF=8.2).



- [8] Sanjoy Mondal, T. Yoshida, U. Rana, M. K. Bera and Masayoshi Higuchi, Thermally stable electrochromic devices using Fe(II)-based metallo-supramolecular polymer, *Sol. Energy Mater. Sol. Cells*, **2019**, 200, 110000. (IF=6.019).
- [9] Sanjoy Mondal, U. Rana and Sudip Malik, "Reduced Graphene Oxide/Fe<sub>3</sub>O<sub>4</sub>/Polyaniline Nanostructures as Electrode Materials for an All-Solid-State Hybrid Supercapacitor", *J. Phys. Chem. C*, **2017**, 121, 7573. (IF=4.18)



- [10] Sanjoy Mondal, T. Yoshida, Masayoshi Higuchi, Electrochromic devices using Fe(II)-based metallo-supramolecular polymer: introduction of ionic liquid as electrolyte to enhance the thermal stability, *J. Soc. Inf. Display*, **2019**, 27, 661–666. (IF=1.6).
- [11] Sanjoy Mondal, U. Rana and Sudip Malik, Network of Polyaniline Nanotubes for Wastewater Treatment and Oil/Water Separation, *ACS Appl. Poly. Mater.*, **2019**, 1, 1624.



- [12] Sanjoy Mondal, U. Rana, R. R. Bhattacharya and S. Malik, One Pot Green Synthesis of Polyaniline Coated Gold Nanorods and its Applications, *RSC Adv.*, **2014**, 4, 57282 (IF=3.07).(Most read article),
- [13] U. Rana, Sanjoy Mondal, J. Sannigrahi, P. K. Sukul, Md. A. Amin, S. Majumdar and S. Malik, Aromatic Bi-, Tri- and Tetracarboxylic Acid doped Polyaniline Nanotubes: Effect of Morphology and Electrical Transport Properties, *J. Mater. Chem. C*, **2014**, 2, 3382. (IF=7.05)
- [14] A. Roy, Sanjoy Mondal, A. Halder, A. Banerjee, D. Ghoshal, A. Paul, Sudip Malik, Benzimidazole linked arylimide based covalent organic framework as gas adsorbing and electrode materials for supercapacitor application, *Euro. Poly. J.*, **2017**, 93, 448. (IF=3.88).
- [15] D. C. Santra, Sanjoy Mondal and S. Malik, Design of Triphenylamine Appended Anthracene Derivatives: Electro-polymerization and their Electro-chromic Behaviours, *RSC Adv.*, **2016**, 6, 81597. (IF= 3.07).

- [16] U. Rana, N. D. Paul, Sanjoy Mondal, C. Chakraborty and S. Malik, Water Soluble Polyaniline Coated Electrode: A Simple and Nimble Electrochemical Approach for Ascorbic Acid Detection, *Synth. Met.*, **2014**, *192*, 43. (IF=2.52).
- [17] YSLV Narayana, T Yoshida, M.K. Bera, Sanjoy Mondal, M Higuchi, Ni (II)-Based Metallosupramolecular Polymer with Carboxylic Acid Groups: A Stable Platform for Smooth Imidazole Loading and the Anhydrous Proton Channel Formation, *ACS Omega* **2020**, *5*, 24, 14796–14804. (IF=2.87).
- [18] T. Yoshida, M.K. Bera, Y. S. L. V. Narayana, Sanjoy Mondal, Hitoshi Abe Masayoshi Higuchi, Electrochromic Os-Based Metallo-supramolecular Polymers: Electronic State Tracking by In-situ XAFS, IR, and Impedance Spectroscopies, *RSC Adv.*, **2020**, *10*, 24691–24696, (IF= 3.07).
- [19] Md. D. Hossain, C. Chakraborty, U. Rana, Sanjoy Mondal, H.-J. Holdt, and M. Higuchi, Green-to-Black Electrochromic Copper(I)-Based Metallo-Supramolecular Polymer with a Perpendicularly Twisted Structure, *ACS Appl. Polym. Mater.* **2020**, *11*, 4449–4454.

### Book Chapters

1. U. Rana, Sanjoy Mondal and S. Malik, *Conjugated Polymer Nanostructure: Synthesis and Application*, Pan Stanford Publishing Pte. Ltd., ISBN: 978-1-315-22962-1.
2. Sanjoy Mondal, U. Rana *Polyaniline Nanostructures for Energy Storage Applications*. Arcler Publishing House, Canada, ISBN: 978-1-77361-539-4
3. S. Dhivar, P. Das, Sanjoy Mondal, U. Rana, S. Malik, *Conjugated Polymer Based Nanocomposites as Electrode Materials*, Wiley-VCH, 2021
4. Sanjoy Mondal, *Graphene-based Materials for Energy Storage Applications*, Arcler Publishing House, Canada (submitted)

### Oral presentations

1. **Invited Talk** on “*Electrochromism and Electrochromic Device*” at Bankura University, WB, India, August 2020.
2. **Oral presentation** on “Metallo-Supramolecular Polymer for Electrochromic Energy Storage Materials” CSJ, Kobe, 2019
3. **Oral presentation** on Design and Fabrication of Thermally Stable Electrochromic Device. The 25th International Display Workshops. 2018
4. **Poster presentation** on *Thermally Stable Electrochromic Devices with Metallo-Supramolecular Polymer*. 43rd International Conference on Coordination Chemistry (ICCC). 2018
5. **Oral presentation** on *Investigation of Electrochromic Device Structure with Metallo-Supramolecular Polymer*. 68th Symposium on Complex Chemistry. 2018
6. **Oral presentation** on “*Thermally Stable Electrochromic Devices with Metallo-Supramolecular Polymer*” in 67<sup>th</sup> SPSJ Annual Meeting 2018 at Nagoya Congress Centre, Nagoya, 23<sup>rd</sup> May 2018.
7. **Oral presentation** on “*High Performance Supercapacitor Device based on Polyaniline Nanostructures*” in YSC-MRSI-2016 at S. N. Bose National Centre for Basic Sciences, India, 16<sup>th</sup> September 2016.
8. **Oral presentation** on “*Facile Synthesis of Polyaniline/Ag Nanocomposite and its Applications*”, in IIMR-15 at CGCRI-CSIR, Jadavpur, Kolkata, India, 11<sup>th</sup> July, 2015.
9. **Oral presentation** on “*Graphene oxide/polyaniline nanostructures: transformation of 2D sheet to 1D nanotube and in situ reduction*”, in 3<sup>rd</sup> FAPS POLYMER CONGRESS and MACRO-2013, at IISc. Bangalore, India, 15-18 May 2013.

**RESEARCH PROJECT/COLLABORATION/GUIDANCE:**

**ANY OTHER INFORMATION/ADDITIONAL RESPONSIBILITY:**