

Dr. KOLEKAR SANJAY SUBRAO

Senior Professor

Department of Chemistry

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**Date of Birth:** June 2, 1970**Education:**

B. Sc. Chemistry Shivaji University, Kolhapur 1990

M. Sc. Chemistry Shivaji University, Kolhapur 1992

Ph. D. Chemistry Shivaji University, Kolhapur 2003

ACADEMIC EXPERIENCE: 28 years**• Department of Chemistry, Shivaji University, Kolhapur**

Senior Professor 2020 (since October)

Professor 2009-2020

Associate Professor 2005-2009

• Department of Chemistry, Hanyang University, Seoul, South Korea

Visiting Professor 2013

Visiting Professor 2012

Visiting Professor 2010

• Department of Chemistry, Sangola College, Sangola (Solapur University, Solapur)

Reader 2003-2005

Lecturer (Sr. Scale) 1998-2003

Lecturer 1992-1998

ADMINISTRATIVE EXPERIENCE:**Shivaji University, Kolhapur:**

- Member, Academic Council
- Coordinator, University Industry Interaction Centre, 2007-2018, 2020-2022
- Coordinator, Department of Applied Chemistry, since 2019
- Member, Standing Committee (special cell), 2010 – 2012
- Rector, Boys Hostel, 2005 – 2009
- Coordinator, Certificate Course in Analytical Instrumentation, 2007- 2008

Solapur University, Solapur:

- Member, Research and Recognition Committee (Chemistry), 2018-2022
- Coordinator, Steering Committee, National Assessment and Accreditation Council (NAAC), Sangola College, Sangola 2003 - 2005
- Head, Department of Chemistry, Sangola College, Sangola, 1992-2003

Awards / Fellowship:

- Brain Pool Fellow National Research Foundation (NRF), South Korea, Host University: Chonnam National University, Gwangju, South Korea, 2018-2019
- Best Teacher Award Shivaji University, Kolhapur, India, 2002

Patent: Korean

- Title: Manufacturing method of copper chalcogenide using deep eutectic solution.
Reference: Application Number 10-2017-0036807 Patent Number: 1-1-2017-0288011-68
Publication/Grant date: 23.03.2017 (http://kportal.kipris.or.kr/kportal/search/total_search.do)

RESEARCH PAPER AWARDS / RECOGNITIONS:

- American Chemical Society ACS ‘Top Five’ Researcher, among the Indian Research Community for ‘*Making American Chemical Society Journals who are the most impactful in the Chemistry Field*’ 2020. October 8, 2020

‘Globally Top Cited ACS Articles amongst the Shivaji University published Articles with ACS Publication during 2017-20. October 1, 2020

ACS ‘Top 10 Most Read’ Paper, *Chemistry of Materials*, 2016.
- Royal Society of Chemistry Cover Image, *Journal of Materials Chemistry A*, 2018. December 7, 2018

Invited Feature Article, *Chemical Communications*, 2014. October 7, 2014

Most Read Article, *CrystEngComm*, 2012. March 21, 2012
- Indian Academy of Sciences / Springer Cover Image, *Bulletin of Materials Science*, 2019. December 2019
- Renewable Energy Global Innovations, Canada Key Scientific Article contributing to the excellence in Energy research, 2015
Physical Chemistry Chemical Physics 17 (2015) 19777-19788
<https://reginnovations.org/key-scientific-articles/wurtzite-czts-nanocrystals-and-phase-evolution-to-kesterite-thin-film-for-solar-energy-harvesting/> January 25, 2016
- Science Direct ‘Science Direct Top 10’ most downloaded article 2011 and ‘Science Direct Top 25 Hottest Articles’ *Comptes Rendus Chimie* 2011, 14, 883–886. March 2012

‘Science Direct Top 25 Hottest Articles’ *Comptes Rendus Chimie* 2011, 14, 878–882. March 2012

‘Science Direct Top 25 Hottest Article’, *Applied Surface Science* 2010, 257, 1786 – 1791. December 2010

‘Science Direct Top 25 Hottest Article’ *Electrochimica Acta* 2010, 55, 4057 – 4061. March 2011
- International Conference -American Canadian Conference for Academic Disciplines Best Paper Award, Ryerson University, Toronto, Canada, 2009. May 25, 2009
- World Gold Council, London Excellent Paper Award (with honorarium of £300), 2001. December 10, 2001

PROPOSAL REVIEWER / PANELIST: Scientific Expert for the section ‘Fundamental Research’ and ‘Applied Research’, Register of Expert Peer-Review for the Scientific Evaluation of Italian Research (REPRISE), Ministry of Education, Universities and Research (MIUR), Rome, **Italy**. (*MIUR.AOODGRIC.REGISTRO_REPRISE.0005455.19-03-2018*). March 16, 2018

MANUSCRIPT REVIEWER: over 75 Journals

- **American Chemical Society:** *ACS Appl. Mater. Interfaces, ACS Appl. Energy Mater., Cryst. Growth Des., Ind. Eng. Chem. Res. etc.*
- **Royal Society of Chemistry:** *New J. Chem, Photochem. Photobiol. Sci., RSC Advances*
- **Elsevier:** *Chem. Eng. J., J. Power Sources, Electrochem. Commun., Electrochimica Acta, Materials & Design, Food Chem., J. Mol. Catal. A, Talanta, Mater. Chem. Phys., J. Ind. Eng. Chem., Appl. Surf. Sci., Spectrochim. Acta Part A, Mater. Sci. Eng. B, J. Magn. Magn. Mater., Chin. J. Catal., J. Alloys Compd., Microchem. J. etc.*
- **Springer:** *Sci. China Mater., J. Nanopart. Res., Environ. Sci. Pollut. Res., J. Solid State Electrochem., Environ. Earth Sci. etc.*
- **Wiley-VCH:** *Int. J. Energy Res., J. Sep. Sci.; CLEAN - Soil, Air, Water etc.*
- **Materials Society of Korea:** Korean Journal of Materials Research
- **American Scientific Publishers:** *J. Nanosci. Nanotechnol.*
- **Taylor and Francis:** *Desalin. Water Treat.; Int. J. Environ. Anal. Chem.; Sep. Sci. Technol.*

FORMAL TEACHING ACTIVITIES:

- Topics in Inorganic Chemistry: energy conversion devices, energy storage devices, chemistry of inorganic materials, coordination chemistry, organometallic chemistry.
- Topics in Analytical Science: electroanalytical techniques, instrumentation techniques, separation science.

RESEARCH ACTIVITIES:

- **Research Topics:** Synthesis of ferrite materials and their applications in supercapacitors; synthesis of materials for battery applications; Synthesis of metal organic framework (MOF) nanostructures and their applications as electrodes in supercapacitor and battery; Synthesis of nanocrystals and colloidal quantum dots and their applications in water splitting; Synthesis of materials for solar cell fabrication; Design and synthesis of ionic liquids and their applications as electrolytes in supercapacitors; Separation science (solvent extraction, spectrophotometry, adsorption).

- **Ph. D. Guidance:** 23 students (17 degree awarded, 2 thesis submitted, 4 Working)

• **Research (Project) Funding:**

Individual = INR 1,45,00,000 (external funding)

- DAE-BRNS (2 projects) ● CSIR (1 project) ● BARC (1 project) ● RGSTC (1 project)
- UGC (3 major projects and 5 minor projects)

Departmental: INR 4,09,00,000 (*Contributions in terms of preparation, presentation and implementation*)

- **Cumulative Impact Factor: 359.938** (till January 2021)
Google Scholar Citation Index = 3071 (highest citations for a paper = 274); **h-index = 32, i10-index = 69** (till January 2021)
<https://scholar.google.co.in/citations?user=nX-3tE4AAAAJ&hl=en>
Scopus Citation Index = 2441 (highest citations for a paper = 198); **h-index = 29** (till January 2021) <https://www.scopus.com/authid/detail.uri?authorId=6602913340>
- **Research Publications: (Total= 111)**
 (Materials Science-60; Analytical Science - 51)

Impact factor	16.683	11-12	9 -10	8 - 9	7 - 8	6- 7	5 - 6	4 - 5	3 - 4	2-3	1-2	<1	ISSN
No. of papers	1	4	1	3	1	7	7	11	17	15	15	10	19

Publications are in the journals published by Nature Publishing Group, American Chemical Society, Royal Society of Chemistry, Elsevier, SpringerNature, Wiley, Taylor and Francis etc.

Material Science:

1. Confinement of Ag₃PO₄ nanoparticles supported by surface plasmon resonance of Ag in glass: efficient nanoscale photocatalyst for solar H₂ production from waste H₂S. S.S. Patil, D.R. Patil, S.K. Apte, M.V. Kulkarni, J.D. Ambekar, C.J. Park, S.W. Gosavi, **S.S. Kolekar** and B.B. Kale. Applied Catalysis B: Environmental, (2016), 190, 75–84 DOI: <http://dx.doi.org/10.1016/j.apcatb.2016.02.068> (Impact Factor **16.683**)
2. Unassisted visible solar water splitting with efficient photoelectrodes sensitized by quantum dots synthesized via an environmentally friendly and efficient eutectic solvent-mediated approach. U.V. Ghorpade, M.P. Suryawanshi, S.W. Shin, J. Kim, S.H. Kang, J.S. Ha, **S.S. Kolekar** and J.H. Kim. Journal of Materials Chemistry A, (2018), 6(45), 22566-22579 DOI: <https://doi.org/10.1039/C8TA05901B> (Impact Factor **11.301**)
[Featured on journal back cover]
3. Eutectic solvent-mediated selective synthesis of Cu-Sb-S-based nanocrystals: Combined experimental and theoretical studies toward highly efficient water splitting. U.V. Ghorpade, M.P. Suryawanshi, S.W. Shin, X. Wang, E. Jo, H. Bae, K.S. Park, J.S. Ha, **S.S. Kolekar** and J.H. Kim. Journal of Materials Chemistry A, (2018), 6(40), 19798-19809, DOI: <https://doi.org/10.1039/C8TA07400C> (Impact Factor **11.301**)
4. Ag:BiVO₄ dendritic hybrid-architecture for high energy density symmetric supercapacitors. S.S. Patil, D.P. Dubal, M.S. Tamboli, J.D. Ambekar, **S.S. Kolekar**, P. Gomez-Romero, B.B. Kale and D.R. Patil. Journal of Materials Chemistry A, (2016), 4, 7580-7584, DOI: <https://doi.org/10.1039/C6TA01980C> (Impact Factor: **11.301**)
5. Low cost flexible 3-D aligned and cross-linked efficient ZnFe₂O₄ nano-flakes electrode on stainless steel mesh for symmetric supercapacitor. M.M. Vadiyar, S.C. Bhise, K.S. Ghule, **S.S. Kolekar**, J.Y. Chang and A.V. Ghule. Journal of Materials Chemistry A. (2016), 4, 3504–3512 DOI: <https://doi.org/10.1039/C5TA09022A> (Impact Factor **11.301**)

