

	<p><b>Dr. Mrs. Sonali Sandeep Kokane</b> Associate Professor, Department of Chemistry</p> <p><b>SATISH PRADHAN DNYANASADHANA COLLEGE, THANE Off Eastern Express Highway, Dnyanasadhana Marg, Thane</b></p> <p><b>Vidwan ID: 557771</b></p>
<b>Department</b>	: Chemistry
<b>Name of the Faculty</b>	: Dr. Sonali Kokane
<b>Designation</b>	: Associate Professor
<b>Qualification/s</b>	: M. Sc., Ph. D.
<b>Email ID</b>	: sonal kokane@gmail.com
<b>Years of Experience</b>	: UG: 15 PG: 10 Research: 13
<b>Thrust Area (Subject Interest)</b>	: Material Science
<b>Details of Paper Presented</b>	: <ol style="list-style-type: none"> <li>1. Presented a paper titled “Intellectual Property Rights of genetically modified seeds” at an International conference titled “Opportunities and Challenges in Agriculture, Environmental, and Biosciences for Global Development” on 29th October at Goa, India</li> <li>2. Magnetic moments in multi-centric spins in Molecule-based Magnets Sonali Kokane and Niranjara Chahande Proceedings of International Conference on ADVANCED MATERIALS FOR PHYSICAL, CHEMICAL AND BIOLOGICAL APPLICATIONS (ICAMPCBA-23) (March 3 &amp; 4, 2023) organized by Rayat Shikshan Sanstha’s KARMAVEER BHAURAO PATIL COLLEGE</li> </ol>

VASHI, (Accredited by NAAC with "A+" Grade)  
NAVI MUMBAI, MAHARASHTRA, INDIA  
(ISBN – 977-81-19175-78-4).

3. The Intellectual Property Rights of Artificial Intelligence-based Inventions

Sonali Kokane, Journal of Scientific Research,  
Volume 65, Issue 2, pages 116-119 ISSN NO.  
0447- 9483; March 2021

<http://dx.doi.org/10.37398/JSR.2021.650223>;

[https://www.bhu.ac.in/research\\_pub/jsr/index.html](https://www.bhu.ac.in/research_pub/jsr/index.html);

(To assess the website of Journal)  
[https://www.bhu.ac.in/research\\_pub/jsr/Volume\\_6\\_5\\_02\\_2021.html](https://www.bhu.ac.in/research_pub/jsr/Volume_6_5_02_2021.html);

4. Synthesis of palladium nanocages by electroless reduction of palladium(II)chloride by silver nanoparticles for possible applications as the catalysts for enhancement in catalysis of palladium catalyzed coupling reactions.

Santanu Lanke, Gaourav Rao, V.V. N. Ravi Kishore, Sonali Kokane and Vijay Balsaraf.

Journal of Advances in Science and Technology  
(ISSN No. 0971-9563) Vol 14 (2),  
December 2014, pp.233-238

5. Published paper in proceedings of two day National Conference on Recent Developments in Synthetic and Materials Chemistry held in N.E.S Ratnam College on 16<sup>th</sup> and 17<sup>th</sup> January 2015.

The paper was titled "An overview of TiO<sub>2</sub> and TiS<sub>2</sub>" Farahat Ansari and Sonali Kokane ISBN: 978-81-922163-5-5.

6. Presented a paper titled "The History of Organic Semiconductors including Conducting Polymers" at the state level seminar on History of Science, Technology, Medicine and Environment on 17<sup>th</sup> September, 2014. This was UGC sponsored 8<sup>th</sup> Dr. Mani Kamerkar Memorial State level seminar hosted by Department of History, Satish Pradhan Dnyanasadhana College.

