

## **Personel Profile of**

**Dr. Hiralal Motilal Patil**

Department of Physics  
Jijamata Education Society's  
Arts, Science and Commerce College,  
Nandurbar-425412

## Personel Details

**Full Name** : Dr. Hiralal Motilal Patil  
**College Name** : Jijamata Education Society's ARTS, SCIENCE  
& COMMERCE COLLEGE, NANDURBAR  
**Date of Birth** : 01-06-1965  
**Gender** : Male  
**Date of First appointment** : 07/08/1990  
**Date of Retirement** : 31/05/2025  
**Department** : Physics  
**Present Designation** : Associate Professor  
**Nature of Post** : Permanent  
**Pay Scale** : 37400-65000, AGP-9000  
**Address** : Department of Physics,  
J.E.S.'s Arts, Science and Commerce.  
College, Nandurbar 425412  
**Mobile No** : 8055425655  
**E-mail address** : [hmp\\_2004@rediffmail.com](mailto:hmp_2004@rediffmail.com)  
**Category** : O.B.C.

### Qualifications:

Sr. No.	Qualification	Name of Board / University	Month and Year of Passing	Grade / Marks / Division
1	Ph.D. [PHYSICS]	NORTH MAHARASHTRA UNIVERSITY, JALGAON	January - 2017	--
2	M.Phil. [PHYSICS]	NORTH MAHARASHTRA UNIVERSITY, JALGAON	March - 1997	A GRADE
3	M.Sc[PHYSICS]	POONA	April - 1989	1205/2000, 60.25, FIRST CLASS
4	B.Sc	POONA	March - 1987	2411/3800, 63.44%, FIRST CLASS
5	HSSC	PUNE	March - 1984	319/600, 53.17%, SECOND CLASS

**Certificate Course:**

Sr. No.	Qualification	Name of Board / University	Duration	Month and Year of Passing	Grade / Marks / Division
1	Certificate Course in Computer Basics	Y.C.M.O.U., Nasik	6 Months	Nov-1993	“O” Grade
2	Certificate Course in Word Processing (Advance)	Y.C.M.O.U., Nasik	6 Months	Nov-1993	“O” Grade
3	Certificate Course in Word Processing (Elementary)	Y.C.M.O.U., Nasik	6 Months	Nov-1993	“O” Grade

**Appointments held**

Sr. No	Designation	Name of Employer	Date of		Reason of leaving, if any
			Joining	leaving	
1	Lecturer	Jijamata Education Society's Arts, Science and Commerce College, Nandurbar	07-08-1990	26-07-1998	--
2	Lecturer (Sr. Scale)		27-07-1998	06-08-2000	--
3	Lecturer (Selection Grade)		07-08-2000	30-06-2006	--
4	Associate Professor		01-07-2006	--	--

**Orientation/Refresher /Short term Courses:**

Course	Institute/University	From	To	No of Days
Orientation	University of Rajasthan, Jaipur	09/05/1994	04/06/1994	29
Refresher	Lucknow University, Lucknow	03/07/1996	30/07/1996	28
Refresher	Jawaharlal Nehru University, New Delhi	27/01/2003	21/02/2003	26
Refresher	Aligarh Muslim University, Aligarh	15/03/2005	07/04/2005	24
Training Programme	Training Programme on Maintenance of Electronic Instruments. M.J. College, Jalgaon	24/11/1997	29/11/1997	06
Faculty Training Workshop	Campus Diversity Initiative Project, a project sponsored by Ford Foundation North Maharashtra University, Jalgaon	02/11/1998	08/11/1998	07
Facilitators Development programme	Campus Diversity Initiative Project, a project sponsored by Ford Foundation and North Maharashtra University, Jalgaon	25/08/1999	31/08/1999	07

A workshop for Physics Teachers on 'C' programming	Department of Computer Science, North Maharashtra University, Jalgaon	22/11/1999	01/12/1999	10
Short Term Course	Sant Gadgebaba Amravati University, Amravati.	15/12/2014	20/12/2014	06
Online Course on Physics of Semiconductors	Centre for Development of Technical Education Indian Institute of Technology, Kanpur	15/08/2017	20/11/2017	12 week
Basics of Quantum Mechanics	Centre for Continuing Education Indian Institute of Technology Kanpur	15/08/2019	18/11/2019	12 week