6. Colloidal wurtzite Cu_2SnS_3 (CTS) nanocrystals and their applications in solar cells. U.V. Ghorpade, M.P. Suryawanshi, S.W. Shin, I. Kim, S.K. Ahn, J.H. Yun, C. Jeong, **S.S. Kolekar** and J.H. Kim. Chemistry of Materials, (2016), 28, 3308-3317, DOI: <https://doi.org/10.1021/acs.chemmater.6b00176>, (Impact Factor **9.567**)
[Featured as the ACS 'Top 10 Most Read' Paper]
7. Anchoring ultrafine $\text{ZnFe}_2\text{O}_4/\text{C}$ nanoparticles on 3D ZnFe_2O_4 nano-flakes for boosting cycle stability and energy density of flexible asymmetric supercapacitor. M.M. Vadiyar, **S.S. Kolekar**, J.Y. Chang, Z. Ye and A.V. Ghule. ACS Applied Materials & Interfaces, (2017), 9, 26016–26028 DOI: <https://doi.org/10.1021/acsami.7b06847>, (Impact Factor **8.758**)
[Featured as the 'Globally Top Cited ACS Articles amongst the Shivaji University published Articles with ACS Publication during 2017-20].
8. Fern-like rGO/ BiVO_4 hybrid nanostructures for high-energy symmetric supercapacitor. S.S. Patil, D.P. Dubal, V.G. Deonikar, M.S. Tamboli, J.D. Ambekar, P. Gomez-Romero, **S.S. Kolekar**, B.B. Kale and D.R. Patil. ACS Applied Materials & Interfaces, (2016), 8, 31602–31610, DOI: <https://doi.org/10.1021/acsami.6b08165> (Impact Factor **8.758**)
9. Carbon- and oxygen-free $\text{Cu}(\text{InGa})(\text{SSe})_2$ solar cell with a 4.63% conversion efficiency by electrostatic spray deposition H. Yoon, N.S. Heon, J.Y. Choi, M.W. Kim, H. Kim, H.S. An, B.K. Min, S.J. Ahn, J.H. Yun, J. Gwak, K.H. Yoon, **S.S. Kolekar**, M. F. A. M. Hest, S.S. Al-Deyab, M.T. Swihart and S.S. Yoon. ACS Applied Materials & Interfaces, (2014), 6, 8369–8377, DOI: <https://doi.org/10.1021/am501286d> (Impact Factor **8.758**)
10. Graphene-wrapped $\text{Ag}_3\text{PO}_4/\text{LaCO}_3\text{OH}$ heterostructures for water purification under visible light. S.S. Patil, M.G. Mali, A. Roy, M.S. Tamboli, V.G. Deonikar, D.R. Patil, M.V. Kulkarni, S.S. Al-Deyab, S.S. Yoon, **S.S. Kolekar** and B.B. Kale. Journal of Energy Chemistry, (2016), 25, 845-853, DOI: <https://doi.org/10.1016/j.jechem.2016.05.004> (Impact Factor **7.216**)
11. Reflux condensation mediated deposition of Co_3O_4 nanosheets and ZnFe_2O_4 nanoflakes electrodes for flexible asymmetric supercapacitor. M.M. Vadiyar, **S.S. Kolekar**, J.Y. Chang, A.A. Kashale and A.V. Ghule. Electrochimica Acta, (2016), 222, 1604–1615, DOI: <https://doi.org/10.1016/j.electacta.2016.11.146> (Impact Factor **6.215**)
12. Design and electro-synthesis of 3-D nanofibers of MnO_2 thin films and their application in high performance supercapacitor. P.R. Jadhav, M.P. Suryawanshi, D.S. Dalavi, D.S. Patil, E.A. Jo, **S.S. Kolekar**, A.A. Wali, M.M. Karanjkar, J.H. Kim and P.S. Patil. Electrochimica Acta, (2015), 176, 523–532, DOI: <https://doi.org/10.1016/j.electacta.2015.07.002> (Impact Factor **6.215**)
13. Thiocyanate functionalized ionic liquid electrolyte for photoelectrochemical study of cadmium selenide pebbles. S.A. Pawar, D.S. Patil, S.K. Patil, D.V. Awale, R.S. Devan, Y.R. Ma, **S.S. Kolekar**, J.H. Kim and P.S. Patil, Electrochimica Acta, (2014), 148, 310–316, DOI: <https://doi.org/10.1016/j.electacta.2014.10.047> (Impact Factor **6.215**)

14. Synthesis and characterization of Ru doped CuO thin films for supercapacitor based on brønsted acidic ionic liquid. J.S. Shaikh, R.C. Pawar, R.S. Devan, Y.R. Ma, P.P. Salvi, **S. S. Kolekar** and P.S. Patil. *Electrochimica Acta*, (2011), 56, 2127 – 2134, DOI: <https://doi.org/10.1016/j.electacta.2010.11.046> (Impact Factor **6.215**)
15. Single step electro synthesis of Cu₂ZnSnS₄ (CZTS) thin films for solar cell application. S.M. Pawar, B.S. Pawar, A.V. Moholkar, D.S. Choi, J.H. Yun, J.H. Moon, **S.S. Kolekar** and J.H. Kim, *Electrochimica Acta*, (2010), 55, 4057 – 4061, DOI: <https://doi.org/10.1016/j.electacta.2010.02.051> (Impact Factor **6.215**)
[Featured as the 'Science Direct Top 25 Hottest Article']
16. Effect of complexing agent on the properties of electro chemically deposited Cu₂ZnSnS₄ (CZTS) thin films. B.S. Pawar, S.M. Pawar, S.W. Shin, D.S. Choi, C.J. Park, **S.S. Kolekar** and J.H. Kim. *Applied Surface Science*, (2010), 257, 1786 – 1791, DOI: <https://doi.org/10.1016/j.apsusc.2010.09.016> (Impact Factor **6.182**)
[Featured as the 'Science Direct Top 25 Hottest Article']
17. Contact angle measurement: a preliminary diagnostic tool for evaluating the performance of ZnFe₂O₄ nano-flake based supercapacitors. M.M. Vadiyar, S.C. Bhise, S.K. Patil, **S.S. Kolekar**, A.R. Shelke, N.G. Deshpande, J.Y. Chang, K.S. Ghule and A.V. Ghule. *Chemical Communications*, (2016), 52, 2557-2560, DOI: <https://doi.org/10.1039/C5CC08373G> (Impact Factor **5.996**)
18. Towards environmentally benign approaches for the synthesis of CZTSSe nanocrystals by hot injection method: a status review. U.V. Ghorpade, M.P. Suryawanshi, S.W. Shin, K.V. Gurav, P.S. Patil, S.P. Pawar, C.W. Hong, J.H. Kim and **S.S. Kolekar**. *Chemical Communications*, (2014), 50, 11258-11273, DOI: <https://doi.org/10.1039/C4CC03176H> (Impact Factor **5.996**)
[Invited feature article]
19. Green approach for hierarchical nanostructure Ag-ZnO and their photocatalytic performance under sunlight. S.S. Patil, M.G. Mali, M.S. Tamboli, D.R. Patil, M.V. Kulkarni, H. Yoon, H.Y. Kim, S.S. Al-Deyab, S.S. Yoon, **S.S. Kolekar** and B.B. Kale. *Catalysis Today*, (2016), 260, 126–134, DOI: <https://doi.org/10.1016/j.cattod.2015.06.004> (Impact Factor **5.825**)
20. Superfast ice crystal-assisted synthesis of NiFe₂O₄ and ZnFe₂O₄ nanostructures for flexible high-energy density asymmetric supercapacitors. SB. Bandgar, M.M. Vadiyar, C.L. Jambhale, Jin-Hyeok Kim and **S.S. Kolekar**. *Journal of Alloys and Compounds*, (2020), 853, 157129 (1-10), DOI: <https://doi.org/10.1016/j.jallcom.2020.157129> (Impact Factor **4.650**)
21. Electrochemical performance of potentiodynamically deposited polyaniline electrodes in ionic liquid. D.S. Patil, S.A. Pawar, S.K. Patil, P.P. Salavi, **S.S. Kolekar**, R.S. Devan, Y.R. Ma, J.H. Kim, J.C. Shin and P.S. Patil. *Journal of Alloys and Compounds*, (2015), 646, 1089-1095, DOI: <https://doi.org/10.1016/j.jallcom.2015.06.190> (Impact Factor **4.650**)

