



Sl. No. as per joining seniority in the
Department- 2

Please Give \checkmark Mark

Full time Teaching Staff	\checkmark
SACT	

1. **Name (in BLOCK CAPITAL letter):** DR. MD MONIRUZZAMAN SK
2. **Educational Qualification** : M.Sc, M.Tech, PhD
3. **Designation** : Assistant Professor
4. **Department** : Chemistry
5. **Email id** : skmm.ntu@gmail.com

6. Profile

Dr. Md Moniruzzaman Sk joined the Krishnagar Women's College in 2020 as an Assistant Professor in the department of chemistry. He obtained his B.Sc. and M.Sc. degree in chemistry (organic chemistry specialization) from the Aligarh Muslim University (AMU) in 2005 and 2007, respectively. He has qualified CSIR-NET(JRF) and GATE in 2008 in chemical sciences. He did M.Tech. from the Indian Institute of Technology (IIT), Kharagpur in 2010 in materials science (polymer). In 2015, he obtained his PhD degree from the Nanyang Technological University (NTU), Singapore in materials science (organic energy storage materials). From 2014 to 2020, he was appointed as a postdoctoral fellow in the NTU where from 2017 to 2020 he served as a group leader. During post-doctoral research works, he worked on nanomaterials for energy storage applications and biomaterials for biomedical applications in collaboration of various institutes in Singapore and USA. He has 18 international publications in various reputed journals.

7. Research Activities:

a. **Projects Completed** : Nil

b. **Research Guidance** : Nil

c. **Publications (Till date):**

- i. **Md Moniruzzaman Sk** and Chee Yoon Yue, Synthesis of polyaniline nanotubes using the self-assembly behavior of vitamin C: a mechanistic study and application in electrochemical supercapacitors, *Journal of Materials Chemistry A*, 2014, 2, 2830-2838.
- ii. **Md Moniruzzaman Sk**, Chee Yoon Yue and Rajeeb Kumar Jena, Facile growth of heparin-controlled porous polyaniline nanofiber networks and their application in supercapacitors, *RSC Advances*, 2014, 4, 5188-5197.
- iii. **Md Moniruzzaman Sk**, Chee Yoon Yue and Rajeeb Kumar Jena, Synthesis of graphene/vitamin C template-controlled polyaniline nanotubes composite for high performance supercapacitor electrode, *Polymer*, 2014, 55, 798-805.
- iv. **Md Moniruzzaman Sk**, Chee Yoon Yue, Rajeeb Kumar Jena and Kalyan Ghosh, Review on advances in porous nanostructured nickel oxides and their composite electrodes for high-performance supercapacitors, *Journal Power Sources*, 2016, 308, 121-140.
- v. **Md Moniruzzaman Sk** and Chee Yoon Yue, Layer-by-layer (LBL) assembly of graphene with p-phenylenediamine (PPD) spacer for high performance supercapacitor applications, *RSC Advances*, 2014, 4, 19908-19915.