**Verified API for the post of Principal : 169.45**

**Experience:**

- A) **Teaching Experience** : UG level – 32 Years  
 B) **Administrative** : As a **HOD - 15 Years**  
 C) **NAAC IQAC coordinator** : 10 Years  
 D) **Research** : 10 Years

**P.G. Recognition** : Yes, NMU/11/PGR/Phy.Sci./850/2015, 07/05/2015

**P.G. Recognition (Ph.D. Guide)** : Yes, NMU/11/PGR/Phy/1474/2020, 20/08/2020

**No. of students registered for Ph.D.:** 02

**Subjects Taught:**

a) **UG Level** : Electronics I and II, Optics, Quantum Mechanics, Solid State Physics, Material Science.

b) **Subjects Taught Other than specialization** : General Knowledge, Environmental Science

**Workload** : 20 lectures/week

**University and College Examination Duties Performed:**

1. Senior Supervisor
2. Assistant Cap Director
3. Moderator at theory examination
4. Digital Examination Committee
5. Chairman of Examination Committee
6. Chairman of Panel of examiners at S.Y.B.Sc practical examination
7. Paper Setter at F.Y./S.Y./T.Y. B.Sc
8. Examiner at theory examination
9. Examiner at practical examinations
10. Junior Supervisor
11. Internal evaluation of the students at F.Y./S.Y./T.Y. B.Sc

**Work on Various Committees Formed By the Principal:**

1. **Internal Quality Assurance Cell (IQAC)** - Co-ordinator
2. **Steering Committee for Re-accreditation** - Co-ordinator

- |  |                              |
|--|------------------------------|
| <b>3. Steering Committee for accreditation</b> | <b>- Assit. Co-ordinator</b> |
| 4. Academic planning Committee                 | - Chairman                   |
| 5. Research Committee                          | - Member                     |
| 6. Student Counseling Committee                | - Member                     |
| 7. Science Club                                | - Member                     |

**Work on Various Committees Formed By the University:**

1. Member of Local Inspection Committee (LIC)
2. Member of Expert Committee
3. Chairman of Panel of examiners at S.Y.B.Sc practical examination
4. Subject expert for the appointment of teacher in the college.

**Involvement in Curriculum Design:**

1. Chairman, Syllabus Framing Committee.
2. Member of Syllabus Framing Committee.
3. Workshops attended related to syllabus framing.

**Leadership Role Played:**

1. **Worked as President of NMUCTO local unit.**
2. **Worked as Secretary of NMUCTO local unit.**
3. Worked as Assistant Director (Implementation), Campus Diversity Initiative Project funded by Ford Foundation (USA) and NMU Jalgaon.
4. Worked as District Coordinator for “Vidnyan Jattha”, a science awareness program organized by Department of Chemical Sciences, NMU, Jalgaon.
5. Organized a “Cycle Rally”, 200km, to aware the people for Aids and Environment, funded by Ford Foundation USA and NMU Jalgaon.

**Conference / Symposium / Workshop Organized:**

Sr. No.	Title of Conference / Symposium / Workshop	Level	Place	Period
1	Workshop - [1st State Level Workshop on NET SET Preparation]	State	JESs Arts, Science and Commerce College, Nandurbar	8-9 Aug., 2015
2	Workshop - [Workshop on restructuring and preparation of syllabi in Physics at T.Y.B.Sc]	University	Jijamata College, Nandurbar	13-14 Feb, 1999

**Publications: (Total-29)**

Sr. No.	Title of the paper with page Nos.	Journal name with ISBN/ISSN No	Peer-Reviewed or UGC listed Journals	Impact Factor, if any (to be determined as per Thomson Reuters list)
1	Crystallographic and FTIR Characteristics of	Archives of Physics Research, Vol.2	Peer Reviewed	5.59

