

## CURRICULAM VITAE

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Dr. Rahul Bharamgonda Patil

### PERMANENT ADDRESS:

A/P: Umalwad,  
Tal: Shirol, Dist: Kolhapur,  
State: Maharashtra, India.  
Pin Code: 416101  
Mobile: +91 9503962022



### PERSONAL DETAILS:

Date of Birth: 13/ 10/ 1980  
Nationality: Indian  
Religion: Hindu Lingayat  
Category: Open  
Marital status: Married  
Email: rrahulpatil@gmail.com

### ACADEMIC CREDENTIALS:

1. Postdoctorate  
Department of Physics,  
National Central University, Taiwan.
2. Ph. D.  
Shivaji University, Kolhapur.  
Title of Thesis:  
Study of optical and mechanical properties of tin oxide and bismuth oxide thin films  
for thin film optical coatings  
Supervisor: Dr. R. K. Puri  
Professor and Head,  
University Science Instrumentation Centre  
(USIC), Shivaji University, Kolhapur.

**ACADEMIC RECORD:**

Sr No	Exam. Passed	University	Subject	Class Obtained	Year of Passing
1.	Ph. D.	Shivaji University	Physics	Awarded	Oct. 2008
2.	M. Sc.	Shivaji University	Physics	Higher Second Class (B+)	May 2003
3.	B. Sc.	Shivaji University	Physics	First Class	April 2001

**TEACHING EXPERIENCE:**

Sr. No.	College Name	Designation	Period
1	Shri. Yashwantrao Patil Science College, Solankur	Head and Assistant Professor	28/04/2014 till to date
2	Sanjeevan Engineering and Technology Institute, Panhala.	Assistant Professor	09/08/2011 to 26/04/2014
3	Rajarambapu Institute of Technology, Sakharale.	Lecturer	15/12/2010 to 30/06/2011
4	Rajaram Shinde Institute of Engineering and Technology, Chiplun.	Lecturer	Aug. 2008 to Jan. 2009
5	Sahyadri Polytechnic, Sawarde, Chiplun.	Lecturer	Nov. 2003 to May 2005

**FELLOWSHIP/S:**

1. Postdoctoral Research Fellowship:  
From Feb. 2009 to Sept. 2010.  
National Central University, Taiwan.
2. Departmental Research Fellowship:  
From Sept. 2005 to Dec. 2007.  
Shivaji University, Kolhapur, India.

**MEMBERSHIP/S:**

1. Indian Society for Technical Education (ISTE) – LM 92087

## **ADMINISTRATIVE EXPERIENCE:**

1] IQAC Coordinator – June 2014 to December 2017. Successfully handled the 1<sup>st</sup> cycle accreditation process of YPSC, Solankur and received NAAC score 2.14

2] Head – Working as Head, Department of Physics since June 2014.

## **PROFESSIONAL LEADERSHIP:**

[1] **Convener:** 1<sup>st</sup> NCMES-2017:- National Conference on Materials and Environmental Science, Feb 15, 2017.

[2] **Editor:** NCMES-2017 Souvenir.

[3] **Convener:** 2<sup>nd</sup> ICMES-2018:- International Conference on Materials and Environmental Science, Dec 07-08, 2018.

[4] **Editor:** ICMES-2018 Souvenir [ISBN – 978-93-5346-224-6]. Coordinator Special Issue of ICMES-2018 in Materials Today Proceedings (Elsevier) (Scopus indexed journal) – Vol 23, Issue P2, (2020).

[5] **Coordinator** 3<sup>rd</sup> ICFMET-2020:- International eConference on Mechanical Engineering and nanotechnology, November 27-28, 2020.

[6] **Guest Editor** – Materials Today Proceedings (Elsevier) (Scopus indexed journal) - ICFMET-2020 Special Issue Vol 47, Issue P16, (2021).

[7] **Guest Editor** – International Journal of Nanotechnology (Inderscience) (Scopus indexed journal) - ICFMET-2020 Special Issue Vol 18, Issue 11/12, (2021).

