

CURRICULUM VITAE

Dr. SAJAN C.P

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Objective:

To progress within my career, I aim to expand my knowledge further by facing new challenges and developing my technical skills. I believe that I can bring innovative thinking and use my existing achievements and experience to become a major contributor to the organization I work for.

Educational Qualification:

- 1. Post-doctorate (2013 May 6- 2015 May 6): Material Science and Engineering** State Key Laboratory of Advanced Technology for Material Synthesis and Processing, Wuhan University of Technology, Luoshi Road 122#, Wuhan 430070, P. R. China.
- 2. Ph.D. (2005-2010): Environmental Science**
Department of Environmental Science
Manasagangothri, University of Mysore,
Mysore 570006, India
- 3. M.Sc. (2001-2003): Environmental Science**
Department of Environmental Science
Manasagangothri, University of Mysore,
Mysore, 570006, India
- 4. B.Sc. (1998-2001): Chemistry, Botany, Geology**
Yuvaraja College, University of Mysore,
Mysore, 570006, India

Work experience

Freelance/self-employ, as a proof reader, from jan2019- till date.

Worked as a Lead Scientist in VerdeEn Chemicals Pvt. Ltd, Ghaziabad, Uttar Pradesh, India, from August 2-2017 to December 25 -2018.

Worked as Consulting Director in “GoldStem Marketing Co Pvt Ltd” from Feb 18- 2010 till April 10- 2017.

Worked as a Foreign expert/ postdoctoral fellow under the guidance of Prof. Yu Jiaguo on topic “Processing of Advanced Photocatalytic Materials using Hydrothermal Technique and its Applications” in the State Key Laboratory of Advanced Technology for Material Synthesis and Processing, Wuhan University of Technology, Wuhan 430070, P. R. China. From May 6-2013 to May 6- 2015.

Worked as a guest faculty/ Assistant Professor at University Evening College, University of Mysore, Mysore, from Sep 2011 to April 2013, during this period as a part of examination duty have worked as Squad member and as squad team leader for three semesters.

Award

The winner of the “Top Papers Award” in 2018. Honor date- Jul 2018, Honor issuer Nano Researcher, honor description Award-winning article- "TiO₂ nanosheets with exposed {001} facets for photocatalytic applications", Nano Research 2016, 9(1): 3–27 DOI 10.1007/s12274- 015-0919-3.

The winner of the “Top Papers Award” in 2017. Honor date- Jul 2017, Honor issuer Nano Researcher, honor description Award-winning article- "TiO₂ nanosheets with exposed {001} facets for photocatalytic applications", Nano Research 2016, 9(1): 3–27 DOI 10.1007/s12274- 015-0919-3

Best Poster award for the poster “Titania coating on Calcium Aluminium Silicate Beads under Hydrothermal Conditions for the Degradation of toxic organics”, presented at the 10th International Conference on Advanced Materials, 8 -13 October 2007, Bangalore, India.

I have cleared the National Entrance Eligibility Test for Lectureship (NET) during the academic period 2012, organized by University Grant Commission (UGC), New Delhi, India.

Ph.D. Thesis

**“Hydrothermal Preparation and Characterisation of Photocatalytic compounds”
Submitted to the University of Mysore**

Guide: Prof. K. Byrappa

DOS in Earth Science

Manasagangothri

University of Mysore, Mysore 570006

Project

1. Estimation of soil and water quality parameters around Gemini Distillery, Nanjangud-Mysore, (Masters dissertation work)

Guide: Prof. K. Byrappa, Dept. of Geology, Manasagangothri, University of Mysore, Mysore 570006.

