CURRICULUM VITAE

Name: Dr. Manoranjan Sahoo Position: Lecturer in Physics Address: P.G. Department of Physics, Bhadrak Autonomous College, Bhadrak Contact: 9437233553 Orcid ID: https://orcid.org/0009-0007-6118-8552



Educational Background:

Sl. No	Degree	University/Institution	Discipline	Year of completio n
1	Bachelor's degree	UTKAL UNIVERSITY, BHUBANESWAR, ODISHA	Physics (Hons)	2000
2	Master's degree	NATIONAL INSTITUTE OF TECHNOLOGY, ROURKELA, ODISHA	Physics	2002
3	M.Phil.	SAMBALPUR UNIVERSITY, SAMBALPUR, ODISHA	Physics	2009
4	Ph.D.	SAMBALPUR UNIVERSITY, SAMBALPUR, ODISHA	Physics	2021

Ph.D. thesis title: CHARACTERIZATION OF MEV PROTON-INDUCED MESOMORPHIC PHASE OF POLYETHYLENE TEREPHTHALATE MATERIAL

Professional Background:

Sl. No	Position held	Name of the Institute	Joining	held Up to
1	LECTURER	BHADRAK AUTONOMOUS COLLEGE, BHADRAK, ODISHA	01/09/2023	CONT
2	JR. LECTURER	GOVT. JUNIOR SCIENCE COLLEGE, TIRING, MAYURBHANJ, ODISHA	24/07/2017	31/08/2023
3	JR. LECTURER	KHALLIKOTE JUNIOR COLLEGE, BERHAMPUR, ODISHA	18/02/2015	08/12/2016

Awards/ Achievements:

Sl. No	Award Name	Agency	Year
1	UNIVERSITY GOLD MEDAL FOR SECURING 1 st CLASS 1 st position in M.SC	SAMBALPUR UNIVERSITY, SAMBALPUR, ODISHA	2002
2	DILLIP KUMAR PATI GOLD MEDAL FOR SECURING 1^{st} CLASS 1^{st} POSITION IN M.SC	SAMBALPUR UNIVERSITY, SAMBALPUR, ODISHA	2002

Publications:

Please write author's list first, then title. Lastly journal citation, and link to your publication (if possible)

- 1. **M. Sahoo**, B. Mallick, S. Rout and G. N. Dash, Structural and Mechanical Strength of proton radiation processed Polyethylene terephthalate, *Journal of Scientific Research*, 12, 83, **2020**.
- 2. **M. Sahoo**, B. Mallick and G. N. Dash, MeV-Proton induced effect on mesophase structure of Polyethylene terephthalate, *Adv.Sci. lett.*, 20, 838, **2014**.
- 3. **M. Sahoo**, B. Mallick, G. N. Dash and T. N. Tiwari, Study of the mesomorphic phase of PET using DSC and XRD techniques, *IOSR journal of Applied physics*, 7, 1, **2015**.

Published Books/ book chapters:

SI. No

Titles, Number

1 XRD and DSC analysis of Mesophase By Biswajit Mallick and Manoranjan Sahoo, ISBN-13: 978-1636485317/ ISBN-10: 1636485316, ELIVA Publisher,(2022)

Conferences attended:

SI. No Detail (Place, Role, Title, Date)

- 1 **M. Sahoo**, B. Mallick and G. N. Dash, Analysis of mesophase of of Polyethylene terephthalate using differential scanning calorimetry technique, *Proceedings of National conference on technical advances in materials science and research*, held during 13-15th February, 2014 at School of Physics, Sambalpur University, Burla, Odisha, India. (Poster)
- 2 **M. Sahoo**, B. Mallick and G. N. Dash, Effect of three phase structure of PET due to Proton-induced microstrain applying XRD technique, *Proceedings of National Semina on Science & Technology for human development*, held during 5-6th December, 2014 at Siksha "O" Anusandhan University, Bhubaneswar, Odisha, India.
- 3 M. Sahoo, B. Mallick and G. N. Dash, MeV-Proton induced effect on mesophase structure of Polyethylene terephthalate, *Proceedings of National Seminar on recent trends in condensed matter Physics*, held during 8-9th February, 2014 at Siksha "O" Anusandhan University, Bhubaneswar, Odisha, India. (Poster)
- M. Sahoo, B. Mallick and G. N. Dash, Mesomorphic phase analysis of 3 MEV Proton irradiated PET using XRD and DSC techniques, *Proceedings of National seminar on recent advancement in materials science*, held during 23-24th August, 2014 at Veer Surendra Sai University of Technology, Burla, Odisha, India. (Oral)
- 5 **M. Sahoo**, B. Mallick and G. N. Dash, Nano-size Crystallites of Mesophase in PET materials, *Proceedings of National seminar on Recent development in Nano science and technology*, held during

9th-10th September, 2018 at Govt. Autonomous College, Rourkela, Odisha, India. (Oral)

- 6 **M. Sahoo**, B. Mallick and G. N. Dash, Dependence of elastic modulus on crystallinity of PET material, *Proceedings of International seminar on Emerging trends in physics and applications*, held during 2-4th February, 2019 at Parala Maharaja Engineering College, Berhampur, Odisha, India.
- 7 **M. Sahoo**, Proton irradiation effect on density of polymer and its measurement using radiation technique, *Proceedings of National seminar on Recent advances of materials in electronics applications*, held during 22-23rd December, 2019 at Govt. Autonomous College, Rourkela, Odisha, India. (Oral)
- 8 **Attended** *International webinar series on Recent trends in Material Science (RTMS-2020)*, held during 13-14th July, 2020 at Department of Applied Physics, Chouksey Engineering College, Bilaspur, India.
- 9 M. Sahoo, B. Mallick and G. N. Dash, Thermal analysis of mesophase in PET: A surface sensing factor of the polymer, *Proceedings of International Virtual conference on Advances in Functional materials*(*AFM-2020*, held during 26-28th August, 2020 at Department of physics, School of Applied Sciences, KIIT Deemed to be University, Bhubaneswar, Odisha, India. (Poster)
- 10 **M. Sahoo**, Two Dimensional Mesophase Pattern in PET Fibre due to proton Irradiation:, *Proceedings* of International conference on Material Science Technology and Sustainable Environment (ICMSTSE-2024), held during 18-19th April, 2024 at RPS Degree College, Mahendergarh, Haryana, India. (Oral)

Workshop/Faculty development programme attended:

SI. No	Detail	
1	Three day Workshop on the use of low energy ion beams, held during 7-9 th November, 2015 at Institute of Physics, Bhubaneswar, Odisha, India.	
2	One day IOP-IANCAS Workshop on Nuclear Sciences, held on 7 th July, 2017 at Institute of Physics, Bhubaneswar, Odisha, India.	
3	Five day Online Faculty Development Programme on Advanced Nano materials and Nano Fabrication Techniques and Devices, held during 10-14 th August, 2020 at Department of Mechanical Engineering, BMS Institute of Technology and Management. Bengaluru, India	
4.	Two days Seminar cum e- workshop on Experimental Electronics, held during 31 st July -1 st August, 2020 at Department of Physics, Hans Raj Mahila Mahavidyalaya, Jalandhar, Punjab, India.	