**Curriculum Vitae**

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**Dr Saravanan Rajendran** *(M.Sc.,M.Phil.,B.Ed.,Ph.D)*

https://orcid.org/0000-0002-3771-4694

*Professor*

*Department of Mechanical Engineering*

*University of Tarapaca, Arica, Chile*

*E-mail:**saravanan3.raj@gmail.com*

*Skype id: saravananr84*

**Professional Experience/Current Position**

|  |  |  |  |
| --- | --- | --- | --- |
| ***College/University, Location*** | ***Position*** | ***Duration*** | ***Remarks*** |
| *University of Tarapaca, Arica, Chile* | *Professor**Dept. Mechanical Engg*  | *June 2022- till date* |  |
| *University of Tarapaca, