

JSS Mahavidyapeetha JSS Academy of Technical Education



Dr. Vishnuvardhan Road, Srinivasapura post Bangalore 560060 www. Jssateb.ac.in

FACULTY PROFILE

Department: Engineering Physics

1. Personal Details

| NAME | Dr. NITYANAND CHOUDHARY | |
|------------------------------|--------------------------|--|
| DEPARTMENT | Engineering Physics | |
| DESIGNATION | Professor | |
| PHONE | +91 9899404999 | |
| EMAIL ID | hodphysics@jssateb.ac.in | |
| Date of Joining (JSSATEB) | 01-01-2016 | |

2. Experience

| Total Experience in Years Teaching: 28 Years Industry: Nil Research: 01 year |
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3. Qualifications

| COURSES | SPECIALIZATION | Year of Award | INSTITUTION | UNIVERSITY |
|---------|---------------------------------------|------------------|-------------------------|-----------------|
| B.Sc | PME | 1993 | Saharsa College Saharsa | LNMU, Darbhanga |
| M.Sc., | Electronics | 1995 | Saharsa College Saharsa | BNMU, Madhepura |
| Ph.D. | Amorphous Semiconductor Physics | 2007 | HBTI Kanpur | UPTU, Lucknow |

4. Research & Publications

| Papers Published in Web of Science indexed Journals | International: 12 | National: | |
|--------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|-------------|--|
| Papers Published in SCOPUS indexed Journals | International: 9 | National: | |
| Papers Published in other Journals | International: 0 | National: | |
| Papers Presented in Conferences / Symposium | International:-4 | National: 2 | |
| Books / Book chapters Published | Name of the book: Modern Optics Publisher: Athena Publication, London Year of Publication: Under process | | |
| | Name of the book: Applied Engineering Physics | | |
| | Publisher: Pearson | | |
| | Year of Publication:2012-13 | | |
| | Name of the book: Laser System and Application | | |

| | Publisher: PHI , New Delhi |
|--|-----------------------------------------------------------------------|
| | Year of Publication:2011 |
| | Name of the book: Applied Engineering Physics II (for JNTU, Kanikada |
| | Recommended as Text book |
| | Publisher: Acme Learning an associate of Excel Book Publication. |
| | Daryaganj, New Delhi |
| | Year of Publication:2011 |
| | Name of the book: Applied Engineering Physics II (for JNTU, Kanikada |
| | Recommended as Text book |
| | Publisher: Acme Learning an associate of Excel Book Publication. |
| | Daryaganj, New Delhi |
| | Year of Publication:2011 |
| | Newsofthe Leeh Mercuel Vol II Decommended on Text heads |
| | Name of the book: Lab Manual Vol II Recommended as Text book |
| | Publisher: Acme Learning an associate of Excel Book Publication. |
| | Daryaganj, New Delhi Year of Publication:2011 |
| | real of Publication.2011 |
| | Name of the book: Lab Manual Vol I Recommended as Text book |
| | Publisher: Acme Learning an associate of Excel Book Publication. |
| | Daryaganj, New Delhi |
| | Year of Publication:2011 |
| | Name of the book: Perspective of Engineering Physics II (for UPTU) |
| | Publisher: Acme Learning an associate of Excel Book Publication. |
| | • |
| | Daryaganj, New Delhi Year of Publication:2009 |
| | |
| | Name of the book: Perspective of Engineering Physics I (for UPTU) |
| | Publisher: Acme Learning an associate of Excel Book Publication. |
| | Daryaganj, New Delhi |
| | Year of Publication: 2009 |
| | |

5. Research Guidance

| PhD Guide/ Give field & University | Yes, Amorphous Semiconductor Physics | Visvesvaraya Technological University: |
|---------------------------------------|-----------------------------------------------------------------|----------------------------------------|
| PhDs / Projects Guided M.Phil | "Photo-electrical properties of Se- Ag Chalcogenide Glasses" | Kanpur University, Kanpur |

6. Grants

i. Funds Received (Projects) : I-STEM committee has recommended to support the research work with the catalytic grant up to 1.1 lakh for our project entitled :influence of thickness and temperature on solution processed SnO₂ based solar cells and sensors". This proposal was jointly submitted by Dr R Shashidhar (supervisor), myself (co-supervisor) and Mr. Anand B C (research scholar) to the I-STEM, center for Nano Science and Engineering (CeNSE), Indian Institute of Science (IISc), Bangalore, under "reverse funding".