7. Synthesis of a new trimetallic paramagnet based on the 'Cl<sub>2</sub>opba' ligand

S. A. Chavan, M. Tokumoto and J. V. Yakhmi

DAE Solid State Phys. Symp., held at Kurukshetra (India) in Dec'98

8. Observation of a photomagnetic effect in a molecular magnet

- M. D. Sastry, R. M. Kadam, M. K. Bhide, S. A. Chavan, J. V. Yakhmi and O. Kahn  
DAE Solid State Phys. Symp., 40C (1997) 428
9. EPR investigations on molecular ferromagnet  
[Ni(pn)<sub>2</sub>]<sub>3</sub>[Fe(CN)<sub>6</sub>]<sub>2</sub>.nH<sub>2</sub>O, (T<sub>C</sub>=18K)  
M. K. Bhide, M. D. Sastry, E. V. K. Sureshkumar,  
H. B. Singh, A. K. Sra, S. A. Chavan and J. V.  
Yakhmi, DAE solid state Physics Symposium,  
40C (1997) 429
10. A new bimetallic ferromagnet based on 1,2-  
propane diamine ligand  
E. V. K. Sureshkumar, S. A. Chavan, H. B. Singh  
and J. V. Yakhmi  
DAE solid State Physics Symposium, 39C (1996)  
89
11. Magnetic studies on some MnCu-based organic  
ferromagnets  
S. A. Chavan, J. V. Yakhmi, V. K. Jain and R.  
Ganguly  
Presented at NATO Advanced Research  
Workshop on 'Magnetism: a Supramolecular f  
unction', at Carcans-Maubisson (France), Sept.16-  
20, 1995
12. Negative remanence in the organic magnet  
(NBu<sub>4</sub>)<sub>2</sub>Mn<sub>2</sub>[Cu(opba)]<sub>3</sub>.  
S. A. Chavan, J. V. Yakhmi, V. K. Jain and R.  
Ganguly  
DAE solid State Physics Symposium, 38C (1995)  
61
13. Magnetization behaviour of CoCu(obbz).2H<sub>2</sub>O  
S. A. Chavan, J. V. Yakhmi, P. Bergerat and O.  
Kahn  
DAE solid State Physics Symposium, 38C (1995)  
15
14. Ferromagnetism in MnCu(obbz).nH<sub>2</sub>O  
S. A. Chavan  
Oral Presentation at 31<sup>st</sup> Annual Convention of  
Chemists at BHU, Varanasi, on 21<sup>st</sup> Dec  
(Selected the Prof. Santi R. Palit awardee, 1994 in  
Phys. Chem.)
15. The organic ferromagnet MnCu(obbz).nH<sub>2</sub>O:  
Synthesis and Magnetization  
S. A. Chavan, J. V. Yakhmi and I. K.  
Gopalakrishnan  
DAE solid State Physics Symposium, 37 (1994)  
129

		<p>16. Charge transfer behaviour of bis(methylethylenedithio)-tetrathiafulvalene (BMeEDT-TTF) complexes E. V. K. Sureshkumar, H. B. Singh, <u>S. A. Chavan</u> and J. V. Yakhmi Solid State Physics (India) 38C (1995) 273</p> <p>17. Sonochemical synthesis of <math>k</math>-(BEDT-TTF)<sub>2</sub>Cu(NCS)<sub>2</sub> and its superconducting properties E. V. K. Sureshkumar, H. B. Singh, <u>S. A. Chavan</u> and J. V. Yakhmi Solid State Physics (India) 37C (1994) 312</p>
<p><b>Details of Publication</b></p>	<p>:</p>	<ol style="list-style-type: none"> <li>1. Phytochemical characterization of the leaves of <i>Saraca indica</i> and investigation of the antimicrobial and the antioxidant properties of the saponin-rich extract of the leaves Siddhesh Pote, Gaganjyot Kaur and Sonali Kokane International Journal of Plant and Environment. (In Press).</li> <li>2. Therapeutic Potential of Cannabis Plant Siddhesh Pote, Parul Khurana, Gaganjyot Kaur and Sonali Kokane International Journal of Plant and Environment. ISSN Print: 2264-1117 ISSN Online: 2455-202X 9(3), 192-201.</li> <li>3. An Analytical study of what cannot be patented in the jurisdiction of India Sonali Kokane Journal of Intellectual Property rights, NISCAIR publication, Volume 25, November 2020, ISSN: 0975-1076 (Online) ISSN: 0971-7544 (Print)</li> <li>4. A review on Carbon-based electrode materials for supercapacitors. Sonali Kokane International Journal of Scientific Research in Engineering and Management, 2020 Volume04, Issue 06, ISSN:2582-3930 (UGC care-listed)</li> <li>5. The future of Organic Electronics Sonali Kokane, Entire Research, Vol-X, Issue 11, 53-56, ISSN:0975-5020</li> <li>6. Study of stabilizers as special additives to acid hypophosphite solutions for Electroless nickel plating.</li> </ol>

Sonali Kokane, International journal of scientific research and management, ISSN: 2582-3930, volume 04, Issue 06, June 2020

7. Correlation between stability constants of organic acids and their effect on the rate of deposition in non-electrolytic Nickel baths

S. S. Kokane, F. N. Ansari, R. P. Chavan and G. R. Bhagure,

South-Asian Journal of Multidisciplinary studies: ISSN: 2349-7858 volume 2 issue 2, 2015.