	gel grown cerium tartrate crystals Page No.: 239 - 245	Issue(1), 2011. ISSN No.: 0976-0970		
2	FTIR and thermal studies on gel grown neodymium tartrate crystals Page No.:1031-1037	Journal of Thermal Analysis and Calorimetry, Vol.107, No.3,2012 DOI:10.1007/s10973-011-1599-1 ISSN No.: 1388-6150	Peer Reviewed	4.626
3	Nucleation and Growth of Lanthanum Tartrate crystals in silica gel. Page No.:168-175	Archives of Physics Research, Vol 1, Issue 4,2010 ISSN No.: 0976-0970	Peer Reviewed	5.59
4	Effect of Cu <sup>2+</sup> doping on the Growth and Band gap energy of Nano Crystals of Lead Iodate. Page No.:128-134	Archives of Applied Science Research, Vol 3, Issue 3,2011 ISSN No.: 0975-508X	Peer Reviewed	116.18
5	Synthesis of silver Nano particles by microbial method and their characterization Page No.:153-158	Archives of Physics Research, Vol 2, Issue 3,2011 ISSN No.: 0976-0970	Peer Reviewed	5.59
6	Growth and characterization of Strontium Tartrate crystals in silica gel Page No.:224-228	Advances in Applied Science Research, Vol.5, Issue 6,2014 ISSN No.: 0976-8610	Peer Reviewed	3.52
7	Growth and Characterization of Mixed Crystals of Ca-Sr Tartrate in Silica Gel Page No.:219-228	Archives of Physics Research Vol.2 Issue1,2011 ISSN No.: 0976-0970	Peer Reviewed	5.59

8	Study of Gel Grown calcium Tartrate Crystals Page No.:21-26	Asian Journal of chemical and Environmental Research, Vol.3, Issue 3, April 2010 ISSN No.: 0974-3049	UGC Listed-3965	3.27
9	Thermal Behaviour of Gel Grown Mixed Crystals of Ca-Sr Tartrate Page No.:62-66	Asian Journal of chemical and Environmental Research, Vol.3, Issue 4, Oct. 2010 ISSN No.: 0974-3049	UGC Listed-3965	3.27
10	SEM, PL, and UV Properties of Mixed Crystals of Ca-Ba Tartrate in silica Gel Page No.:63-69	Der Chemica Sinica Vol. 2, Issue3,2011 ISSN No.:0976-8505	Peer Reviewed	0.676
11	Structural and Optical Properties of Calcium Cadmium Tartrate. Page No.: 67-73	Archives of Physics research Vol.2 Issue2,2011 ISSN No.: 0976-0970	Peer Reviewed	5.59
12	Growth of Lithium Tartrate Crystal by Hydro Silica Gel Method Page No.: 129-132	ResearchersWorld Vol.VII, Issue 4(5), Dec.2016 ISSN No.: 2231-4172	Peer Reviewed	3.19
13	Growth of Mixed Copper- Lithium Tartrate Crystals By single Diffusion Gel Method Page No.:118-125	Ajanta Vol.8, Issue 1, Jan.-March-2019 ISSN No.: 2277-5730	Peer Reviewed and UGC listed No.40776	5.5
14	X-ray Diffraction Studies of Copper Oxalate Crystals Grown By Gel method. Page No.:214-218	Ajanta Vol.8, Issue 1, Jan.-March-2019 ISSN No.: 2277-5730	Peer Reviewed and UGC listed No.40776	5.5

15	Growth of Calcium Mixed Tartrate crystals. Page No.37-40	Journal of Research and Development, Vol.8 (Special Issue), Dec.2017, ISSN No.: 2230-9578	Peer Reviewed and UGC listed No.64768	4.270
16	Growth of Lithium Tartrate Crystals By Gel method Page No.:58-60	Journal of Research and Development, Vol.8 (Special Issue), Dec.2017, ISSN No.: 2230-9578	Peer Reviewed and UGC listed No.64768	4.270
17	Growth and Characterization of Cadmium Oxalate Crystals Using Silica Gel, Page No.: 12791-12793	International Journal of Current Advanced Research, Vol.7, Issue 5(H), May2018 ISSN No.:O:2319-6475,ISSN P:2319-6505	Peer Reviewed	6.614
18	Effects of Cobalt Doping On the Structural and Optical Properties of Gel Grown Pb(IO <sub>3</sub> ) <sub>2</sub> Crystals. Page No.:127-133	Archives of Physics research Vol.2 Issue1,2011 ISSN No.: 0976-0970	Peer Reviewed	5.59
19	Growth and Thermal studies of mixed Crystals of Ca-Ba Tartrate in Silica Gel. Page No.:404-413	Archives of Applied Science Research, Vol 3, Issue 2,2011 ISSN No.: 0975-508X	Peer Reviewed	116.18
20	Growth of Cadmium Oxalate By Gel method. Page No.:101-105	International journal of Science Info.(IJSI) Vol.1, Issue 2,2016 ISSN No.: 2455-4367	Peer Reviewed	



