# **CURRICULUM VITAE**

# Dr. Latthe Sanjay Subhash

#### **Contact Details**

#### Official Address

Dr. Sanjay S. Latthe

Assistant Professor, JSPS Fellow,

Department of Physics,

Vivekanand College (Autonomous), Kolhapur,

C.S.No.2130 "E" Ward, Tarabai Park,

Kolhapur - 416 003, Maharashtra, India.

Tel: +91-0231-2658612, Mob. No.: +91-7030310947

Email ID: latthes@gmail.com



Kumbhar Galli, Near Hanuman Temple,

A/P- Sangola, Tal- Sangola,

Dist-Solapur, Pin: 413 307,

Maharashtra, India.

#### **Personal Details:**

Date of Birth: 01/06/1985. Religion: Hindu. Caste: Lingayat. Marital Status: Married.

#### RESEARCH EXPERTISE

- 1) Superhydrophobic coatings for anti-icing applications.
- 2) Superhydrophobic coatings for self-cleaning and anti-corrosive applications.
- 3) Sponge and Membrane fabrication for Oil-Water separation applications.
- 4) Photocatalytic TiO<sub>2</sub> coatings on polycarbonate for self-cleaning applications.
- 5) Synthesis of CdO thin films for LPG gas sensor applications.
- 6) Synthesis of thermo-responsive polymer coatings.



#### PROFESSIONAL EXPERIENCE

- 01<sup>st</sup> June 2022 to till date as a Assistant Professor in Physics at Department of Physics, Vivekanand College, Kolhapur (Autonomous), Kolhapur - 416003, Maharashtra, India.
- 2. **15**<sup>th</sup> June 2016 to 31<sup>st</sup> May 2022 as a Assistant Professor in Physics at Department of Physics, Raje Ramrao Mahavidyalaya, Jath, Dist: Sangli 416404, Maharashtra, India.
- 3. **14**<sup>th</sup> **September 2015 to 14**<sup>th</sup> **June 2016** as a "**DST-INSPIRE Faculty Fellow**" at Department of Technology, Savitribai Phule Pune University, Ganeshkhind, Pune 411007, Maharashtra, **India**.
- 4. **June 2013 to June 2015** as a "**JSPS-Post Doctorate Fellow**" at Photocatalysis International Research Center, Tokyo University of Science, Tokyo, **Japan**.
- 5. October 2012 to May 2013 as a "Research Professor" at School of Mechanical Engineering, Solar cell and Aerosol Science Lab., Korea University, Seoul, South-Korea.
- 6. October 2010 to September 2012 as a "Post Doctoral Researcher" at Koç University, Istanbul, Turkey.

## 1. Academic Credentials

Sr. No.	Degree awarded	University	Subjects	Class Obtained	Year of Passing
1.	Ph.D*	Shivaji University Kolhapur, India	Physics	Awarded	2010
2.	M. Sc.	Shivaji University Kolhapur, India	Physics (Solid State Physics)	First Class	2007
	D C	<b>1</b> /	` ′	D: .: .:	2005
3.	B. Sc.	Shivaji University Kolhapur, India	Physics	Distinction	2005
4.	H.S.C.	Pune Board, Pune,	All Science	First Class	2002
		India			
5.	S.S.C.	Pune Board, Pune,	All Language and	First Class	2000
		India	Science		

<sup>\*</sup> Title of PhD Thesis: "Sol-gel Synthesis and Physico-chemical Properties of Silica based Hydrophobic Coatings" (2007-10) under the guidance of Prof. A. Venkateswara Rao, Dept. of Physics, Shivaji University, Kolhapur.

#### 2. Research Projects

Sr. No.	Name of the Project	Funding Agency	Year	Amount (Rs.)	Status
1.	Optically Transparent and Durable Polymer- Nanoparticle Superhydrophobic Coatings for Self- cleaning Applications	Department of Science and Technology (DST), New Delhi, India. (DST/INSPIRE/04/2015 /000281)	2015- 2020	35, 00, 000 /-	Completed
2.	Surface Modified Superhydrophobic Sponges for Effective Oil-water Separation Applications	India Science and Research Fellowship (ISRF) Programme sponsored by Centre for International Co- operation in Science (CICS) / Department of Science and Technology (DST), New Delhi, India. (DO/CICS/542/2017)	March – May 2018	1, 65, 173 /-	Completed
3.	Durable and Scalable Superhydrophobic Membranes for Efficient Oil-Water Separation	National Natural Science Foundation of China (Project approval number: 21950410531)	2020- 2021	20, 00,000/-	Completed

## 3. Fellowships/Awards/Scientific Abroad Visits (27)

- 1) Included in "World's Top 2% Scientists" by Stanford University, USA in 2022 23.
- 2) Included in "World's Top 2% Scientists" by Stanford University, USA in 2021 22
- 3) Received "**Brand Kolhapur Award**" by the auspicious hands of Honourable Mr. Vikas Kharage, Principal Secretary to Chief Minister of Maharashtra on Sunday, 07<sup>th</sup> November 2021 at Hotel Sayaji, Kolhapur, Maharashtra, India.
- 4) Received "Best Teacher Award" by 'Youth for Jath' Organization on Sunday, 29<sup>th</sup> August 2021.
- 5) Received "Outstanding Scientist Award" in 9<sup>th</sup> International Scientist Awards on Engineering, Science and Medicine at Trichy, Tamilnadu, India during 12<sup>th</sup> 13<sup>th</sup> September 2020 organized by VDGOOD Professional Association, India.
- 6) Participated in "Japan-Asia Youth Exchange Program in Science" (Sakura Exchange Program in Science) administered by Japan Science and Technology

- Agency (JST) during <u>21<sup>st</sup> November 2019 01<sup>st</sup> December 2019</u> in **Tokyo University of Science, Noda, Japan**.
- 7) "**D. Y. Patil Aadarsh Shikshak Purashkar**" by Ajinkyatara Vidya Pratishthan, Jath, Maharashtra, India on <u>05<sup>th</sup> September 2019</u>.
- 8) "Recognition as Research Guide for M.Phil. Ph.D. (Physics)" by Shivaji University, Kolhapur on 03<sup>rd</sup> September 2019.
- 9) **Visiting Professor**, Henan University, Kaifeng, China during <u>03<sup>rd</sup> May 2019 to 17<sup>th</sup></u> July 2019.
- 10) **Visiting Professor**, Henan University, Kaifeng, China during <u>17<sup>th</sup> September 2018 to</u> 11<sup>th</sup> November 2018.
- 11)Participated in "Japan-Asia Youth Exchange Program in Science" (**Sakura Exchange Program in Science**) administered by Japan Science and Technology Agency (JST) during 10<sup>th</sup> June 2018 30<sup>th</sup> June 2018 in **Tokyo University of Science**, **Noda**, **Japan**.
- 12) Participated in "Japan-Asia Youth Exchange Program in Science" (**Sakura Exchange Program in Science**) administered by Japan Science and Technology Agency (JST) during 14<sup>th</sup> November 04<sup>th</sup> December 2017 in **Tokyo University of Science**, **Noda**, **Japan**.
- 13) Participated in the **2<sup>nd</sup> BRICS Young Scientists Conclave** held at Zhejiang University, **Hangzhou**, **China** during 11<sup>th</sup>-15<sup>th</sup> July 2017. (Nominated by Department of Science and Technology (DST), Govt. of India).
- 14) Participated in "Japan-Asia Youth Exchange Program in Science" (Sakura Exchange Program in Science) administered by Japan Science and Technology Agency (JST) during 2<sup>nd</sup> 22<sup>nd</sup> October 2016 in Tokyo University of Science, Noda, Japan.
- 15) Participated as a **Young Scientist** at the **Post-Lindau Tour of German Universities and Research Institutions** organized during 2<sup>nd</sup> to 8<sup>th</sup> July 2016 by German Research Foundation (DFG) **Bonn, Germany** (Invited through agreement on Scientific Co-operation between DST, India and DFG, Germany).

Sr. No.	Visited University / Research Institutes in Germany	Day and Date
1.	Heidelberg University, Heidelberg	Saturday, 02 <sup>nd</sup> July 2016
2.	Heinrich Heine University, Dusseldorf	Monday, 04 <sup>th</sup> July 2016
3.	Peter Grunberg Institute, Electronic Properties, Julich	Tuesday, 05th July 2016
4.	Institute of Physics, RWTH, Aachen	Tuesday, 05 <sup>th</sup> July 2016
5.	Surface Physics, Philipps University, Marburg	Wednesday, 06 <sup>th</sup> July 2016
6.	Albert Einstein Institute (AEI), Hannover	Thursday, 07 <sup>th</sup> July 2016
7.	Institut fur Quantenoptik (IQ), Hannover	Thursday, 07 <sup>th</sup> July 2016
8.	Technische Universitat (TU), Berlin	Friday, 08 <sup>th</sup> July 2016

- 16)Participated as a **Young Scientist** in the **66<sup>th</sup> Lindau Nobel Laureate Meeting** dedicated to Physics held in **Lindau, Germany** from <u>26<sup>th</sup> June 2016 01<sup>st</sup> July 2016</u> (Nominated by Department of Science and Technology (DST), Govt. of India).
- 17)Participated in **Nobel Prize Dialogue, Tokyo 2015** held at Tokyo, Japan on <u>1</u><sup>st</sup> March 2015.
- 18)"**DST-INSPIRE Faculty Award 2015**", by Department of Science and Technology (DST), Government of India, <u>10<sup>th</sup> August 2015</u>.
- 19) "Japan Society for the Promotion of Science (JSPS), Post-Doctoral Fellowship" at Photocatalysis International Research Center, Tokyo University of Science, Tokyo, Japan (2013-2015).
- 20) "Post-Doctoral Fellowship" by School of Mechanical Engineering, Solar Cell and Aerosol Science Lab, Korea University, Seoul, South Korea (2012-2013).
- 21) "Post-Doctoral Fellowship" by Scientific and Technological Research Council of Turkey (TUBITAK-1001), Koç University, Istanbul, Turkey (2010-2012).
- 22) "Senior Research Fellowship (SRF)" by Council of Scientific & Industrial Research (CSIR), New Delhi, Govt. of India (April-October 2010).
- 23) "UGC Research Fellowship in Sciences for Meritorious Students" by University Grant Commission (UGC), New Delhi, Govt. of India (2008-10).
- 24) "Retired Teachers Scholarship" for securing highest number of marks at M.Sc.-I (Physics) examination held in April-2006 amongst the students of "Earn and Learn Scheme", Shivaji University, Kolhapur.
- 25) "Late Bajirao Bhimrao Desai and Smt. Sonabai Bajirao Desai Award" for securing the highest number of marks in the subject of Physics (Principle) at the B.Sc. examination, April-2005 and Prosecute for further studies for M.Sc. (Physics) and admitted in the "Earn and Learn Scheme", Shivaji University, Kolhapur.
- 26) "Eklavya Merit Scholarship" by Govt. of Maharashtra, India for accomplishment of Master of Science degree in Shivaji University, Kolhapur (2005-07).
- 27) "Eklavya Award" by Sangola Vidyamandir Prashala (1999) for continuing education in hard economic situations.

#### 4. Foreign Affairs (08)

1) Co-ordinator of the <u>International MoU</u> signed between *Raje Ramrao Mahavidyalaya*, *Jath*, *India and Henan University*, *Kaifeng*, *China* for faculty exchange and research collaboration (November 2022).

