

CV of Dr. Syed Arshad Hussain

1. Name of the applicant: DR. SYED ARSHAD HUSSAIN

2. Present Position: Assistant Professor (Stage-III)

3. Affiliation: Department of Physics, Tripura University (A Central University)

4. Address:

Department of Physics
Tripura University (A Central University)
Suryamaninagar – 799022
West Tripura, Tripura, India
Email: sa_h153@hotmail.com
sahussain@tripurauniv.in
Phone: 03812375317 (O)
09862804849 (M)
Fax: 0381237 4802 (O)

5. Website:

i) <http://sahussaintu.wordpress.com/> (personal)

ii) <http://www.tripurauniv.in/index.php/for-faculties?id=198> (Office)

6. Research areas: Thin film and Nanoscience: Organo-clay hybrid, FRET, Biosensor, Biomimetic Surfaces, Langmuir films.

7. Date of birth: 05.12.1975

8. Educational qualification: M. Sc., NET, Ph.D.

S.No.	Degree	University	Year	Subjects	Percentage (Div./Class)
1.	B.Sc. Hons in Physics	Tripura University	1999	Physics (Hons), Math., Chem, Eng,	62%
2.	M.Sc. Electronics special	Tripura University	2001	Physics	71%
3.	Ph.D.	Tripura University	2007	Physics	Awarded on February, 2007
4.	Post doctoral research (outside India)	Centre for Surface Science and Catalysis, K. U. Leuven, Leuven, Belgium	August, 2007 to July, 2008	Energy transfer and mechanical properties of hybrid films of clay minerals	

Title of Ph.D. Thesis: Photophysical studies of organized molecular assemblies in Langmuir-Blodgett films.

9. List of Publications:

Total no of publications in peer reviewed journals: **65**

In International journals: **52** In National journals: **10** Review article: **03**

Publication list with details is given in annexure – I

10. a) List of Seminar/Conf. etc organized:

i) **Convener** of the International Conference on Material Science (ICMS2013) organized by the Department of Physics, Tripura University during 21 – 23 rd February, 2013.

ii) **Organizing Secretary** of the Conference on Recent Trends of Research in Physics organized by the Department of Physics, Tripura University during 3-4 th February, 2012.

iii) **Convener** of the Seminar on condensed Matter Physics (SCMP 2010), held at the Department of Physics, Tripura University, Suryamaninagar – 799130, Tripura (West), on 16th February, 2010.

iv) **Joint convener** of VIth National Conference of Physics Academy of North-East (PANE-2009), at the Department of Physics, Tripura University, Suryamaninagar – 799130, Tripura (West), during 3-4th April, 2009.

v) **Organizing Secretary** of Reunion-2007 of Department of Physics, held on 6th May 2007

b) List of Seminar/Conf. etc attended with paper:

Total: **24** Invited Talk: **02** International: **07** National: **17**

Details are given in annexure – II

11. List of ongoing/completed projects

Total: 07; As Principal Investigator: 05 (one is under process) As Co-Principal Investigator: 02

Project under process:

1) Project Title: Photo-physical studies of some molecules in solution, bulk and ultrathin films in presence and absence of nano-clay: investigations of fluorescence resonance energy transfer and sensor application.

Funding agency: DST, Govt of India

Short listed by the review committee. Interview will be held on 21st Nov., 2014 at Delta Studies Institute, Andhra University, Visakhapatnam- 530017

Ongoing Projects

1) Project Title: Investigations of molecular organization in nano-dimensional organo-clay mono- and multilayer hybrid films fabricated by Langmuir-Blodgett and Layer-by-Layer Self assembled technique.

Funding agency: CSIR, Govt of India (Ref. 03(1146)/09/EMR-II dt 12/11/2009).

Total grant: Rs. 22 lakhs (2009 – till today, ongoing)

PI: [Dr. Syed Arshad Hussain](#)

Completed Projects

1) Project Title: Investigations of the organizations and morphology of nano-dimensional organo-clay hybrid Langmuir-Blodgett (LB) films

Funding agency: DAE, Govt of India (DAE Young Scientist Research Award -2009) (Ref. No. 2009/20/37/8/BRNS/3328 dt 9/3/2010)

Total grant: Rs. 15.33 lakhs (2010 – 2013)

PI: [Dr. Syed Arshad Hussain](#)

2) Project Title: Fabrication and characterizations of ultrathin films obtained by molecular self assembly method through electrostatic interactions

Funding agency: DST, Govt of India (Fast Track Scheme for Young Scientist) (Ref. No. SE/FTP/PS-54/2007)

Total grant: Rs. 13.74 lakhs (2010 – 2014)

PI: [Dr. Syed Arshad Hussain](#)

3) Project Title: Morphological and photophysical investigations of Langmuir and Langmuir-Blodgett films

Funding agency: DST, Govt of India (Ref No: SR/S2/LOP-19/07)

Total grant: Rs. 19.64 lakhs (2008-2012)

PI: Dr. D. Bhattacharjee; [Co-PI: Dr. Syed Arshad Hussain](#)

4) Project Title: Photophysical investigation of stable Langmuir-Blodgett films of organic, polymeric and water soluble materials

Funding agency: CSIR, Govt of India (Ref. Ref. No.03 (1080)/06/EMR-II)

Total grant: Rs. 7.5 lakhs (2007-2010)

PI: Dr. D. Bhattacharjee; [Co-PI: Dr. Syed Arshad Hussain](#), Dr. R. K. Nath

5) Project Title: Photophysical studies of organized molecular assemblies in Langmuir-Blodgett Films.