[8] **Editor** – Souvenir ICF-MET-2020.

[9] **Organizing Secretary** – 4<sup>th</sup> ICF-CEET-2021:- International eConference on Frontiers in Computer & Electronics Engineering and nanoTechnology, November 19-20, 2021.

[10] **Editor** – Souvenir ICF-CEET-2021.

[11] **Guest Editor** – Journal of Active and Passive Electronic Devices (Old City Publishing) (Scopus indexed journal) – ICF-CEET 2021 – Special issue Vol 16, No. 2, (2022).

[12] **Guest Editor** – Journal of Advanced Applied Scientific Research (WOS indexed journal) – ICF-CEET 2021 – Special issue Vol 4, No. 1, (2022).

[13] **Convener** – 5<sup>th</sup> ICF-MET-2023:- International eConference on Frontiers in Materials Engineering and nanoTechnology, May 05 – 06, 2023.

[14] **Editor** – Souvenir ICF-MET-2023.

[15] **Guest Editor** – IOP-JPCS (Scopus indexed) - ICF-MET-2023 – Special issue Vol-2604(2023).

[16] **Guest Editor** – Energy & Environment Focus (American Scientific Publishers) (WOS indexed) – ICF-MET-2023 Special Issue, Vol 7, No. 2, (2023) 117-226.

[17] **Guest Editor** – International Journal of Integrated Engineering (Scopus indexed) - ICF-CEET 2021 – Special issue

[18] **Co-Convener** – 6<sup>th</sup> International Conference on Nanomaterials for Energy & Environment (Nano-E2), December 21-23, 2023.

[19] **Editor** – Souvenir 6<sup>th</sup> Nano-E2 with ISBN [978-93-6076-047-2]

[20] **Guest Editor** – Iranian Journal of Materials Science and Engineering (Scopus indexed) – 6<sup>th</sup> Nano-E2 Special Issue. Volume 21, Number 1 (2024).

[21] **Associate Editor** – Energy and Environment Focus (American Scientific Publishers, USA) [ISSN: 2326-3040]

[22] **Editor-in-Chief** – Chem Sci Advances (Ariston Publishing House, USA).

[ISSN: 2997-9587]

#### **PUBLICATIONS:**

<i>Publications</i>	<i>National</i>	<i>International</i>
Research Papers	-	43
Books	06	02

#### **CONFERENCES:**

<i>Level</i>	<i>Number</i>
National	15
International	15

#### **PHD GUIDANCE:**

<i>Students status</i>	<i>Total</i>
Completed	01
Working	01

#### **LIST OF RESEARCH PUBLICATIONS:**

- 1) **R. B. Patil**, J. B. Yadav, R. K. Puri, Vijaya Puri; “Optical properties and adhesion of air oxidized vacuum evaporated bismuth thin films” (*Journal of Physics and Chemistry of Solids*, **68 (4) (2007) 665-669**) [ISSN: 0022-3697] [IF: 2.207].