22. Synthesis of nanocrystalline nickel-zinc ferrite ($\text{Ni}_{0.8}\text{Zn}_{0.2}\text{Fe}_2\text{O}_4$) thin films by chemical bath deposition method. D.K. Pawar, S.M. Pawar, P.S. Patil and **S.S. Kolekar**. Journal of Alloys and Compounds, (2011), 509, 3587 – 3591, DOI: <https://doi.org/10.1016/j.jallcom.2010.12.079> (Impact Factor **4.650**)
23. Holey $\text{C@ZnFe}_2\text{O}_4$ nanoflakes by carbon soot layer blasting approach for high performance supercapacitors. M.M. Vadiyar, S.B. Bandgar, **S.S. Kolekar**, J.Y. Chang, Y.C. Ling, Z. Ye and A.V. Ghule. ACS Applied Energy Materials, (2019), 2(9), 6693-6704 DOI: <https://doi.org/10.1021/acsaem.9b01195> (Impact Factor **4.473**)
24. Metal precursor dependent synthesis of NiFe_2O_4 thin films for high-performance flexible symmetric supercapacitor. S.B. Bandgar, M.M. Vadiyar, Y.C. Ling, J.Y. Chang, S.H. Han, A.V. Ghule and **S.S. Kolekar**, ACS Applied Energy Materials, (2018), 1(2), 638–648, DOI: <https://doi.org/10.1021/acsaem.7b00163> (Impact Factor **4.473**)
[Featured as the 'Globally Top Cited ACS Articles amongst the Shivaji University published Articles with ACS Publication during 2017-20.
Featured in the ACS 'Top Five' Researcher, among the Indian Research Community for 'Making American Chemical Society Journals who are the most impactful in the Chemistry Field' 2020]
25. Magnetically separable $\text{Ag}_3\text{PO}_4/\text{NiFe}_2\text{O}_4$ composites with enhanced photocatalytic activity. S.S. Patil, M.S. Tamboli, V.G. Deonikar, G.G. Umarji, J.D. Ambekar, M.V. Kulkarni, **S.S. Kolekar**, B.B. Kale and D.R. Patil. Dalton Transactions, (2015), 44, 20426–20434, DOI: <https://doi.org/10.1039/C5DT03173G> (Impact Factor **4.174**)
26. One-pot in situ hydrothermal growth of $\text{BiVO}_4/\text{Ag/rGO}$ hybrid architectures for solar water splitting and environmental remediation. S.S. Patil, M.G. Mali, M.A. Hassan, D.R. Patil, **S.S. Kolekar** and S.W. Ryu., Nature Sci. Rep., (2017), 7, Article number: 8404 1-12, DOI: <https://doi.org/10.1038/s41598-017-08912-z> (Impact Factor **3.998**)
27. Synthesis and electrochemical supercapacitive performance of nickel-manganese ferrite composite films. M.K. Zate, S.M.F. Shaikh, V.V. Jadhav, K.K. Tehare, **S.S. Kolekar**, R.S. Mane, M. Naushad, B.N. Pawar and K.N. Hui. Journal of Analytical and Applied Pyrolysis, (2015), 116, 177–182, DOI: <https://doi.org/10.1016/j.jaap.2015.09.012> (Impact Factor **3.905**)
28. Nanopetals assembled copper oxide electrode for supercapacitor using novel 1-(1'-methyl-2'-oxo-propyl)-2,3-dimethylimidazolium chloride ionic liquid as an electrolyte. D.V. Awale, S.C. Bhise, S.K. Patil, M.M. Vadiyar, P.R. Jadhav, G.J. Navathe, J.H. Kim, P.S. Patil and **S.S. Kolekar**. Ceramics International, (2016), 42, 2699–2705, DOI: <https://doi.org/10.1016/j.ceramint.2015.10.155> (Impact Factor **3.830**)
29. Rapid synthesis of nanostructured copper oxide for electrochemical supercapacitor based on novel [HPMIM][Cl] ionic liquid. G.J. Navathe, D.S. Patil, P.R. Jadhav, D.V. Awale, A.M. Teli, S.C. Bhise, **S.S. Kolekar**, M.M. Karanjkar, J.H. Kim and P.S. Patil. Journal of Electroanalytical Chemistry, (2015), 738, 170–175
DOI: <https://doi.org/10.1016/j.jelechem.2014.11.036> (Impact Factor **3.807**)

30. Wurtzite CZTS nanocrystals and phase evolution to kesterite thin film for solar energy harvesting. U.V. Ghorpade, M.P. Suryawanshi, S.W. Shin, C.W. Hong, I. Kim, J.H. Moon, J.H. Yun, J.H. Kim and **S.S. Kolekar**. Physical Chemistry Chemical Physics, (2015), 17, 19777-19788, DOI: <https://doi.org/10.1039/C5CP02007G>, (Impact Factor **3.430**)
[Featured as the Key Scientific Article contributing to the excellence in Energy research, 2015, Renewable Energy Global Innovations, Canada]
31. Synthesis and enhancement of photocatalytic activities of ZnO by silver nanoparticles. R.S. Patil, M.R. Kokate, D.V. Shinde, **S.S. Kolekar** and S.H. Han. Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, (2014), 122, 113–117, DOI: <https://doi.org/10.1016/j.saa.2013.09.116> (Impact Factor **3.232**)
32. Bioinspired synthesis of highly stabilized silver nanoparticles using Ocimum tenuiflorum leaf extract and their antibacterial activity. R.S. Patil, M.R. Kokate, **S.S. Kolekar**, Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, (2012), 91, 234-238, DOI: <https://doi.org/10.1016/j.saa.2012.02.009> (Impact Factor **3.232**)
33. Rotational reflux chemistry approach derived flat holey CuFe₂O₄ nanosheets for supercapacitors application. S.B. Bandgar, M.M. Vadiyar, U.P. Suryawanshi, C.L. Jambhale, J.H. Kim and S.S. Kolekar. Materials Letters, (2020), 279, 128514 (1-4) DOI: <https://doi.org/10.1016/j.matlet.2020.128514> (Impact Factor **3.204**)
34. Synthesis of Cu₂ZnSnS₄ (CZTS) absorber by rapid thermal processing (RTP) sulfurization of stacked metallic precursor films for solar cell applications. S.M. Pawar, A.I. Inamdar, B.S. Pawar, K.V. Gurav, S.W. Shin, X. Yanjun, **S.S. Kolekar**, J.H. Lee, J.H. Kim and H. Im. Materials Letters, (2014), 118, 76-79, DOI: <https://doi.org/10.1016/j.matlet.2013.12.047> (Impact Factor **3.204**)
35. Marigold micro-flower like NiCo₂O₄ grown on flexible stainless-steel mesh as an electrode for supercapacitors. G.P. Kamble, A.A. Kashale, A.S. Rasal, S.A. Mane, R.A. Chavan, J.Y. Chang, Y.C. Ling, S.S. Kolekar, and A.V. Ghule. RSC Advances, (2021), (*accepted*) (Impact Factor **3.119**)
36. Binder free 2D aligned efficient MnO₂ micro flowers as stable electrodes for symmetric supercapacitor applications. A.A. Kashale, M.M. Vadiyar, **S.S. Kolekar**, B.R. Sathe, J.Y. Chang, H.N. Dhakal and A.V. Ghule. RSC Advances, (2017), 7, 36886–36894, DOI: <https://doi.org/10.1039/C7RA05655A> (Impact Factor **3.119**)
37. Mechanochemical growth of porous ZnFe₂O₄ nano-flakes thin film as electrode for supercapacitor application. M.M. Vadiyar, S.C. Bhise, S.K. Patil, S.A. Patil, D.K. Pawar, A.V. Ghule, P.S. Patil and **S.S. Kolekar**. RSC Advances, (2015), 5, 45935 –45942, DOI: <https://doi.org/10.1039/C5RA07588B> (Impact Factor **3.119**)
38. Hydrothermal synthesis of rutile TiO₂ nanoflowers using brønsted acidic ionic liquid [BAIL]: Synthesis, characterization and growth mechanism. S.S. Mali, C.A. Betty, P.N. Bhosale, R.S. Devan, Y.R. Ma, **S.S. Kolekar** and P.S. Patil. CrystEngComm, (2012), 14, 1920–1924, DOI: <https://doi.org/10.1039/C2CE06476F> (Impact Factor **3.117**)
[Featured as the Most Read Article]