2. Effect of desulfurization of lead-acid battery paste on smelting recovery,

PI: Dr. Amol Naik,

Co PI: **Dr. Sajan CP**

VerdeEn Chemicals Pvt Ltd Ghaziabad

3. Recovery of valuable elements from melting slag, PI: Dr. Amol Naik
Co PI: ***Dr. Sajjan CP***
VerdeEn Chemicals Pvt Ltd Ghaziabad

Field and laboratory experiences

- 1 Year 8 month's industrial experience in developing green technology for the recovery of lead from scrap leaded battery.
- 7 years laboratory experience in the fabricating of designer photocatalysts, photocatalytic composites, doped semiconductor materials ranging from nano to micro size using the hydrothermal technique and to characterize the prepared catalytic materials using X-ray diffraction, scanning electron microscopy, TEM, Fourier transform infrared spectroscopy, dynamic light scattering, BET, UV-Visible spectrophotometer, and Photoluminescence.
- Practical knowledge in the implementation of catalysts based on advanced oxidation processes techniques in the drinking water and wastewater treatment.
- Practical knowledge of CO₂ reduction and H₂ production using semiconductor catalytic material processed using Hydrothermal and solvothermal route.
- As a part of fieldwork, I have visited many industries to know and study the practice of environmental safety and management, solid waste management and water treatment techniques implemented in the industry and their function.
- Have practical knowledge in knowing the formation of rock structures, their dip and strike measurements, morphology and origin.
- Practical knowledge of soil and water analysis

Practical knowledge of analytical instruments

- OES Optical emission spectrometer
- UV-Visible spectrophotometer
- Photoluminescence spectroscopy
- Contrast microscope
- Powder X-ray diffractometer
- Fourier transmitted Infrared spectrophotometer
- Gas chromatography

Subject specialization

- Environmental Chemistry
- Environmental Biology
- Environmental Geology
- Environmental statistic
- Environmental Impact assessment
- Environmental economics and policy
- Environmental auditing and safety
- Wastewater engineering and solid waste management
- Environmental technology and management

Computer Skills

Basic knowledge in computer operations, Word, Excel, PowerPoint, and tally 5.4(certified by Keonics), Sound knowledge in Origin and SPSS.

Other Skills

Certified person in operating Ametek QES spectroscopy

Book Published

“ Textbook of Income Tax” for Bachelor of Commerce and Bachelor of Business administration students as per University of Mysore syllabus by *Mahadevaswamy M and Sajan C.P* (2013) ISBN:978-93-81437-48-3

Book Chapter

1. Processing of hybrid TiO₂ semiconducting materials and their environmental application, *Sajan Chimmikuttanda Ponnappa*, Amol Naik, Rupesh Singh , Chapter submitted to Advanced Materials for Sustainable Environmental Remediation: Terrestrial and Aquatic Environments. Elsevier. (2022) pp 277-299 doi.org/10.1016/B978-0-323-90485-8.00011-4
Scopus, SCI
2. Cotton Farmers Perception towards Weather Based Insurance in Davangere, Karnataka- A Case Study. *Mahadevswamy M, Sajan C.P, Kotreshwar C*, Gyan Publishing House, ISBN: 978-81-212-1182-6, (2013), pp 353- 361
3. Influence of weather Index-Based Insurance (WIBI) on the financial stability of Cotton farmers in Chitradurga district, Karnataka – A case study. *Mahadevswamy M, Sajan C.P, Kotreshwar C*, Inclusive Agriculture Development- New Dimension. ISBN: 978-93-313-1976-0, (2012) Pp. 104-115.

List of publications in National/International Journals

1. Monitoring Heavy Metal Pollution at Al-Buraihi Sewage Station in Taiz, Yemen using Napier Grass (Pennisetum Purpureum Schumach) as A Bioindicator, Raya Q.A. Al-Ansi, Abdelhafeez M.A.

