

# FACULTY PROFILE

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*Dr. Piyali Ghosh*

**M.SC. PH.D.**

**ASSISTANT PROFESSOR**

**DEPARTMENT OF CHEMISTRY**

**M.U.C. WOMEN'S COLLEGE, BURDWAN.**

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## A. ACADEMIC QUALIFICATIONS

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- Doctor of Philosophy (Science) (The University of Burdwan): in CHEMISTRY.
- Master of Science (The University of Burdwan): In Chemistry with specialization in Physical Chemistry.
- Bachelor of Science (Chemistry Honours) (The University of Burdwan): From Shree Gopal Banerjee College, Bagati.
- Qualified National Eligibility Test (N.E.T.).

## B. ACADEMIC DISTINCTIONS AND AWARDS

- National Scholarship
- Gnanendra Ardhya Fellowship for top most position in B.Sc. Part-II (Hons.) Examination.

## C. PROFESSIONAL STATUS

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NAME OF THE POST/DESIGNATION	INSTITUTION	APPOINTING AUTHORITY	NATURE OF POST
Assistant Professor	M.U.C. Women's College, Burdwan	M.U.C. Women's College by the recommendation of W.B.C.S.C	PERMANENT

#### **D. TEACHING EXPERIENCE**

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- More than Eleven years teaching experience.

#### **E. PRESENT ADMINISTRATIVE POST HELD:**

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- Presently act as a Convener of Students' Attendance Committee, M.U.C. Women's College, Burdwan.
  - Member of the Seminar Committee, Student's Personal Counselling Committee, Cultural Committee of this college.
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#### **F. TOPIC IN PH.D.**

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- STUDIES ON PHYSICO-CHEMICAL PROPERTIES OF OPEN AND CLOSED  $\pi$ -CONJUGATED NETWORKS FROM GRAPH THEORETICAL POINT OF VIEW.
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#### **G. AREA OF RESEARCH**

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- Theoretical Chemistry (Graph Theoretical Chemistry)
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#### **H. RESEARCH & PUBLICATIONS**

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##### **PAPERS IN PEER-REVIEWED/ INDEXED RESEARCH JOURNALS**

- Algorithms to calculate the distance numbers and the Wiener indices of linear and cylindrical poly (p-phenylene) in terms of number of hexagonal rings, S. Basu, P. Ghosh and B. Mandal; J.Mol.Phys., 106, 2507 (2008). – International
- Characteristic polynomials of alternant edge weighted linear chains with subsequent application to some linear poly (p-phenylene) graphs; P. Ghosh and B. Mandal; J.Math.Chem., 48, 1069 (2010) – International.

- Use of symmetry plane fragmentation and graph squaring techniques to express the eigenspectra for some vertex-weighted graphs of linear chains and cycles in analytical form; P. Ghosh; T. Ghosh; B. Mandal J.Mol.Phys., 109, 267 (2011). – International
- Formulas for the characteristic polynomial coefficients of the pendant graphs of linear chains, cycles and stars, P. Ghosh and B. Mandal; J.Mol.Phys., 112, 1021 (2014). – International
- Analytical eigenspectra of alternant edge-weighted graphs of linear chains and cycles: some applications, P. Ghosh, D.J. Klein and B.Mandal; J.Mol.Phys., (Received 2 November 2013; accepted 17 January 2014) – International
- Eigensolutions of dodecahedron graphs, P.Ghosh, S. Karmakar and B. Mandal, Chem Phys Lett.; 594, 41 (2014). – International
- Cardinalities of poly(p-phenylene) graphs, P.Ghosh, S.Karmakar and B.Mandal; J.Mol.Phys.; 112, 2646 (2014) – International
- Schematic generation of characteristic polynomials and the Hosoya indices of mono- and di-substituted polymer graphs of linear chains and cycles, P. Ghosh, S.Karmakar, S. Basu and B.Mandal; Ind.. Chem. Soc.; 91, 503(2014) – National
- Matrix product forms for the characteristic polynomial coefficients of poly(p-phenylene) graphs - P. Ghosh, S. Karmakar and B. Mandal, Ind.. Chem. Soc.; 91, 1(2014) - National (received online 16 August 2013, accepted 04 July 2014).- National
- Formula for the Wiener Index of n-polyphencene systems, P.Ghosh, PRAJANAN O SADHONA- A SCIENCE ANNUAL; 1, 20 (2014) – National
- Discussion on reciprocal graph from graph theoretical point of view, P.Ghosh, PRAJANAN O SADHONA- A SCIENCE ANNUAL; 2, 47 (2015).- National
- Use of symmetry plane factorisation method to determine the eigenspectra of benzene molecule, Journal of Arts, Science & Teaching; 1, 55 (2015)- National
- Formula for the Determination of Characteristic Polynomial and Hosoya Index of Star Graph, Journal of Arts, Science & Teaching; 2, 55 (2016)- National

#### PAPERS PRESENTED IN ACADEMIC SEMINARS/CONFERENCE/WORKSHOP

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- 21st West Bengal state Science and Technology Congress-2014 (20th & 21st Feb, 2014): Paper presentation

- UGC Sponsored national Seminar on “FRONTIER IN CHEMISTRY” (4TH & 5TH December, 2013) - Paper presentation (single author)
- International Seminar on “Science: Past, Present and Future” (12<sup>TH</sup> December, 2017) – Paper Presentation (single author)
- UGC Sponsored national Seminar on “DEBATES ON THE 18TH CENTURY HISTORY OF INDIA: A PROGRESS OF A EDCADENCE” (31ST Jan, 2014) – attained (Single author).
- Academies Lecture Workshop on “Current Trends in Chemistry” (17th &18th Feb., 2014): Attained

## I. MEMBERSHIP OF ASSOCIATIONS/SOCIETIES

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- Life member, Chemistry Teachers’ Association of India (CTA).
- Life time member of National Science Congress.

Piyali Ghosh

Date: 04.02.2018

(Piyali Ghosh)