Funding agency: UGC, Govt of India (minor research project)

Total grant: Rs. 0.35 lakhs (2004-2005)

PI: [Dr. Syed Arshad Hussain](#)

12. Foreign visits for research purpose:

Sl. No.	Visited institute address	Purpose of visit
1.	Centre for Surface Chemistry and Catalysis, K. U. Leuven, Belgium	Postdoctoral Research (2007 -08) 13 months
2.	K. U. Leuven, Belgium	Visiting Scientist (April – July, 2011) Three months
3.	Antalya, Turkey	Attending Conference Euroclay – 2011 held at ANTALYA during June 26-July 1, 2011
4.	Dhaka , Bangladesh	Attending Conference International Science Seminar organized by The Asiatic Society of Bangladesh during 28-29 Nov., 2011 as Invited Speaker
5.	Yamaguchi University, Yamaguchi, Japan	Research Collaboration with Prof. Jun Kawamta as a part of Cooperative Science Program of Yamaguchi University, Japan during Nov-Dec, 2013
6.	Osaka University, Osaka, Japan	Research Collaboration with Prof. Takoya Matsomuto as a part of Cooperative Science Program of Yamaguchi University, Japan during Nov-Dec, 2013

13. Research Collaboration:

In India:

- i) Dr. Pabitra Kumar Paul, Department of Physics, Jadavpur University, Kolkata, India
- ii) Prof. D. K. Aswal, Head, Thin Films Devices Section, Technical Physics Division, Bhabha Atomic Research Center (BARC), Mumbai.

Outside India:

- i) Prof. Robert A. Schoonheydt, Centre for Surface Chemistry and Catalysis, K. U. Leuven, Belgium.
- ii) Prof. Alexander Volodin, Laboratory of Solid State Physics and Magnetism, Department of Physics and Astronomy, K. U. Leuven, Belgium.
- iii) Prof. Jun Kawamata, School of Chemistry, Yamaguchi University, Japan.
- iv) Prof. Takuya Matsumoto, Graduate School of Engineering, Osaka University, Japan.

v) Prof. Mohamed Mehdi CHEHIMI, Leader of the Surface & Interface research team, Université Paris, France. [Ms. Jlassi Khouloud](#), PhD student of Prof. Chehemi is going to join Thin film & Nanoscience lab under my supervision through Raman – Charpak Scholarship for six months.

14.

i) List of Ph. D. thesis carried out under my supervision:

Sl. No.	Name of the candidate	Title of the thesis	Status
01.	Dr. Dhananjay Dey	Spectroscopic characterizations of organized Molecular Assemblies in Ultra thin films fabricated by Layer-by-Layer (LbL) self assembled Technique	Completed 2012
02.	Dr. Md. Nurul Islam	Photo physical characterizations of organized molecular assemblies in ultrathin films fabricated by Langmuir-Blodgett (LB) and Layer by Layer (LbL) self assembled (SAM) techniques	Completed 2013
03.	Dr. Sekhar Chakraborty	Investigations of molecular and particulate Organization in hybrid organo-clay mono and multilayer films	Completed 2013
04.	Mr. Santanu Chakraborty	Spectroscopic characterizations of some organic molecules in presence and absence of nano-dimensional clay sheets in restricted geometry of ultra-thin films.	Thesis submitted May, 2014
05.	Mr. Dibyendu De	Investigation of Fluorescence Resonance Energy Transfer (FRET) among dyes in solution and ultra-thin films	Thesis submitted September, 2014
06.	Mr. Arpan Datta Roy	Fluorescence resonance energy transfer in presence of biological molecules	Registered 2014
07.	Ms. Jaba Saha	Study of fluorescence resonance energy transfer and its sensing applications	Registered 2014
08.	Mr. Pintu Debnat	Study of molecular aggregates of cyanine dyes in ultra-thin films	Registration under process
09.	Bapi De	--	Course work going on

ii) List of M. Phil Dissertation carried out under your supervision:

Sl No	Name of the candidate	Title of the thesis	Status
01.	Namita Das (presently working as Assistant Professor at TIT, Agartala)	Photophysical Characterizations of Organized Molecular Assemblies of Pyrene in Mixed LB Films	Completed 2007
02.	Shirshendu Choudhury (presently working as PGT, Agartala)	Optical characterizations of ultrathin films fabricated by Layer by Layer (LbL) technique	Completed 2007
03.	Nabanita Chackraborty	Spectroscopic characterizations of self assembled films of rosebengal	Completed 2007