- Mohammed, Mahmoud M. Ali, Wadie Ahmed Mokbel Ghalib, and **Sajan Chimmikuttanda Ponnappa**, European journal of Engineering Science and Technology (accepted). **GS, crossref**
2. Determination of Radon Concentration in Groundwater of Areekode Region, Kerala, India- A case study, Madhukumar D M, **Sajan C P**, Ravi H R, Prasad N Bapat, Wadie Ahmed Mokbel Ghalib, Almoliki Mohammed Mansoor, Journal of the Geological Society of India (accepted). **Impact Factor 1.459 SCIE, Scopus, GS**
 3. Determination of Heavy Metals in Groundwater around Al-Buraihi sewage station in Taiz city, Yemen, Raya Qaid Alansi, Abdelhafeez M.A. Mohammed, Mahmoud M. Ali, Wadie Ahmed Mokbel Ghalib, and **Sajan Chimmikuttanda Ponnappa**, Journal of Pollution and Health, Vol. 11, No. 30, June 2021, 10.5696/2156-9614-11.30.210604. (**GS, crossref**)
 4. Environmental factors that influence the geography of yemen leading to dust and sand storms - a case study, Wadie Ahmed Mokbel Ghalib, Almoliki Mohammed Mansoor, **Sajan Chimmikuttanda Ponnappa** Journal of Environmental Geography 14 (1–2), 24–37. DOI: 10.2478/jengeo-2021-0003(**GS, crossref**)
 5. Fabrication and Density Functional Theory Calculations of Bromine Doped Carbon Nitride Nanosheets with Enhanced Photocatalytic Reduction of CO₂ into Solar Fuels, Maxwell Selase Akple, **Sajan Ponnappa Chimmikuttanda**, Gabriel Kwame Sipi Takyi, Van Wellington Elloh, Biointerface Research in Applied Chemistry, Volume 11, Issue 6, 2021, 14602 – 14619, DOI: 10.33263/BRIAC116.1460214619 IF: 1.95(**Scopus, WOS, GS**)
 6. Influence of Ni (II) oxime complex coupled with combination of diverse sized ZnO nanoparticles on Photovoltaic Performance, Prashanth Kumar P.N., **Sajan Ponnappa Chimmikuttanda**, Ravi Hethgowdanahally Rajegowda, Amol Naik, Maxwell Selase Akple, European journal of Engineering Science and Technology, 3 (2):41-57, 2020. Doi: 10.33422/ejest.v3i2.349 (**GS, crossref**)
 7. Fabrication of MoS₂ deposited TiO₂ hollow microspheres and their enhanced photocatalytic application in the generation of hydrogen, **Sajan Ponnappa Chimmikuttanda**, Maxwell Selase Akple, Amol Naik, Ravi Hethgowdanahally Rajegowda, Materials for Renewable and Sustainable Energy (2020) 9:22, <https://doi.org/10.1007/s40243-020-00182-6>. **SCI, 2.98 IF (Scopus, GS)**
 8. Chemical Analysis of High-Level Nuclear Waste Elements Fixed in Sodium Zirconium Phosphate (NaZr₂P₃O₁₂) Matrix, Rupesh Singh, **Sajan CP** and Amol Naik, 2018, Journal of Pollution(Hilaris) IF:**0.89 (GS)**
 9. A ternary Z-scheme WO₃–Pt–CdS composite for improved visible-light photocatalytic H₂ production activity, Maxwell Selase Akple & **Sajan Ponnappa Chimmikuttanda**, J Nanopart Res. Springer (2018)20:231 <https://doi.org/10.1007/s11051-018-4341-0> **Impact Factor: 2.25. SCI (GS, Scopus, SCIE)**
 10. Hydrothermal synthesis of TiO₂ hollow spears adorned with SnO₂ quantum dots and their efficiency in the production of methanol via photocatalysis **Sajan C.P**, Amol Naik, Maxwell Selase Akple and Ravi H.R, Environmental Science and Pollution research. Springer Publication. 25 Sep 2017, 24(34):26436-26443 DOI 10.1007/s11356-017-0249-y. **Impact Factor: 4.22 SCI (GS, SCI , Scopus)**
 11. Synthesis of rare-earth-doped yttrium vanadate polyscale crystals and their enhanced photocatalytic degradation of aqueous dye solution. C. K. Chandrashekar, P. Madhusudan, H. P. Shivaraju, **C. P. Sajan**, B. Basavalingu, S. Ananda, K. Byrappa. International Journal of Environmental Science and Technology, Springer, 2017, DOI 10.1007/s13762-017-1401- **Impact Factor: 2.8 (GS, Scopus, SCIE)**

