

DR. RITAM MUKHERJEE

Assistant Professor of Chemistry

Overview:

Teacher of Chemistry with an aim to instil the philosophy of modern science into my students

Date of appointment to the present job: 23rd March 2015

Academic background:

Completed B.Sc. (Hons) and M.Sc. in Chemistry from the University of Calcutta and obtained Ph.D. from Jadavpur University. Specialized in Inorganic Chemistry

Information about M Phil/Ph D etc.:

- PhD Topic:** Mechanistic Studies on Transition Metal Complexes

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

- Research interest:** Theoretical simulation of reaction kinetics and dynamics

Publications:

- Oxidation of iodide with a mononuclear manganese(IV) complex ion: Mechanistic investigation of autocatalytic behaviour:** Sarvejit Kumar Chandrabanshi, Subrata Mukhopadhyay and Ritam Mukherjee; *Polyhedron* 2020, **187**, 114664
(<https://doi.org/10.1016/j.poly.2020.114664>)
- Electron transfer. Part 169 [1]. Delayed reduction of mononuclear manganese(IV) using vanadium(III) :** Basab Biyyaji Dhar, Ritam Mukherjee and Edwin S. Gould; *Inorganica Chimica Acta* 2011, **365**, 232 - 234.
(<https://doi.org/10.1016/j.ica.2010.09.019>)
- Reactions of aquatitanium(II) with hypervalent chromium species:** Basab Biyyaji Dhar, Ritam Mukherjee and Edwin S. Gould; *Dalton Transactions* 2009, (5), 868-871.
(<https://doi.org/10.1039/B815582H>)
- Electron transfer. Part 165. Oxidations of Ti(II) (aq) with ligated iron (III) and ruthenium (III):** Ritam Mukherjee, V. Manivannan and Edwin S. Gould; *Inorganica Chimica Acta* 2007, **360** (11), 3633-3636.
(<https://doi.org/10.1016/j.ica.2007.01.026>)
- Reductions by titanium(II) as catalyzed by titanium(IV):** Ritam Mukherjee, Zhiyong Yang and Edwin S. Gould; *Dalton Transactions* 2006, (6), 772 – 774.
(<https://doi.org/10.1039/B510212J>)
- Electron transfer between ascorbic acid and a (μ -oxo) diiron(III, III) complex : an example of chloride inhibition:** Ritam Mukherjee, B. B. Dhar, R. Banerjee; *Polyhedron* 2006, **25**, 1367-1372.
(<https://doi.org/10.1016/j.poly.2005.09.014>)

- ❑ **Kinetics of oxidation of phenylhydrazine by a (μ -oxo) diiron(III,III) complex in acidic aqueous media:** Ritam Mukherjee, Basab Bijayi Dhar, Rupendranath Banerjee and Subrata Mukhopadhyay; *Journal of Coordination Chemistry* 2006, **59**, 1157-1165.
(<https://doi.org/10.1080/00958970500410614>)

- ❑ **Kinetics and mechanism of oxidation of iodide with a (μ -oxo)diiron(III) complex in weakly acidic media:** Ritam Mukherjee, B. B. Dhar, R. Banerjee; *International Journal of Chemical Kinetics* 2005, **37**, 737 – 743.
(<https://doi.org/10.1002/kin.20125>)

- ❑ **Mechanistic Studies on the Oxidation of Hydrazine by tris(biguanide) manganese(IV) in Aqueous Acidic Media:** B. B. Dhar, Ritam Mukherjee, S. Mukhopadhyay, R. Banerjee; *Helvetica Chimica Acta* 2005, **88**, 2294 – 2301.
(<https://doi.org/10.1002/hlca.200590164>)

- ❑ **Mechanistic investigation of the oxidation of glyoxylic and pyruvic acids by tris(biguanide) manganese(IV) in weakly acidic aqueous media:** B. B. Dhar, Ritam Mukherjee, S. Mukhopadhyay, R. Banerjee; *European Journal of Inorganic Chemistry* 2004, 4854-4858.
(<https://doi.org/10.1002/ejic.200400547>)

- ❑ **Kinetics and mechanism of oxidation of Fe²⁺ by tris(biguanide) manganese(IV) ion in aqueous acid media:** B. B. Dhar, Ritam Mukherjee, S. Mukhopadhyay, R. Banerjee; *European Journal of Inorganic Chemistry* 2004, 2950-2955.
(<https://doi.org/10.1002/ejic.200300887>)

Books and Chapters:

Participated in syllabus preparation and wrote three chapters of study material for Higher Secondary level Chemistry course for the West Bengal State Open School.

Seminars, Webinars and Conferences attended:

- ❑ Presented paper in “National Conference on Future India: Science and Technology” organized by City College, Kolkata and Indian Science Congress Association, Kolkata chapter, February 27th -28th, 2019.

- ❑ Presented poster in the “38th ACS Central Regional Meeting 2006” organized by the American Chemical Society. May 17th – 18th, 2006; Frankenmuth, Michigan, USA.

Life Membership

Fellow of Indian Chemical Society