15. Award/Distinction earned:

- i) [Visiting Post Doctoral Fellow](#) (2007-08), K. U. Leuven, Belgium.
- ii) Selected to attend the Science Conclave: A Congregation of Nobel Prize Winners, Indian Institute of Information Technology, Allahabad, Dec., 15-21, 2008.
- iii) [Jagadish Chandra Bose Award-2009](#) by Govt. of Tripura, India.
- D. [DST-Young Scientist Research Award](#) by Department of Science & Technology, Govt. of India.
- iv) [DAE-Young Scientist Research Award \(2009-12\)](#) by Department of Atomic Energy, Govt. of India.
- v) [Felicitation](#) by State Journalist Forum, Tripura India
- vi) [Best paper presentation award](#) in International Conference on Emerging Areas of Chemistry -2011 organized by Department of Chemistry, Tripura University during 9-11 Jan, 2011.
- vii) [Visiting Scientist](#) (May, 2011 to July, 2011), K. U. Leuven, Belgium.
- viii) [Felicitation](#) by Asiatic Society of Bangladesh during 28-29 Oct., 2011.
- ix) “[Bharat Jyoti Award](#)” (2011) by “The India International Friendship Society”, New Delhi, India.
- x) “[Rasthriya Vidhya Samman Puruskar](#)” (2012) by EGSI, New Delhi, India.
- xi) [Invited to visit Yamaguchi University](#), Japan during Nov-Dec, 2013 as a part of Cooperative Science Program of Yamaguchi University, Japan.
- xii) [Invited to visit Osaka University](#) during Nov-Dec, 2013 as a part of Cooperative Science Program of Osaka University, Japan.

16. Member of professional bodies:

A. Executive committee member:

Physics Academy of North East (PANE)

B. Invited Life Member: American Nano Society (ANS)

C. Life Member:

Indian Physical Society
Indian Physics Association
Indian Science Congress association
Material Research Society of India

D. General Secretary:

Tripura University Alumni Association (TUAA)
Society for Physical Science in Tripura (SPST)

17. Editorial experience:

A. Associate Editor: Journal of Spectroscopy and Dynamics (JSD)

B. Editorial Board Member of the following Journals:

- i) Research Journal of Physical & Applied Sciences
- ii) International Journal of Applied Physics (IJAP)
- iii) International Journal of Materials Physics (IJMP)
- iv) International Journal of Physics and Applications (IJPA)
- v) Journal of New Development in Chemistry
- vi) Journal of Surface and Hybrid Coating Technology
- vii) Recent Advancements in Physics (RAPH)

C. Served as the **Guest Editor of Special Issue on “Material Science”** published in *Invertis Journal of Science and Technology*, Vol. 7, No. 2, 2014.

D. Served as the **Guest Editor of Physics Express (Cognizure)**, vol. 4 (2014) – Special issue – proceedings of the ICMS2013 conference organized by Department of Physics, Tripura University during 21-23, February, 2013.

E. Served as one of the **Guest Editors of Indian Journal of Physics (Springer)**, June 2010 volume 84 (6).

F. Served as one of the **Editors in the Proceedings of the conference of the Physics Academy of North-East (PANE) 2009** published as the book **“Research in Physics in north-East India”**. The conference was held during 2-4th April, 2009 at the Department of Physics, Tripura University, India.

G. **Served as one of the Editors** in the Proceedings of the **“Conference on Recent Trends of Research in Physics (CRTRP)”** published as book (ISBN No: 978-81-904362-9-8) by Research India Publications, New Delhi, India. The conference was held during 3-4th February, 2012 at the Department of Physics, Tripura University, India.

H. Editor of the wall magazine Innovation 2010 at the department of Physics, Tripura University

18. Reviewer:

i) Acted as the reviewer of projects submitted to DST as an enlisted reviewer panel member of DST, Govt. of India.

ii) Regularly acting as the reviewer for different journals. Few of them are as follows:

Spectrochimica Acta A (Elsevier), Journal of Colloid and Interface Science (Elsevier), Journal of Physics and Chemistry of Solids (Elsevier), The Journal of Physical Chemistry C (ACS), Indian Journal of Physics (Springer), The Journal of Physical Chemistry B (ACS), Colloids and Surfaces A: Physicochemical and Engineering Aspects (Elsevier), Langmuir (ACS) etc.

19. Any other relevant information:

i) Google scholar information:

<http://scholar.google.co.in/citations?user=aFaX6hcAAAAJ&hl=en>

h-index: 11; i10 index: 17

ii) Attended the ASSOCHAM Global Knowledge Summit – IV, “Nanotechnology & Biotechnology – Meet the Future Nano – Bio Billionaires held at Vigyan Bhavan, New Delhi during 27 – 29 th March, 2006 organized by ASSOCHAM, New Delhi. Participated the program as the representative of Government of Tripura. The program was a bilateral knowledge summit between India and China. Scientists and Businessman from 19 countries throughout the world participated in the program and exchange their views. The memorable incident was the interaction with the Nobel laureate Prof. Harry Kroto (1996, Chemistry) during the program.