12. Template free processing of Ag anchored ZnO poly scale sheets and their application in the photocatalytic degradation of organics present in the pharmaceutical effluent. **Sajan C. P.** Amol Naik, Girish H N, Ravi H R and Rupesh Singh, Water Conservation Science and Engineering, Springer publication. DOI 10.1007/s41101-017-0022-6. **ESCI (GS)**
13. Supercritical hydrothermal synthesis of polycrystalline gadolinium aluminum perovskite materials (GdAlO₃, GAP), HN Girish, P Madhusudan, **Sajan C. P.**, BV Suresh Kumar, and K Byrappa, AIMS Materials Science, 2017, 4(3): 540-550. **Impact Factor: 2.01 ESCI, Scopus GS**
14. Hydrothermal fabrication of WO₃-modified TiO₂ crystals and their efficiency in photocatalytic degradation of FCF. **Sajan C. P.**, Amol Naik, and Girish H. N. International Journal of Environmental Science and Technology, Springer, 2017, 1-12. DOI: 10.1007/s13762-016-1239-1. **Impact Factor: 2.8 (GS, Scopus, SCIE)**
15. Comparative study of hydrothermal synthesized AlPO₄-5 activated Carbon and the combination of activated carbon and AlPO₄-5 filters in the treatment of wastewater and industrial effluent, **Sajan C. P.**, Suresh Kumar B. V, Amol Naik. Water Conservation Science and Engineering, Springer, 2016, 1:177–195. DOI 10.1007/s41101-016-0012-0. **ESCI, GS**
16. Microwave synthesis of Molybdenum-doped LiFePO₄/C and its electrochemical studies. Amol Naik, **Sajan C. P.**, Dalton Transactions, RCS publication. DOI: 10.1039/C6DT00331A. **Impact Factor: 4.39 WOS, Scopus**
17. TiO₂ nanosheets with {001} facets for photocatalytic applications, **Sajan C. P.** S. Wageh, Ahmed A Al-Ghamdi, Jiaguo Yu, Shaowen Cao, Nano Research, 2015, DOI: 10.1007/s12274-015-0919-3. **Impact Factor: 8.89 GS, Scopus, SCIE**
18. Studies on PALS and dielectric constant of novel composite R³⁺ doped aluminophosphate zeolite, Ravi H.R, **Sajan C. P.**, Channegowda, B.V Suresh Kumar, International Resource Journal of Applied Science, Volume 2, issue 1, 2015. **GS**
19. Hydrothermal Synthesis and Characterisation of Gadolinium Aluminium Perovskite (GdAlO₃), Girish H. N., Basavalingu B., Shao G.-Q, **Sajan C. P.**, Verma S.K., Materials Science-Poland, 33(2), 2015, 301-305. **Impact Factor: 1.32 GS, Scopus, SCIE**
20. Synthesis Characterisation and application of Novel composite Mn⁶⁺: ZnO nanocrystal. H R Ravi, P Naveen Kumar, **Sajan C. P.** N Pavan, S Chandramma, H C Devarajegowda., International Journal of Electronics and Communication Engineering & Technology (IJECEt)., Volume 6, Issue 6, June (2015), pp. 01-07, Article ID: 40120150606001. IF: 3.10, **GS**
21. Perception of SC/ST students participating in higher education with special reference to Mysore, Karnataka, Mahadevaswamy.M, **Sajan C. P.** G. Kotreshwar, ISSN: 2321-5925. Volume 1, Issue 4 (2013), PP 39-42
22. Modification of dielectric and structural properties of PVC by Gamma Irradiation. Ravi H.R, Sreepad H.R, **Sajan C. P.**, Research and Reviews in Polymer, ISSN: 2249-8877, Volume 3, Issue 3, (2012), pp. 89-92
23. Impact of Mining on Social And Economical Condition In Mudugere Taluk, Chickamagaluru District, India – A Case Study, Mahesh N, Asima Nusrath, **C.P Sajan** Asian Journal of Development Matter 2012, Volume 6, Issue 1, pp. 200- 212
24. Photodegradation of Textile effluent by Cr³⁺: ZnO, Girish H N, **Sajan C P.** Ramesh Madegowda, Ramegowda, International Journal of Engineering Research & Technology (IJERT), Vol. 1 Issue 7, September – 2012 (**crossref, scopus**) IF: 7.87
25. Impact of Iron ore Mining on Sedimentation Load In Bhadra River – A Case Study, Asima