DOI: <http://dx.doi.org/10.1016/j.jpics.2007.02.019>

- 2) **R. B. Patil**, R. K. Puri, Vijaya Puri; “Oxidation temperature dependent optical properties of bismuth oxide thin films: effect of vapour chopping and air exposure” (*Applied Surface Science*, **253** (2007) 8682-8688) [ISSN: 0169-4332] [IF:4.439].  
DOI: <http://dx.doi.org/10.1016/j.apsusc.2007.04.041>
- 3) J. B. Yadav, **R. B. Patil**, R. K. Puri, Vijaya Puri; “Studies on undoped SnO<sub>2</sub> thin film deposited by Chemical Reactive Evaporation method” (*Material Science and Engineering B*, **139** (2007) 69-73) [ISSN: 0921-5107] [IF: 3.316].  
DOI: <http://dx.doi.org/10.1016/j.mseb.2007.01.032>
- 4) J. B. Yadav, **R. B. Patil**, R. K. Puri, Vijaya Puri; “Optical properties of the chopped and nonchopped vacuum evaporated polyaniline thin film” [*Journal of Non-Crystalline Solids*, **353** (2007) 4691-4696] [ISSN: 0022-3093] [IF: 2.488].  
DOI: <http://dx.doi.org/10.1016/j.jnoncrysol.2007.06.060>
- 5) **R. B. Patil**, R. K. Puri, Vijaya Puri; “Effect of chopping on the properties of bismuth oxide thin films” [*Materials Letters*, **62** (2008) 198-201] [ISSN: 0167-577X] [IF: 2.687].  
DOI : <http://dx.doi.org/10.1016/j.matlet.2007.04.102>
- 6) **R. B. Patil**, R. K. Puri, Vijaya Puri; “Physical properties of tin oxide thin films improved by vapour chopping” [*Journal of Alloys and Compounds*, **463** (2008) 453-457] [ISSN:0925-8388] [IF: 3.779].  
DOI: <http://dx.doi.org/10.1016/j.jallcom.2007.09.033>
- 7) **R. B. Patil**, R. K. Puri, Vijaya Puri; “Intrinsic stress of bismuth oxide thin films: effect of vapour chopping and air ageing” [*Journal of Physics: Conference Series*, **114** (2008) 012036] [ISSN: 1742-6588] [IF: 0.45].  
DOI: <http://iopscience.iop.org/1742-6596/114/1/012036>
- 8) **R. B. Patil**, R. K. Puri, Vijaya Puri; “Improvement in the mechanical properties of tin oxide thin films due to chopping” [*Journal of Alloys and Compounds*, **462** (2008) 235-239] [ISSN: 0925-8388] [IF: 3.779].  
DOI: <http://dx.doi.org/10.1016/j.jallcom.2007.08.003>
- 9) J. B. Yadav, **R. B. Patil**, R. K. Puri, Vijaya Puri; “Studies on spin coated PANI/PMMA composite thin film: effect of post deposition heating” [*Applied Surface Science*, **255** (2008) 2825-2829] [ISSN: 0169-4332] [IF: 4.439].  
DOI: <http://dx.doi.org/10.1016/j.apsusc.2008.08.015>
- 10) **R. B. Patil**, R. K. Puri, Vijaya Puri; “Optical transmission loss in tin oxide thin film optical waveguide” [*Applied Surface Science*, **255** (2009) 4271-4273] [ISSN: 0169-4332] [IF: 4.439].  
DOI: <http://dx.doi.org/10.1016/j.apsusc.2008.11.027>