21	Comparative X-ray Diffraction Studies on Gel Grown Crystals of Li-Tartrate,Cu-Tartrate and Mixed Li-Cu. Tartrate. Page No.:664-669	International Journal of Emerging Technologis and Innovative Research Vol.6, Issue6,Jun 2019 ISSN No.: 2349-5162	Peer Reviewed	5.87
22	Growth and thermal Behavior of Mixed Crystals of Calcium Cadmium Tartrate in Silica Gels. Page No.:1047-1053	Journal of Thermal Analysis and Calorimetry, Vol.107, No.3,2012 DOI:10.1007/s10973-011-1600-z ISSN No.: 1388-6150	Peer Reviewed	4.626
23	Thermal, FTIR and Raman spectral analysis of Cu(II)-doped lead iodate crystals Page No.:267-271	Journal of Thermal Analysis and Calorimetry, Vol.111, No.1,2013 DOI:10.1007/s10973-012-2255-0 ISSN No.: 1388-6150	Peer Reviewed	4.626
24	Elemental Analysis of Gel Grown Ca-Cd Tartrate. Page No.:383-385	Advances in Applied Science Research, Vol.4, Issue 1,2013 ISSN No.: 0976-8610	Peer Reviewed	3.52
25	Influence of Za(II) doping on the Structural and Optical Properties of Gel Grown Lead Iodate Crystals. Page No.:233-239	Advances in Applied Science Research, Vol.2, Issue 4,2011 ISSN No.: 0976-8610	Peer Reviewed	3.52
26	SEM,EDXRF,and SXG Efficiency of Co(II) doped Lead Iodate Crystals Grown By Gel Technique. Page No.:87-90	Journal of Chemical and Pharmaceutical Research Vol.4,Issue 1,2012 ISSN No.: 0975-7384	Peer Reviewed	0.14

27	NLO Property and Surface Morphology of Lead Iodate crystals Doped with Zinc. Page No.:432-436	DER-Pharma Chemica Vol.3, Issue 6,2011 ISSN No.: 0975-413X	Peer Reviewed	0.129
28	Environmental effect on Growth of Copper Tartrate crystals By Single Diffusion Gel Method. Page No.:19-24	Academic Research Vol.10, Issue 1,Oct.2015(Special Issue) ISSN No.: 2230-7796	Peer Reviewed	
29	Spherulitic Growth of Neodymium Tartrate Crystals in Silica Gel. Page No.:108-113	Journal of Scientific Review Vol.2, Issue 2,2010	Peer Reviewed	

\*\*\* Citation index is attached.

**(a) Books published**

Sr. No	Title of the Book	Name of the Publisher with address	International/ National/Chapter in edited book/ of Book by International Publisher/ Editor of Book by National Publisher
1.	PHY 601: Quantum Mechanics ISBN: 978-93-90862-87-0	Prashant Publications Jalgaon	T. Y. B. Sc.: Chapter in book

**Design of new curricula and courses**

Sr. No	Title of curricula and courses designed	Name of the program
1	PHY202 Magnetism & Electromagnetism	F.Y.B.Sc (CBCS)
2	PHY601Quantum Mechanics	T.Y.B.Sc (CBCS)
3	PHY101Mechanics & Properties of Matter	F.Y.B.Sc (2018)
4	Solid State physics	T.Y.B.Sc (2017)

5	Elasticity & Properties of Matter	F.Y.B.Sc (2015)
6	Material Science	T.Y.B.Sc (2014)
7	PHY-504(A) Electronics - II	T.Y.B.Sc (2009)
8	Electricity & Magnetism	F.Y.B.Sc (2007)
9	PHY-504(A) Electronics - II	T.Y.B.Sc (2004)
10	Electronics	F.Y.B.Sc (2002)