5. Time resolved photoluminescence spectra of PPV film: heterogeneity and excited state relaxation.

V. V. N. Ravi Kishore, Sonali Kokane, K. L. Narasimhan, N. Periasamy Chemical Physics Letters 386 (1-3) pages 118-112 (2004)

6. Photophysics of PPV and Alq – a comparison

V. V. N. Ravi Kishore, N. Periasamy, Sonali Kokane and K. L. Narasimhan

Synthetic Metals 132 (2003) 235-238

7. Modified CVD deposition of poly(p-phenylene vinylene)

Sonali Kokane, M. Patankar, K.L. Narasimhan, N. Periasamy

Synthetic Metals 9551 (2002) 1–4

8.  $(\text{NBu}_4)_2\text{Mn}[\text{Cu}(\text{opba})]_2$  : a new structural class among 'opba' bimetallic magnets.

H. Stoekli-Evans, A. Neels, S. A. Chavan, and J. V. Yakhmi

Synthetic Metals, (2000) 106-114

9. Magnetic behaviour of Ni-Fe hexacyanates as influenced by change of ligand

P. Ghalsasi, R. Ganguly, S.A. Chavan and J. V. Yakhmi

Mol. Cryst. Liq. Cryst. 79 (1998) 127

10. Photo-induced changes in the magnetic order of  $(\text{NBu}_4)_2\text{Mn}_2[\text{Cu}(\text{opba})]_3 \cdot 6\text{DMSO} \cdot 1\text{H}_2\text{O}$

M. D. Sastry, M. K. Bhide, R. M. Kadam, S. A. Chavan, J. V. Yakhmi and O. Kahn

Chem. Phys. Lett. 301 (1999) 385

11. Ferromagnetism at 19K in a bimetallic compound based on 1,2-propane diamine ligand

E. V. K. Suresh Kumar, S.A. Chavan, A. K. Sra, M. K. Bhide, M. D. Sastry, R. Ganguly, H.

B. Singh and J. V. Yakhmi, *Philos. Mag. B* 79 (1999) 127

12. Magnetic behaviour of the molecular sponges  $\text{CoCu}(\text{pba})(\text{H}_2\text{O})_3 \cdot 2\text{H}_2\text{O}$  where pba=1,2-propylene bis(oxamato)

S. A. Chavan, Joulia Larionova, J. V. Yakhmi and O. Kahn,

*Philosophical. Mag. B* 77 (1998) 1657

13. Magnetic Molecular Sponges

S. A. Chavan, O. Kahn and J. V. Yakhmi,

*Indian Journal of Pure and Applied Physics* (1998)

p.

14. Dramatic modifications of magnetic properties through dehydration-rehydration process of the molecular magnetic sponges

$\text{CoCu}(\text{obbz})(\text{H}_2\text{O})_4 \cdot 2\text{H}_2\text{O}$  and

$\text{CoCu}(\text{obze})(\text{H}_2\text{O})_4 \cdot 2\text{H}_2\text{O}$  with

obbz=oxamidobis(N,N'-benzoato) and

obze=oxamido-N-benzoato-N'-ethanoato

Joulia Larionova, Suvarna Chavan, J. V. Yakhmi,

Anne Gulbrandsen, J. Sletten, Claude Sourisseau

and Olivier Kahn, *Inorganic Chemistry* 36 (1997)

6374

15. An EPR study of spin correlations and existence of ordered and disordered phases in

$(\text{NBu}_4)_2\text{Mn}_2[\text{Cu}(\text{opba})]_3 \cdot 6\text{DMSO} \cdot 1\text{H}_2\text{O}$

R. M. Kadam, M. D. Sastry, M. K. Bhide, S.A.

Chavan, J. V. Yakhmi and O. Kahn

*Chemical Physics Letters* 281 (1997) 292

16. Muon spin relaxation studies on the ferromagnet  $\text{MnCu}(\text{obbz}) \cdot 1\text{H}_2\text{O}$

R. Cywinski, J. V. Yakhmi, S. A. Chavan, S. P.

Cotrell and O. Kahn

*Synthetic Metals* 85 (1-3) (1997) 1751

17. Coexistence of spin fluctuations and magnetic order in  $(\text{NBu}_4)_2\text{Mn}_2[\text{Cu}(\text{opba})]_3$ : EPR evidence

