TEACHER PROFILE/ CV

1. Full name of the faculty member: Dr. Partha Dutta

2. Designation: Asassociate Professor

3. Department: Chemistry

4. Specialization (if any): Physical Chemistry

5. Contact Information: 4/2, Viveknagar, Jadavpur , P.O. Santoshpur, Kolkata – 75,

West Bengal, India

e-mail: par_dut@yahoo.com

6. **Academic qualifications**

Please mention here the degrees (graduation onward):

College/ university	Abbreviation of the Degree
Jadavpur University	**B. Sc.**
Jadavpur University	**M. Sc.**
Jadavpur University	**Ph. D. in Science**

7. Post holding after appointment at this institution

Designation	Department	Duration		Institution
		From	To	
1. Assistant Prof. (Stage 2)	**Chemistry**	**14.05.2010**	**14.12.2012**	**M.M.C. College**
2. Assistant Prof. (Stage 3)		**15.12.2012**	**14.12.2015**	
3. Associate Professor		**15.12.2015**	**Till date**	

7. Post held before appointment at this institution

Designation	Department	Duration		Institution
		From	To	
1. Lecturer	Chemistry	15.12.2003	31.12.2005	A. C. College
2. Assistant Prof. (Stage 1)		01.01.2006	14.12.2007	
3. Assistant Prof. (Stage 2)		15.12.2007	13.05.2010	

8. Research interests: ***Ultrafast Laser Spectroscopy, Terahertz Time Domain Spectroscopy, Photophysical Properties, Nanomaterials : Synthesis & Characterization***

9. Research Project

(a) " Charge – carrier dynamics in modified Graphene oxides studied by terahertz time-domain spectroscopy" , Collaborative Research Project with Kobe University, Japan sponsored by Hyogo Overseas Research Network (HORN), Japan

(b) **"**Synthesis and Characterization of Graphene Oxide based Nano-composites", Minor Research Project sponsored by UGC

10. Lectures delivered/paper presentation

Title	Conference/Symposium and Year	Nature of Participation	Venue
1. ----------	CTMSE, 19th -20th January, 2018	Delegate	S. N. Bose National Center for Basic Sciences, Kolkata, INDIA
1. Graphene Oxide and			

Graphene Oxide-Polyaniline Nanocomposites: A Temperature-Dependent Conductivity Study Using Terahertz Time Domain Spectroscopy	13th International Conference on Materials Chemistry (MC13), Royal Society of Chemistry Conference, 10th to 13th July, 2017	Poster	ACC centre, Liverpool, UK
2. Low Frequency Response of Graphene Oxide: A Temperature Dependent Study	Two Days UGC Sponsored National Seminar, February, 2016	Poster	St. Paul' s Cathedral College, W. B., INDIA
3. Temperature Dependent Terahertz TDS Study of Graphene Oxide	" Nanoscience and its Application" (UGC Sponsored), 28/th November, 2015	Poster	Fakir Chand College, Diamond Harbour, W. B., INDIA
4. Terahertz Time Domain Spectroscopy of Graphene Oxide and Graphene Oxide-Polyaniline Nanocomposites: A Temperature Dependence Study	Seminar on 24th July, 2015	Invited Talk	Kobe University, JAPAN
5. Model Spectral Analysis of low frequency spectra in solution	" Current Thrust areas Experimental Research in Physical Science" , 25th April, 2015	Poster	Vidyasagar Evening College, Kolkata, ` W. B., INDIA
6. Fluoride in Ground v Challenges in 21st Century	Two-Day International Seminar on Groundwater:	Poster	Hotel the Fame, Berhampore,

	Issues & Challenges of the 21st Century 29th & 30th December, 2014		Murshidabad, West Bengal, INDIA
7. ----------	International Symposium on Advances in Spectroscopy And Ultrafast Dynamics (ASUD 2014) 12th to 14th December, 2014	Delegate	Indian Association for the Cultivation of Science (IACS) Kolkata, INDIA
8. Terahertz Spectroscopy for Industrial Development	" Role of Chemistry in Human Civilisation" , 26th September, 2014	Poster	Department of Chemistry, Jogesh Chandra Chaudhuri College, W. B., INDIA
9. ----------	Trends in Surface Science and Related Areas 24th July, 2014	Delegate	Department of Chemistry Presidency University, Kolkata, INDIA
10. Terahertz Time Dom Spectroscopy: A New Regime	Physical Chemistry Research: Teaching and Industrial Perspectives (PCRTIP-2013) 28th September, 2013	Invited Talk	Department of Chemistry Jadavpur University, Kolkata, INDIA
11. Terahertz Time -Dor Spectroscopy: Polar Solute Molecules in Non-polar solvents	Frontiers in Molecular Spectroscopy and Theory 7th to 9th March, 2009	Oral	Indian Association for the Cultivation of Science (IACS) Kolkata, INDIA

