

Curriculum vitae

Dr. Kankan Kumar Maity, M. Sc., Ph. D.

Josadombur, Naikuri, Tamluk, Purba Medinipur, 721630.

Ph. No. 09735210755, 09614605271

e-mail ID: maity.kankankumar@gmail.com



SUMMARY

Biological organic chemist with rich experience in isolation, purification and structure determination of the polysaccharides from plant and mushrooms.

- Expertise in determination of the structure of the polysaccharide by chemical methods.
 - Expertise in NMR data analysis.
 - Experience in synthesis of silver and gold nanoparticles with the polysaccharides.
-

RESEARCH EXPERIENCE

Doctoral Studies (with Dr. S. S. Islam)

Dec-2008 to June, 2014.

Department of Chemistry & Chemical Technology, Vidyasagar University, Midnapore, West Bengal, India.

I have completed my Ph.D. on structural characterization and study of immunoactivation of the polysaccharides isolated from different plant and mushrooms. The title of my thesis is “**Studies on Bioactive Polysaccharides from Mushroom and Plant**”. My Ph.D. work is based upon the following matters.

- Isolation and purification of polysaccharide: I have isolated and purified five different polysaccharides from one plant and two different mushrooms. The polysaccharides have some immunoenhancing properties.
 - Structure determination: The structures of the polysaccharides had been characterized by various chemical methods and also by some typical 1D and 2D NMR studies.
 - Nanoparticle synthesis: I have synthesized silver and gold nanoparticles of one of the polysaccharide which have antimicrobial activity also.
-

TEACHING EXPERIENCE

- Working as Government Approved Part-Time Teacher at Haldia Government College in Chemistry from August, 08 to till now. [B.Sc. and M. Sc. (Chemistry)].
- Worked as Part-Time Teacher at Panskura Banamali College in Chemistry from Sep-2007 to Dec-2008. [Courses teaching: B.Sc. (Honours and General)].

- Worked as External Examiner for B.Sc. (Hons) Practical Exam at Kharagpur College under Netaji Subhas Open University on 2011 & 2012.
-

TECHNICAL SKILLS AND ACHIEVEMENTS:

- Working knowledge of Polarimeter, UV/VIS, GPC, GC, GC-MS, IR, 1D and 2D NMR spectra.
 - Synthesis of nanoparticles and their analysis by XRD, TEM, SEM, UV/VIS, IR spectra.
 - Familiarized with SciFinder, Scopus, Chemdraw, Origin etc.
 - Qualified UGC-NET LS (June- 2007, June- 2008)
-

EDUCATION:

- **Ph.D. (in biological organic chemistry)** **2008-2014**
(Vidyasagar University)
 - **M. Sc. (Chemistry)** **2005-2007**
(Pandit Ravishankar Shukla University, Raipur)
 - **B. Sc. (Chemistry Honours)** **2000-2004**
(Tamralipta Mahavidyalaya, Vidyasagar University)
-

CONFERENCE AND PRESENTATIONS:

- National Symposium on “**Frontiers in Chemical Sciences**” at Vidyasagar University, Feb-2009.
- International seminar on “**Higher Education and Employability**” at Vidyasagar University, Feb-2009.
- National Symposium on “**Frontiers in Chemical Sciences**” at Vidyasagar University, March-2010.
- International seminar on “**Renovation and Rejuvenation of Higher Education and Research across the Disciplines**” at Vidyasagar University, March-2010.
- Conference on “**Molecules to Materials**” at Haldia Government College, March-2011.
- National Seminar on “**Useful and Harmful Effects of Polymers in Our Society**”. At Garhbeta College, Nov-2011.
- Poster presentation: “**A heteropolysaccharide from alkaline extract of a somatic hybrid of *Pleurotus florida* and *Volvariella volvacea*: structural and biological studies**” at the International Symposium on “**Frontiers in Chemical Sciences**” at Vidyasagar University, March-2012.

PUBLICATIONS:

1. A heteropolysaccharide from aqueous extract of an edible mushroom, *Pleurotus ostreatus* cultivar: structural and biological studies.
Kankan K. Maity, S. Patra, B. Dey, S. K. Bhunia, S. Mandal, D. Das, D. K. Majumdar, S., Maiti, T. K. Maiti, S. S. Islam.* (*Carbohydrate Research*, 346, 2011, 366–372.)
2. A β -glucan from the alkaline extract of a somatic hybrid (*PfloVv5FB*) of *Pleurotus florida* and *Volvariella volvacea*: structural characterization and study of immunoactivation.
Kankan K. Maity, S. Patra, B. Dey, S. K. Bhunia, S. Mandal, B. Bahera, T. K. Maiti, S.R. Sikdar, S.S. Islam.* (*Carbohydrate Research*, 370, 2013, 13-18).
3. Structural characterization of an immunoenhancing heteropolysaccharide isolated from hot water extract of the fresh leaves of *Catharanthus rosea*.
S. Patra, **Kankan K. Maity**, S. K. Bhunia, B. Dey, D. Das, S. Mondal, B. Bhunia, T. K. Maiti, S. S. Islam.* (*Carbohydrate Polymers*, 81, 2010, 584–591)
4. Structural characterization and study of immunoenhancing properties of heteroglycan isolated from a somatic hybrid mushroom (*PfloVv1aFB*) of *Pleurotus florida* and *Volvariella volvacea*.
S. Patra, **Kankan K. Maity**, S. K. Bhunia, B. Dey, S. Mandal, T. K. Maiti, S. R. Sikdar, S. S. Islam.* (*Carbohydrate Research*, 346, 2011, 1967–1972)
5. Chemical analysis of new water-soluble (1 \rightarrow 6)-, (1 \rightarrow 4)-a, b-glucan and water-insoluble (1 \rightarrow 3)-, (1 \rightarrow 4)-b-glucan (Calocyban) from alkaline extract of an edible mushroom, *Calocybe indica* (Dudh Chattu).
S. Mandal, **Kankan K. Maity**, S. K. Bhunia, B. Dey, S. Patra, S. R. Sikdar, S. S. Islam.* (*Carbohydrate Research*, 345, 2010, 2657–2663)
6. Structural characterization of an immunoenhancing heteroglycan isolated from an aqueous extract of an edible mushroom, *Lentinus squarrosulus* (Mont.) Singer.
S. K. Bhunia, B. Dey, **Kankan K. Maity**, S. Patra, S. Mandal, S. Maiti, T. K. Maiti, S. R. Sikdar, S. S. Islam.* (*Carbohydrate Research*, 345, 2010, 2542–2549)
7. Chemical analysis of an immunoenhancing water-soluble polysaccharide of an edible mushroom, *Pleurotus florida* blue variant.
B. Dey, S. K. Bhunia, **Kankan K. Maity**, S. Patra, S. Mandal, S. Maiti, T. K. Maiti, S. R. Sikdar, S. S. Islam.* (*Carbohydrate Research*, 345, 2010, 2736–2741)
8. Glucans of *Pleurotus florida* blue variant: Isolation, purification, characterization and immunological studies.
B. Dey, S. K. Bhunia, **Kankan K. Maity**, S. Patra, S. Mandal, S. Maiti, T. K. Maiti, S. R. Sikdar, S. S. Islam.* (*International Journal of Biological Macromolecules*, 50, 2012, 591–597)
9. Heteroglycan from an alkaline extract of a somatic hybrid mushroom (*PfloVv1aFB*) of *Pleurotus florida* and *Volvariella volvacea*: structural characterization and study of immunoenhancing properties.
S. K. Bhunia, B. Dey, **Kankan K. Maity**, S. Patra, S. Mandal, S. Maiti, T. K. Maiti, S. R. Sikdar, S. S. Islam.* (*Carbohydrate Research*, 354, 2012, 110–115)
10. Structure and immunology of a heteroglycan from somatic hybrid mushroom of *Pleurotus florida* and *Calocybe indica* var. APK2.

- B. Dey, S. K. Bhunia, **Kankan K. Maity**, S. Patra, S. Mandal, B. Bahera, T. K. Maiti, S. R. Sikdar, S. S. Islam.* (*International Journal of Biological Macromolecules*, 52, 2013, 312–318)
11. A heteroglycan from the mycelia of *Pleurotus ostreatus*: structure determination and study of antioxidant properties.
S. Patra, P. Patra, **Kankan K. Maity**, S. Mandal, S. K. Bhunia, B. Dey, K. S. P. Devi, S. Khatua, K. Acharya, T. K. Maiti, S. S. Islam.* (*Carbohydrate Research*, 368, 2013, 16-21)
12. Isolation and characterization of an immunoenhancing glucan from alkaline extract of an edible mushroom, *Lentinus squarrosulus* (Mont.) Singer.
S. K. Bhunia, B. Dey, **Kankan K. Maity**, S. Patra, S. Mandal, S. Maiti, T. K. Maiti, S. R. Sikdar, S. S. Islam.* (*Carbohydrate Research*, 346, 2011, 2039–2044)
13. Structural analysis of an arabinan isolated from alkaline extract of the endosperm of seeds of *Caesalpinia bonduc* (Nata Karanja).
S. Mandal, S. Patra, B. Dey, S. K. Bhunia, **Kankan K. Maity**, S. S. Islam.* (*Carbohydrate Polymers*, 84, 2011, 471–476)
-

REFERENCES AVAILABLE ON REQUEST

Declaration

Hereby, I declare that the information furnished above is true to the best of my knowledge.

Date: 01.12.2015.

Place: Tamluk.

Dr. Kankan Kumar Maity