- vi. Kalyan Ghosh, Chee Yoon Yue, **Md Moniruzzaman Sk**, Rajeeb Kumar Jena, Development of 3D Urchin-Shaped Coaxial Manganese Dioxide@Polyaniline (MnO₂@PANI) Composite and Self-Assembled 3D Pillared Graphene Foam for Asymmetric All-Solid-State Flexible Supercapacitor Application, *ACS Applied Materials & Interfaces*, 2017, 9, 15350-15363.
- vii. Suresh Kumar Raman Pillai, Jing Wang, Yilei Wang, **Md Moniruzzaman Sk**, Ari Bimo Prakoso, Rusli and Mary B. Chan-Park, Totally embedded hybrid thin films of carbon nanotubes and silver nanowires as flat homogenous flexible transparent conductors, *Scientific Report*, 2016, 6, 38453.
- viii. Rajeeb Kumar Jena, Chee Yoon Yue, **Md Moniruzzaman Sk** and Kalyan Ghosh, A novel high performance poly (2-methyl thioaniline) based composite electrode for supercapacitors application, *Carbon*, 2016, 115, 175-187.
- ix. Kalyan Ghosh, Chee Yoon Yue, **Md Moniruzzaman Sk**, Rajeeb Kumar Jena, Shuguang Bi, Development of a 3D graphene aerogel and 3D porous graphene/MnO₂@ polyaniline hybrid film for all-solid-state flexible asymmetric supercapacitors, *Sustainable Energy & Fuels*, 2018, 2, 280-293.
- x. Debasish Ghosh, Soumen Giri, **Md Moniruzzaman Sk**, Tanya Das, Manas Mandal and Chapal Kumar Das, A MnMoO₄/graphene hybrid composite: high energy density supercapacitor electrode material, *Dalton Transactions*, 2014,43, 11067-11076.
- xi. Rajeeb Kumar Jena, Chee Yoon Yue, **Md Moniruzzaman Sk** and Kalyan Ghosh, A novel high performance bismaleimide/diallyl bisphenol A (BMI/DBA)-epoxy interpenetrating network resin for rigid riser application, *RSC Advances*, 2015, 5, 79888-79897.
- xii. **Md Moniruzzaman Sk**, Chee Yoon Yue and Rajeeb Kumar Jena, Non-covalent interactions and supercapacitance of pseudo-capacitive composite electrode materials (MWCNTCOOH/MnO₂/PANI), *Synthetic Metals*, 2015, 208, 2-12.
- xiii. **Md Moniruzzaman Sk** and Chee Yoon Yue, Synthesis of graphene/heparin template-controlled polyaniline nanofibers composite for high performance supercapacitor electrode, *Materials Research Express*, 2014, 1, 4505.
- xiv. **Md Moniruzzaman Sk**, Sumanta Sahoo, Debasish Ghosh, Chapal Kumar Das, R. Singh, Preparation and characterization of polypyrrole/modified multiwalled carbon nanotube nanocomposites polymerized in situ in the presence of barium titanate. *Journal of Applied Polymer Science*, 2013, 128, 698-705.
- xv. **Md Moniruzzaman Sk**, Chapal Kumar Das, Preparation and characterization of in situ polymerized nanocomposites based on polyaniline in presence of MWCNTs, *Macromolecular Symposia*, 2010, 298, 34-42.
- xvi. **Md Moniruzzaman Sk**, Prativa Das, Amit Panwar, Lay Poh Tan, Synthesis and characterization of site selective photo-crosslinkable glycidyl methacrylate functionalized gelatin-based 3D hydrogel scaffold for liver tissue engineering, *Materials Science and Engineering: C*, 2021, 123, 111694.
- xvii. Amit Panwar, **Md Moniruzzaman Sk**, Bae Hoon Lee and Lay Poh Tan, Synthesis and fabrication of gelatin-based elastomeric hydrogels through cosolvent-induced polymer restructuring, *RSC Advances*, 2022, 12, 7922.
- xviii. **Md Moniruzzaman Sk**, Prabhanjan Pradhan, Biplab Kumar Patra, and Amit Kumar Guria, Green biomass derived porous carbon materials for electrical double-layer capacitors (EDLCs), *Materials Today Chemistry*, 2023, 30, 101582.

Program attended

- Participated in Professional Development Program for Faculty Members held on 12th September, 2020 organized by IQAC, Krishnagar Women's College.
- Participated in the COVID Pandemic Awareness Program held on 15th July 2021, organized by the COVID Care Committee, Krishnagar Women's College.

Academic Post

- Head of the Department, Department of Chemistry

Association with college's subcommittees

- Research and Development committee (Joint Convenor)
- Building committee (College fund/RUSU/State Govt. Fund/UGC) (Joint Convenor)
- Examination Committee (University and External Examinations) (Member)
- Games and Sports Committee (Member)
- ICT and Website Maintenance committee (Member)
- Career Counselling committee (Member)
- Library committee (Member as HoD)
- Student Support and Progression Subcommittee (Member as HoD)