- 2) Arranged donation of worth Rs. 8500/- for CHB staff and M.Sc. (Physics) students from **Qatar University**, **Qatar** for the payment of registration fee of Sixth International Conference on Advances in Materials Science (ICAMS-2021) through the research collaboration between Department of Physics, Raje Ramrao Mahavidyalaya, Jath, India and Qatar University, Qatar on Wednesday, 03<sup>rd</sup> March 2021.
- 3) Two students Miss. Pratiksha Patil, and Miss. Supriya Hipparagi of Dept. of Physics, Raje Ramrao Mahavidyalaya, Jath visited Tokyo University of Science, Noda, Japan during 21<sup>st</sup> November 2019 01<sup>st</sup> December 2019 through "Japan-Asia Youth Exchange Program in Science" (Sakura Exchange Program in Science) administered by Japan Science and Technology Agency (JST), Japan.
- 4) Co-ordinator of the <u>International MoU</u> signed between *Raje Ramrao Mahavidyalaya*, *Jath*, *India and Henan University*, *Kaifeng*, *China* for faculty exchange and research collaboration (December 2018).
- 5) Three students Miss. Mayuri Sutar, Miss. Varsha Patil, and Mr. Chandrakant Barakade of Dept. of Physics, Raje Ramrao Mahavidyalaya, Jath visited Tokyo University of Science, Noda, Japan during 10<sup>th</sup> June 2018 30<sup>th</sup> June 2018 through "Japan-Asia Youth Exchange Program in Science" (Sakura Exchange Program in Science) administered by Japan Science and Technology Agency (JST), Japan.
- 6) Hosted **Mr. Anock Somadder**, Assistant Professor, Department of Physics, Shahjalal University of Science and Technology, **Sylhet-3114**, **Bangladesh** for 03 months (March May 2018) to carry out the research project in my research laboratory through funding by *India Science and Research Fellowship (ISRF) Programme (2017-2018), Centre for International Co-operation in Science (CICS) / Department of Science and Technology (DST), Govt. of India.*
- 7) Two students Mr. R. S. Sutar and Mr. S. P. Dalawai of Dept. of Physics, Raje Ramrao Mahavidyalaya, Jath visited Tokyo University of Science, Noda, Japan during 14<sup>th</sup> November 04<sup>th</sup> December 2017 through "Japan-Asia Youth Exchange Program in Science" (Sakura Exchange Program in Science) administered by Japan Science and Technology Agency (JST), Japan.
- 8) Co-ordinator of the <u>International MoU</u> signed between *Raje Ramrao Mahavidyalaya*, *Jath*, *India and Tokyo University of Science*, *Japan* for faculty exchange and research collaboration (December 2016).

#### 5. Orientation/Refresher/FDP Programs (16)

 Completed Online Two - Week Refresher Course in "PHYSICS", organized by Ramanujan College, University of Delhi in Collaboration with Bhaskaracharya College of Applied Sciences, University of Delhi and Deshbandhu College, University of Delhi under the aegis of Ministry of Education, Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching from 30<sup>th</sup> August – 13<sup>th</sup> September, 2023 and obtained Grade A+.

- 2) Completed Refresher Course, Swayam ARPIT Online Course Certification, the ARPIT Course for Career Advancement Scheme (CAS) promotion Leadership and Governance in Higher Education Level 2 during 01<sup>st</sup> December 2020 to 31<sup>st</sup> March 2021 with a "B" Grade in the proctored examination held on 21<sup>st</sup> August 2021.
- 3) Participated, "Online Faculty Development Program on Research Methodology", organized by Balaji Institute of Management Sciences, Narsampet, Warangal, Telangana from 13<sup>th</sup> 17<sup>th</sup> July, 2020.
- 4) Participated, "Twelve Days Faculty Development Programme on Online Teaching-Learning and Research Methodology" organized by Govt. P. G. College, Bilaspur, Rampur - Uttar Pradesh from 18<sup>th</sup> July – 29<sup>th</sup> July, 2020
- 5) Participated, Five days online Faculty Development Programme on "Know Everything related to Research" organized by Ilahia College of Engineering and Technology, Ernakulam, Kerala from 23<sup>rd</sup> 28<sup>th</sup> July 2020.
- 6) Participated, "One Week Online Multi-Disciplinary Faculty Development Program on MOOCs, E-content Development and OER" organized by Government First Grade College, Hungund from 28<sup>th</sup> May 03<sup>rd</sup> June 2020.
- 7) Participated, "Online Workshop On Research Writing And Legal Aspects of Academic Research" organized by the Faculty Development Centre UGC-Human Resource Development Centre, Savitribai Phule Pune University, Pune 411007, Under the scheme of Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching from 12 13<sup>th</sup> June 2020.
- 8) Participated, "Two weeks Faculty Development Programme on LaTex" organized by Gopalan College of Engineering and Management, Whilefield, Bangalore, Karnataka, India from 17<sup>th</sup> 30<sup>th</sup> April 2020.
- 9) Participated, Two Weeks Faculty Development Programme on "Managing Online Classes and Co-Creating MOOCs", organized by Ramanujan College, University of Delhi from 20<sup>th</sup> April 06<sup>th</sup> May, 2020.
- 10) Participated, Faculty Development Programme (Ten Days) On "Effective Ways To Develop E-content For Teaching-Learning" conducted by Maratha Vidya Prasarak Samaj's, K.R.T. Arts, B.H. Commerce and A.M. Science (K.T.H.M.) College, Nashik in association with Human Resource Development Centre (UGC-HRDC), Savitribai Phule Pune University, Pune from 21<sup>st</sup> 30<sup>th</sup> May 2020.
- 11) Participated, One Week Faculty Development Program on "MOODLE Learning and Management System" organized by Vivekanand College, Kolhapur from 25<sup>th</sup> 30<sup>th</sup> April 2020.
- 12) Completed Refresher Course, Swayam ARPIT Online Course Certification, the ARPIT Course for Career Advancement Scheme (CAS) promotion Leadership and Governance in Higher Education Level 2 with a "B" Grade in the proctored examination held on 16<sup>th</sup> February 2020.

- 13) Participated, Two Days Online Faculty Development Programme on "Medicinal Chemistry & Pharmaceutical Aspects: Present And Future" organized by K. L. E. Society's Jagadguru Tontadarya College, Gadag, Karnataka in association with Royal Society of Chemistry (London, UK), Local Section Deccan (LSD), India on 21<sup>st</sup> 22<sup>nd</sup> July, 2020.
- 14) Participated, One Week National Level Faculty Orientation Workshop on Revised Guidelines of NAAC organized by Yashvantrao Chavan Institute of Science, Satara from 27<sup>th</sup> April 02<sup>nd</sup> May 2020.
- 15) Participated in the "Faculty Development Program (FDP) on Data Science" organized by Bharati Vidyapeeths Dr. Patangrao Kadam Mahavidyalaya, Sangli during 24<sup>th</sup> December 2019 to 30<sup>th</sup> December 2019.
- 16) Participated in "170<sup>th</sup> General Orientation Programme" conducted at the UGC-Human Resource Development Centre, Savitribai Phule Pune University, Pune 411007, Maharashtra, India from 15<sup>th</sup> September to 05<sup>th</sup> October 2019 and obtained Grade 'A'.

## 6. Invited Lectures/Guest Lectures (28)

- 1) Resource Person, One Day Lead College Workshop on "Applications of Nanomaterials" organized by **Department of Chemistry, Dattajirao Kadam Arts, Science and Commerce College, Ichalkaranji** on 15<sup>th</sup> February 2023.
- 2) Invited Talk on "Sawdust Polystyrene based Pellets and SiO<sub>2</sub> Polystyrene based Leaf Mesh for effective Oil-Water Separation" in "02<sup>nd</sup> International Conference on Recent Advances in Materials Science and Technology" organized by Department of Physics, **G. S. Tompe Arts, Commerce and Science College, Chandur Bazar** in collaboration with IQAC, Sant Gadge Baba Amravati University, Amravati on 12<sup>th</sup> 14<sup>th</sup> May 2022.
- 3) Invited Talk on "Sawdust-Polymer based Pellets for effective Oil-Water Separation" in Online 2<sup>nd</sup> International Conference on Advances in Engineering Science and Technology organized by **Brahmdevdada Mane Institute of Technology, Solapur**, Maharashtra, India on 29<sup>th</sup> 30<sup>th</sup> April 2022.
- 4) Resource Person in Camp of National Service Scheme (NSS) organized by Raje **Ramrao Mahavidyalaya, Jath** on Thursday, 24<sup>th</sup> March 2022.
- 5) Resource Person on "Nanoscience" in One Day Seminar on "Research Methodology in Science" under lead college organized by **Shrimant Babasaheb Deshmukh Mahavidyalaya, Atpadi** on Thursday, 17<sup>th</sup> March 2022.
- 6) Guest Lecture on "How to Write a Research Paper" at Henan Key Laboratory of Polyxometalate Chemistry, Henan Joint International Research Laboratory of Environmental Pollution Control Materials, College of Chemistry and Chemical

- Engineering, **Henan University, Kaifeng 475004, P. R. China** on Monday, 14<sup>th</sup> March 2022.
- 7) Invited Talk in "02<sup>nd</sup> International Conference on Material Manufacturing" organized by Engineered Science Publisher, USA in association with **Maratha Vidya Prasarak Samaj's Arts Science and Commerce College Ozar (MIG), Nashik**, India on 26<sup>th</sup> 28<sup>th</sup> February, 2022.
- 8) Resource Person on 'Transmission Electron Microscopy (TEM)' in "07 Days Online Faculty Development Program on Characterization Techniques used in Chemical and Biological Sciences (CTCBS FEB-22)" organized by **Waghire College of Arts, Commerce, and Science, Saswad, Pune, Maharashtra, India** on 11<sup>th</sup> February 2022.
- 9) Resource Person on 'Scanning Electron Microscopy A Tool for Surface Morphology' in "07 Days Online Faculty Development Program on Characterization Techniques used in Chemical and Biological Sciences (CTCBS FEB-22)" organized by Waghire College of Arts, Commerce, and Science, Saswad, Pune, Maharashtra, India on 10<sup>th</sup> February 2022.
- 10) Resource Person on "Recent Trends in Materials Science" organized by Department of Physics, Yashavantrao Chavan Institute of Science (YCIS), Satara, Maharashtra, India on 25<sup>th</sup> January 2022.
- 11) Online Guest Lecture on "Sound and Acoustics of the Buildings" in **Shri. R. K. Patil Arts, Commerce, and Science College, Sankh, Maharashtra, India** during 12<sup>th</sup> 21<sup>st</sup> January 2022.
- 12) Invited Lecture on "Superhydrophobic Coating on Various Substrates for Self-Cleaning Application" in Special E-Conference on "Materials of the Future: Smart Applications in Science and Engineering" organized by Emergent Materials Journal, Center for Advanced Materials (CAM) & Biomedical Research Laboratory (BRC), **Qatar University, Qatar** during 29 31 March 2021.
- 13) Invited Lecture in "Refresher Course in Basic Sciences" held during 21<sup>st</sup> December 2020 to 02<sup>nd</sup> January 2021 organized by UGC–Human Resource Development Centre, **Sant Gadge Baba Amravati University, Amravati,** Maharashtra, India on Friday, 01<sup>st</sup> January 2021.
- 14) Invited Talk on "Superhydrophobic Surfaces for Self cleaning Applications" in National Webinar on Industrial Nanotechnology organized by Yashavantrao Chavan Institute of Science, Satara, Maharashtra, India on Saturday, 20<sup>th</sup> March 2021.
- 15) Invited Talk on "Modern Technologies in 21<sup>st</sup> Century" on the eve of National Science Day organized by **Padmabhushan Vasantraodada Patil Mahavidyalaya**, **Kavathe Mahankal**, Maharashtra, India on Thursday, 25<sup>th</sup> February 2021.