- 11) **R. B. Patil**, J. B. Yadav, R. K. Puri, Vijaya Puri; “Optical properties of vapour chopped and nonchopped tin oxide thin films” [*Vacuum*, **83** (2009) 1355-1358] [ISSN: 0042-207X] [IF: 2.067].  
DOI: <http://dx.doi.org/10.1016/j.vacuum.2009.04.046>
- 12) S. H. Tamboli, **R. B. Patil**, R. K. Puri, Vijaya Puri; “Modification in optical properties of MgO thin films by vapour chopping” [*Journal of Alloys and Compounds*, **477** (2009) 855-859] [ISSN: 0925-8388] [IF: 3.779].  
DOI: <http://dx.doi.org/10.1016/j.jallcom.2008.11.011>
- 13) S. H. Tamboli, S. V. Kamat, S. P. Patil, **R. B. Patil**, J. B. Yadav, Vijaya Puri, R. K. Puri, O. S. Joo; “Oxidation temperature and vapour chopping effects on superficial properties of Bi<sub>2</sub>O<sub>3</sub> thin film prepared on glass and alumina substrates” [*Archives of Physics Research*, **1/4** (2010) 73-81] [ISSN: 0976-0970] [IF: 1.35].
- 14) **Rahul B. Patil**, R. K. Puri, Vijaya Puri; “Mechanical properties of bismuth oxide thin films” (*Archives of Physics Research*, **2/1** (2011) 31-38). [ISSN: 0976-0970]. [IF: 1.35].
- 15) S. H. Tamboli, R. K. Puri, V. Puri, **R. B. Patil**, M. F. Luo; “Comparative study of physical properties of vapor chopped and nonchopped Al<sub>2</sub>O<sub>3</sub> thin films” [*Materials Research Bulletin*, **46** (2011) 815-819] [ISSN: 0025-5408] [IF: 2.873].  
DOI: <http://dx.doi.org/10.1016/j.materresbull.2011.02.037>
- 16) S. V. Kamat, S. H. Tamboli, V. Puri, R. K. Puri, **R. B. Patil**, M. F. Luo; “Determination of optical transmission loss in poly-3-methyl thiophene thin film planar waveguide: Effect of vapour chopping” [*Progress in Electromagnetics Research-M*, **18** (2011) 197-207] [ISSN: 1937-8726] [IF: 1.62].  
DOI: [10.2528/PIERM11032501](http://dx.doi.org/10.2528/PIERM11032501)
- 17) S. H. Tamboli, C. B. Singh, **R. B. Patil**, V. Puri, Vandana Singh, R. K. Puri, M. F. Luo; “Enhanced secondary electron emission yield of MgO thin films by vapor chopping technique for plasma display panels” [ASP - *Journal of Nano-electronics and Opto-electronics*, **6** (2011) 1-6] [ISSN: 1555-130X] [IF: 1.069].  
DOI: <http://dx.doi.org/10.1166/jno.2011.1152>
- 18) Chiun-Yu Ho, **Rahul B. Patil**, Chao-Chuan Wang, Chen-Sheng Chao, Yu-Da Li, Hsing-Chung Hsu, Meng-Fan Luo, Yin-Chang Lin, Yu-Lin Lai, Yao-Jen Hsu; “Methanol-driven structuring of Au-Pt bimetallic nanoclusters on a thin film of Al<sub>2</sub>O<sub>3</sub>/NiAl(100)” [*Surface Science*, **606** (2012) 1173-1179] [ISSN: 0039-6028] [IF: 1.997].  
DOI: <http://dx.doi.org/10.1016/j.susc.2012.03.015>
- 19) **Rahul B. Patil**, Aviraj Jatratar, Rupesh Devan, Yuan-Ma, Vijaya Puri, J.B. Yadav; “Effect of pH on the properties of chemical bath deposited polyaniline thin films”

[*Applied Surface Science*, 327 (2015) 201-204] [ISSN: 0169-4332] [IF: 4.439].

DOI: <http://dx.doi.org/10.1016/j.apsusc.2014.11.128>

- 20) S. H. Tamboli, **R. B. Patil**, A. A. Jatratar, G. G. Chougale, S. M. Bargir, J. B. Yadav, Vijaya Puri; “Vapor chopped MgO thin film optical waveguide” [*Materials Today Proceedings*, 23/2 (2020) 175-181] [ISSN: 2214-7853] [Scopus Cite Score: 1.8].

DOI: <https://doi.org/10.1016/j.matpr.2020.02.015>

- 21) Santosh B. Parit, Vijay C. Karade, **Rahul B. Patil\***, Nilesh V. Pawar, Rushikesh P. Dhavale, Madhumita Tawre, Karishma Pardesi, Umesh Jadhav, Vishal Davkar, Rahul Tanpure, Jin Hyeok Kim, Jyoti Jadhav, Ashok D. Chougale; “Bioinspired synthesis of multifunctional silver nanoparticles for enhanced antimicrobial and catalytic applications with tailored SPR properties” [*Materials Today Chemistry*, 17 (2020) 100285] [ISSN: 2468-5194] [IF: 8.3].