For reference:

Prof. Mushahid Husain

Vice Chancellor
M. J. P. Rohilkhand
University, Bareilly
Former- Director
Centre for Nanoscience
& Nanotechnology, JMI
and
Professor
Department of Physics, JMI
E-mail :
vcoffice@mjpru.ac.in,
mush_phys@rediffmail.com
Tel: 0581-2527282(O)
Fax: 0581-2528384
Mobile: 09811214084

Prof. Robert A. Schoonheydt

Centre for Surface Chemistry and
Catalysis
K.U.Leuven, Kasteelpark
Arenberg 23 B-3001
Leuven, Belgium.
E-mail:
Robert.Schoonheydt@biw.kuleuven.be
robert.schoonheydt@telenet.be

Prof. Amir Berman

Department of Biotechnology &
Engineering and the Institute of
Applied Biosciences,
Ben-Gurion University of the
Negev,
Beer-Sheva 84105, Israel
E-mail:
aberman@bgumail.bgu.ac.il

I certify that the above information is true.

Syed Arshad Hussain

(Syed Arshad Hussain)

(DR. SYED ARSHAD HUSSAIN)
Assistant Professor,
Department of Physics,
Tripura University, Suryamaninagar.

Annexure-I

Publications of Dr. Syed Arshad Hussain

Total: **65**; In International journals: **52** In National journals: **10**; Review article: **03**

* **Corresponding author**

2015

- 65.** Interaction of nano- clay platelets with a phospholipid in presence of a fluorescence probe.
Mitu Saha, **S. A. Hussain**, D. Bhattacharjee.
Molecular Crystals and Liquid Crystals (accepted for publication)
- 64.** Development of a sensor to study the DNA conformation using molecular logic gates
Dibyendu Dey, Debajyoti Bhattacharjee, A. D. Roy, J. Saha, S. Chakraborty, **Syed Arshad Hussain***
Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy (Accepted for publications)
- 63.** Fluorescence Resonance Energy Transfer (FRET) sensor (*Invited Review article*)
Syed Arshad Hussain*, Dibyendu Dey, Sekhar Chakraborty, Jaba Saha, Arpan Datta Roy, Santanu Chakraborty, Pintu Debnath, D. Bhattacharjee
J. Spectrosc. Dyn. 2015, 5: 7

2014

- 62.** Sensing of DNA conformation based on change in FRET efficiency between laser dyes
Dibyendu Dey, Jaba Saha, Arpan Datta Roy, D. Bhattacharjee, Sangram Sinha, P. K. Paul, Santanu Chakraborty, **Syed Arshad Hussain***
Sensors and Actuators B: Chemical 204 (2014) 746–753
- 61.** Formation of fluorescent H – aggregates of a cyanine dye in ultrathin film and its effect on energy transfer
Santanu Chakraborty, Pintu Debnath, Dibyendu Dey, D. Bhattacharjee, **Syed Arshad Hussain***
Journal of Photochemistry and Photobiology A: Chemistry 293 (2014) 57–64
- 60.** Effect of Nano clay platelets and DNA on controlling the H-dimer of Oxazine 4 Perchlorate (OX4) in LbL film
J. Bhattacharjee, **Syed Arshad Hussain**, D. Bhattacharjee
Applied Physics A 116 (2014) 1669-1676
- 59.** Development of an Ion-Sensor using Fluorescence Resonance Energy Transfer
Dibyendu Dey, Jaba Saha, Arpan Datta Roy, D. Bhattacharjee, **Syed Arshad Hussain***
Sensors and Actuators B: Chemical 195 (2014) 382–388
- 58.** Formation and control of excimer of a coumarin derivative in Langmuir – Blodgett films
Santanu Chakraborty, D. Bhattacharjee, **Syed Arshad Hussain***
Journal of Luminescence 145 (2014) 824–831

57. Monolayer characteristics of chitosan assembled in Langmuir films mixed with arachidic acid
Jayasree Nath, R. K. Nath, Adrita Chakraborty, **Syed Arshad Hussain***
Surf. Rev. Lett. 21, 1450049 (2014)

56. Study of Hysteresis during pH and Temperature Changes of Acriflavine: A Gateway to Optrode
S. Banik, Dibyendu Dey, D. Bhattacharjee and **Syed Arshad Hussain***
Invertis Journal of Science and Technology, Vol. 7, No. 2, 2014. ; pp. 1-8

2013

55. Control of H-dimer formation of Acridine Orange using nano clay platelets
J. Bhattacharjee, **Syed Arshad Hussain**, D. Bhattacharjee
Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy 116 (2013) 148–153

54. Adsorption behaviour of DNA onto a cationic surfactant monolayer at the air-water interface
C. Hansda, **Syed Arshad Hussain**, D. Bhattacharjee and Pabitra Kr. Paul
Surface Science 617 (2013) 124–130

53. Adsorption of Congo red in cationic Langmuir-Blodgett films: spectroscopic investigations
S. A. HUSSAIN, J. BHATTACHARJEE, S. CHAKRABORTY, D. BHATTACHARJEE
Journal of Surface Science and Technology 29 (2013) 1-13