- 16) Invited Talk on "Superhydrophobic Surfaces for Self cleaning Applications" in One Day Online E-Conference on "Progress in Materials Science", organized by **Shrimant Babasaheb Deshmukh Mahavidyalaya, Atpadi**, Maharashtra, India on Monday, 13<sup>th</sup> July 2020.
- 17) Examiner for Oral Session in Two Days International E-Conference on Cutting Edge Smart Materials and Nanotechnology (ICCESMN-2020) jointly organized by Department of Physics and IQAC of **Sadguru Gadage Maharaj College, Karad**, Maharashtra, India from 20<sup>th</sup> 21<sup>st</sup> August 2020.
- 18) Invited Talk on "Superhydrophobic Coating on Various Substrates for Self-cleaning Applications" in the One Day State Level Seminar on "Advanced Materials and Nanotechnology" organized by **Department of Physics, Karmaveer Bhaurao Patil Mahavidyalaya, Pandharpur, Maharashtra, India** on 04<sup>th</sup> February 2020.
- 19) Invited Talk on "Photocatalytic TiO<sub>2</sub> Thin Film on Polymeric Substrates for Self-cleaning Application" in The 3<sup>rd</sup> International Symposium on Recent Progress of Energy and Environmental Photocatalysis (Photocatalysis 3) organized by Katsushika Campus, **Tokyo University of Science, Tokyo, Japan** during 29-30 November 2019.
- 20) Invited Talk on "Silica based Superhydrophobic Surfaces for Self cleaning Applications" in The First Chemistry International Summer Camp of Henan University organized by **Henan University**, **China** during 12-13 July 2019.
- 21) Guest Lecture on "Superhydrophobic surfaces for self cleaning and oil water separation applications" on 12<sup>th</sup> June 2018 at Photocatalysis International Research Center (PIRC), **Tokyo University of Science, Noda, Japan.**
- 22) Guest Lecture on "Candle Soot Based Superhydrophobic Coatings for Self-cleaning Applications" on 27<sup>th</sup> November 2017 at Photocatalysis International Research Center (PIRC), **Tokyo University of Science, Noda, Japan.**
- 23) Invited Talk on "Lotus-leaf like Superhydrophobic Coating on variety of Substrates for Self-cleaning Applications" in the Indo-German Convention of Lindau Alumni 2017 organized by Kasturba Medical College, Manipal, Karnataka, India during 21<sup>st</sup> 24<sup>th</sup> September 2017.
- 24) Guest Lecture on "Revolution in Science since Nineteenth Century" to B. Sc. Students during Wel Come Function on 07<sup>th</sup> September 2017 at **Sangola College, Sangola**, Dist: Solapur, Maharashtra, India.
- 25) Invited Talk on "Superhydrophobic Coatings for Self-cleaning Applications" in the **2<sup>nd</sup> BRICS Young Scientists Conclave** held at **Zhejiang University**, **Hangzhou**, **China** during 11<sup>th</sup> 15<sup>th</sup> July 2017.
- 26) Guest Lecture on "Water Repellent Coating" on 08<sup>th</sup> November 2016 at **Shri Guru Basaveshwar High School**, Billur, Tal: Jath, Dist: Sangli, Maharashtra, India.

- 27) Guest Lecture on "SLIPS Technology for Anti-icing Coatings" on 10<sup>th</sup> October 2016 at Photocatalysis International Research Center (PIRC), **Tokyo University of Science, Noda, Japan.**
- 28) Guest Lecture on "Wetting and Non-wetting Coatings for Self-cleaning Applications" on 04<sup>th</sup> October 2016 at Photocatalysis International Research Center (PIRC), **Tokyo University of Science, Noda, Japan.**

## 7. Committees/National/International Conference (28)

- 1) **Examiner/Judge** of "Innovative Research Ideas Competition" organized as a part of Vivekanand Mahotsav 2023 on 18<sup>th</sup> April 2023 at **Vivekanand College, Kolhapur** (**Autonomous**).
- 2) <u>Chair Person</u>, Two Days International Conference on "Innovation in Smart and Technomaterials" organized by Department of Physics, Sadguru Gadage Maharaj College, Karad during 16 17 January 2023.
- 3) Examiner for Poster Presentation, Two Days International Conference on "Innovation in Smart and Technomaterials" organized by Department of Physics, Sadguru Gadage Maharaj College, Karad during 16 17 January 2023.
- 4) **Organizing Secretary** of Webinar on "Unwrapping Brighter Future Opportunities after Post Graduation in Physical Science" organized by Department of Physics, Raje Ramrao Mahavidyalaya, Jath, India on Friday, 22<sup>nd</sup> April 2022.
- 5) **Organizing Committee Member** of One Day National Workshop on "Guidance on NET-SET Examination", organized by Department of Physics and Department of Chemistry, Raje Ramrao Mahavidyalaya, Jath, India Wednesday, 20<sup>th</sup> April 2022.
- 6) **Organizing Secretary** of "One Hour with Prof. Albert Einstein" organized by Department of Physics, Raje Ramrao Mahavidyalaya, Jath, India on Monday, 18<sup>th</sup> April 2022.
- 7) **Organizing Secretary** of "One Day International Symposium on Advances in Photocatalysis" organized by Department of Physics, Raje Ramrao Mahavidyalaya, Jath, India on Wednesday, 13<sup>th</sup> April 2022.
- 8) **Organizing Secretary** of Poster Presentation Competition on 'Research and Innovations by Indian Scientists' organized by Raje Ramrao Mahavidyalaya, Jath, India under Lead College Scheme of Shivaji University, Kolhapur on Monday, 28<sup>th</sup> March 2022.
- 9) <u>Expert for Oral Presentation</u> in "Fourth National Conference on Recent Trends in Pure and Applied Sciences (RTPAS–2022)" is organized by Internal Quality Assurance Cell, Bharati Vidyapeeth's Dr. Patangrao Kadam Mahavidyalaya, Sangli on 21<sup>st</sup> 22<sup>nd</sup> January, 2022.

- 10) <u>Chair Person</u>, International Webinar on "Energy Sustainability and New Materials" organized by Department of Physics and Electronic Science, S. M. Joshi College, Hadapsar, Pune on Tuesday, 05<sup>th</sup> October 2021.
- 11) <u>Session Chair</u> in Third National Conference on Recent Trends in Pure and Applied Sciences organized by Bharati Vidyapeeth's Dr. Patangrao Kadam Mahavidyalaya, Sangli, Maharashtra, India on 13<sup>th</sup> March 2021.
- 12) <u>Convenor</u> of "Sixth International Conference on Advances in Materials Science (Online) (ICAMS- 2021)" organized by Post-Graduate Department of Physics, Raje Ramrao Mahavidyalaya, Jath, India during 23<sup>rd</sup> 24<sup>th</sup> April 2021.
- 13) <u>Convenor</u> of "Fifth International Conference on Advances in Materials Science (Online) (ICAMS 2020)" organized by Post-Graduate Department of Physics, Raje Ramrao Mahavidyalaya, Jath, India on 06<sup>th</sup> 07<sup>th</sup> June 2020.
- 14) *Convenor*, "Webinar on Opportunities of Higher Education and Job for B.Sc. Physics Students", organized by Department of Physics, Raje Ramrao Mahavidyalaya, Jath, India on Sunday, 31<sup>st</sup> May 2020.
- 15) *Convenor*, "Webinar on Single Crystal Perovskites: Next Wave of Photovoltaic Technology", organized by Department of Physics, Raje Ramrao Mahavidyalaya, Jath, India on Sunday, 14<sup>th</sup> June 2020.
- 16) <u>Session Chair</u> in One Day International Conference on Recent Advances in Physical and Chemical Sciences (ICRAPCS-2020) organized by Sangola College, Sangola, Dist: Solapur on 22<sup>nd</sup> January 2020.
- 17) <u>Convenor</u> of "Fourth International Conference on Advances in Materials Science" organized by **Post-Graduate Department of Physics, Raje Ramrao** Mahavidyalaya, Jath, India on 20<sup>th</sup> 21<sup>st</sup> January 2020.
- 18) <u>Session Chair</u> in The 3<sup>rd</sup> International Symposium on Recent Progress of Energy and Environmental Photocatalysis (Photocatalysis 3) organized by Katsushika Campus, **Tokyo University of Science, Tokyo, Japan** during 29-30 November 2019.
- 19) <u>Convenor</u> of "One Day International Workshop on Job Opportunities for Indian Students in Japan" organized by **Department of Chemistry**, **Department of Physics and IQAC**, **Raje Ramrao Mahavidyalaya**, **Jath**, **India** on 28<sup>th</sup> February 2019.
- 20) <u>Convenor</u> of "One Day National Workshop on Contributions of Women to Science and Opportunities for Women in Science" organized by **Department of Physics**, **Raje Ramrao Mahavidyalaya**, **Jath**, **India** on 15<sup>th</sup> February 2019.
- 21) <u>Convenor</u> of "Third International Conference on Advances in Materials Science" organized by Post-Graduate Department of Physics, Raje Ramrao Mahavidyalaya, Jath, India on 27<sup>th</sup> 29<sup>th</sup> December 2018.

- 22) Board of Studies (BOS) in Physics **Subcommittee Member** under faculty of Science and Technology, Shivaji University, Kolhapur (2018-19).
- 23) <u>Co-convenor</u> of "Second International Conference on Advances in Materials Science" organized by **Post-Graduate Department of Physics, Raje Ramrao** Mahavidyalaya, Jath, India on 22<sup>nd</sup> 23<sup>rd</sup> December 2017.
- 24) <u>Session Chair</u> in "International Conference on Innovations in Engineering and Technology (CIET2K16)" organized by SKN Sinhgad College of Engineering, Pandharpur on 30-31<sup>st</sup> December 2016.
- 25) Initiated a Japanese "Fujishima-Terashima Award" for students securing highest marks in B.Sc. and M.Sc. (Physics) in Raje Ramrao Mahavidyalaya, Jath by collecting funds from Prof. Akira Fujishima and Prof. Chiaki Terashima, Tokyo University of Science, Japan (2016).
- 26) <u>Secretary</u> of "International Conference on Advances in Materials Science (ICAMS-2016)" organized by **Post-graduate Department of Physics, Raje Ramrao College, Jath** during 7-8 December 2016.
- 27) Arranged <u>Visit and Interactions of Six Japanese Scientists</u> (Prof. Terashima, Mr. Adachi, Mr. Katagishi, Mr. Sakurai, Mr. Hara and Mr. Miyasaka) from Tokyo University of Science, Japan with students of *Shri Guru Basaveshwar High School*, Billur, Tal:Jath, Dist: Sangli, Maharashtra, India on 8<sup>th</sup> December 2016 to create awareness in High School students about the science.
- 28) <u>Member of organizing committee</u> of One Day Workshop on "Role of Headmasters in Effective School Administration" held at Raje Ramrao Mahavidyalaya, Jath, Maharashtra, India on 25<sup>th</sup> September 2016.

#### 8. Reviewer for the International Journals (18)

Name of the Journal	Impact Factor	Name of the Journal	Impact Factor
Chemical Engineering Journal	10.65	Progress in Organic Coatings	4.46
ACS Applied Materials & Interfaces	8.75	Results in Physics	4.01
Applied Materials Today	8.35	Colloids & Surfaces A: Physicochemical & Engineering Aspects	3.99
Environmental Pollution	6.79	Analyst	3.86
Materials and Design	6.28	Surface & Coatings Technology	3.78
Applied Surface Science	6.18	RSC Advances	3.07
Separation & Purification Technology	5.77	Materials Letters	3.01
Process Safety & Environmental Protection	4.99	ACS Omega	2.87

Composites Communications	4.91	Synthetic Metals	2.52
	.,, -	~ J 110110 010 1:10 00115	

#### 9. Total Research Publications: 100

Total Citations: 6900\*, h index: 45\*, i-10 index: 70\* (Google Scholar)

Sr. No.	Research Articles	Numbers
1.	International Journals	58
2.	Review Articles	04
3.	Book/Book Chapters	10
5.	Patents	01
6.	Conference Proceedings	27

#### **A. Patents (01)**

1) Ruimin Xing, <u>Sanjay S. Latthe (山齐 拉特)</u>, Shanhu Liu, "A Novel and Facile Approach to Prepare Self-cleaning Yellow Superhydrophobic Polycarbonates" (*Chinese Patent* ZL 201710915807.1. Filed on 30.09.2017). (*Chinese Patent* CN 107778515 B Sanctioned on 28.06.2019)

## B. Books/Book Chapters Published: (10)

- 1) S. Nagappan, M. Duraivel, S. A. Hira, M. Yusuf, **Sanjay S. Latthe**, K. Prabakar, Kang Hyun Park, "Core–Shell Nanostructures-Based Porous Carbon Nanomaterials for Oxygen Reduction Reaction", Handbook of Porous Carbon Materials, 323–350, 2023.
- 2) Sanjay S. Latthe; Pradip P. Gaikwad; Akshay R. Jundle; Sagar S. Ingole; Rajaram S. Sutar; Kishor Kumar Sadasivuni; Shanhu Liu, "Chapter 16: Superhydrophobic Coatings for Oil–Water Separation", Advances in Superhydrophobic Coatings, Royal Society of Chemistry (RSC), 371-389, 2023
- 3) Rajaram S. Sutar, S. G. Deshmukh, A. M. More, A. K. Bhosale, and <u>Sanjay S. Latthe</u>, Superhydrophobic Coatings of Silica NPs on Cover Glass of the Solar Cells for Self-cleaning Application, Chapter 14, Book: Artificial Intelligence, Internet of Things (IoT) and Smart Materials for Energy Applications, CRC Press TandF Book, ISBN 9781032115023, September 20, 2022 by CRC Press, 360 Pages.
- 4) Guest Editor of "Macromolecular Symposia (A special issue for ICAMS 2021)" volume 400, (ISSN: 1521-3900) published by WILEY-VCH Verlag GmbH & Co. KGaA, Weinheim (2021).
- 5) Guest Editor of "Macromolecular Symposia (A special issue for ICAMS 2020)" volume 392, Part 1 and volume 393, Part 2 (ISSN: 1521-3900) published by WILEY-VCH Verlag GmbH & Co. KGaA, Weinheim (August and October 2020).