- Nusrath, Mahesh N, **C.P Sajjan** My Science Volume 4, issue 2, 2011, 20-33.
26. Comparative study on the photodegradation of Indigo Carmine dye using commercial TiO₂ and natural rutile. **C.P. Sajjan**, B. Basavalingu, S. Ananda, and K. Byrappa Journal of the Geological Society of India Volume 77, Number 1, 82-88, DOI: 101007/s12594-011-0010-y. **Impact Factor 1.459 SCIE, Scopus, GS**
 27. Impact Assessment of Effluent Discharge on Underground Water Qualities around Gemini Distillery, Nanjangud, Mysore District *Touba Khosravi, H.P Shivaraju, **C.P. Sajjan** and K. Byrappa* International Journal of Applied Environmental Sciences ISSN 0973-6077 Volume 5, Number 4 (2010), pp. 617–626 Research India Publications. **GS**
 28. Photocatalytic activity of TiO₂: AlPO₄-5 Zeolites for degradation of indigo carmine dye *B.V. Suresh Kumar, **C.P. Sajjan**, B. Basavalingu G.V.Narasimha Rao and K. Byrappa* Indian Journal of Chemical Technology, Volume 17, May 2010, pp 191- 197. **Impact Factor:0.34. SCIE**
 29. Photocatalytic degradation of textile effluent using hydrothermal prepared Titania supported molybdenum oxide photocatalyst. **C.P. Sajjan**, B. Shahmoradi, H.P. Shivaraji., K.M. Lokanatha Rai, S. Ananda, M.B. Shayan, T. Thon Thai, G.V. Narasimha Rao, and K. Byrappa Material Research Innovations Volume 14, Number 1, February 2010, pp. 89-94(6), Maney Publications, UK. **Impact Factor: 0.54 Scopus, GS**
 30. Photocatalytic treatment of organic pollutants in textile effluent by using hydrothermally prepared photocatalytic composite *H. P Shivaraju, **C. P Sajjan**, T. Rungnapa, M. S. Vijay Kumar, C. Ranganathaiah and K. Byrappa* Journal of Material Research Innovation, Volume 14, Number 1, February 2010, pp. 80-86(7), Maney Publications, UK. **Impact Factor: 0.54 Scopus GS**
 31. Hydrothermal preparation of ZnO: CNT and TiO₂: CNT composites and their photocatalytic applications. *K. Byrappa, A. S. Dayananda, **C. P. Sajjan**, B. Basavalingu, M. B. Shayan, K. Soga, M. Yoshimura,* J Mater Sci (2008) 43:2348-2355. **Impact Factor: 4.22. SCI, GS, SCIE, Scopus**
 32. Seasonal analysis of physicochemical parameters of groundwater samples from rural areas of Karkala Taluk, Karnataka State, India *K. Byrappa, P.G. Smitha and **C.P. Sajjan*** ESAIJ, 2(2), (2007) 59-67 **GS**
 33. Soil characteristics around Nanjangud, Mysore District, India- A case study *K. Byrappa, **C.P. Sajjan**, B.V. Suresh Kumar and C. Ranganathaiah* ESAIJ 1(2-3), (2006) 72-79 **GS**
 34. Hydrothermal synthesis of doped ZnO and its application in photodegradation of toxic amaranth dye *K Byrappa, **C P Sajjan** , S Ananda , Lokanatha K.M. Rai , M.S. Vijay Kumar , Kohei Soga,* 10.1107/S0108767308081154, **SCIE IF 1.94**