52. Three Component Complex Langmuir – Blodgett Films of Water Soluble
Eosin Y With Dodecyl Trimethyl Ammonium Bromide and Stearic Acid
D. Bhattacharjee, Santanu Chakraborty, **Syed Arshad Hussain***
Journal of Surface Science and Technology Vol 29, No. 1-2, pp. 67-83, 2013

51. Development of a DNA sensor using a molecular logic gate
D. Bhattacharjee·D. Dey·S. Chakraborty, **Syed Arshad Hussain***, S. Sinha
J Biol Phys; 39(3) (2013) 387-394

50. Silver Nanoparticles and Their Antimicrobial Activity on a Few Bacteria
Ratan Das, Mitu Saha, **Syed Arshad Hussain**, Siddhartha S. Nath
BioNanoSci. (2013) 3:67–72

49. Formation of nanoscale aggregates of a coumarin derivative in Langmuir–Blodgett film
Santanu Chakraborty ·D. Bhattacharjee · **Syed Arshad Hussain***
Appl Phys A 111(4) (2013) 1037 – 1043

48. Development of hard water sensor using Fluorescence Resonance Energy Transfer
Dibyendu Dey, S. Chackraborty, D. Bhattacharjee, **Syed Arshad Hussain***
Sensors & Actuators: B. Chemical 184 (2013) 268 – 273

47. Interaction of a Laser Dye with a Floating Phospholipid Monolayer
MITU SAHA, **SYED ARSHAD HUSSAIN**, AND D. BHATTACHARJEE
Journal of Macromolecular Science, Part A (2013) 50, 1–8

46. Preparation of Polystyrene-Clay nanocomposite by Solution Intercalation Technique
P. K. PAUL, **S. A. HUSSAIN**, D. BHATTACHARJEE, and M. PAL
Bulletin of Materials Science, June 2013, Volume 36, Issue 3, pp 361-366

45. Nano Dimensional Hybrid Organo-clay Langmuir-Blodgett Films (*invited review article*)

Syed Arshad Hussain*, Sekhar Chakraborty and Debajyoti Bhattacharjee
Current Physical Chemistry, Volume 3, Number 3, August 2013Pp: 322 – 332

44. Incorporation of nano-clay saponite layers in the organo-clay hybrid films using anionic amphiphile stearic acid by Langmuir–Blodgett technique

Syed Arshad Hussain*, S. Chakraborty, D. Bhattacharjee, R.A. Schoonheydt
Thin Solid Films 536 (2013) 261–268

43. Effect of nanoclay laponite and pH on the energy transfer between fluorescent dyes

Dibyendu Dey, D. Bhattacharjee, S. Chakraborty, **Syed Arshad Hussain***
Journal of Photochemistry & Photobiology A: Chemistry 252 (2013) 174– 182

2012

42. An Introduction to Fluorescence Resonance Energy Transfer (FRET)

Syed Arshad Hussain*
Science Journal of Physics (ISSN:2276-6367), Volume 2012, Article ID sjp-268, 4 Pages, 2012. doi: 10.7237/sjp/268

41. Lack of Scientific outlook

Syed Arshad Hussain*
Golden Research Thoughts (ISSN:-2231-5063), Volume 2, Issue. 3, Sept 2012

40. Fluorescence Resonance Energy Transfer between Organic Dyes in Presence and Absence of Nano Clay Laponite

Syed Arshad Hussain*
Noto-are (ISSN 1941-2681).

2011

39. Langmuir-Blodgett Films of Nanodimensional organo-clay hybrid materials

Syed Arshad Hussain*
Special Diamond Jubilee Volume
Journal of the Asiatic Society of Bangladesh (Science) 37(2): 345-357 (2011)

38. Adsorption of Cationic Laser Dye onto Polymer/Surfactant Complex Film

P. K. Paul, **Syed Arshad Hussain**, Debajyoti Bhattacharjee and Mrinal Pal
Chinese Journal of Chemical Physics Volume 24 Number 3, Issue 3 (June 2011)

37. Layer-by-Layer self assembled films of rosebengal

D. Dey, **S. A. Hussain** and D. Bhattacharjee
International Journal of Modern Physics B Vol. 25, No. 29 (2011) 4039-4046

36. Adsorption kinetics of a fluorescent dye in a long chain fatty acid matrix

Syed Arshad Hussain, Soma Banik, S. Chakraborty, D. Bhattacharjee
Spectrochimica Acta Part A Volume 79, Issue 5, Sept. 2011, pp 1642-1647

35. J-aggregates of thiocyanine dye organized in LB films: effect of irradiation of light
Syed Arshad Hussain, Dibyendu Dey, S. Chakraborty, D. Bhattacharjee
Journal of Luminescence 131 (2011) pp. 1655-1660

34. Molecular self assembly of chicao sky blue onto solid substrate
Md. N. Islam, D. Dey, D. Bhattacharjee, **S. A. Hussain***
International Journal of Modern Physics B 25 (2011) 1905-1914

2010

33. Langmuir – Blodgett Films a unique tool for Molecular Electronics
Syed Arshad Hussain*
Journal of Science Forum (ISSN 0976-5395), Vol 1 No. 1 (2010) 23 – 34