12. Ultrafast Dynamics: From Solutions to Organized Assemblies	Invited Presentation 24th December, 2008	Oral	Indian Institute of Science, Education and Research (IISER), Kolkata, INDIA
13. Low Frequency Spectra Polar Solute molecules in Non-polar Solvents by Terahertz Time Domain Spectroscopy	5th Asian Conference on Ultrafast Phenomena 6th to 9th January, 2008	Poster	National University of Singapore, SINGAPORE
14. Low Frequency Spectra Polar Solute molecules in Non-polar Solvents by Terahertz Time Domain Spectroscopy	Joint Conference of JMLG/ EMLG Meeting 2007 and 30th Symposium on Solution Chemistry of Japan 21st to 25th November, 2007	Oral	Fukuoka University, JAPAN
15.			

THz-TDS of Polar Solute Molecules in Non-Polar Solvents	Mini Symposium on Low Frequency Spectra in Condensed Phases; Molecular Dynamics and Intermolecular Interactions 2nd June, 2007	Oral	Kobe University, JAPAN
16. Solvation Dynamics in PVP and PVP-SDS Aggregates	Third Asian Photochemistry Conference, 2002 (APC-2002) January, 2002	Poster	Centaur Hotel, Mumbai, INDIA

11. Publications:

(a) Published paper in Journals

1. **"Tuning of Photoluminescence of Graphene Oxide Based Nanomaterials in the UV-Visible Region: Formation of Aggregates by H-Bonding through Water Molecules"**

Chemistry Select, **2022, *7***

2. **" Photoluminescence Amplification of Cerium Incorporated Graphene Oxide Nanoparticles by Photoinduced Reduction: A Mechanistic Study Highlighting Structural Orderness"**

Journal of Luminiscenece, **2021,** *DOI: 10.1016/j.jlumin.2021.118019*

3. **"Synthesis, Properties of Graphene Oxide-Metal Oxide Mixed Nanocomposites and their Applications -Review"**

IJASE, **2019**, DOI: 10.29294/IJASE.5.3.2019.1032-1039

4. "**Tunable Luminescence of Graphene Oxide-Polyaniline nano-composite: Effect of an anionic Surfactant**"

Journal of Luminiscenece, **2018**, DOI: 10.1016/j.jlumin.2018.10.008

5. "**Review on 'Graphene and Graphene Oxide based system for the detection of synthetic azo dyes"**

IJAETMS, **2018**, *5*, 1-8

6. "**Influence of Intense Electric Field on the Screening Length in Opto-Electronic Materials**"

Materials Focus, **2018**, *7 (3)*, 390-404

7. **"Effect of an anionic surfactant (SDS) on the photoluminescence of graphene oxide (GO) in acidic and alkaline medium"**

RSC Advances, **2018**, *8*, 584-595.

8. **" Heavily Doped Single Quantum Wells and the Effective Mass"**

Materials Focus, **2017**, *6*, 1-52.

9. **" Temperature Dependent Conductivity of Graphene Oxide and Graphene Oxide-Polyaniline Nanocomposites Studied by Terahertz Time-Domain Spectroscopy"**

Journal of Physical Chemistry C, **2017**, *121*, DOI 10.1021/acs.jpcc.6b10412

10. **" Can Photons Affect the entropy?"**

Materials Focus, **2017**, *6*, 1-34.

11. **"pH dependent tunable photoluminescence of Polyaniline grafted Graphene Oxide (GO- PANI) nanocomposite"**

Saha, P.; Pyne, D. K.; Pal, M.; Datta, S; Das, P. K.; **Dutta, P**.; Halder, A.

Journal of Luminiscence **2017**, *181*, 138-146.