### Awards/Fellowship

Sr. No.	Name of the award /Fellowship	Name of the Academic Body/ Society/Association	International /National
1	<b>Gurugaurao Puraskar</b>	<b>O.B.C. Students, Teachers and Parents Development Association, Dhule</b>	<b>National</b>

**Invited lectures / Resource Person/ paper presentation in Seminars/ Conferences/full paper in Conference Proceedings (Note: Paper presented in Seminars/Conferences and also published as full paper in Conference Proceedings will be counted only once)**

Sr. No.	Title of the Invited lecture/paper presentations/ full paper in Conference Proceedings	Title of Conference/se minar	Organized by	Level International/ National/State/ University
<b>A) Paper Presentation in Conference and seminars</b>				
1	Growth of Calcium mixed Tartrate Crystals	Nonconventional Energy sources for Rural Development of India(NCESFR DOI-2018)	Uttamrao Patil Arts & Science College, Sakri	National
2	Synthesis of Silver Nano Particles Papaya Root	Recent Development in Nano Materials & their Applications (NC-RDNMA 2016)	G.T.Patil Arts, Commerce & Science College Nandurbar	National
3	Recent Trends in Environmental Protection :Concerns & Challenges(RTEPC)	National Seminar on Recent Trends in Environmental Protection :Concerns & Challenges(RTEPC)	Arts,Commerce & Science College, Songir, Dist Dhule	National

4	Calculation of Surface Area and Pour Size of Gel Grown Lanthanum Tartrate Crystals from Sorttition Data.	National Seminar on Advanced Materials & Its Applications (2013)	S.V.S's ,Arts & Science College Dondaicha Dist.Dhule	National
5	Surface Characterization of Gel Grown Serium Tartrate Crystals.	Advances in Nano structured Materials & their Applications	A.S..mandal's Arts,Commerce & Science College Taloda Dist.Nandurbar	National
6	Effect of Various Parameters on Growth of CaCd Crystals	National Conference on Recent Advances in Material Synthesis and Characterization -2011	Dadasaheb Devidas Bhole College, Bhusawal	National
7	Implementation of MP3 Decoder Using VLSI	Impact of Information Communication Technology on National Economy- 2010	Vilasrao Deshmukh College of Engineering and Technology	National
8	Design and Implementation of MP3	International Conference on Science, Engineering and Spirituality-2010 (ICSES10)	S.E.S. College of Engineering, Navalnagar, Dist:Dhule	International
9	Implementation of MP3 Decoder Using VLSI	A National Level Paper Presentation Vidyashram's Techfiesta 2010	P.S.G.V.P.Mandal s, College of Engineering, Shahada Dist: Nandurbar	National
10	Image Processing for Face Recognition	National Level Technical Level Paper Presentation Contest 2005	P.S.G.V.P.Mandal s, D.N. Patel College of Engineering, Shahada Dist: Nandurbar	National
11	Use of Computer in Banking	Impact of Computer technology on Languages and Social Sciences	G.D. Bendale Mahila Mahavidyalaya, Jalgaon	University level

12	Role of Physics Teacher in Society	Convention of Physics Electronics Association 2001	Arts, Science and Commerce College, Navapur	University level
13	Growth and Thermal Behavior of Calcium Tartrate Crystals in Silica Gels	National Conference on Indian Development in Recent and Ideal Semiconductors for Novel Applications (NC-IDRIS-2012)	Arts, Science and Commerce College, Navapur	National
14	Growth of Cadmium Oxalate by Gel Method	Recent Development in Nano Materials & their Applications (NC-RDNMA 2016)	G.T.Patil Arts, Commerce & Science College Nandurbar	National
15	Study of Growth Parameters of Copper Tartrate Crystals in Silica Gel	Recent Development in Nano Materials & their Applications (NC-RDNMA 2016)	G.T.Patil Arts, Commerce & Science College Nandurbar	National
16	Growth of Lithium Tartrate Crystals by single Diffusion Gel Method	National Conference on Electronic Materials Thin Films and Its Applications (NCEMTFA-2016)	J.D.M.V.P Arts, Commerce and Science College, Jalgaon	National
17	Use of Nano Technology For Cancer Treatment	National Seminar on Emerging Trends at the Interface of BioTechnology, 17-18Feb. 2007	P.S.G.V.P.Mandal's Arts, Science & Commerce College Shahada	National
18	FTIR Studies on Gel Grown Lanthanum Tartrate Crystals	Advances in Science & Technology of NanoMaterials (AISATON-2010)	S.G.Patil Arts, Science & Commerce College Sakri Dist. Dhule	National