DOI: <https://doi.org/10.1016/j.mtchem.2020.100285>

- 22) PK Salokhe, SS Shetti, VD Patil, TR Patil, RM Nille, AB Chougale, KT Gurav, RB Sutar, AA Jatratar, GG Chougale, JB Yadav, BM Mohite, SM Bargir, **Rahul B Patil**, SH Tamboli; “Study of physical properties of chemical bath deposited nickel oxide thin films” [*Materials Today Proceedings*, 43 (2021) 2810-2813] [ISSN: 2214-7853] [Scopus Cite Score: 1.8]

DOI: <https://doi.org/10.1016/j.matpr.2020.09.328>

- 23) **Rahul B. Patil\***, Ashok D. Chougale; “Analytical methods for the identification and characterization of silver nanoparticles: A brief review” [*Materials Today Proceedings*, 47/P16 (2021) 5520-5532] [ISSN: 2214-7853] [Scopus Cite Score: 1.8]

DOI: <https://doi.org/10.1016/j.matpr.2021.03.384>

- 24) **Rahul B. Patil\***, Ashok D. Chougale; “On the shape based SPR of silver nanostructures” [*Inderscience Int J Nanotechnol.* 18/11-12 (2021)1015-1027] [ISSN: 1741-8151] [IF: 0.37; Scopus Cite Score: 1.3]

DOI: <https://doi.org/10.1504/IJNT.2021.119224>

- 25) Karade Vijay; **Patil Rahul**; Parit Santosh; Kim Jin Hyeok; Chougale Ashok; Dawkar Vishal; “Molecular insights into shape-based silver nanoparticles: a weapon to cope with pathogenic attacks” [*ACS Sustainable Chemistry & Engineering*, 9 (2021) 12476-12507] [ISSN: 2168-0485] [IF: 8.1]

DOI: <https://doi.org/10.1021/acssuschemeng.1c03797>

- 26) Rupali Chavan, Nilesh Bhat, Santosh Parit, K Narasimharao, Rupesh Devan, **Rahul Patil**, Vijay Karade, Nilesh Pawar, JH Kim, JP Jadhav, AD Chougale; “Development of magnetically recyclable nanocatalyst for enhanced Fenton and photoFenton degradation of

MB and Cr(VI) photo-reduction” [*Materials Chemistry and Physics*, 293 (2023) 126964] [ISSN:0254-0584] [IF: 4.7]

DOI: [10.1016/j.matchemphys.2022.126964](https://doi.org/10.1016/j.matchemphys.2022.126964)

