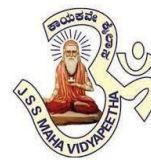





JSS Mahavidyapeetha
JSS Academy of Technical Education, Noida
Department of Physics



FACULTY PROFILE

1. Personal Details

NAME	Dr. Alok Singh	
DEPARTMENT	Physics	
DESIGNATION	Assistant Professor	
PHONE	+91 9453563007	
EMAIL ID	alok.singh@jssaten.ac.in	
Date of Joining (JSSATEN)	13-12-2024	

2. Experience

Total Experience in Years	Teaching:- 4	Industry: - 00	Research: - 8
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3. Qualifications

COURSES	SPECIALIZATION	Year of Award	INSTITUTION	UNIVERSITY
B.Sc.	Physics	2008	Vikramajit Singh Sanatan Dharma, College, Kapur Nagar, Uttar Pradesh	Chhatrapati Shahu Ji Maharaj University, Kanpur Nagar, Uttar Pradesh
M.Sc.	Physics (Electronics)	2010	Vikramajit Singh Sanatan Dharma, College, Kapur Nagar, Uttar Pradesh	Chhatrapati Shahu Ji Maharaj University, Kanpur Nagar, Uttar Pradesh
M.Phil.	Physics (Fiber Optics and Photonics)	2012	University Institute of Engineering and Technology, Kanpur Nagar, Uttar Pradesh	Chhatrapati Shahu Ji Maharaj University, Kanpur Nagar, Uttar Pradesh
Ph.D.	Applied Physics (Plasmonics based Sensor and Photovoltaic)	2024	Gautam Buddha University, Gautam Budh Nagar, Uttar Pradesh	Gautam Buddha University, Greater Noida, Gautam Budh Nagar, Uttar Pradesh
Post Doc.	-	-	-	-

4. Research & Publications

Papers Published in Web of Science indexed Journals	International: 03	National: 00
Papers Published in SCOPUS indexed Journals	International: 00	National: 00
Papers Published in other Journals	International: 00	National: 00
Papers Presented in Conferences / Symposium	International: 08	National: 06
Books / Book chapters Published	Name of the book: Publisher: Year of Publication:	

5. Research Guidance

PhD Guide? Give field & University	NIL	NIL
PhDs / Projects Guided	NIL	NIL

6. Grants

i. Funds Received (Projects)

Project Name	Grant Amount	Date of receiving the Grant	Duration	Grant issuing authority/ Body / Organization
-	-	-	-	-

ii. Patents

Sl. No.	Title Details	Details of award of patent / Filed
-	-	-

iii. Consultancy

Title of the work	Amount in Rs.	Date of receiving the Grant	Duration	Grant issuing authority/ Body / Organization
-	-	-	-	-

7. Awards Received

Awards	<ul style="list-style-type: none"> ▪ Selected for the Project Associate Fellowship by DST and SERB, India in year (2020). ▪ Best Poster Award for the work entitled, “Matlab GUI based Assistance Tool for Bio-Sensing” by A. Singh, M. S. Shishodia, in Seminar on Recent Trends in Basic and Applied Science – 2022 held at DPBS PG College, Anoopshahr, Bulandshahar (UP), March 13th, (2022). ▪ Best Poster Award for the work entitled, “Matlab-Simulink based Analysis of Single and Double Junction Photovoltaic Cell”, by Neha, Rama, A. Singh, M. S. Shishodia, Conference on “Renewable Energy and Sustainable Environment: Challenge and Remedies” (CRESE-2018) held at SMVDU, Katra, Jammu, India, April 24th-25th, (2018).
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8. Publications

i. International Journals

Sl. No.	Title of the paper	Name(s) of Author(s)	Name of the Journal	Volume No. Issue No. Year	WOS / Scopus / Both	Impact Factor	Publisher
1.	Fano resonances in graphene coated refractory nitride nanoshell and nanomatryoshka for sensing food adulteration	Alok Singh, Manmohan Singh Shishodia, Daksh Agarwal, and Pushpendra Kumar	Applied Physics A	Vol. 129 2023	Scopus	2.9	Springer
2.	Thickness Controlled Physical Properties of Chemically Synthesized Nanostructured Calcite Thin Films	Jyoti Kumari, Harish, Akash, Arushi Pandey, Pushpendra Kumar, Manoj K Singh, Alok Singh, Manmohan Singh Shishodia, Rajendra P. Joshi, Anoop Kumar	ChemistrySelect	Vol. 7 2022	Scopus	2.1	Wiley-VCH

3.	Graphene vs. silica coated refractory nitrides based core-shell nanoparticles for nanoplasmonic sensing	Alok Singh, Manmohan Singh Shishodia	Physica E: Low-dimensional Systems and Nanostructures	Vol. 124 2020	Scopus	3.57	Elsevier
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ii. National Journals

Sl. No.	Title of the paper	Name(s) of Author(s)	Name of the Journal	Volume No. Issue No. Year	WOS / Scopus / Both	Impact Factor	Publisher

iii. Conferences

Sl. No.	Title of the paper	Name(s) of Author(s)	Name of the Conference	Volume No. Issue No. Year	WOS / Scopus	Impact Factor	Publisher
1.	Numerical Optimization of TiN and ZrN Nanorods based Plasmonic Nanosystems for Enhanced Solar Absorption	A. Singh, M. S. Shishodia, P. Rajput, S. Juneja	Second International Conference on Recent Trends in Applied Physics & Material Science (RAM-2024), Bikaner, Rajasthan	2024	-	-	(RAM-2024), Bikaner, Rajasthan