12**. " The Story of Graphene Oxide"**

Dutta, P.

Uttaran, **2016**, *1*, 133.

13. **"Excitation wavelength dependent UV fluorescence of dispersed modified graphene oxide: Effect of pH "**

Dutta, P.; Nandi, D.; Datta, S.; Chakraborty, S.; Das, N.; Chatterjee, S.; Ghosh, U. C.; Halder, A.

Journal of Luminiscence **2015**, *168*, 269.

14. **"Terahertz time domain spectroscopy studies in liquids and solutions"**

Dutta, P.

Prajnan-O-Sadhona-A Science Annual **2015**, *2*, 40.

15. " **Low-frequency Dynamics in Condensed Phases Studied by Terahertz Time-Domain Spectroscopy**"

Kambara, O.; Ponseca Jr., C. S.; **Dutta, P.**; Tominaga, K.

Abstract book of 2nd International Symposium on Terahertz Science and Technology between Japan and Sweden **2009,** 52.

16. "**THz-TDS Studies on Proteins and Molecular Complexes in Solutions**"

Tominaga, K.; Kawaguchi, S.; Shibata, M.; Kandori, H.; **Dutta, P.**

Proceedings of the Conference IRMMW-THZ **2009**, R4C02.0539

17. **" Obtaining Low Frequency Spectra of Acetone Dissolved in Cyclohexane by Terahertz Time-Domain Spectroscopy"**

Dutta, P.; Tominaga, K.

J. Phys. Chem. A **2009**, *113*, 8235.

18. **" Terahertz Time-Domain Spectroscopic Study of the Low-Frequency Spectra of Nitrobenzene in Alkanes"**

Dutta, P.; Tominaga, K.

J. Mol. Liq. **2009**, *147*, 45.

19. **" Dependence of Low Frequency Spectra on Solute and Solvent in Solutions studied by Terahertz Time-Domain Spectroscopy"**

Dutta, P.; Tominaga, K.

Mol. Phys.: An International Journal at the Interface Between Chemistry and Physics **2009**, *107*, 1845.

20. **" Low-Frequency Dynamics in Condensed Phases Studied by Terahertz Radiation Spectroscopy"**

Kambara, O.; Kawaguchi, S.; **Dutta, P.**; Ponseca Jr., C. S.; Ikeshima,K.; Yamaguchi, S.; Hirai, S.; Banno, M.; Naito, S.; Tominaga, K.

Proceedings of International Symposium on Terahertz between Japan and Sweden, TMU Symp. Ser., **2008**, *1*, 44**.**

21. **" Solvation Dynamics in a worm-like CTAB Micelle"**

Sen, P.; Mukherjee, S.; Halder, A.; **Dutta, P.**; Bhattacharyya, K.

Res. Chem. Intermed. **2005**, *31*, 135.

22. **" Ultrafast Chemistry in Complex and Confined Systems"**

Dutta, P.; Bhattacharyya, K.

J. Chem. Sci. **2004**, *116*, 5.

23. **" Solvation Dynamics in the Molten Globule State of a Protein"**

Sen, P.; Mukherjee, S.; **Dutta, P.**; Halder, A.; Mandal, D.; Banerjee, R.; Roy, S.;

Bhattacharyya, K.

J. Phys. Chem. B **2003**, *107*, 14563.

24. **" Solvation Dynamics in DMPC Vesicle in the Presence of a Protein"**

Dutta, P.; Sen, P.; Mukherjee, S.; Bhattacharyya, K.

Chem. Phys. Lett. **2003**, *382*, 426.

25. **" Solvation Dynamics of 4-Aminophthalimide in a Polymer (PVP)-Surfactant (SDS) Aggregate"**

Dutta, P.; Sukul, D.; Sen. S.; Bhattacharyya, K.

Phys. Chem. Chem. Phys. **2003**, *5*, 4875.

26. **" Solvation Dynamics in a Protein-Surfactant Aggregate. TNS in HSA-SDS"**

Mukherjee, S.; Sen. P.; Halder, A.; Sen, S.; **Dutta, P.**; Bhattacharyya, K.

Chem. Phys. Lett. **2003**, *379*, 471.

27. **" Solvation Dynamics in the Water Pool of an Aerosol-OT Microemulsion. Effect of Sodium Salicylate and Sodium Cholate"**

Dutta, P.; Sen, P.; Mukherjee; S.; Halder, A.; Bhattacharyya, K.