- 27) Umesh Babar, Priyanka Chavan, Ashok Chougale, **Rahul Patil**, Smita Mahajan, and Pradip Kamble; “Reflux Deposited ZnO Nanoparticles for Supercapacitor Application” [*ASP - Energy Environ. Focus* 7/3 (2023) 266–269] [ISSN: 2326-3040].
- 28) Tanaji Patil, RS Kamble, **Rahul Patil**, Satish Gangawane, Mansing Takale; “Enhanced Supercapacitive Performance Of Electrodeposited Nanostructured Molybdenum Doped Mn<sub>3</sub>O<sub>4</sub> Thin Films” [*De Gruyter-International Journal of Materials Research*, 115(01) (2024) 47-58] [ISSN: 2195-8556][IF: 0.8]  
DOI: [10.1515/ijmr-2022-0414](https://doi.org/10.1515/ijmr-2022-0414)
- 29) Rupali Chavan, Vishal More, Nilesh Pawar, Vishal Davkar, JP Jadhav, **Rahul Patil\***, Ashok Chougale; “Catalytic and kinetic studies of CuFe<sub>2</sub>O<sub>4</sub> as a superior heterogenous nanocatalyst for dye degradation and Cr(VI) reduction” [*Springer-Clean Technologies and Environmental Policy*, (2024) 1-21] [ISSN: 1618-9558][IF: 4.7]  
DOI: [10.1007/s10098-023-02727-5](https://doi.org/10.1007/s10098-023-02727-5)
- 30) Tanaji Shankar Patil; Sandip Mahadeo Nikam; Vijay Paman Kothavale; Raviraj Shripati Kamble; **Rahul B. Patil**; Mansing V. Takale; S. A. A. Gangawane; “Structural, morphological and supercapacitive studies of electrophoretically deposited nanostructured trimanganese tetraoxide (Mn<sub>3</sub>O<sub>4</sub>) thin films” [*Thin Solid Films*, 792 (2024) 140252] [ISSN: 1879-2731] [IF: 2.36].  
DOI: <https://doi.org/10.1016/j.tsf.2024.140252>
- 31) Tanaji. S. Patil, S. M. Nikam, R. S. Kamble, **R. B. Patil**, M. V. Takale, S. A. Gangawane; “Structural, optical, and supercapacitive properties of pure, nickel, and molybdenum ion doped trimanganese tetraoxide (Mn<sub>3</sub>O<sub>4</sub>) thin films” [*IUST-Iranian Journal of Materials Science and Engineering*, 21/1 (2024) 1-10] [ISSN:2383-3882] [IF: 1.1]  
DOI: [10.22068/ijmse.3527](https://doi.org/10.22068/ijmse.3527)
- 32) Tanaji S. Patil, V. P. Kothavale, V. P. Malekar, R. S. Kamble, **R. B. Patil**, K. V. Gurav, M. V. Takale, S. A. Gangawane; “Effect of Nickel (Ni) Ion Doping on the Morphology and Supercapacitive Performance of Mn<sub>3</sub>O<sub>4</sub> Thin Films” [*Springer-Journal of Electronic Materials*, 53 (2024) 394-407] [ISSN: 0361-5235] [IF: 2.2]  
DOI: [10.1007/s11664-023-10765-4](https://doi.org/10.1007/s11664-023-10765-4)
- 33) Aishwarya Jadhav, Rupali Chavan, Santosh Sonawane, Pradip Kamble, Smita Mahajan, Balasaheb Vhankhande, Rajesh Ghorpade, Ashok Chougale, **Rahul Patil\***; “Photocatalytic Degradation of Crystal Violet Dye Using Iron Oxide Nanoparticles” [*ASP-Journal of*

*Nanoelectronics and Optoelectronics*, 19/3 (2024) 272-277] [ISSN: 1555-130X] [IF: 1.07].

DOI: 10.1166/jno.2024.3571

- 34) Umesh D. Babar, Dipali B. Borage, Gauri S. Wagh, Vaishnavi S. Jadhav, Priyanka P. Chavan, Ashok D. Chougale, Kisan C. Rathod, **Rahul Patil**, Uday T. Pawar, Pradip D. Kamble\*; “Chemically synthesized Sb doped SnO<sub>2</sub> nanoparticles for supercapacitor application” [*ASP-Journal of Nanoelectronics and Optoelectronics*, 19/4 (2024) 364-369] [ISSN: 1555-130X] [IF: 1.07].

DOI: 10.1166/jno.2024.3588

- 35) Rupali Chavan, Sarfraj Mujawar, Vishal Dawkar, Vishalkumar More, Nilesh Pawar, **Rahul Patil**, Jyoti Jadhav, and Ashok Chougale\*; “Enhanced Photodegradation of Methylene Blue Using Reusable Cobalt Ferrite Nanocomposites” [*ASP-Science of Advanced Materials*, 16/5 (2024) 589-595] [ISSN: 1947-2935] [IF: 1.47].

DOI: 10.1166/sam.2024.4689

- 36) Priyanka P. Chavan, Umesh D. Babar, Ashok D. Chougale, Santosh R. Sonwane, Dadaso Shetti, **Rahul Patil**, Pradip D. Kamble\*; “Hydrothermal Synthesis and Characterization of Metal Ferrite Nanocomposites for Energy Storage Applications” [*ASP-Journal of Nanoelectronics and Optoelectronics*, 19/7 (2024) 684-691] [ISSN: 1555-130X] [IF: 1.07].