39. Facile synthesis CuO nanosheets electrode for supercapacitor with long cyclic stability in novel methyl imidazole based ionic liquid electrolyte. S.C. Bhise, D.V. Awale, M.M. Vadiyar, S.K. Patil, B.N. Kokare and **S.S. Kolekar**. Journal of Solid State Electrochemistry, (2017), 21, 2585–2591, DOI: <https://doi.org/10.1007/s10008-016-3490-2> (Impact Factor **2.646**)
40. Self-assembly of coordination polymers of Pr(III), Nd(III), Tb(III), Dy(III) and Ho(III) with 5-hydroxyisophthalic acid and adipic acid: Syntheses, structures, porosity, luminescence and magnetic properties. M. Kariem, M. Yawera, M. Kumar, H.N. Sheikh, P. Sood and **S.S. Kolekar**. Journal of Solid State Chemistry, (2017), 255, 61–69, DOI: <https://doi.org/10.1016/j.jssc.2017.08.001> (Impact Factor **2.726**)
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42. Binder free chemical synthesis of ZnFe₂O₄ thin films for asymmetric supercapacitor with improved performance. M. Vadiyar, **S. Kolekar**, J. Chang, N. Deshpande, A. Kashale and A. Ghule, Ionics, (2017), 23, 741–749 DOI: <https://doi.org/10.1007/s11581-016-1833-8> (Impact Factor **2.394**)
43. A novel one step synthesis of silver nanoparticles using room temperature ionic liquid and their biocidal activity. R.S. Patil, M.R. Kokate, P.P. Salvi and **S.S. Kolekar**. Comptes Rendus Chimie, (2011), 14, 1122 -1127, DOI: <https://doi.org/10.1016/j.crci.2011.07.009> (Impact Factor **2.223**)
44. Reflux temperature-dependent zinc cobaltite nanostructures for asymmetric supercapacitors. G.P. Kamble; A.A. Kashale; S.S. Kolekar; I-W.P. Chen; B.R. Sathe; A.V. Ghule, Journal of Materials Science: Materials in Electronics, ISSN:0957-4522, (*accepted*) (Impact Factor **2.220**)
45. Hydroxy functionalized ionic liquids as promising electrolytes for supercapacitor study of α -Fe₂O₃ thin films. S.K. Patil, M.M. Vadiyar, S.C. Bhise, S.A. Patil, D.V. Awale, U.V. Ghorpade, J.H. Kim, A.V. Ghule and **S.S. Kolekar**, Journal of Materials Science: Materials in Electronics, (2017), 28, 11738–11748, DOI: <https://doi.org/10.1007/s10854-017-6978-3> (Impact Factor **2.220**)
46. Synthesis of hydrophilic nickel zinc ferrite thin films by chemical route for supercapacitor application. D.K. Pawar, J.S. Shaikh, B.S. Pawar, S.M. Pawar, P.S. Patil and **S.S. Kolekar**, Journal of Porous Materials, (2012), 19, 649–655. DOI: <https://doi.org/10.1007/s10934-011-9516-3> (Impact Factor **2.183**)
47. Nanostructured microspheres of silver @ zinc oxide: an excellent impeder of bacterial growth and biofilm. S.S. Patil, R.H. Patil, S.B. Kale, M.S. Tamboli, J.D. Ambekar, W.N. Gade, **S.S. Kolekar** and B.B. Kale, Journal of Nanoparticle Research, (2014), 16, 2717 DOI: <https://doi.org/10.1007/s11051-014-2717-3> (Impact Factor **2.132**)