R. M. Kadam, M. D. Sastry, S. A. Chavan, J. V.

Yakhmi and O. Kahn

*Molecular Crystals Liquid Crystals* 305-306

(1997)

18. Magnetization behaviour of  $(\text{NBu}_4)_2\text{Mn}_2[\text{Cu}(\text{opba})]_3$  and related solvated ferromagnets

S. A. Chavan, R. Ganguly, V. K. Jain and J. V.

Yakhmi

*Journal of Applied Physics* 79 (8) (1996) 5260

		<p>19. Observation of negative remanence in an organic ferromagnet  <u>S. A. Chavan</u>, J. V. Yakhmi, R. Ganguly, and V. K. Jain  Current Science 70 (1996) 234</p> <p>20. Molecular Organic Ferromagnets  J. V. Yakhmi and <u>S. A. Chavan</u>  Physics News 27 (1996) 13-19</p> <p>21. Magnetism in binuclear compounds  MCu(obbz).nH<sub>2</sub>O with M=Mn or Co  <u>S. A. Chavan</u>, J. V. Yakhmi and I. K. Gopalakrishnan  Molecular Crystals Liquid Crystals. 274 (1995) 11-16</p> <p>22. Molecular Ferromagnets – a review  <u>S. A. Chavan</u>, J. V. Yakhmi and I. K. Gopalakrishnan  Material Science &amp; Engineering (C) 3 (1995) 175</p>
<b>Details of Patent</b>	:	<p>Process for manufacturing the organic conducting polymer Poly(p-phenylenevinylene) for Electronic Applications by Light Induced Dehydrochlorination  <u>Sonali Kokane</u>, K. L. Narasimhan, N. Periasamy and Meghan Patankar  Tata Institute of Fundamental Research  Indian Patent no: 215159</p> <p>URL:<a href="http://ipindiaseservices.gov.in/PatentSearch/PatentSearch/ViewApplicationStatus">http://ipindiaseservices.gov.in/PatentSearch/PatentSearch/ViewApplicationStatus</a></p>
<b>Details of Seminar/Workshop/Conferences/Symposia attained</b>	:	<ol style="list-style-type: none"> <li>1. Indo-German-Teachers-Program on Organic Electronics, Kalina Campus, on 2<sup>nd</sup> December 2017</li> <li>2. Orientation Course at Programme Officers of NSS at Empanelled Training Institute Ahmednagar from 23<sup>rd</sup> Nov to 29<sup>th</sup> Nov 2016</li> <li>3. Revised Syllabus workshop for SYBSc, Royal College, Mira Road, on 16<sup>th</sup> June 2017</li> <li>4. Revised Syllabus for T.Y.B.Sc. in the subject of Chemistry and Choice Based Credit System on July 27, 2018 at KM Agarwal college, Kalyan.</li> <li>5. Seven days workshop in GN Khalsa College from 17<sup>th</sup> to 24<sup>th</sup> March 2021 in “Advanced Course for</li> </ol>

		education in biotechnology and soft skill development”
<b>Details of Book Authored</b>	:	“Elementary Magnetism for Chemists” ISBN: 978-93-92168-56-7
<b>No. of Research Scholar Registered</b>	:	Ph.D.: 03
<b>Details of Projects</b>	:	Minor Research Project: University of Mumbai titled “Role of Organic Acids in Electroless Nickel bath and their stabilization thereof” in AUGUST 2014.
<b>Experience on the various Committees at the University of Mumbai</b>	:	BOS, Applied Component, TYBSc OSM committee PhD interview panel Paper setting for TYBSc
<b>Experience on the various Committees at College</b>	:	<ol style="list-style-type: none"> <li>1. IPR Committee</li> <li>2. Students Activity Centre</li> <li>3. NSS</li> <li>4. Science Admission Committee, Member</li> <li>5. Remedial Cell, Member</li> <li>6. Research and Development Cell, member</li> <li>7. Proposal for various Awards and Recognition, Member</li> <li>8. Incubation cell</li> </ol>
<b>Membership</b>	:	<ol style="list-style-type: none"> <li>1. The Indian Science Congress Association</li> <li>2. International Society for Environmental Botanists</li> </ol>
<b>Awards and Recognitions</b>	:	WIPO (UN) Scholarship to attend the face-to face component of AICC at Seoul, Korea in October 2018



<b>Any Other Information</b>	:	Registered Patent Agent
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