- 6) Guest Editor of "Macromolecular Symposia (A special issue for ICAMS 2018)" volume 387, issue 1 (ISSN: 1521-3900) published by WILEY-VCH Verlag GmbH & Co. KGaA, Weinheim (October 2019).
- 7) Sanjay S. Latthe, R. S. Sutar, A. K. Bhosale, K. K. Sadasivuni, and Shanhu Liu, "Superhydrophobic Surfaces for Oil Water Separation" in Superhydrophobic Polymer Coatings: Fundamental, Design, Fabrication and Applications, 2019, Elsevier, Chapter 16, pp. 339-356.
- 8) <u>Sanjay S. Latthe</u>, Kazuya Nakata, Rainer Höfer, Akira Fujishima, Chiaki Terashima, "Lotus Effect-based Superhydrophobic Surfaces: Candle Soot a promising class of Nanoparticles for Self-cleaning and Oil-water Separation Applications" in Surface Coatings and Adhesives: Sustainable Technologies and Applications, 2019, Royal Society of Chemistry (RSC), 92-119.
- 9) Associate Editor of "Advances in Materials Science 2017 (A special issue for ICAMS 2017)" pp. 1 333 (ISBN: 978 84 931247 6 5) published by Bhumi Publishing, Kolhapur, Maharashtra, India (2017).
- 10) Sanjay S. Latthe and A. K. Bhosale, "Sol-Gel Processed Superhydrophobic Coatings on Numerous Substrates for Self-Cleaning Applications: A Lotus Leaf Effect" in Biodiversity Assessment: Tool for Conservation, 2017, Chapter 18, pp. 230-238 (ISBN: 978-81-931247-3-4) published by Bhumi Publishing, Kolhapur, Maharashtra, India (2017).

#### C. Review Articles: (04)

- 1) S. P. Dalawai, M. Aly Saad Aly, <u>Sanjay S. Latthe</u>, R. Xing, R. S. Sutar, S. Nagappan, Chang-Sik Ha, Kishor Kumar Sadasivuni, and Shanhu Liu, "*Recent Advances in durability of superhydrophobic self-cleaning technology: A critical review*", Progress in Organic Coatings, 2020, 138, 105381. (**IF** = **3.42**).
- 2) <u>Sanjay S Latthe</u>, R. S Sutar, A. K Bhosale, S. Nagappan, Chang-Sik Ha, K. K. Sadasivuni, Shanhu Liu, and Ruimin Xing, "*Recent developments in air-trapped superhydrophobic and liquid-infused slippery surfaces for anti-icing application*", Progress in Organic Coatings, 2019, 137, 105373. (**IF** = **3.42**).
- 3) <u>Sanjay S. Latthe</u>, C. Terashima, K. Nakata, and Akira Fujishima, "Superhydrophobic Surfaces Developed by Mimicking Hierarchical Surface Morphology of Lotus Leaf", <u>Molecules</u>, 2014, 19(4), 4256-4283. (IF = 2.01).
- 4) Sanjay S. Latthe, A. B. Gurav, S. M. Chavan, and R. S. Vhatkar, "Recent Progress in Preparation of Superhydrophobic Surfaces: A Review", J. Surface Engineered Materials and Advanced Technology, 2 (2012) 76-94. (IF = 1.51).

#### D. Research Articles Published in International Journals (58)

1) R. S. Sutar, <u>Sanjay S. Latthe</u>, N. B. Gharge, P. P. Gaikwad, A. R. Jundle, S. S. Ingole, R. A. Ekunde, S. Nagappan, K. H. Park, A. K. Bhosale, Shanhu Liu, "Facile

- approach to fabricate a high-performance superhydrophobic PS/OTS modified SS mesh for oil-water separation", Colloids and Surfaces A: Physicochemical and Engineering Aspects, 657 (2023) 130561. (IF = 5.518)
- 2) Liangyu Tong, Yunpeng Liu, Chenyu Song, Yuqing Zhang, **Sanjay S Latthe**, Shanhu Liu, Ruimin Xing, "(Fe, Ni)S2@MoS2/NiS2 hollow heterostructure nanocubes for high-performance alkaline water electrolysis", **International Journal of Hydrogen Energy**, **47**, **21**, (2022), **11143-11152**. (**IF** = **5.816**)
- 3) Rajaram S. Sutar, Saravanan Nagappan, Appasaheb K. Bhosale, Kishor Kumar Sadasivuni, Kang-Hyun Park, Chang-Sik Ha and <u>Sanjay S. Latthe</u>, "Superhydrophobic Al2O3–Polymer Composite Coating for Self-Cleaning Applications", Coatings, (2021), 11, 1162. (IF = 2.88).
- 4) Rajaram S. Sutar, <u>Sanjay S. Latthe</u>, Saravanan Nagappan, Chang-Sik Ha, Kishor Kumar Sadasivuni, Shanhu Liu, Ruimin Xing, Appasaheb K Bhosale, "Fabrication of robust self-cleaning superhydrophobic coating by deposition of polymer layer on candle soot surface", **Journal of Applied Polymer Science**, 49943, 2021. (**IF** = **2.5**)
- 5) Suresh Gosavi, Rena Tabei, Nitish Roy, <u>Sanjay S. Latthe</u>, Yuvaraj M Hunge, Norihiro Suzuki, Takeshi Kondo, Makoto Yuasa, Katsuya Teshima, Akira Fujishima, Chiaki Terashima, "Low Temperature Deposition of TiO2 Thin Films through Atmospheric Pressure Plasma Jet Processing", Catalysts, 11 (1), 91, 2021. (IF = 3.52)
- 6) <u>Sanjay S. Latthe</u>, V. S. Kodag, R. S. Sutar, A. K. Bhosale Saravanan Nagappan Chang-Sik Ha, Kishor Kumar Sadasivuni, S. R. Kulal, Shanhu Liu, Ruimin Xing, "Sawdust-based superhydrophobic pellets for efficient oil-water separation" Materials Chemistry and Physics 2020, 243, 122634. (**IF** = **2.78**)
- 7) Santosh V Mohite, Ruimin Xing, Bingyue Li, <u>Sanjay S Latthe</u>, Yong Zhao, Xiying Li, Liqun Mao, Shanhu Liu, "Spatial Compartmentalization of Cobalt Phosphide in P-Doped Dual Carbon Shells for Efficient Alkaline Overall Water Splitting", Inorganic Chemistry, 2020 (IF = 4.85)
- 8) B. Li, R. Xing, S. V. Mohite, <u>Sanjay S. Latthe</u>, A. Fujishima, S. Liu, and Y. Zhou, "CoS<sub>2</sub> nanodots anchored into heteroatom-doped carbon layer via a biomimetic strategy: Boosting the oxygen evolution and supercapacitor performance", **Journal of Power Sources 2019, 436, 226862.** (IF = 7.46)
- 9) <u>Sanjay S. Latthe</u>, R. S. Sutar, T. B. Shinde, S. B. Pawar, T. M. Khot, A. K. Bhosale, Kishor Kumar Sadasivuni, R. Xing, L. Mao, S. Liu, "Superhydrophobic Leaf Mesh Decorated with SiO<sub>2</sub> Nanoparticle–Polystyrene Nanocomposite for Oil–Water Separation", <u>ACS Appl. Nano Mater.</u>, 2019, 2 (2), pp 799–805. (IF = 4.5)
- 10) <u>Sanjay S. Latthe</u>, R. S. Sutar, V. S. Kodag, A. K. Bhosale, A. M. Kumar, K. K. Sadasivuni, R. Xing, S. Liu, "Self-cleaning superhydrophobic coatings: Potential industrial applications", <u>Progress in Organic Coatings</u>, 2019, 128, 52-58. (IF = 2.97).

- 11)R. Li, S. Li, Y. Liu, T. Ochiai, <u>Sanjay S. Latthe</u>, K. Nakata, R. Xing, S. Liu, "Polyelectrolyte-assisted soft reduced process for Pt-Cu nanoclusters with enhanced electrocatalytic activity for the methanol oxidation reaction", <u>Journal of Physics and Chemistry of Solids</u>, 2019, 124, 361-366. (IF = 2.20).
- 12) T. Adachi, <u>Sanjay S. Latthe</u>, S. W. Gosavi, N. Roy, N. Suzuki, H. Ikari, K. Kato, K. Katsumata, K. Nakata, M. Furudate, T. Inoue, T. Kondo, M. Yuasa, A. Fujishima, C. Terashima, "Photocatalytic, superhydrophilic, self-cleaning TiO<sub>2</sub> coating on cheap, light-weight, flexible polycarbonate substrates", <u>Applied Surface Science 458</u> (2018) 917–923. (IF = 4.43).
- 13)R. Xing, <u>Sanjay S. Latthe</u>, A. K. Bhosale, Rui Li, A. Madhan Kumar, S. Liu, "A Novel and Facile Approach to Prepare Self-cleaning Yellow Superhydrophobic Polycarbonates", <u>Journal of Molecular Liquids</u>, 247 (2017) 366-373. (IF = 3.64).
- 14)P. G. Pawar, Ruimin Xing, R. C. Kambale, A. Madhan Kumar, S. Liu, <u>Sanjay S. Latthe</u>, "Polystyrene assisted superhydrophobic silica coatings with surface protection and self-cleaning approach", <u>Progress in Organic Coatings 105 (2017)</u> 235 244. (IF = 2.632).
- 15)C. Terashima, R. Hishinuma, N. Roy, Y. Sugiyama, <u>Sanjay S Latthe</u>, K. Nakata, T. Kondo, M. Yuasa, and Akira Fujishima, "Charge Separation in TiO<sub>2</sub>/BDD Heterojunction Thin Film for Enhanced Photoelectrochemical Performance", <u>ACS Appl. Mater. Interfaces</u>, 2016, 8 (3), pp 1583–1588. (IF = 6.72).
- 16) A. M. Kumar, <u>Sanjay S. Latthe</u>, P. Sudhagar, I. B. Obot and Z. M. Gasem, "In-situ synthesis of hydrophobic SiO2-PMMA composite for surface protective coatings: Experimental and quantum chemical analysis", <u>Polymer</u>, 2015, 77, 79-86. (IF = 3.56).
- 17) S. Liu, Q. Xu, <u>Sanjay S. Latthe</u>, A. B. Gurav, and R. Xing, "Superhydrophobic/superoleophilic magnetic polyurethane sponge for oil/water separation", <u>RSC Adv.</u>, <u>2015</u>, <u>5</u>, <u>68293-68298</u>. (**IF** = **3.84**).
- 18) <u>Sanjay S. Latthe</u>, P. Sudhagar, A. Devadoss, A. M. Kumar, S. Liu, C. Terashima, K. Nakata, and Akira Fujishima, "A mechanically bendable superhydrophobic steel surface with self-cleaning and corrosion-resistant properties", <u>Journal of Materials</u> <u>Chemistry A, 2015, 3, 14263-14271</u>. (IF = 7.44).
- 19) S. Liu, X. Liu, <u>Sanjay S. Latthe</u>, L. Gao, S. An, S. S. Yoon, B. Liu, and R. Xing, "Self-cleaning transparent superhydrophobic coatings through simple sol—gel processing of fluoroalkylsilane", <u>Applied Surface Science</u>, 2015, 351, 897-903. (IF = 2.71).
- 20) S. Liu, <u>Sanjay S. Latthe</u>, H. Yang, B. Liu, and R. Xing, "Raspberry-like superhydrophobic silica coatings with self-cleaning properties", <u>Ceramics International</u>, 2015, 41 (9), 11719-11725. (IF = 2.6).