32. Langmuir-Blodgett monolayers of cationic dyes in the presence and absence of clay mineral layers:
N,N' -dioctadecyl thiocyanine, octadecyl rhodamine B and laponite.
Syed Arshad Hussain, R. A. Schoonheydt
Langmuir 2010, 26(14), 11870–11877

31. Effect of nano-clay platelets on the J-aggregation of thiocyanine dye organized in Langmuir-Blodgett films
D. Bhattacharjee, **Syed Arshad Hussain***, S. Chakraborty, R. A. Schoonheydt
Spectrochimica Acta Part A 77 (2010) 232–237

30. Fluorescence Resonance Energy Transfer between organic dyes adsorbed onto nano-clay and Langmuir–Blodgett (LB) films
Syed Arshad Hussain*, S. Chakraborty, D. Bhattacharjee, R.A. Schoonheydt
Spectrochimica Acta Part A 75 (2010) 664–670

29. Reaction kinetics of organo-clay hybrid films: In-situ IRRAS, FIM and AFM studies
Syed Arshad Hussain, Md N. Islam, D. Bhattacharjee
Journal of Physics and Chemistry of Solids 71 (2010) 323–328

28. Photophysical studies of xanthene dye in alkanols and in inorganic ions
B Ganguly, R K Nath, **S A Hussain** and A K Panda
Indian J. Phys. 84 (6), 549-555 (2010)

27. Investigations of RhB18 langmuir monolayer by fluorescence imaging microscopy
S A Hussain, S Chakraborty and D Bhattacharjee
Indian J. Phys. 84 (6), 625-629 (2010)

2009

26. Langmuir-Blodgett Films and Molecular Electronics (*Brief Review*) *download pdf*
Syed Arshad Hussain, D. Bhattacharjee
Modern Physics Letters B vol. 23 No. 27 (2009) 3437-3451

25. Preparation of ODA-clay hybrid films by Langmuir–Blodgett technique
P. K. Paul, **Syed Arshad Hussain**, D. Bhattacharjee
Modern Physics Letters B vol. 23 No. 10 (2009) 1351-1358

2008

- 24.** Orientation of Carbazole molecule in the mixed Langmuir-Blodgett films
S. Biswas, **S. A. Hussain** and D. Bhattacharjee
Indian J. Phys. 82(2), 173-177 (2008)
- 23.** Photophysical characterizations of 2-(4-Biphenyl)-5 phenyl-1, 3, 4- oxadiazole in restricted geometry
P. K. Paul, **S. A. Hussain** and D. Bhattacharjee
Journal of Luminescence 128/1 (2008)41-50
- 22.** Preparation and characterization of an anionic dye-polycation molecular films by electrostatic Layer-by-Layer adsorption process
D. Dey, **S. A. Hussain**, R. K. Nath and D. Bhattacharjee
Spectrochimica Acta A Vol 70 Issue 2 (2008) 307-312
- 21.** Monolayer Characteristics of pyrene mixed with stearic acid at the air-water interface
Md. N. Islam, D. Bhattacharjee, **Syed Arshad Hussain***
Surface Review and Letters Volume: 15, Issue: 3 (June 2008), 287-293
- 20.** Aggregation of P-Terphenyl Along with PMMA/SA at the Langmuir and Langmuir–Blodgett Films
Syed Arshad Hussain*, Md. N. Islam, H. Leeman, D. Bhattacharjee
Surface Review and Letters, Vol. 15, No. 4 (2008) 1–9
- 19.** Effect of temperature and ionic concentration on Self-Assembled Films of Chicago Sky Blue
D. Dey, M. N. Islam, **S. A. Hussain*** D. Bhattacharjee
Chinese Physics Letters, Vol. 25, No. 10 (2008) 3732
- 18.** Photophysical characterization of layer-by-layer self-assembled films of deoxyribonucleic acid
D. Dey, M. N. Islam, **S. A. Hussain** and D. Bhattacharjee
Journal: Pramana Journal of Physics, Vol 71 No 2 (2008) 379-384
- 17.** Spectroscopic characterizations of nonamphiphilic 2, 5-Bis (5- tert- butyl- benzoxazolyl) – thiophene molecules at the air-water interface and in Langmuir-Blodgett films
S. Biswas, **S. A. Hussain** and D. Bhattacharjee
Surface Review Letters Vol. 15, No. 6 (2008) 1–8
- 16.** Electrostatic self assembly and characterization of ultra thin films of a secondary diazo dye
D. Dey, **S.A. Hussain**, D. Bhattacharjee
Chemical Journal on Internet, Aug. 1, 2008 Vol.10 No.8 P.38
- 15.** Layer by Layer (LbL) Technique for fabrication of electrostatic Self assembled ultrathin films
D. Dey, M.N. Islam, **S.A. Hussain** and D. Bhattacharjee
International Journal of Pure and Applied Physics, Vol. 4, No. 1 (2008) pp. 39—44