19	Review on Single Electron Transistor	National Conference on Materials & Devices for Future Technology, 7 March 2011	School of Physical Sciences, NMU, Jalgaon	National
20	Surface Characterization of Gel Grown Cerium Tartrate Crystals	National Conference on Nanostructures and NanoMaterials (NCNN-2012) 28 March 2012	Eklavya Study Center, Nandurbar	National
<b>B) Invited Talk</b>				
1	Resource Person	One Day National Level workshop on SWAYAM, 1 <sup>st</sup> Feb, 2020	S.J.M.S.M's Arts and Commerce College, Khapar, Tal: Akkalkuwa	National
2	Resource Person	Non-conventional Energy Sources for Rural Development of India, 6 <sup>th</sup> Jan 2018.	NSS's Uttamrao Patil Arts and Science College, Dahiwel, Tal Sakri Dist Dhule	National
3	Resource Person	Short Term Programme on Advances in Nanoscience and Nano Technology, 22-27 Dec 1017	A.S.Mandals Arts, Science and Commerce College, Taloda	University
4	Resource Person	IIIrd State Level Workshop on NET/SET Exam Preparation, 9-10 Sep 2017	Jijamata College, Nandurbar	State
5	Resource Person	Ist State Level Workshop on NET/SET Exam Preparation, 8-9 Aug 2015	Jijamata College, Nandurbar	State

6	Resource Person	State Level Seminar on Recent Advances in Nanocrystalline Materials and Applications, Feb 6-7, 2009	P.S.G.V.P. Mandals Arts, Science and Commerce College, Shahada	State
<b>C) Invited Talk</b>				
1	Global Warming	Global Warming awareness workshop, 25 <sup>th</sup> Jan 2019	P.S.G.V.P. Mandals Arts, Science and Commerce College, Shahada	University
2	NAAC Process	NAAC Awareness Workshop, 5 <sup>th</sup> July 2018	Maharaj J.P. Valvi Arts, Commerce and Science College, Dhadgaon	University
3	Nano Technology in Medicine	Student Assembly, 11 Feb. 2015	N.T.V.S's Institute of Pharmacy, Nandurbar.	University
4	Nano Technology	NSS Camp Patonda, 28 Dec. 2013	Jijamata Colege Nandurbar	University
5	Awareness of Global Warming	Student Assembly, 07 March. 2012	P.S.G.V.P. Mandal's College of Pharmacy, shahada	University

**Conference / Symposium / Workshop Attended:**

Sr. No.	Title of Conference / Symposium / Workshop	Level	Place	Period
1	Conference - [NC-IDRIS-2012]	National	Navapur	6-7 Oct. 2012
2	Conference - [NCNN-2012]	National	Eklavya Study Centre, Nandurbar	28th March, 2012
3	Conference - [Materials and Devices for Future Technology]	National	School of Physical Sciences, NMU, Jalgaon	7th March, 2011
4	Conference - [Recent Advances In Material Synthesis and Characterization]	National	Dadasaheb D.N. Bhole College, Bhusawal	22-23 Jan, 2011

5	Conference - [Impact of Information Communication Technology on National Economy]	National	V.D.C.E.T., Mouda, Nagpur	13th March, 2010
6	Conference - [ICSES 10]	International	SESCOE, Navalnagar	1-2 April, 2010
7	Seminar - [Rainmaa-2009]	State	PSGVP Mandals ASC College, Shahada	6-7 Feb., 2009
8	Workshop - [Restructuring of the Syllabi for Physics at T.Y.B.Sc]	University	Shri V.S. Naik ASC College, Raver	15-16 March, 2009
9	Workshop - [New Trends in Higher Education]	University	PSGVP Mandals ASC College, Shahada	1st March, 2009
10	Conference - [Emerging Trends at the Interface of Biotechnology]	National	PSGVP Mandals ASC College, Shahada	17-18 Feb, 2007
11	Conference - [AISATON]	State	S.G. Patil College, Sakri	8-9 March, 2010

(Dr. H. M. Patil)  
Dept. Of Physics