48. Amide functionalized ionic liquid as facile fluorescent probe for detection of nitrophenolic compounds. S.K. Patil, D.V. Awale, M.M. Vadiyar, S.A. Patil, S.C. Bhise, A.H. Gore, G.B. Kolekar, J.H. Kim and **S.S. Kolekar**. *Chemistry Select*, (2017), 2(14), 4124–4130, DOI: <https://doi.org/10.1002/slct.201700611> (Impact Factor **1.811**)
49. Comparative study of individual and mixed aqueous electrolytes with ZnFe₂O₄ nano-flakes thin film electrode based supercapacitor. M.M. Vadiyar, S.C. Bhise, S.K. Patil, **S.S. Kolekar**, J.Y. Chang and A.V. Ghule, *Chemistry Select*, (2016), 5, 959 – 966, DOI: <https://doi.org/10.1002/slct.201600151> (Impact Factor **1.811**)
50. Mesoporous nickel oxide nanosheet as an electrode material for supercapacitor application using 1-(2',3'-dihydroxypropyl)-3-methylimidazolium hydroxide ionic liquid electrolyte, S.C. Bhise, D.V. Awale, M.M. Vadiyar, S.K. Patil, U.V. Ghorpade, B.N. Kokare, J. H. Kim and **S.S. Kolekar**. *Bulletin of Materials Science*, (2019), 42(6) 263:1-10 DOI: <https://doi.org/10.1007/s12034-019-1961-7> (Impact Factor **1.392**)
[Featured on journal front cover]
51. Binder-free synthesis of high quality nanocrystalline ZnCo₂O₄ thin film electrodes for supercapacitor application. G.P. Kamble, A.A. Kashale, S.S. Dhanayat, **S.S. Kolekar** and A.V. Ghule, *Bulletin of Materials Science*, (2019), 42(6), 272:1-7 DOI: <https://doi.org/10.1007/s12034-019-1950-x> (Impact Factor **1.392**)
52. Fabrication of Cu₂ZnSnS₄ (CZTS) thin film solar cell using single step electrodeposition method. S.M. Pawar, B.S. Pawar, K.V. Gurav, D.W. Bae, S.H. Kwon, **S.S. Kolekar** and J.H. Kim, *Japanese Journal of Applied Physics*, (2012), 51, 10NC27 DOI: <http://dx.doi.org/10.1143/JJAP.51.10NC27> (Impact Factor **1.376**)
53. Supercapacitor application of 3-(3'-hydroxypropyl)-1,2-dimethylimidazolium chloride electrolyte using copper oxide synthesized by chemical bath deposition method. D.V. Awale, S.C. Bhise, S.K. Patil and **S.S. Kolekar**. *Materials Today: Proceedings*, (2019), 9, 184-192 DOI: <https://doi.org/10.1016/j.matpr.2019.02.151> (Impact Factor - not assigned)
54. Controlled synthesis of nanostructured nickel oxide thin film for supercapacitor application. S.C. Bhise, D.V. Awale, M.M. Vadiyar, S.K. Patil, B.N. Kokare, A.V. Ghule and **S.S. Kolekar**. *Advanced Science Letters*, (2018), 24, 5587–5592, DOI: <https://doi.org/10.1166/asl.2018.12155> (Impact Factor - not assigned)
55. Behavior of graphene oxide in ionic liquid for supercapacitor application. S.T. Jadhav, S.U. Dubal, L.D. Jadhav, J.S. Shaikh, A.U. Chavan, A.P. Jamale, S.P. Patil P.S. Patil and **S.S. Kolekar**, *AIP Conference Proceedings*, (2013), 1536, 1183-1184, DOI: <https://doi.org/10.1063/1.4810661> (Impact Factor - not assigned)
56. Photoelectrochemical studies of chemically (Sol–Gel) synthesized tin oxide nanocrystallites. S.S. Bhande, S.L. Gaikwad, B.G. Pawar, A.V. Shaikh, **S.S. Kolekar**, Oh-S. Joo, R.S. Mane and S.H. Han, *Journal of Nanoengineering and Nanomanufacturing*, (2013), 3(3), 237-242, DOI: <https://doi.org/10.1166/jnan.2013.1138> (Impact Factor - not assigned)

57. Electrochemical tailoring of honeycomb-structured ZnO thin films by interfacial surfactant templating. B.G. Pawar, P.P. Salvi and **S.S. Kolekar**, ISRN Nanomaterials, (2012), Article ID 907340, 1-6, DOI: <https://doi.org/10.5402/2012/907340>, (Impact Factor - not assigned)
58. Effect of sintering temperatures on the synthesis of SnO₂ nanospheres. B.G. Pawar and **S.S. Kolekar**, ISRN Chemical Engineering, (2012), Article ID 954869, 1-7, DOI: <https://doi.org/10.5402/2012/954869> (Impact Factor - not assigned)
59. One-pot synthesis of PVA-capped silver nanoparticles their characterization and biomedical application, R.S. Patil, M.R. Kokate, C.L. Jambhale, S.M. Pawar, S.H. Han and **S.S. Kolekar**. Advances in Natural Sciences: Nanoscience and Nanotechnology, (2012), 3, 1-7 DOI: <https://doi.org/10.1088/2043-6262/3/1/015013> (Impact Factor - not assigned)
60. Effect of annealing atmosphere on the properties of electrochemically deposited Cu₂ZnSnS₄(CZTS) thin films. B.S. Pawar, S.M. Pawar, K.V. Gurav, S.W. Shin, J.Y. Lee, **S.S. Kolekar** and J.H. Kim, ISRN Renewable Energy, (2011), Article ID 934575, 1-5, DOI: <https://doi.org/10.5402/2011/934575> (Impact Factor - not assigned)

Analytical Science: (*selected publications*)

61. Food safety evaluation of buprofezin, dimethoate and imidacloprid residues in pomegranate. S.C. Utture, K. Banerjee, **S.S. Kolekar**, S. Dasgupta, D.P. Oulkar, S.H. Patil, S.S. Wagh, P.G. Adsule and M.A. Anuse, Food Chemistry, (2012), 131, 787–795, DOI: [10.1016/j.foodchem.2011.09.044](https://doi.org/10.1016/j.foodchem.2011.09.044) (Impact Factor **6.306**)
62. Rapid extraction separation of aluminium(III) from associated elements with n-octylaniline from succinate media. T.N. Shilimkar, **S.S. Kolekar** and M.A. Anuse, Separation and Purification Technology, (2005), 42(1), 55 – 63, DOI: <https://doi.org/10.1016/j.seppur.2004.06.004> (Impact Factor **5.744**)
63. Synergistic liquid-liquid extractive spectrophotometric determination of gold(III) using 1-(2',4'-dinitro aminophenyl)- 4,4,6-trimethyl-1,4- dihydropyrimidine -2-thiol. G.S. Kamble, **S.S. Kolekar**, S.H. Han and M.A. Anuse. Talanta, (2010), 81, 1088 – 1095, DOI: <https://doi.org/10.1016/j.talanta.2010.02.002> (Impact Factor **5.339**)
64. Solvent extraction separation of rhodium(III) with N- n -octylaniline as an extractant. **S.S. Kolekar** and M.A. Anuse, Talanta, (2002), 58, 761-771, DOI: [https://doi.org/10.1016/S0039-9140\(02\)00365-X](https://doi.org/10.1016/S0039-9140(02)00365-X) (Impact Factor **5.339**)
65. Tailor-made dicationic ionic liquid as a fluorescent sensor for detection of hydroquinone and catechol. S.K. Patil, S.A. Patil, M.M. Vadiyar, D.V. Awale, A.S. Sartape, L.S. Walekar, G.B. Kolekar, U.V. Ghorpade, J.H. Kim and **S.S. Kolekar**. Journal of Molecular Liquids, (2017), 244, 39–45, DOI: <http://dx.doi.org/10.1016/j.molliq.2017.08.119> (Impact Factor **5.065**)
66. Removal of malachite green dye from aqueous solution with adsorption technique using *Limonia acidissima* (Wood apple) shell as low cost adsorbent. A.S. Sartape, A.M. Mandhare, V.V. Jadhav, P.D. Raut, M.A. Anuse and **S.S. Kolekar**. Arabian Journal of Chemistry, (2017), 10(2), S3229 - S3238, DOI: <http://dx.doi.org/10.1016/j.arabjc.2013.12.019> (Impact Factor **4.762**)