J. Phys. Chem. B **2003**, *107*, 10815.

28. **" Solvation Dynamics in a Protein-Surfactant Complex"**

Dutta, P.; Sen, P.; Halder, A.; Mukherjee, S.; Sen, S.; Bhattacharyya; K.

Chem. Phys. Lett. **2003**, *377*, 229.

29. **" Isomerization and Fluorescence Depolarization of Merocyanine 540 in Polyacrylic Acid. Effect of pH"**

Sukul, D.; Sen, S.; **Dutta, P.**; Bhattacharyya, K.

Proc. Indian Acad. Sci. (Chem. Sci.) **2002**, 114, 501.

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30. **" Excited State Proton Transfer of 1-Naphthol in a Hydroxypropylcellulose/Sodium Dodecyl Sulfate System"**

Dutta, P.; Halder, A.; Mukherjee, S.; Sen, P.; Sen, S.; Bhattacharyya, K.

Langmuir **2002**, *18*, 7867.

31. **" Solvation Dynamics in Bile Salt Aggregates"**

Sen, S.; **Dutta, P.**; Mukherjee, S.; Bhattacharyya, K.

J. Phys. Chem. B **2002**, *106*, 7745.

32. **" Solvation Dynamics of TNS in Polymer (PEG)-Surfactant (SDS) Aggregate"**

Dutta, P.; Sen, S.; Mukherjee, S.; Bhattacharyya, K.

Chem. Phys. Lett. **2002**, *359*, 15.

33. **" Solvation Dynamics in the Water Pool of Aerosol Sodium Dioctylsulfosuccinate Microemulsion: Effect of Polymer"**

Sen, S.; **Dutta, P.**; Sukul, D.; Bhattacharyya, K.

J. Phys. Chem. A **2002**, *106*, 6017.

34. **" Solvation Dynamics in Aqueous Polymer Solution and in Polymer-Surfactant Aggregate"**

Sen, S.; Sukul, D.; **Dutta, P.**; Bhattacharyya, K.

J. Phys. Chem. B **2002**, *106*, 3763.

35. **" Photoisomerization of Merocyanine 540 in Polymer-Surfactant Aggregate"**

Sen, S.; Sukul, D.; **Dutta, P.**; Bhattacharyya, K.

Proc. Indian Acad. Sci. (Chem. Sci.) **2002**, *114*, 83.

36. **" Slow Solvation Dynamics of Dimethylformamide in a Nanocavity. 4-Aminophthalimide in β-Cyclodextrin"**

Sen, S.; Sukul, D.; **Dutta, P.**; Bhattacharyya, K.

J. Phys. Chem. A **2001**, *105*, 10635.

37. **“ Fluorescence Anisotropy Decay in Polymer-Surfactant Aggregates”**

Sen, S.; Sukul, D.; **Dutta, P.**; Bhattacharyya, K.

J. Phys. Chem. A **2001**, *105*, 7495.

(b) Articles /Chapters published in books

(c) **Conference/ seminar volumes**

(d) Other publication

12. Administrative/Professional Experience

a) Member of the Governing Body at A. C. College, Jalpaiguri, 2008 -2010

b) Bursar at M. M. C. College from 2013 to 2015

c) Member of the Governing Body at M. M. C. College, from 2017 to till date

d) IQAC Coordinator, M. M. C. College

e) Chair Invited Sessions of International Conference on Chemical and Environmental Sciences, ICCAES 2020 , ICCAES 2022, ICCAES 2024

13. Other notable activities

a) **Member of Royal Society of Chemistry, UK**

b) **General Secretary of VISION ,** a *Registered Organization under Indian Trust Act – 1882, Regn. No. - IV-190306993/2016*

c) **Ex- President and Member** of BHS'95, a Registered Organization under Indian Trust Act – 1882,

d) ***Life Member*** *of Indian Association for Cultivation of Science*

14. Special remarks, if any

a) YouTube Channel:
https://youtube.com/@ParthasMusicalSampan300377?si=HUKiRGwYkTWUWMkR

b) Blogs: https://pardutta.blogspot.com/?m=1

c) Facebook page: https://www.facebook.com/parthadutta300377