2007

- 14.** Immobilization of single strand DNA on solid substrate
S. A. Hussain, P. K. Paul, D. Dey, D. Bhattacharjee and S. Sinha
Chemical Physics letter Vol. 450, Issues 1-3, 14 December 2007, Pp 49-54
- 13.** Miscibility and molecular orientation of carbazole in the mixed Langmuir and Langmuir-Blodgett films
Md. N. Islam, D. Bhattacharjee and **S. A. Hussain***
Chinese Physics letter (IOP) 2007 24 (7): 2044-2047
- 12.** Langmuir-Blodgett films of p-terphenyl into different matrices: Evidence of dimer formation
S. Deb, **S. A. Hussain**, S. Biswas and D. Bhattacharjee
Spectro Chimica Acta A 68/2 (2007) 257-262
- 11.** Formation of complex Langmuir and Langmuir-Blodgett films of water soluble rosebengal
S. Biswas, D. Bhattacharjee, R. K. Nath and **S. A. Hussain***
Journal of Colloid and Interface Science 311(2) (2007) 361-367
- 10.** Miscibility of two components in the binary mixture of 9-phenyl anthracene mixed with stearic acid or polymethyl methacrylate at air-water interface
P. K. Paul, Md. N. Islam, D. Bhattacharjee and **S. A. Hussain***
Chinese Physics Letter (IOP) Vol 21 No. 5 (2007) 1331
- 9.** Orientation of Carbazole molecule in the mixed Langmuir-Blodgett films
S. Biswas, D. Bhattacharjee and **S. A. Hussain***
Macromolecules: An Indian Journal Vol. 3 Issue 4, 2007.

2006

- 8.** Formation of complex films with water-soluble CTAB molecules
S. Biswas, **S. A. Hussain**, S. Deb, R. K. Nath and D. Bhattacharjee
Spectro Chimica Acta part A 65 (2006) 628–632
- 7.** Role of microenvironment in the mixed Langmuir-Blodgett films
S. A. Hussain, P. K. Paul and D. Bhattacharjee
Journal of Colloid and Interface Science; Vol. 299 Issue 2 (2006) pp 785 – 790
- 6.** Role of various LB parameters on the optical characteristics of mixed Langmuir-Blodgett films
S. A. Hussain, P. K. Paul and D. Bhattacharjee
Journal of Physics and Chemistry of Solids 67 (2006) 2542–2549

2005

- 5.** Spectroscopic Characterizations of the mixed Langmuir Blodgett (LB) films of 2,2'-biquinoline molecules: evidence of dimer formation
S. Deb, S. Biswas, **S. A. Hussain** and D. Bhattacharjee
Chemical Physics Letter , 405 (2005) 323–329

4. Spectroscopic Characterizations of non-amphiphilic 2-(4-biphenyl)-6-phenyl benzoxazole molecules at the air-water interface and in Langmuir-Blodgett Films

S. A. Hussain, S. Deb and D. Bhattacharjee
Journal of Luminescence, 114 (2005) 197-206

3. Langmuir Blodgett Films of 9-phenyl anthracene molecules incorporated into different matrices

S. A. Hussain, S. Deb, S. Biswas, D. Bhattacharjee
Spectrochimica Acta Part-A , 61 (2005) 2448-2454

2. Ageing effect of mixed Langmuir-Blodgett film of 9-Phenyl Anthracene in PMMA and SA matrices

S. Deb, S. Biswas, **S. A. Hussain** and D. Bhattacharjee
Indian Journal of Physics 79 (9), 1027-1031 (2005)

1. Langmuir-Blodgett technique a unique tool for fabrication of Ultrathin Organic Films

S. A. Hussain, S. Deb and D. Bhattacharjee
J. Env. Sc. Res. Vol 4 (25-33), 2005

Syed Arshad Hussain

(Syed Arshad Hussain)

(DR. SYED ARSHAD HUSSAIN)
Assistant Professor,
Department of Physics,
Tripura University, Suryamaninagar.

Annexure-II

List of Seminar/Conf. etc attended by Dr. Syed Arshad Hussain

Total: 24 Invited Talk: 02 International: 07 National: 17

S. No.	Title of the paper presented	Title of Conference / Seminar	Organized by	National /international
01.	Langmuir-Blodgett films a unique technique for ultrathin film formation	Third Regional Conference on Physics Research in North East India.	Organized by Department of Physics Dibrugarh University, Dibrugarh-786004, Assam, INDIA. November 09, 2002	National
02.	Photophysical characteristics of mixed Langmuir Blodgett films of PBBO molecules.	CMDAYS-04	Department of Physics, NEHU, Shillong-793022 August 25-27, 2004	National
03.	Time dependent change in mixed Langmuir-Blodgett films of 9-Phenyl Anthracene in PMMA and SA matrices	National Symposium on Impact of Chemistry on Life and Society (NSICLS)	Department of Chemistry, Tripura University Suryamaninagar-799130, Tripura October 1-3, 2004	National
04.	Photophysical studies of mixed Langmuir-Blodgett films of 2,2'-Biquinoline molecules mixed with SA matrix.	PANE conference – 2004	Department of Physics, Gurucharan College, Silchar-788004, Assam November 5 & 6, 2004	National
05.	PRESSURE EFFECT STUDIES OF MIXED LANGMUIR-BLODGETT FILMS OF 2-2' BIQUINOLINE MOLECULES MIXED WITH SA MATRIX	50th ANNUAL TECHNICAL SESSION and National Conference On Current Trends of research in Science and Technology under the auspices of Assam Science Society	Department of Physics, Guwahati University, Guwahati January 28 & 29, 2005	National