DOI: 10.1166/jno.2024.3627

- 37) Rupali Chavan, **Rahul Patil**\*, Ashok Chougale; “Efficient Dye Removal Strategies: Exploring the Role of Biochar” [*Ariston-ChemSci Advances*, 1/1 (2024) 4-13] [ISSN: 2997-9587]

DOI: 10.69626/csa.2024.0003

- 38) R. R. Chavan, K. C. Rathod, V. R. More, N.V. Pawar, J. P. Jadhav, **R. B. Patil**, A. D. Chougale; “Catalytic Activity of CuO-bentonite Bead for the Removal of Methylene Blue by Fenton like Process” [*Ariston- MatSci Express*, 1/2 (2024) 96-104] [ISSN: 2997-8440]

DOI: 10.69626/mse.2024.0096

- 39) Aasiya S. Jamadar, Rohit B. Sutar, Susmita Patil, Reshma Khandekar, Tukaram Dongale, **Rahul Patil**, Ashok Chougale, Jyotiprakash B. Yadav\*; “Attaining High-Rate Hydrogen Evolution via SILAR deposited bimetallic Nickel Cobalt Boride Electrode: Exploring the influence of Ni to Co Ratio” [*International Journal of Hydrogen Energy*, 85 (2024) 661-672] [ISSN: 1879-3487] [IF: 8.1]

DOI: 10.1016/j.ijhydene.2024.08.426

- 40) Yadav, Priyanka L. ; Joshi, Pawan; Lokhande, Vaibhav; Lee, Chi-Feng; Hsieh, Shang-Hsien ; Wang, Hsiao-Tsu; Shao, Yu-Cheng; Pao, Chih-Wen; Chen, Chia-Hao; Yadav, Jyotiprakash; Ghimire, Madhav; Deshpande, Nishad; **Patil, Rahul\***; “Revisiting the Electronic Structure of  $\alpha$ -MnO<sub>2</sub> for Energy Storage Application” [*ACS-The Journal of Physical Chemistry C*, **129(5)** (2025) 2619-2629] [ISSN: 1932-7455] [IF: 3.5]  
DOI: 10.1021/acs.jpcc.4c08253
- 41) Vaishnavi Bote, Bharati Shinde, Rupali Chavan, Aishwarya Jadhav, Rajesh Ghorpade, Shivaji Jamadade, **Rahul Patil**, Jyotiprakash Yadav, Ashok Chougale, Vishalkumar More; “Optimizing Precursor Concentration for Enhanced Morphological and Catalytic Performance of ZnO Nanoparticles in Crystal Violet Dye Degradation” [*Ariston- ChemSci Advances*, **2(2)** (2025) 104-113] [ISSN: 2997-9587]  
DOI: 10.69626/csa.2025.0104
- 42) Ankita Patil, Rupali Chavan, Aishwarya Jadhav, Aviraj Jatrakar, **Rahul Patil**, Nilesh Pawar, Ashok Chougale; “pH–Controlled Synthesis of Magnetic Fe<sub>3</sub>O<sub>4</sub> Nanoparticles for Enhanced Crystal Violet Dye Degradation via Photo–Fenton Process” [*Ariston- ChemSci Advances*, **2(2)** (2025) 114-124] [ISSN: 2997-9587]  
DOI: 10.69626/csa.2025.0114
- 43) Rupali Chavan, Shruti Deshpande, Vijay Chavan, Nilesh Pawar, Vishalkumar More, Jyotiprakash Yadav, Deok Kee Kim, Prashant Patil, Jyoti Jadhav, **Rahul Patil**, Ashok Chougale\*; “Engineering Multifunctional Zinc Ferrite Nanoparticles through Glucose Capping for Photocatalytic Dye Degradation and Electrochemical Water Splitting” [*Wiley - Applied Organometallic Chemistry*, **40/3** (2026) e70530] [ISSN: 1099-0739] [IF: 3.7]  
DOI: 10.1002/aoc.70530
- 44)