- 21) H. Yoon, H. Kim, <u>Sanjay S. Latthe</u>, Min-woo Kim, S. Al-Deyab, and S. S. Yoon, "A highly transparent self-cleaning superhydrophobic surface by organosilane-coated alumina particles deposited via electrospraying", <u>Journal of Materials Chemistry A, 2015, 3 (21), 11403-11410.</u> (IF = 7.44).
- 22) <u>Sanjay S. Latthe</u>, P. Sudhagar, C. Ravidhas, A. Jennifer christy, D. David Kirubakaran, R. Venkatesh, A. Devadoss, C. Terashima, K. Nakata and Akira Fujishima, "Self-cleaning and superhydrophobic CuO coating by jet-nebulizer spray pyrolysis technique", <u>CrystEngComm</u>, 2015,17, 2624-2628. (IF = 4.03).
- 23) D.-Y. Kim, J.-G. Lee, B. N. Joshi, <u>Sanjay S. Latthe</u>, S. S. Al-Deyab, and S. S. Yoon, "Self-cleaning superhydrophobic films by supersonic-spraying polytetrafluoroethylene-titania nanoparticles", <u>Journal of Materials Chemistry A</u>, 2015, 3, 3975–3983. (IF = 7.44).
- 24) A. B. Gurav, Q. Xu, <u>Sanjay S. Latthe</u>, R. S. Vhatkar, S. Liu, H. Yoon, and S. S. Yoon, "Superhydrophobic Coatings Prepared from Methyl-modified Silica Particles Using Simple Dip-coating Method", <u>Ceramics International</u>, <u>2015</u>, <u>41(2)</u>, <u>3017</u>–3023. (IF = 2.6).
- 25) H. Yoon, S. H. Na, J. Y. Choi, <u>Sanjay S. Latthe</u>, M. T. Swihart, S. S. Al-Deyab, and S. S Yoon, "Gravity-driven hybrid membrane for oleophobic-superhydrophilic oil-water separation and water purification by graphene", <u>Langmuir</u>, <u>2014</u>, <u>30 (39)</u>, <u>pp 11761–11769</u>. (IF = 4.45).
- 26) Sanjay S. Latthe, S. Liu, C. Terashima, K. Nakata and Akira Fujishima, "Transparent, Adherent, and Photocatalytic SiO<sub>2</sub>-TiO<sub>2</sub> Coatings on Polycarbonate for Self-Cleaning Applications", Coatings, 2014, 4, 497-507.
- 27) <u>Sanjay S. Latthe</u>, C. Terashima, K. Nakata, M. Sakai, and Akira Fujishima, "Development of Sol-gel processed Semi-transparent and Self-cleaning Superhydrophobic Coatings", <u>Journal of Materials Chemistry A</u>, 2014, 2, 5548–5553. (IF = 7.44).
- 28) A. B. Gurav, <u>Sanjay S. Latthe</u>, R. S. Vhatkar, J. G. Lee, D. Y. Kim, J. J. Park, and S. S. Yoon, "Superhydrophobic surface decorated with vertical ZnO nanorods modified by stearic acid", <u>Ceramics International</u>, <u>2014</u>, <u>40</u> (5), <u>7151-7160</u>. (IF = 2.10).
- 29) M. W. Lee, S. An, <u>Sanjay S. Latthe</u>, C. Lee, S. Hong, and S. S. Yoon, "Electrospun Polystyrene Nanofiber Membrane with Superhydrophobicity and Superoleophilicity for Selective Separation of Water and Low Viscous Oil", <u>ACS Appl. Mater.</u> <u>Interfaces</u>, 2013, 5 (21), 10597–10604. (IF = 6.72).
- 30) <u>Sanjay S. Latthe</u>, S. An, S. Jin and S. S. Yoon, "High Energy Electron Beam Irradiated TiO2 Photoanodes for Improved Water Splitting", <u>Journal of Materials Chemistry A</u>, 2013, (1), 13567-13575. (IF = 7.44).

- 31) J. J. Park, D. Y. Kim, <u>Sanjay S. Latthe</u>, J. G. Lee, M. Swihart, and S. S. Yoon, "Thermally-Induced Superhydrophilicity in TiO2 Films Prepared by Supersonic Aerosol Deposition", <u>ACS Appl. Mater. Interfaces</u>, 2013, 5 (13), pp 6155–6160. (IF = 6.72).
- 32) A. B. Gurav, Sanjay S. Latthe and R. S. Vhatkar, "Sol-gel processed porous water repellent silica micro-bowls", Surface Innovations, 1 (SI3), (2013), 176-180.
- 33) M. W. Lee, <u>Sanjay S. Latthe</u>, A. Yarin, and S. S. Yoon, "Dynamic Electrowetting-on-dielectric (DEWOD) on Unstretched and Stretched Teflon", <u>Langmuir</u>, <u>29</u> (25) (2013) 7758–7767. (IF = 4.38).
- 34) K. D. Demir, B. Kiskan, <u>Sanjay S. Latthe</u>, A. L. Demirel, and Y. Yagci, "Thermally curable fluorinated main chain benzoxazine polyethers via Ullmann coupling", <u>Polymer Chemistry</u>, 4 (6) (2013) 2106-2114. (IF = 5.52).
- 35) M. W. Lee, S. An, B. Joshi, <u>Sanjay S. Latthe</u>, and S. S. Yoon, "Highly efficient wettability control via three-dimensional (3D) suspension of titania nanoparticles in polystyrene nanofibers", <u>ACS Applied Materials and Interfaces</u>, 5 (4) (2013) 1232-1239. (IF = 6.72).
- 36) <u>Sanjay S. Latthe</u> and A. L. Demirel, "Polystyrene/octadecyltrichlorosilane superhydrophobic coatings with hierarchical morphology", <u>Polymer Chemistry</u>, 4 (2013) 246-249. (IF = 5.52).
- 37) <u>Sanjay S. Latthe</u>, and A. V. Rao, "Superhydrophobic SiO<sub>2</sub> Micro-particle Coatings by Spray Method", <u>Surface & Coatings Technology</u>, 207 (2012) 489–492. (IF = 1.94).
- 38) A. V. Rao, <u>Sanjay S. Latthe</u>, C. Kappenstein, V. Ganesan, M. C. Rath and S. N. Sawant, "Wetting behaviour of high energy electron irradiated porous superhydrophobic silica films", <u>Applied Surface Science</u>, 257 (2011) 3027–3032. (IF = 2.71).
- 39) A. V. Rao, <u>Sanjay S. Latthe</u>, S. A. Mahadik and C. Kappenstein, "Mechanically stable and corrosion resistant superhydrophobic sol-gel coatings on copper substrate", <u>Applied Surface Science</u>, 257 (2011) 5772–5776. (IF = 2.71).
- 40) A. B. Gurav, <u>Sanjay S. Latthe</u>, C. Kappenstein, S. K. Mukharjee, A. V. Rao and R. S. Vhatkar, "Porous water repellent silica coatings on glass by sol-gel method", <u>J. Porous Materials</u>, <u>18</u> (2011) 361-367. (IF = 1.34).
- 41) M. S. Khandekar, R. C. Kambale, <u>Sanjay S. Latthe</u>, J. Y. Patil, P. A. Shaikh, N. Hur and S. S. Suryavanshi, "Role of fuels on intrinsic and extrinsic properties of CoFe2O4 synthesized by combustion method", <u>Materials Letters</u>, 65 (2011) 2972-2974. (IF = 2.48).

- 42) V. V. Ganbavle, U. K. H. Bangi, <u>Sanjay S. Latthe</u>, S. A. Mahadik and A. V. Rao, "Self-cleaning silica coatings on glass by single step sol-gel route", <u>Surface & Coatings Technology</u>, 205 (2011) 5338-5344. (IF = 1.94).
- 43) S. L. Dhere, U. K. H. Bangi, <u>Sanjay S. Latthe</u>, and A. V. Rao, "Enhancement in hydrophobicity of silica films using metal acetylacetonate and heat treatment", <u>J. Physics and Chemistry of Solids</u>, 72 (2011) 45–49. (IF = 1.52).
- 44) <u>Sanjay S. Latthe</u>, H. Imai, V. Ganesan, C. Kappenstein and A. V. Rao, "Optically transparent superhydrophobic TEOS-derived silica films by surface silylation method", <u>J. Sol-Gel Science and Technology</u>, 53 (2010) 208-215. (IF = 1.66).
- 45) <u>Sanjay S. Latthe</u>, H. Imai, V. Ganesan and A. V. Rao, "*Ultrahydrophobic silica films by sol–gel process*", <u>J. Porous Materials</u>, <u>17 (2010) 565-571</u>. (**IF** = **1.34**).
- 46) <u>Sanjay S. Latthe</u>, S. L. Dhere, C. Kappenstein, H. Imai, V. Ganesan, S. C. Gupta, P. B. Wagh and A. V. Rao, "Sliding behavior of water drops on sol-gel derived hydrophobic silica films", <u>Applied Surface Science</u>, 256 (2010) 3259-3264. (IF = 2.71).
- 47) <u>Sanjay S. Latthe</u>, H. Imai, V. Ganesan and A. V. Rao, "Porous superhydrophobic silica films by sol-gel process", <u>Microporous and Mesoporous Materials</u>, 130 (2010) 115-121. (IF = 3.36).
- 48) A. V. Rao, <u>Sanjay S. Latthe</u>, S. L. Dhere, S. S. Pawar, H. Imai, V. Ganesan, S. C. Gupta and P. B. Wagh, "Control on wetting properties of spin-deposited silica films by surface silylation method", <u>Applied Surface Science</u>, <u>256</u> (2010) 2115-2121. (IF = 2.71).
- 49) S. L. Dhere, <u>Sanjay S. Latthe</u>, C. Kappenstein, G. M. Pajonk, H. Imai, V. Ganesan, S. C. Gupta, P. B. Wagh and A. V. Rao, "Transparent water repellent silica films by sol-gel process", <u>Applied Surface Science</u>, <u>256</u> (2010) 3624-3629. (IF = 2.71).
- 50) S. L. Dhere, <u>Sanjay S. Latthe</u>, C. Kappenstein and A. V. Rao, "Comparative Studies on p-type CuI Grown on Glass and Copper Substrate by SILAR Method", <u>Applied Surface Science</u>, 256 (2010) 3967-3971. (IF = 2.71).
- 51) A. V. Rao, A. B. Gurav, <u>Sanjay S. Latthe</u>, R. S. Vhatkar, C. Kappenstein, P. B. Wagh, and S. C. Gupta, "Water repellent porous silica films by sol-gel dip-coating method", <u>J. Colloid and Interface Science</u>, 352 (2010) 30-35. (IF = 3.17).
- 52) <u>Sanjay S. Latthe</u>, H. Imai, V. Ganesan and A. V. Rao, "Superhydrophobic silica films by sol-gel co-precursor method", <u>Applied Surface Science</u>, <u>256</u> (2009) <u>217</u>-222. (IF = 2.71).
- 53) <u>Sanjay S. Latthe</u>, D. Y. Nadargi and A. V. Rao, "TMOS based water repellent silica thin films by co-precursor method using TMES as a hydrophobic agent", <u>Applied Surface Science</u>, 255 (2009) 3600-3604. (IF = 2.71).