67. Hexavalent chromium recovery by liquid-liquid extraction with 2-octylaminopyridine from acidic chloride media and its sequential separation from other heavy toxic metal ions. C.P. Mane, S.V. Mahamuni, **S.S. Kolekar**, S.H. Han and M.A. Anuse. *Arabian Journal of Chemistry*, (2016), 9(2), S1420-S1427, DOI: <http://dx.doi.org/10.1016/j.arabjc.2012.03.021> (Impact Factor **4.762**)
68. Liquid - liquid anion exchange extraction studies of samarium(III) from salicylate media using high molecular weight amine. A.M. Mandhare, S.H. Han, M.A. Anuse and **S.S. Kolekar**, *Arabian Journal of Chemistry*, (2015), 8, 456–464, DOI: <http://dx.doi.org/10.1016/j.arabjc.2011.01.026> (Impact Factor **4.762**)
69. Dissipation and distribution behavior of azoxystrobin, carbendazim and difenoconazole in pomegranate fruits. S.C. Utture, K. Banerjee, S. Dasgupta, S.H. Patil, M.R. Jadhav, S.S. Wagh, **S.S. Kolekar**, M.A. Anuse and P.G. Adsule. *Journal of Agricultural and Food Chemistry*, (2011), 59, 7866–7873, DOI: <https://doi.org/10.1021/jf200525d> (Impact Factor **4.192**)
70. Extraction of pesticides, dioxin-like PCBs and PAHs in water based commodities using liquid–liquid microextraction and analysis by gas chromatography–mass spectrometry. S. Dasgupta, K. Banerjee, S. Utture, P. Kusari, S. Wagh, K. Dhumal, **S. Kolekar** and P. Adsule. *Journal of Chromatography A*, (2011), 1218(38), 6780– 6791, DOI: <https://doi.org/10.1016/j.chroma.2011.07.043> (Impact Factor **3.998**)
71. Rapid and sensitive synergistic extraction and spectrophotometric determination of silver(I) using 1-(2',4'-dinitro aminophenyl)-4,4,6-trimethyl-1,4-dihydropyrimidine-2-thiol: analysis of real samples. G.S. Kamble, A.P. Gaikwad, B.N. Kokare, **S.S. Kolekar**, S.H. Han and M.A. Anuse, *Industrial & Engineering Chemistry Research*, (2011), 50(19), 11270–11279, DOI: <https://doi.org/10.1021/ie200812w> (Impact Factor **3.573**)
72. Extraction and separation of mercury(II) from succinate media with high molecular weight amine as an extractant. C.P. Mane, S.V. Mahamuni, A.P. Gaikwad, R.V. Shejwal, **S.S. Kolekar** and M.A. Anuse. *Journal of Saudi Chemical Society*, (2015), 19, 46–53, DOI: <http://dx.doi.org/10.1016/j.jscs.2011.12.016> (Impact Factor **3.515**)
73. Development of an reliable analytical method for synergistic extractive spectrophotometric determination of cobalt(II) from alloys and nano composite samples by using chromogenic chelating ligand. G.S. Kamble, A.A. Ghare, **S.S. Kolekar**, S.H. Han, and M.A. Anuse. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, (2011), 84, 117 – 124, DOI: <https://doi.org/10.1016/j.saa.2011.09.015> (Impact Factor **3.232**)
74. Synergistic extraction and spectrophotometric determination of copper(II) using 1-(2',4'-dinitro aminophenyl)- 4,4,6-trimethyl-1,4-dihydropyrimidine-2-thiol: analysis of alloys, pharmaceuticals and biological samples. G.S. Kamble, **S.S. Kolekar**, and M.A. Anuse, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, (2011), 78, 1455 – 1466, DOI: <https://doi.org/10.1016/j.saa.2011.01.027> (Impact Factor **3.232**)

75. Removal of Bi(III) with adsorption technique using coconut shell activated carbon as a low cost adsorbent. A.S. Sartape, A.M. Mandhare, P.P. Salvi, D.K. Pawar, P.D. Raut, M.A. Anuse and **S.S. Kolekar**, Chinese Journal of Chemical Engineering, (2012), 20(4), 768-775, DOI: [https://doi.org/10.1016/S1004-9541\(11\)60247-4](https://doi.org/10.1016/S1004-9541(11)60247-4) (Impact Factor 2.627)

Book Publication: International (1), University (1)

Conference/Symposia/Workshop Presentations: (Total 42)

International: 23 (Canada, South Korea and India); **National:** 19

Chairman- Scientific Session in Conference: International (2); National (5)

Invited Talks: International (01), National (12)

Refresher/Orientation/Training Programme Participation:

- Chemistry / Material Science Refresher Course / Orientation Programme : 03
- Schools and Workshops : 05
- **Organization of Conference / Symposium / Refresher Course (National Level)** as Co-ordinator / Liaison Officer / Convener: 09

Member on Academic Bodies:

1. Academic Council, **Shivaji University**, Kolhapur.
2. Research and Recognition Committee, **Solapur University**, Solapur, **2018-2023**.
3. Ad-hoc Board in Environmental Science, Shivaji University, Kolhapur, **2008 - 2010**.
4. Sub-Committee, School of Nanoscience and Nanotechnology, Shivaji University, Kolhapur, **2011**.
5. Sub-Committee, Post Graduate Diploma in Industrial Safety, Health and Environment (PGDISHE), Department of Environmental Science, Shivaji University, Kolhapur, **2008**.
6. Syllabus Committee, M. Sc. Chemistry and Applied Chemistry, Shivaji University, Kolhapur, **since 2005**.