ii. Patents: Nil

iii. Consultancy

7. Awards Received: Nil

8. Publications

i. International Journals

| SI. 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 | Application of SRCBD S: SnO₂ nanostructured Thin Films as Room Temperature Gas and Humidity Sensors | Anand B C, R Shashidhar, Nityanand Choudhary | Journal of the Korean Physical Society | 82, 2023 | Both | 0.800 | Springer |
| 2 | Positive impedance and low hysteresis MoS | Shashidhar, Nityanand Choudhary | Digest Journal of Nanomaterias and Biostructures | 18,1 2023 | Both | 1.000 | National Institute R and D of Materials Physics |
| 3 | Synthesis of Nanoparticles by Solution Combustion Method: A Review | Nityanand Choudhary & R Shashidhar | JSS Journal of Scientific Studies | 1,2,2023 | Others | - | J S S Academy of Technical Education |
| 4 | Influence of thickness and illumination on Electrical Properties of MOS capacitor of spray pyrolysed mixed phase CdTe2O5 - CdTe03 -CdTe film | R.Shashidhar & Nityanand Choudhary | Emergent Materials | 1-9, 2021 | Both | 4.8 | Springer Nature |
| 5 | Cost effective SnS heterojunction solar cells synthesized by spray pyrolysis | R.Shashidhar & Nityanand Choudhary | Journal Sol-Gel Science & Technology | 96,1,2020 | Both | 2.3 | Springer |
| 6 | Thickness dependent studies of hetero- junction solar cell synthesized on quartz substrate by spray pyrolysis Technique | R.Shashidhar & Nityanand Choudhary | Indian Journal of Pure & Applied Physics (IJPAP) | 58, 2020 | Both | 0.7 | NISCAIR- CSIR, India |
| 7 | Luminescence of bio- synthesized rod like Bismuth Oxychloride nanoparticles | Nityanand Choudhary & R.Shashidhar | Advances in Natural Sciences: Nano Science & Nano Technology | 10,3,2019 | Both | 1.7 | Vietnam Academy of Science and Technology (VAST) (VN) and IOP (UK) |
| 8 | Spectroscopic properties of red emitting Eu ³⁺ doped Y ₂ SiO ₅ nanophosphors for WLED's on the basis of Judd-Ofelt analysis: Calotropis gigantea latex mediated synthesis | Nityanand Choudhary & G. Ramakrishna | Journal of Luminescence | 181,2017 | Both | 3.3 | Elsevier |

| 9 | Dielectric relaxation in glassy Se ₈₀ Ge ₂₀ and Se ₇₅ Ge ₂₀ Ag ₅ Chelcogenide glassy Alloys | A.Dwivedi, R Arora, N. Mehta, N Choudhary & A. Kumar, | Int. Sci. J.Semi. Phys.Quantum Electronics and Optoelectronics | 8,2005 | Both | 0.3 | National Academy of Sciences of Ukraine |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|-------------------------------------------------------------------------|---------|------|-----|--------------------------------------------------|
| 10 | Dielectric relaxation in glassy Se ₇₀ Te-x Ag _x alloys | N. Choudhary & A. Kumar | Ind. J. Pure Appl. Phys | 44,2006 | Both | 0.7 | NISCAIR- CSIR, India |
| 11 | Dielectric relaxation in glassy Se _{100-x} Sb _x alloys | N Choudhary & A Kumar | Turkish J. Phys. | 29,2005 | Both | 1.4 | Academic Journal |
| 12 | Dielectric Relaxation in Se ₉₀ Ge _x In _{10-x} alloys | N Choudhary, D K Goel & A Kumar | Indian. J. Engg & Mat. Sc. | 11,2004 | Both | 0.9 | CSIR |

ii. National Journals: Nil

iii. Conferences: Nil

iv. Workshops / Conferences Attended

| SI. No. | Name of the workshop / Conference | Organiser | Date |
|---------|--------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|---------------------------|
| 1 | Two Day Online International Conference on "Advanced Materials Science and Applications" (ICAMSA-2020) | Department of Physics, MSRIT, Bangalore, Karnataka, India | 3rd to 4th September 2020 |
| 2 | Second international conference on Current applications in material science | SJB Institute of Technology, Bangalore | 4th May 2019 |
| 3 | National Conference Advanced Lithium Ion Batteries: Science and Technology (NALIBST- 2019) | Indian Institute of Science, Bangalore, | 27-28 December 2019 |
| 4 | International Conference on Nanotechnology (NANOCON 2018) | Bharati Vidhyapeeth, Pune | 25th to 26th October 2018 |
| 5 | International conference on surface engineering (INCOSURF-2018) | Electrochemical Society of India (ECSI and Department of Inorganic and Physical Chemistry, IISc., Bangalore | 9th to 11th August 2018 |
| 6 | INDIAS 2004, | Goa University, Goa | 24-26 September 2004 |
| 7 | National Conference in emerging Materials and Technologies, | Venkateswara University, Tirypati | 3-4 August 2004 |

v. Workshops / Conference (Orgainsed)

| SI. No. | Name of the workshop / Conference | Organized by | Date | Role |
|---------|---------------------------------------|--------------|-----------|------------|
| 1 | International Conference on Cognitive | IEEE | 3-4 March | Organizing |
| | Computing and Information Processing | | 2015 | Chair |

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

| SI. No. | Name of the workshop / Conference | Organiser | Date |
|---------|-----------------------------------|-----------|------|

| 1 | Frontiers in Material Research for Energy Application | Thyagarajar College of Engineering, Madurai | 11 th to 17 th December 2017 |
|---|----------------------------------------------------------|------------------------------------------------------|----------------------------------------------------|
| 2 | Laser Science and Technology | NITTR, Chandigarh | 19-23 January -2009 |
| 3 | Advanced Methods for Material Characterization | IIT, Roorkee | 06-10 February-2006 |
| 4 | Principle of organization | JSSATE, NOIDA | 17-20January 2004 |

9. Details of NPTEL / COURSERA courses completed

| SI. No. | Name of the subject | Organised by | Date of completion / Award | Grade / Marks |
|---------|-----------------------------------------------|--------------|----------------------------|---------------|
| 1 | Solid state Physics | NPTEL | 28.09.2021 | 50 % |
| 2 | HTML,CSS and java script for web developer | Coursera | 03.06.2020 | 100 % |
| 3 | Python for data science | NPTEL | Aug-Sep .2019 | 70 % |

10. Membership of Professional Bodies:

1. BOE, Mahamaya Technical University NOIDA (2010-2013)

11. Any other information you will like to share about your professional experience

Dr.Nityanand Choudhary Professor of Physics JSS Academy of Technical Education Bangalore 560060