- 54) <u>Sanjay S. Latthe</u>, H. Hirashima and A. V. Rao, "TEOS based water repellent silica films obtained by a co-precursor sol-gel method", <u>Smart Materials and Structures</u>, 18 (2009) 095017. (IF = 2.02).
- 55) A. V. Rao, <u>Sanjay S. Latthe</u>, D. Y. Nadargi, H. Hirashima, and V. Ganesan, "Preparation of MTMS based transparent superhydrophobic silica films by sol—gel Method", <u>J. Colloid and Interface Science</u>, 332 (2009) 484-490. (IF = 3.17).
- 56) D. Y. Nadargi, <u>Sanjay S. Latthe</u>, H. Hirashima, and A. V. Rao, "Studies on rheological properties of methyltriethoxysilane (MTES) based flexible superhydrophobic silica aerogels", <u>Microporous and Mesoporous Materials</u>, <u>117</u> (2009) 617-626. (IF = 3.36).
- 57) D. Y. Nadargi, <u>Sanjay S. Latthe</u>, and A. V. Rao, "Effect of post-treatment (gel aging) on the properties of methyltrimethoxysilane based silica aerogels prepared by two-step sol-gel process", <u>J. Sol-Gel Science and Technology</u>, <u>49</u> (2009) 53-59. (IF = 1.66).
- 58) D. S. Dhawale, A. M. More, <u>Sanjay S. Latthe</u>, K. Y. Rajpure, and C. D. Lokhande, "Room temperature synthesis and characterization of CdO nanowires by chemical bath deposition (CBD) method", <u>Applied Surface Science</u>, <u>254</u> (2008) 3269-3273. (IF = 2.71).

#### E. Research Articles Published in Conferences and Symposiums (27)

- R. S. Sutar, N. P Kulkarni, S. Nagappan, A. R. Jundle, P. G. Pawar, N. N. Pargaonkar, N. B. Gharge, P. S. Yadav, S. S. Kshirsagar, S. S. Kanchankoti, A. S. Sawant, S. G. Kodag, S. S. Mahajan, V. S. Shinde, K. H. Park, K. K. Sadasivuni, A. K Bhosale, Sanjay S Latthe, "Octadecyltrichlorosilane-Modified Superhydrophobic-Superoleophilic Stainless Steel Mesh for Oil-Water Separation", Macromolecular Symposia, 400 (1), 2100096, 2021.
- 2) R. S. Sutar, P. B. Patil, A. K. Bhosale, S. Nagappan, S. R. Shinde, P. P. Chikode, C. E. Patil, S. S. Kadam, P. M. Kadam, C. R. Bobade, K. K. Sadasivuni, K. H. Park, **Sanjay S Latthe**, "Photocatalytic and Superhydrophilic TiO2-SiO2 Coatings on Marble for Self-Cleaning Applications", Macromolecular Symposia 400 (1), 2100083, 2021.
- 3) Rajaram S. Sutar, Shriram D. Manadeshi, <u>Sanjay S Latthe</u>, S. R. Kulal, G. D. Salunkhe, K. K. Rangar, R. A. Lavate, S. B. Raut, A. C. Sapkal, A. K. Bhosale, Kishor Kumar Sadasivuni, Shanhu Liu, Ruimin Xing, "Superhydrophobic Coating Using TiO2 NPs/PMHS Composite for Self-Cleaning Application", Macromolecular Symposia, vol. 393, no. 1, p. 2000033, 2020.
- 4) Rajaram S. Sutar, Sima S. Gaikwad, <u>Sanjay S. Latthe</u>, Vishnu S. Kodag, S. B. Deshmukh, L. P. Saptal, S. R. Kulal, A. K. Bhosale, "Superhydrophobic Nanocomposite Coatings of Hydrophobic Silica NPs and Poly (methyl methacrylate)

- with Notable Self-Cleaning Ability", Macromolecular Symposia, vol. 393, no. 1, p. 2000116, 2020.
- 5) Rajaram S. Sutar, Revati C. Salunkhe, <u>Sanjay S. Latthe</u>, Vishnu S. Kodag, Poonam M. Shewale, Shital R. Shinde, M. B. Sajjan, M. H. Karennavar, Kishor Kumar Sadasivuni, Santosh V. Mohite, Shanhu Liu, Ruimin Xing, "Superhydrophobic PU Sponge Modified by Hydrophobic Silica NPs—Polystyrene Nanocomposite for Oil—Water Separation", Macromolecular Symposia, vol. 393, no. 1, p. 2000035, 2020.
- 6) Rajaram S. Sutar, <u>Sanjay S. Latthe</u>, A. M. Sargar, C. E. Patil, V. S. Jadhav, A. N. Patil, K. K. Kokate, Appasaheb K Bhosale, Kishor Kumar Sadasivuni, Santosh V. Mohite, Shanhu Liu, Ruimin Xing, "Spray Deposition of PDMS/Candle Soot NPs Composite for Self-Cleaning Superhydrophobic Coating", Macromolecular Symposia, vol. 393, no. 1, p. 2000031, 2020.
- 7) Rajaram S. Sutar, Manisha S. Mane, <u>Sanjay S. Latthe</u>, P. G. Pawar, Sarita S. Kumbhar, Uma V. Nerle, U. E. Mote, J. L. Bhosale, B. N. Kokare, Kishor Kumar Sadasivuni, Shanhu Liu, Ruimin Xing, "Oil–Water Separation by ZnO-Based Superhydrophobic PU Sponges", Macromolecular Symposia, vol. 393, no. 1, p. 2000036, 2020.
- 8) Sonali B. Jadhavar, Rajaram S. Sutar, <u>Sanjay S. Latthe</u>, R. S. Vhatkar, "Preparation of Superhydrophobic Coating Using Silica–PMMA Nanocomposite", Macromolecular Symposia, vol. 393, no. 1, p. 2000161, 2020.
- 9) Rajaram S. Sutar, Prashant J. Kalel, <u>Sanjay S. Latthe</u>, Deepak A. Kumbhar, Smita S. Mahajan, Prashant P. Chikode, Swati S. Patil, Sunita S. Kadam, V. H. Gaikwad, Appasaheb K. Bhosale, Kishor Kumar Sadasivuni, Shanhu Liu, Ruimin Xing, "Superhydrophobic PVC/SiO2 Coating for Self-Cleaning Application", Macromolecular Symposia, vol. 393, no. 1, p. 2000034, 2020.
- 10) <u>Sanjay S. Latthe</u>, Rajaram S. Sutar, A. K. Bhosale, Vishnu S. Kodag, Poonam M. Shewale, Ruimin Xing, and Shanhu Liu, "Fabrication of Silica/PMMA Composite based Superhydrophobic Coating by Drop Casting Method" in the International Conference on Smart Materials and Nanotechnology (ICSMN-2020) organized by SKN Sinhgad College of Engineering, Korti, Pandharpur-413304, Maharashtra, India during 02<sup>nd</sup> 04<sup>th</sup> January, 2020.
- 11) R. S. Sutar, <u>Sanjay S Latthe</u>, A. K. Bhosale, Ruimin Xing, and Shanhu Liu, "Durable Self-Cleaning Superhydrophobic Coating of SiO2–Cyanoacrylate Adhesive via Facile Dip Coat Technique", Macromolecular Symposia, 2019, 387 (1), 1800218 in Third International Conference on Advances in Materials Science (ICAMS-2016) organized by *Post-graduate Department of Physics, Raje Ramrao College, Jath, Maharashtra, India* on December 27 29 December, 2019.
- 12) R. S. Sutar, A. Somadder, S. B. Pawar, T. M. Khot, T. B. Shinde, P. G. Pawar, A. K. Bhosale and <u>Sanjay S. Latthe</u>, "Durability of Superhydrophobic Candle Soot Layer Deposited on Adhesive Tape" in 'International Conference on Recent Trends in Science, Engineering Technology and Humanities 2018' (ICRTSETH 2018),

- organized by **Shivaji Polytechnic College, Sangola, Maharashtra, India** on 13<sup>th</sup> April 2018. International Journal of Multifaceted and Multilingual Studies, Vol. V (IV), April 2018, pp. 67 70. ISSN (Print): 2394-207X.
- 13) R. S. Sutar, S. B. Pawar, T. B. Shinde, T. M. Khot, D. R. Gade, A. K. Bhosale and Sanjay S. Latthe, "Improvement in the Durability of Superhydrophobic Candle Soot Layer using Polystyrene" in International Conference on 'New Trends in Nanotechnology' (ICNTN 2018) organized by Department of Physics, Arts, Science & Commerce College, Indapur, Dist- Pune, Maharashtra, India on 26<sup>th</sup> 27<sup>th</sup> February 2018. International Journal of Multifaceted and Multilingual Studies, Vol. V (II), February 2018, pp. 86 88. ISSN (Print): 2394-207X.
- 14) R. S. Sutar, A. M. Kokare, D. M. Chougule, M. S. Ankalagi, R. L. Kalal, S. P. Pattanshetti, S. S. Kokare, S. R. Kokare, A. K. Bhosale and <u>Sanjay S. Latthe</u>, "*Bioinspired Superhydrophobic and Icephobic Surfaces A Short Review*" in One Day National Conference on Recent Advances in Zoology (RAIZ 2018) organized by **Dept. of Zoology, Raje Ramrao Mahavidyalaya, Jath, Maharashtra, India** on 13<sup>th</sup> January 2018. International Journal of Life Sciences, 2018, pp. 177 180 (ISSN:23-7817(P), ISSN:2320-964X(O)) (Special Issue).
- 15) A. M. Kokare, R. S. Sutar, S. G. Deshmukh, R. Xing, Shanhu Liu, and <u>Sanjay S. Latthe</u>, "ODS Modified TiO<sub>2</sub> Nanoparticles for the Preparation of Self-cleaning Superhydrophobic Coating" in 2<sup>nd</sup> International Conference on Condensed Matter & Applied Physics (ICC-2017) organized by *Department of Physics*, Govt. Engineering College Bikaner, Bikaner, Rajasthan, India on 24-25<sup>th</sup> November, 2017. (AIP Conference Proceedings 1953, 100068, 2018).
- 16) Ashvini M. Kokare, Rajaram S. Sutar, Dipali M. Chougule, and Sanjay S. Latthe, "Superhydrophobic Coating using Organically Modified TiO<sub>2</sub> Nanoparticles" in Advances in Materials Science 2017 (A special issue for ICAMS 2017) pp. 47 50 (ISBN: 978 84 931247 6 5) published by Bhumi Publishing, Kolhapur, Maharashtra, India (2017).
- 17) Balaji T. Khogare, Rajaram S. Sutar, Krishna K. Rangar, and <u>Sanjay S. Latthe</u>, "Recent Advances in Carbon Soot Coated Superhydrophobic Materials for Oil-water Separation (Short Review)" in Advances in Materials Science 2017 (A special issue for ICAMS 2017) pp. 64 67 (ISBN: 978 84 931247 6 5) published by Bhumi Publishing, Kolhapur, Maharashtra, India (2017).
- 18) Rajaram S. Sutar, A. K. Bhosale and <u>Sanjay S. Latthe</u>, "A Facile Fabrication of Durable PS-SiO₂ Composite Superhydrophobic Coatings" in Advances in Materials Science − 2017 (A special issue for ICAMS 2017) pp. 146 − 150 (ISBN: 978 − 84 − 931247 − 6 − 5) published by Bhumi Publishing, Kolhapur, Maharashtra, India (2017).
- 19) S. G. Deshmukh, A. M. More and Sanjay S. Latthe, "Structural, Raman and Wettability Properties of Nanocrystalline ZnO Thin Film deposited by SILAR Method" in Advances in Materials Science 2017 (A special issue for ICAMS 2017) pp. 167 170 (ISBN: 978 84 931247 6 5) published by Bhumi Publishing, Kolhapur, Maharashtra, India (2017).