06.	π -A Isotherm and layer effect of CA-PMMA mixed Langmuir-Blodgett films	CMDAYS-05	Department of Physics, Berhampur University Berhampur-760007, Orissa	National
07.	Evidence of dimer formation in the mixed LB films of p-terphenyl in different matrices	National Conference on Disperse Systems	Organized by Department of Chemistry, Assam University Silchar-788 011 Assam (November 23-25, 2006)	National
08.	Aggregation of DBPI molecules mixed with SA in Langmuir-Blodgett Films: a spectroscopic and pressure dependence study	National Symposium on Spectroscopy and its application (NSSS-2006)	Organized by Department of Spectroscopy, Indian association for Cultivation of Science Jadavpur, Kolkata, India (January 18-20, 2006).	National
09.		PANE conference - 2007	Organized by Department of Physics, Gauhati University, Assam 1-2 March, 2007	National
10.	Effect of nano-clay platelets on the J-aggregation of thiocyanine dye organized in Langmuir-Blodgett films	Condensed Matter Days (CMDAYS 09) during 26-28 August, 2009	Department of Physics, Jadavpur University, Kolkata, West Bengal	National
11.	Investigation of RhB18 Langmuir monolayer by Fluorescence Imaging Microscopy	VI th National Conference of the Physics Academy of North East during 2-4 April, 2009	Department of Physics, Tripura University	National
12	Organic Molecules adsorbed onto nano-clay and Langmuir-Blodgett (LB) films: Trace of FRET	97 th Indian Science Congress held at University of Kerala during January 3-7, 2010	University of Kerala, Kerala	National
13	Influence of MgCl ₂ on the organization of nano-clay sheet in the organo-clay hybrid films	National Seminar on Condensed Matter Physics (SCMP2010) on 16 th February, 2010	Department of Physics, Tripura University	National

14	An AFM investigations of hybrid organo-clay films	Seminar on “Frontier Areas of Chemistry” on 3 rd September, 2010	Department of Chemistry, Tripura University	National
15	Organo-clay hybrid films: An AFM and spectroscopic investigations	7 th National Conference in Physics held at Department of Physics, Manipur University during 5-8 October, 2010	Department of Physics, Manipur University, Manipur, India	National
16	Hybrid Langmuir-Blodgett Monolayers of Nano Clay: An Infrared and Atomic Force Microscopy Study.	International Conference on fundamental and applications of Nanoscience & Technology	School of Materials Science & Nanotechnology, Jadavpur University, Kolkata, India. Dates 9-11 Dec., 2010	International
17.	Mechanics of nano-dimensional Clay mineral Sheets	International conference on emerging areas of chemistry	Department of Chemistry, Tripura University, Tripura Dates: 12-14, Jan, 2011	International
18.	(i) Effect of Nano-Clay Layers on Fluorescence Resonance Energy Transfer Between Organic Dyes (ii) Mechanical properties of nano-dimensional Clay Mineral Layers	Euroclay – 2011 held at ANTALYA during June 26-July 1, 2011	European Clay Groups Association (ECGA) & Turkish National Committee on Clay Science	International
19.	Langmuir-Blodgett films of Nano dimensional organo-clay hybrid films	International Science Seminar organized by The Asiatic Society of Bangladesh, Dhaka, during 28-29 Nov., 2011	The Asiatic Society of Bangladesh, Dhaka, during 28-29 Nov., 2011	Invited Talk International
20.	Nano dimensional organo – clay hybrid films	Fifteenth national conference on surfactants, emulsions and biocolloids – 2011	Department of Chemistry, Tripura University, Tripura Dates 27 – 29 December, 2011	National

21.	Construction of basic and universal molecular logic gates on the basis pH sensitiveness of dsDNA	National conference on recent trends of research in Physics during 3 – 4 February, 2012	Department of Physics, Tripura University, Tripura	National
22.	Clay sheets: the natural nano materials	33 rd annual conference of the Institute of Indian Geographers & International seminar on population, development & disaster management during 8 – 11 February, 2012	Department of Geography & Disaster Management, Tripura University, Tripura	International
23.	Nano-mechanics of single clay sheet	International conference on Material Science (IS2013) 21-23 February, 2013	Department of Physics, Tripura University, Tripura	International
24.	Nanodimensional Organo-Clay Hybrid Films with Improved Functionality	International conference on “Organic Devices: The Future Ahead”	Bhabha Atomic Research Centre, Mumbai, India 3-6 March, 2014	Invited Talk International

Syed Arshad Hussain

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(DR. SYED ARSHAD HUSSAIN)
Assistant Professor,
Department of Physics,
Tripura University, Suryamaninagar.