2.	Effect of Plasmon Resonance of Metal Nitrides in Semiconduct or Plasmonic Devices	P. Rajput, S. Juneja, A. Singh, and M. S. Shishodia	Second International Conference on Recent Trends in Applied Physics & Material Science (RAM-2024), Bikaner, Rajsthan	2024	-	-	(RAM-2024), Bikaner, Rajsthan
3.	Enhancing Light Absorption in Photovoltaics : A Comparative Study of TiN, ZrN, and Au Nanorod Systems	A. Singh, M. S. Shishodia	IRIS-2024, Jaipur, Rajasthan	2024	-	-	IRIS-2024, Jaipur, Rajasthan
4.	Software Package for Designing Plasmonics Nanoparticle based Refractive Index Sensors	A. Singh, M. S. Shishodia	Conference on Optics, Photonics & Quantum Optics (COPaQ-2022), IIT Roorkee	2018	-	-	(COPaQ-2022), IIT Roorkee
5.	Python Based Toolbox for Simulating Nanoparticle Scattering	A. Singh, M. S. Shishodia	OPTCT, IIT Delhi, December 26- 27th, (2022).	2022	-	-	OPTCT, IIT Delhi
6.	Matlab GUI based Assistance Tool for Bio-Sensing	A. Singh, M. S. Shishodia	National Seminar on Recent Trends in Basic and Applied Sciences, DPBS PG College, Anoopshahr, Bulandshahar (UP)	2022	-	-	-

7.	MATLAB Based GUI for Scattering Analysis and Designing Nanoparticle Based Plasmonic Sensors	A. Singh, M. S. Shishodia	OPTCT, IIT Delhi	2021	-	-	OPTCT, IIT Delhi
8.	Toolbox for Designing Nanoshell and Nanomatryos hka based Plasmonic Sensors	A. Singh, M. S. Shishodia	FOP, IIT Delhi	2021	-	-	FOP, IIT Delhi
9.	Analysis of Fano Resonance based Sensing using Graphene Coated Plasmonic Nanoparticles	A. Singh, M. S. Shishodia	FOP, IIT Delhi	2021	-	-	FOP, IIT Delhi
10.	Towards Development of Mie Theory based GUI Tools for Designing Graphene Assisted Plasmonic Sensors	A. Singh, M. S. Shishodia	OPTCT, IIT Roorkee	2021	-	-	OPTCT, IIT Roorkee
11.	Spherical and Cylindrical Plasmonic Nanoparticles for Enhanced Light Trapping in Photovoltaic Cells	A. Singh, P. Kumar, M. S. Shishodia	International Conference on Emerging Challenges and Opportunities in Energy Sector (ECOES) RGIPT, Jais, India	2018	-	-	(ECOES) RGIPT, Jais, India

12.	Spherical and Cylindrical Plasmonic Nanoparticles for Improved Photovoltaics : A Theoretical Investigation	A. Singh, M. S. Shishodia	National Conference on “Renewable Energy and Sustainable Environment: Challenge and Remedies” (CRESE) SMVDU, Katra, India	2018	-	-	(CRESE) SMVDU, Katra, India
13.	Scattering and Far/Near Field Characteristics of Metallic Nanoparticles for Photovoltaic Applications	A. Singh, M. S. Shishodia	National Conference on “Current and Future Perspectives in Nanotechnology: Nanoworld”, University of Delhi	2018	-	-	
14.	Matlab-Simulink based Analysis of Single and Double Junction Photovoltaic Cell	Neha, Rama, A. Singh, M. S. Shishodia	National Conference on “Renewable Energy and Sustainable Environment: Challenge and Remedies” (CRESE) SMVDU, Katra, India	2018	-	-	(CRESE) SMVDU, Katra, India

iv. Workshops /Conferences Attended

Sl. No.	Name of the workshop / Conference	Organizer	Date
1.	FDP on Challenges and Innovations in Different Energy Storage Technologies	JSS Academy of Technical Education, Noida	16-12-2024 to 21-12-2024

v. Workshops / Conference (Organized)

Sl. No.	Name of the workshop / Conference	Organized by	Date	Role
-	-	-	-	-

vi. Conference Attended (those sponsored by AICTE / ISTE/IETE/TEQIP or any other sponsoring body)

v. Workshops / Conference (Organized)

Sl. No.	Name of the workshop / Conference	Organized by	Date	Role
-	-	-	-	-

vi. Conference Attended (those sponsored by AICTE / ISTE/IETE/TEQIP or any other sponsoring body)

Sl. No.	Name of the workshop / Conference	Organizer	Date
1	-	-	-
	0		

9. Details of NPTEL / COURSERA courses completed

Sl. No.	Name of the subject	Organized by	Date of completion / Award	Grade / Marks

10. Membership of Professional Bodies:

<ul style="list-style-type: none">• Optical Society of India (Associate Member No.179)• OPTICA (Member No. 1985419)
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11. Any other information you will like to share about your professional experience

Developed Software Package (NanoSensorLab) for Designing Plasmonics Nanoparticle based Refractive Index Sensors