- 20) Tejaswini B. Shinde, Smita B. Pawar, Tushar M. Khot, Dipali R. Gade, and Sanjay S. Latthe, "Preparation of Superhydrophobic Superoleophilic Candle Soot Deposited Membranes for Oil Water Separation Applications" in Advances in Materials Science 2017 (A special issue for ICAMS 2017) pp. 268 271 (ISBN: 978 84 931247 6 5) published by Bhumi Publishing, Kolhapur, Maharashtra, India (2017).
- 21) Sanjay S. Latthe, "Sol-gel Processed Superhydrophobic Silica Coatings for Self-cleaning Applications" in International Conference on Innovations In Engineering and Technology (CIET2K16) organized by SKN Sinhgad College Of Engineering, Pandharpur, Maharashtra, India on 30-31st December 2016. International Journal of Research in Computer Science and Information Technology (IJRCSIT), IJRCSIT I ISSN No.: 2319-5010 I Vol. 1 I Issue 31 Dec 2016.
- 22) <u>Sanjay S. Latthe</u>, "Superhydrophobic Coatings Developed using Modified Alumina Nanoparticles for Self-Cleaning Applications" in International Conference on Advances in Materials Science (ICAMS-2016) organized by *Post-graduate Department of Physics*, *Raje Ramrao College*, *Jath*, *Maharashtra*, *India* on December 7-8<sup>th</sup>, 2016. *Vol-I* (ISBN: 978-93-5254-490-5).
- 23) R. S. Sutar, A. K. Bhosale, S. P. Dharigouda and <u>Sanjay S. Latthe</u>, "Self-cleaning Superhydrophobic Silica Coatings Modified by Polystyrene" in International Conference on Advances in Materials Science (ICAMS-2016) organized by **Postgraduate Department of Physics, Raje Ramrao College, Jath** on December 7-8<sup>th</sup>, 2016. Vol-I (ISBN: 978-93-5254-490-5).
- 24) B. T. Khogare, S. R. Kulal, K. K. Rangar, G. D. Salunkhe, P. G. Pawar and <u>Sanjay</u> <u>S. Latthe</u>, "A polystyrene modified sponges for effective oil/water separation" in International Conference on Advances in Materials Science (ICAMS-2016) organized by *Post-graduate Department of Physics, Raje Ramrao College, Jath, Maharashtra, India* on December 7-8<sup>th</sup>, 2016. *Vol-II A (ISBN: 978-93-5254-490-5)*.
- 25) <u>Sanjay S. Latthe</u>, C. Terashima, K. Nakata, and Akira Fujishima, "*Photocatalytic TiO*<sub>2</sub> Coatings on Polycarbonate Sheets for Self-cleaning Application" in 21<sup>st</sup> Photocatalyst Symposium Secretariat 2014 held at *University of Tokyo*, *Tokyo*, *Japan*, on 12<sup>th</sup> December 2014. (*Photo Functionalized Materials Society*, Vol. 45, *ISSN 1345-5818*).
- 26) <u>Sanjay S. Latthe</u>, C. Terashima, K. Nakata, and Akira Fujishima, "Self-cleaning TiO<sub>2</sub> Coatings on Polycarbonate" in International Conference on Advanced and Applied Material Science (ICAAMS-2014) organized by Gopal Krishna Gokhale College, Kolhapur-416012, Maharashtra, India on 15 16<sup>th</sup> January 2014. (ISBN 978-81-928717-2-1).
- 27) <u>Sanjay S. Latthe</u>, C. Terashima, K. Nakata, and Akira Fujishima, "Superhydrophilic *TiO*<sub>2</sub> Coating on Polycarbonate for Self-cleaning Application" in 20<sup>th</sup> Photocatalyst Symposium Secretariat 2013 held at *University of Tokyo, Tokyo, Japan*, on 13<sup>th</sup> December 2013. (*Photo Functionalized Materials Society, Vol. 42, ISSN 1345-5818*).

#### F. Online Educational Courses (06)

- 1) Participated, online course of "Classical Electromagnetism 1 (Electrostatics)" organized by **Indian Institute of Technology (IIT), Kanpur** on 15<sup>th</sup> August to 13<sup>th</sup> December 2020.
- 2) Participated, online course of "Learning Physics Through Simple Experiments" organized by **Indian Institute of Technology (IIT), Kanpur** on  $02^{nd}$  April  $10^{th}$  June 2020.
- 3) Participated, online course of "Advanced Course on Special theory of Relativity" organized by **Indian Institute of Technology (IIT), Kanpur** on 26<sup>th</sup> January 19<sup>th</sup> May 2020.
- 4) Participated, online course of "Basics of Quantum Mechanics" organized by Indian Institute of Technology (IIT), Kanpur on 15<sup>th</sup> August to 18<sup>th</sup> November 2019.
- 5) Participated, online course of "*Physics of Semiconductors*" organized by **Indian Institute of Technology (IIT), Kanpur** on 20<sup>th</sup> August to 20<sup>th</sup> November 2017.
- 6) Participated, online course of "Learning through Physics Experiments" organized by **Indian Institute of Technology (IIT), Kanpur** on 20<sup>th</sup> September to 20<sup>th</sup> November 2016.

## G. Papers Presented at National and International Conferences (68)

- Participated, "First International Conference on Recent Trends in Physical, Chemical, Biological Nanosciences (ICRT-PCBNano-2022)", organized by Department of Physics, Lal Bahadur Shastri College of Arts, Science and Commerce, Satara on 17<sup>th</sup> – 18<sup>th</sup> May 2022.
- 2) **Participated**, "One Day National Workshop on Advances in Functional and Sustainable Materials" organized by Department of Physics, Sadguru Gadage Maharaj College, Karad in collaboration with Department of Physics, Smt. K. R. P. Kanya Mahavidyalaya, Islampur, Maharashtra, India on 08<sup>th</sup> April 2022.
- 3) **Participated**, National Workshop on "Understanding the Revised Assessment and Accreditation Process" organized by IQAC and Sangola College Sangola on 10<sup>th</sup> March 2022.
- 4) **Participated**, "International Web-Seminar on "Recent Trends in Nanostructured Materials Based Devices and Their Applications" organized by Department of Physics and IQAC in Collaboration with Electra Solar Energy System Pvt. Ltd, MIDC, Koregaon, Dist-Satara on 18<sup>th</sup> July, 2020.
- 5) **Oral Presentation** on research paper entitled "Superhydrophobic Surfaces for Self-Cleaning Applications" in "Two Days International E-Conference on Cutting Edge Smart Materials and Nanotechnology (ICCESMN-2020)" jointly organized by

- Department of Physics and IQAC of Sadguru Gadage Maharaj College, Karad, Maharashtra, India from  $20^{th} 21^{st}$  August 2020.
- 6) **Participated** in Five Days National Virtual Workshop on "Preparation of Physics NET/SET Examination" organized by Department of Physics and IQAC of Sadguru Gadage Maharaj College, Karad, Maharashtra, India from 29<sup>th</sup> July 02<sup>nd</sup> August 2020.
- 7) **Participated**, Online International Conference on "Advanced Materials" organized by P.C. Jabin Science College, Hubballi, Karnataka, India, held on 20<sup>th</sup> July 2020.
- 8) **Participated**, One Week Online Workshop on NAAC Assessment and Accreditation Framework (Standard Operating Procedure) organized by Arts, Commerce and Science College, Palus from 27 July 01<sup>st</sup> August 2020.
- 9) **Participated**, One Day International E-Conference on "Advanced Functional Nanomaterials and Their Device Applications" organized by Department of Physics and IQAC, Krishna Mahavidyalaya, Rethare Bk, Maharashtra, India on 10<sup>th</sup> August, 2020.
- 10) **Participated**, National Webinar on "Advanced Materials for Multifunctional Applications" organized by Department of Physics and Internal Quality Assurance Cell (IQAC), Padmabhushan Dr. Vasantraodada Patil Mahavidyalaya, Tasgaon, Maharashtra, India on Friday, 04<sup>th</sup> September 2020.
- 11) **Participated**, One Day International Online Workshop on "Nanomaterial Synthesis is Emerging Facet of the World" organized by Late Pushpadevi Patil Arts and Science College, Risod, Maharashtra, India on 20<sup>th</sup> May 2020.
- 12) **Participated**, International Web-Seminar on "Novel Applications of Nanomaterials" organized by Prof. Dr. N. D. Patil Mahavidyalaya, Malakapur, Maharashtra, India on 18<sup>th</sup> July 2020.
- 13) **Participated**, One Day National online seminar on "Recent Trends in Materials Research" organized by Department of Physics, Balwant College, Vita, Maharashtra, India on 29<sup>th</sup> July 2020.
- 14) **Participated,** One day online national conference on "Emerging Trends in Physical Sciences NCETPS-2020" organized by Arts, Science and Commerce College Ramanandnagar (Burli) on 22<sup>nd</sup> July 2020.
- 15) **Participated**, Indo-UK Virtual Conference 'Current Innovations and the Future of Therapeutic Developments' CIFTD-2020, organized by Centre for Biomaterials Cellular & Molecular Theranostics (CBCMT) at Vellore Institute of Technology (VIT), Vellore, India and Swansea University, United Kingdom from 01<sup>st</sup> 03<sup>rd</sup> June, 2020.

- 16) **Participated**, Virtual Conference on "Materials for Energy Harvesting and Catalysis" organized by Tata Institute of Fundamental Research (TIFR), Mumbai from 01<sup>st</sup> 03<sup>rd</sup> May 2020.
- 17) **Participated**, National e-Conference on "Spectroscopic Characterization Techniques in Research" organized by Department of Physics and IQAC, Shrimant Babasaheb Deshmukh Mahavidyalaya, Atpadi, Maharashtra, India on 17<sup>th</sup> July 2020.
- 18) **Participated**, Virtual International Poster Conference on COVID-19 (VIP-C-COVID: Impact and Response) organized by Internal Quality Assurance Cell (IQAC), Karmaveer Hire Arts, Science, Commerce and Education College, Gargoti, Tal—Bhudargad, Dist—Kolhapur, M.S. India in collaboration with Bhumi Publishing, India from 12<sup>th</sup>—13<sup>th</sup> June, 2020.
- 19) **Participated**, One Day Workshop on 'NAAC- Revised Accreditation Framework' organized by Internal Quality Assurance Cell under the aegis of RUSA, Maharashtra; Regional Joint Director, Higher Education, Kolhapur & IQAC, Shivaji University, Kolhapur and Yashavantrao Chavan Institute of Science (Autonomous) on 01<sup>st</sup> June, 2020.
- 20) **Participated**, National Level Virtual Conference On "Environment and Biodiversity for Sustainable Development" organized by Department of Chemistry, Botany & Zoology in association with IQAC, Raje Ramrao Mahavidyalaya, Jath 416 404, Dist Sangli, Maharashtra, India. 04<sup>th</sup> 05<sup>th</sup> June, 2020.
- 21) **Participated**, International E-Conference on "Strategies & Challenges in Higher Education during COVID-19 Lockdown Period in India with reference to the World" organized by Government Vidarbha Institute of Science & Humanities, Amravati, India on 15<sup>th</sup> 17<sup>th</sup> May, 2020.
- 22) **Participated**, Online Workshops on "Intellectual Property Rights" organized by PDPU, New Delhi from 10<sup>th</sup> 11<sup>th</sup> April 2020.
- 23) **Participated**, One Day International Conference on "Clean Energy Conservation and Storage Technologies" organized by Shri Pancham Khemraj Mahavidyalaya, Sawantwadi, Maharashtra, India on 30<sup>th</sup> April 2020.
- 24) **Participated**, "International Conference on Recent Trends in Advanced Materials-2020" (ICRTAM-2020), Jointly organized by Nevjabai Hitkarini College, Bramhapuri, Dist. Chandrapur, Late. B. S. Arts, Prof. N. G. Science & A. G. Commerce College, Sakharkheda Dist. Buldhana and Shri. Sant Gadge Maharaj Mahavidyalaya, Hingna, Dist. Nagpur held on 6<sup>th</sup> July, 2020.
- 25) **Participated**, Second International Twitter Conference #Nanobio20 organized by The New College, Kolhapur and Dada Patil Mahavidyalaya, Karjat along with knowledge partners Department of Botany, Shivaji University, Kolhapur, from 13<sup>th</sup> 15<sup>th</sup> April, 2020.