Administrative Responsibilities: (*few selected*)

1. Coordinator, Memorandum of Understanding (MoU) between University Industry Interaction Center, Shivaji University, Kolhapur and Leaders in Industry-University Cooperation, Chonnam National University, Gwangju, South Korea (International MoU), 2016.
2. Departmental Committees, Department of Chemistry, Shivaji University, Kolhapur, 2006-2007 and 2019-2020.
3. Administrative Excellence Award Committee, Shivaji University, Kolhapur, 2014.
4. Panel of Expert Guides for "AVISHKAR 2014-15", Shivaji University, Kolhapur 2014.
5. Entrance Examination Committee, Shivaji University, Kolhapur 2014.
6. Executive Committee, Yashwantrao Chavan School of Rural Development, Shivaji University, Kolhapur since 2013.
7. Departmental Research Committee, Department of Agrochemicals and Pest Management, Shivaji University, Kolhapur 2010-2012.
8. Editorial Board, *Shivsandes*, an E-Magazine, Shivaji University, Kolhapur, 2008 -2014.
9. Golden Jubilee Celebration Committees, Shivaji University, Kolhapur, 2011-2012.
10. University Level Committee constituted to 'Improve the Standard of Higher Education', as per guidelines of Higher and Technical Education, Government of Maharashtra, 2011.
11. Member, University Delegation to visit Manipal Academy of Higher Education, Manipal, Karnataka state, September, 2007.

12. University Celebration Committees as Golden Jubilee, Workshops, National Youth Festival, Sports Events, Disaster management, National Management, Convocation etc. Shivaji University, Kolhapur.
13. Various University Level Committees constituted by Vice Chancellor and Director, BCUD, Shivaji University, Kolhapur as LIC, Staff Selection etc.
14. Coordinator, College Science Improvement Programme (COSIP), Sangola College, Sangola, 2002-2005.
15. Coordinator, Maharashtra Talent Search Examination (MTSE), Sangola Taluka, Sangola, conducted by Wadia College, Pune, 1995-2005.

Other Responsibilities at University:

1. **Curriculum Development:** Member, Syllabus Formation/Revision Committee in Chemistry, Industrial Chemistry, Applied Chemistry, Nanotechnology.
2. **University Examination Related Work:** End semester examination work (paper setting etc), Examination / Evaluation responsibilities for internal / continuous assessment work, Examination work such as coordination, senior supervision etc.
3. **University Functions:** Member, organizing committees formed for Convocation and Foundation Day Celebration etc.

Association with other University / other examinations:

1. **Member**, Panel of Judges, Ph. D. Defense, Hanyang University, Seoul, **South Korea**.
2. **Referee**, Ph. D. Thesis of above 25 Universities and National Research Institutes in India.
3. **Member**, Research Committee, D. Y. Patil University, Kolhapur.
4. **Member**, Board of Examiners and Examiner at Gulbarga University; Karnataka State Women's University, Vijayapura; Kuvempu University, Shankargatta; Rani Chennamma University, Belgaum etc.
5. **Observer**, Maharashtra State Eligibility Test for Lectureship (SET), Pune and AIPMT / NEET Examination, CBSE, Board, New Delhi.

Life Membership of Professional Bodies (India):

1. Society for Materials Chemistry (SMC), BARC, Mumbai (*LM-477*).
2. Indian Science Congress Association (ISCA), Kolkata. (*L-14835*).
3. Indian Association of Nuclear Chemists and Allied Scientists (IANCAS), BARC, Mumbai (*LM-1041*).
4. Indian Society of Analytical Scientists (ISAS), BARC, Mumbai (*LM-1894*).
5. Association of Separation Scientists and Technologists (ASSET), BARC, Mumbai (*LM-007*).
6. Indian Council of Chemists (ICC), Agra (*LF-873*).
7. Fellow, Indian Chemical Society (ICS), Kolkata (*F-4564*).

Students Advised:

- **Former Ph. D. students:**

Ashish Sartape, conferred December 2011, currently Assistant Professor

Aniruddha Mandhare, conferred December 2011, currently Assistant Professor

Prathmesh Salvi, conferred December 2011, currently Research Scientist, R & D Centre,
Reliance Industries Limited, Mumbai

Dattatrya Pawar, conferred June 2012, currently Assistant Professor

Sagar Utture, conferred August 2012, currently Manager Analytical, PS-Food, TÜV SÜD South Asia Pvt. Ltd. Bangalore

Rupali Patil, conferred March 2013

Bharat Pawar, conferred March 2013, currently Assistant Professor

Bharati Pawar, conferred January 2015

Santosh Patil, conferred April 2016, completed PDF at Chonnam National University and currently Post-Doctoral Fellow at Pohang University of Science and Technology, Pohang, **South Korea**

Madagonda Vadiyar, conferred January 2017, completed PDF at Laurentian University, Ontario and Concordia University, Quebec, **Canada**, currently Korean Research Fellow (KRF) at Dongguk University, Seoul, **South Korea**

Umadevi Ghorpade, conferred February 2017, completed PDF at Chonnam National University, **South Korea** and currently Post-Doctoral Fellow at University of Limerick, Limerick, **Ireland**

Dipak Awale, conferred December 2017, currently Assistant Professor

Sagar Bhise, conferred October 2018, currently Assistant Professor

Gurupad Kore, conferred October 2018, currently Associate Professor

Sandip Patil, conferred October 2018, currently Assistant Professor

Anita Ghare, conferred November 2018, currently Assistant Professor

Vidya Jadhav, conferred September 2019

- **Current Ph. D. Students:**

Suryakant Patil, thesis submitted December 2020

Shubhangi Bandgar, thesis submitted, December 2020

Pramod Kumbhar, started January 2016

Dattarya Narale, started July 2018

Rachana Ghavare, started July 2018

Rakhee Bhosale, started July 2020

Collaboration with Scientifically Renowned Personalities:

Scientists from renowned universities / institutes have always extended scientific support, guidance and also offered great human values which always helped me to contribute to the science. Some of them are included here,

1. **Prof. Kim J. H.**, Department of Materials Science and Engineering, Chonnam National University, Gwangju, **South Korea**
2. **Prof. Han S. H.**, Department of Chemistry, Hanyang University, Seoul, **South Korea**

3. **Prof. Zhibin Ye**, Department of Chemical and Materials Engineering,
Concordia University, Montreal, Quebec, **Canada**
4. **Dr. Wadgaonkar P. P.**, National Chemical Laboratory,
Council of Scientific and Industrial Research, **India**
5. **Dr. Kale B. B.**, Centre for Materials For Electronics Technology (C-MET),
Ministry of Information and Technology, Government of India, **India**
6. **Prof. Mane R. S.**, School of Physical Science, S. R. T. M. University, Nanded, **India**
7. **Prof. Patil P. S.**, Department of Physics, Shivaji University, Kolhapur, **India**