

Asmita Shah

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Education

- **Unité Dynamique et Structures des Matériaux Moléculaires (UDSMM)** Expected July 2022
Université du Littoral Côte d'Opale (ULCO), Calais, France
Ph.D. – Physics, (Required credits-24, Obtained credits-76)
Director – Prof. Redouane Douali
Co-Director – Prof. Abdelylah Daoudi
Supervisor – Dr. Dharmendra Pratap Singh
Thesis Title – Organic Material based Discotic Liquid Crystals for Flexible Photovoltaic Applications
- **Central University of Jharkhand (CUJ), India** July 2012-May2017
Integrated M. Tech. (Nanotechnology), (BS+MS Dual Degree) (Credits-9.25/10)
(M. Tech Project – Indian Institute of Technology, Kanpur)
Advisor – Dr. Raju Kumar Gupta
Co-Advisor– Dr. Gajendra Prasad Singh
Thesis Title – Organic Development of novel materials for supercapacitor Application

Experience

- ❖ Ph. D Scholar
SMAEO, Université du Littoral Côte d'Opale (ULCO), Calais, France Dec 2018 - Present
- ❖ Visiting Researcher
Indian Institute of Science Education and Research (IISER), Pune, India Jul 2019-Aug 2019
- ❖ Junior Research Fellow
Indian Institute of Technology (IITD), Delhi, India Aug 2018 - Oct 2018
- ❖ Junior Research Fellow
Institute of Nano Science and Technology (INST), Mohali, India Jan 2018 - Jul 2018
- ❖ Research Assistant
Indian Institute of Technology (IITK), Kanpur, India May 2016 - Aug 2017
- ❖ B. Tech & M. Tech Degree
Central University of Jharkhand (CUJ), Ranchi, India Jan 2016 – Apr 2016
- ❖ Research Intern
Steel Authority of India Ltd (SAIL), Ranchi, India June 2011 - July 2016

Awards and Recognitions

- Liquid Crystal beauty artist of May 2022, ILCS 2022
- Advanced Materials and Liquid Crystal Institute (AMLICI) Student Travel Grant, ILCC2022 2022
- Liquid Crystal beauty artist of November 2021, ILCS 2021
- Advanced Materials and Liquid Crystal Institute (AMLICI) Student Travel Grant, ILCC2020 2020
- Junior Research Fellow (JRF), under DST-SERB Project, India 2018
- Junior Research Fellow (JRF), under DST-Nano Mission Project, India 2018

Publications

- **Shah**, D. P. Singh, B. Duponchel, F. Krasinski, A. Daoudi, S. Kumar, R. Douali, Molecular ordering dependent charge transport in π -stacked triphenylene-based discotic liquid crystals and its correlation with dielectric properties, *Journal of Molecular Liquids*, 342(2021), 117353.
- J. De, M. Devi, **A. Shah**, S. P. Gupta, I. Bala, D. P. Singh, R. Douali, S. K. Pal, Luminescent Conductive Columnar π -Gelators for Fe (II) Sensing and Bio-Imaging Applications, *J. Phys. Chem. B* (2020), 124, 45, 10257–10265.
- **Shah**, B. Duponchel, A. Gowda, S. Kumar, M. Becuwe, C. Davoisne, C. Legrand, R. Douali, D. P. Singh, Charge transport in phenazine–fused triphenylene discotic mesogens doped with CdS nanowires”, *New J. Chem.*, 44 (35) (2020), 14872-14878.
- **Shah**, M. S. Sannaikar, S. R. Inamdar, B. Duponchel, R. Douali, D. P. Singh, Photoluminescence modulation in the graphene oxide dispersed 4-n-octyl-4'-cyanobiphenyl molecular system, *Journal of Luminescence*, 226 (2020) 117509.
- P. Mahesh, **A. Shah**, K. Swamynathan, D. P. Singh, R. Douali, and S. Kumar, Carbon dots-dispersed hexabutyloxytriphenylene discotic mesogens: Structural, morphological and charge transport behavior, *J. Mater. Chem.C*, 8 (2020) 9252-9261.
- B. Prakash, V. Katoch, **A. Shah**, M. Sharma, M. M. Devi, J. J Panda, J. Sharma, A. K. Ganguli, Continuous Flow Reactor for the Controlled Synthesis and Inline Photocatalysis of Antibacterial Ag₂S Nanoparticles, *J. Photochem. Photobiol.*, (2020)
- A Tyagi, MC Joshi, **A Shah**, VK Thakur, RK Gupta, Hydrothermally tailored three-dimensional Ni–V layered double hydroxide nanosheets as high-performance hybrid supercapacitor applications, *ACS Omega* (2019), 4, 2, 3257–3267.
- AS Bhattacharyya, R. Kumar, V. Raj, S Shrinidhi, S. Suman, **A. Shah**, R. P Kumar, Some aspects of epitaxial thin film growth, arXiv:1604.02020
- S Shrinidhi, S Suman, **A Shah**, P Prabhakar, A Chaurasia, A Kumar, KG Chauhan, AS Bhattacharyya, Structural characterization of APPJ treated Bismaleimide coatings and heat-treated Titania-BMI, arXiv:1604.07297, 2016.

Oral and Poster Presentations

- **Shah**, R. Douali, S. Kumar, A. Daoudi, B. Duponchel, D. P. Singh, Coping with the poor conductivity of organic semiconductor liquid crystals via carbon-dots dispersion, (15th to 17th December, **2021**), Calais, France.
- **Shah**, D. P. Singh, B. Duponchel, R. Douali, S. Kumar, A. Daoudi, Positive charge carrier transport properties of triphenylene core-based discotic liquid crystal stabilized with a UV-crosslinked reactive nematogen, 20th Symposium on anisotropic self-organizing systems (CFCL, 2021), Calais, France (31st August to 2nd September **2021**).
- **Shah**, D. P. Singh, B. Duponchel, A. Daoudi, S. Kumar, R. Douali, Columnar liquid crystals: One dimensional charge transporting material for futuristic opto-electronic and photovoltaic applications, Pole MTE (**2021**), Calais, France.
- **Shah**, D. P. Singh, B. Duponchel, A. Daoudi, S. Kumar, R. Douali, Charge transport behavior of carbon dot-dispersed hexaalkoxytriphenylene discotic matrices, 27th NCLC-2020, Noida, India (21st to 23rd Dec **2020**).

- **Shah**, D. P. Singh, B. Duponchel, A. Daoudi, S. Kumar and R. Douali, Charge transport mechanism in triphenylene core based homologous series of discotic mesogens and their applications in opto-electronics and photovoltaics, 19th Symposium on anisotropic self-organizing systems (CFCL, 2019), Sète, France (3rd to 6th September, **2019**).
- D. P. Singh, **A. Shah**, I. Bala, S. K. Pal, A. Gowda, S. Kumar and R. Douali, Charge transport behavior
- in triphenylene derivative discotic liquid crystals and their opto-electronic applications, 19th Symposium on anisotropic self-organizing systems (CFCL, 2019), Sète, France (3rd to 6th September, **2019**).

References:

1. Prof. Redouane Douali

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2. Prof. Abdelylah Daoudi

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3. Dr. Dharmendra Pratap Singh

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