- 26) **Received Award** as "Most Active Participant Award (Second Prize)" in Second International Twitter Conference #NanoBio20 organized by the New College, Kolhapur, Maharashtra, India during 13<sup>th</sup> 15<sup>th</sup> April 2020.
- 27) **Participated**, "National Level Innovative Research Idea Competition of Vivekanand Mahotsav 2020: Shodh Chaitanyacha" organized by Vivekanand College, Kolhapur on 31<sup>st</sup> January 2020.
- 28) Participated, One Day State Level Seminar on "Advanced Materials and Nanotechnology" organized by Department of Physics, Karmaveer Bhaurao Patil Mahavidyalaya, Pandharpur, Maharashtra, India on 04th February 2020.
- 29) **Participated**, One Day International Conference on Recent Advances in Physical and Chemical Sciences (ICRAPCS-2020) organized by **Sangola College**, **Sangola**, **Dist: Solapur, Maharashtra, India** on 22<sup>nd</sup> January 2020.
- 30) Participated, "Fourth International Conference on Advances in Materials Science" organized by Post-Graduate Department of Physics, Raje Ramrao Mahavidyalaya, Jath, India on 20<sup>th</sup> 21<sup>st</sup> January 2020.
- 31) **Participated**, "International Conference on Smart Materials and Nanotechnology (ICSMN-2020)" organized by SKN Sinhgad College of Engineering, Korti, Pandharpur-413304, Maharashtra, India during 02<sup>nd</sup> 04<sup>th</sup> January, 2020.
- 32) **Participated**, The 3<sup>rd</sup> International Symposium on Recent Progress of Energy and Environmental Photocatalysis (Photocatalysis 3) organized by Katsushika Campus, **Tokyo University of Science, Tokyo, Japan** during 29-30 November 2019.
- 33) **Participated**, The First Chemistry International Summer Camp of Henan University organized by **Henan University**, **China** during 12-13 July 2019.
- 34) Participated, "One Day International Workshop on Job Opportunities for Indian Students in Japan" organized by Department of Chemistry, Department of Physics and IQAC, Raje Ramrao Mahavidyalaya, Jath, India on 28<sup>th</sup> February 2019.
- 35) Participated, "One Day National Workshop on Contributions of Women to Science and Opportunities for Women in Science" organized by Department of Physics, Raje Ramrao Mahavidyalaya, Jath, India on 15<sup>th</sup> February 2019.
- 36) **Participated**, "National Conference on Nanomaterials-2018 (NCNm-2018)", organized by **Department of Physics**, **Vivekanand College**, **Kolhapur**, Maharashtra, India on 21<sup>st</sup> August 2018.
- 37) Participated, "International Conference on Recent Trends in Science, Engineering

- *Technology and Humanities 2018*" (ICRTSETH 2018), organized by **Shivaji Polytechnic College, Sangola**, Maharashtra, India on 13<sup>th</sup> April 2018.
- 38) **Participated**, "International Conference on 'New Trends in Nanotechnology (ICNTN 2018)" organized by Department of Physics, **Arts, Science & Commerce College, Indapur**, Dist- Pune, Maharashtra, India on 26<sup>th</sup> 27<sup>th</sup> February 2018.
- 39) **Participated**, "One Day National Conference on Recent Advances in Zoology (RAIZ 2018)" organized by Dept. of Zoology, **Raje Ramrao Mahavidyalaya**, **Jath**, Maharashtra, India on 13<sup>th</sup> January 2018.
- 40) Oral Presentation, "Second International Conference on Advances in Materials Science" organized by Post-Graduate Department of Physics, Raje Ramrao Mahavidyalaya, Jath, India on 22<sup>nd</sup> 23<sup>rd</sup> December 2017.
- 41) **Poster Presentation**, "Joint Symposium of the 2<sup>nd</sup> International Symposium on Recent Progress of Energy and Environmental Photocatalysis & the 23<sup>rd</sup> China-Japan Bilateral Symposium on Intelligent Electrophotonic Materials and Molecular Electronics" organized by **Tokyo University of Science, Katsushika campus, Tokyo, Japan** on 1–3 December, 2017.
- 42) **Participated**, 2<sup>nd</sup> International Conference on "*Condensed Matter & Applied Physics* (*ICC-2017*)" organized by Department of Physics, **Govt. Engineering College Bikaner, Bikaner, Rajasthan**, India on 24<sup>th</sup> 25<sup>th</sup> November, 2017.
- 43) **Participated**, National Conference on "*Recent Trends in Nanomaterials*, (*NCRTN-2017*)" organized by Department of Nanoscience and Technology, **Yashavantrao Chavan Institute of Science, Satara**, Maharashtra, India on 28<sup>th</sup> September 2017.
- 44) **Participated**, One Day Workshop on "Formulation of Research Proposal for the RGSTC Scheme-Assistance for S & T Applications through University System" organized by RGSTC, Shivaji University, Kolhapur, Maharashtra, India on 6<sup>th</sup> May 2017.
- 45) **Participated**, Two Day National Seminar on "Changing Paradigms of Social Movements" organized by **Dept. of Political Science**, **Raje Ramrao Mahavidyalaya**, **Jath** on 17–18<sup>th</sup> February 2017.
- 46) Participated, One Day Workshop on "The Maharashtra Public Universities Act, 2016" organized by Shivaji University Teacher's Association (SUTA), Kolhapur at Balwant College, Vita, Dist. Sangli on 5<sup>th</sup> February 2017.
- 47) Participated, "National Conference on Recent Trends in Physical, Chemical and Nanosciences-2017 (NCRT-PCNano-2017)" jointly organized by Department of

- Physics and Chemistry, Lal Bahadur Shastri College of Arts, Science and Commerce, Satara on 23<sup>rd</sup> January 2017.
- 48) Participated, "Recent Trends in Nanomaterials and its Applications (RTNA-2017)" jointly organized by **Department of Physics and Chemistry, Vidnyan**Mahavidyalaya, Sangola on 21st January 2017.
- 49) Participated, "MSBTE on Wheel Career Fair 2016-17" organized by Shivaji Polytechnic College, Sangola on 7<sup>th</sup> January 2017.
- 50) Oral presentation, <u>First Prize for Paper Presentation</u>, International Conference on Innovations In Engineering and Technology (CIET2K16) organized by **SKN**Sinhgad College Of Engineering, Pandharpur on 30–31st December 2016.
- 51) Oral presentation, "International Conference on Advances in Materials Science (ICAMS-2016)" organized by Post-graduate Department of Physics, Raje Ramrao College, Jath on December 7–8, 2016.
- 52) **Poster presentation**, "Third International Conference on Nanotechnology for Better Living, Theme: Nano-Materials for Electronics, Energy, Environment and Structure" jointly organized by **IIT Kanpur and NIT Srinagar** held at National Institute of Technology, Srinagar, Jammu Kashmir, India on May 25<sup>th</sup> 29<sup>th</sup>, 2016.
- 53) Participated, "The Genetic Revolution and Its Future Impact", Nobel Prize Dialogue Tokyo 2015 held at Tokyo International Forum (Hall B5, B7), Tokyo, Japan on 1st March 2015.
- 54) Oral presentation, "21st Photocatalyst Symposium Secretariat 2014" at University of Tokyo, Tokyo, Japan, 12th December 2014.
- 55) Oral presentation, <u>First Prize for Paper Presentation</u>, "International Conference on Mechanical and Production Engineering (ICMPE)" organized by Institute of Technology and Research held at Kolhapur, Maharashtra on 29<sup>th</sup> June 2014.
- 56) Oral presentation, "International Conference on Advanced and Applied Material Science (ICAAMS-2014)" at Gopal Krishna Gokhale College, Kolhapur, Maharashtra (India), 15<sup>th</sup>–16<sup>th</sup> January, 2014.
- 57) Oral presentation, "20<sup>th</sup> Photocatalyst Symposium Secretariat 2013" at University of Tokyo, Tokyo, Japan, 13<sup>th</sup> December 2013.
- 58) Participated, "Global Photovoltaic Conference 2012 (GPVC2012)", Busan, South Korea, 19<sup>th</sup>–21<sup>st</sup> November, 2012.
- 59) Oral presentation, "International Conference on Materials Science and Technology (ICMST 2012)" at Department of Physics St. Thomas College Pala Arunapuram

- PO, Kottayam DT, Kerala (India), 10<sup>th</sup>-14<sup>th</sup> June 2012.
- 60) Poster presentation, "National Seminar on Advanced Materials (NSAM-2010)" at Dept. of Physics, Shivaji University, Kolhapur (India), 19<sup>th</sup>–20<sup>th</sup> March 2010.
- 61) **Poster presentation**, "International Conference on Sol-Gel Processes for Advanced Ceramics (SGPAC-2009)" at Convention Centre, Anupuram (Kalpakkam), (India), 11<sup>th</sup>–14<sup>th</sup> October, 2009.
- 62) **Poster presentation**, "International Workshop on Molecular/Organic Electronic Devices (MOED-2009)" at **Guru Nanak Dev University**, **Amritsar**, (India),  $22^{nd} 25^{th}$  September, 2009.
- 63) **Poster presentation**, "International Workshop on Nanotechnology and Advanced Functional Materials (NAFM—2009)" at National Chemical Laboratory (NCL), Pune, (India), 9<sup>th</sup>–11<sup>th</sup> July, 2009.
- 64) Poster presentation, "53<sup>rd</sup> DAE Solid State Physics Symposium (DAE-SSPS)", at Bhabha Atomic Research Centre (BARC) and Tata Institute of Fundamental Research (TIFR) Mumbai, 16<sup>th</sup>–20<sup>th</sup> December, 2008.
- 65) **Poster presentation**, "International conference on Nanomaterials and Applications (ICNAMA-2008)" at Dept. of Physics **Shivaji University, Kolhapur (India)**, 9<sup>th</sup>–11<sup>th</sup> December, 2008.
- 66) **Poster presentation**, "52<sup>nd</sup> DAE Solid State Physics Symposium (DAE-SSPS)", at University of Mysore, Mysore (India), 27<sup>th</sup>–31<sup>st</sup> December, 2007.
- 67) **Poster presentation**, "International conference on Advanced Materials (ICAMA-2007)" at Dept. of Physics **Shivaji University, Kolhapur (India)**, 15<sup>th</sup>–17<sup>th</sup> November, 2007.
- 68) **Participated,** "15<sup>th</sup> Annual Conference Cum Student's Carnival on Mathematics for Social Sciences, Shivaji University Mathematics Society (SUMS)" organized by **Sangola College, Sangola** on 20<sup>th</sup> 21<sup>st</sup> December 2003.

#### H. Extra-Curricular Activities

1) My work experiences with 'Marathi Vidnyan Parishad, Mumbai, India' during 2005-07 have extensively developed my scientific vision and have provided me with a good base for my early career development. I voluntarily worked for this academy to create awareness about science in school students during the year 2005-07.

- 2) M.Sc. (Physics) education through "*Earn and Learn Scheme*" during 2005-07 at Shivaji University, Kolhapur.
- 3) National Cadet Core (NCC): "A" (1999) and "B" (2004) Certificates.
- 4) *English Type-Writing*: 30 WPM, B-grade (November 2004).
- 5) MS-CIT: 67%, January 2004 (Self-study mode).

I hereby declare that all the information given above is correct to the best of my knowledge.

Dr. Sanjay Subhash Latthe

Date: 01 / 10 / 2023