Articles submitted/ accepted

1. Monitoring Heavy Metal Pollution at Al-Buraihi Sewage Station in Taiz, Yemen using Napier Grass (*Pennisetum Purpureum Schumacher*) as A Bioindicator, *Raya Q.A. Al-Ansi, Abdelhafeez M.A. Mohammed, Mahmoud M. Ali, Wadie Ahmed Mokbel Ghalib, and **Sajjan Chimmikuttanda Ponnappa*** European journal of Engineering Science and Technology (Submitted)
2. Hydrothermal Fabrication of TiO₂/Graphene composite and its Photocatalytic application in the production of Methanol, **Sajjan. C.P.**, *Jianguo Yu, P. Madhusudana, Bei Cheng,* Nanoscale, RCS publication. (submitted)
3. Hydrothermal deposition of CdS quantum dots onto ultrathin TiO₂ nanosheets and its

enhanced visible-light photocatalytic application in Hydrogen production, **Sajan. C.P.**, Jiaguo Yu, Bei Cheng, Physical Chemistry Chemical Physics, RCS publication. (submitted).

Papers presented at National and International Conference/ Seminars

1. Hydrothermal Coating of ZnO on Calcium Alumino-Silicate Beads and Their Application in the Photocatalytic Degradation of Amaranth Dye, *Shivaraju H. P, **C. P. Sajan**, M. B. Shayan, T. Runghana, S. Pakamard, S. Ananda and K. Byrappa* 10th International Conference on Advanced Materials, IUMRS-ICMA 2007.
2. Preparation of Metal Oxide: Polymer Composites, Characterization, and Applications, *K. S. Manjula, M. B. Shayan, **C. P. Sajan**, Shivaraju H. P, Siddaramaiah and K. Byrappa* 10th International Conference on Advanced Materials, IUMRS-ICMA 2007.
3. Photocatalytic degradation of textile effluent using hydrothermally prepared Mo: TiO₂, **C.P. Sajan**, H.P. Shivaraju., K.M. Lokanatha Rai, S. Ananda, M.B. Shayan, T. Thon Thai, G.V. Narashima Rao, and K. Byrappa International Conference IUMRS-ICAM 2007.
4. Titania coating on calcium aluminum silicate beads under hydrothermal condition for the degradation of toxic organics, T Runghana, S Pakamard, *Shivaraju H. P, **C. P. Sajan**, Ranganathiah, S. Ananda and K. Byrappa*, 10th International Conference on Advanced Materials, IUMRS-ICMA 2007.
5. Hydrothermal preparation of TiO₂, ZnO crystallite and their applications in photocatalytic degradation of DDT and Rhodamine B dye, *K. Byrappa, A.K. Subramani, **C.P. Sajan**, K.M. Lokanatha Rai, S. Ananda*, 35th National Seminar on Crystallography, 22-24 Feb. 2006, NPL, New Delhi.
6. Roof top rain water harvesting and groundwater recharge, Participant in Workshop, organized by University of Mysore, 20/02/2009
7. National workshop on applied geochemistry in mineral exploration, Participant in Workshop, organized by University of Mysore, 26-02-2009
8. Synthesis, Characterization and application of Mn doped ZnO nanocrystals, **C.P Sajan**, Paper presentation, International conference on nanoscience and nanotechnology, 06-07-2011.

Personal Details

Date of Birth:	May 7 th , 1980
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The above-provided information is correct and true to the best of my knowledge.

A handwritten signature in blue ink, appearing to be 'Sajan C.P.', written in a cursive style.

Place: Kushalnagar

(Dr. Sajan C.P)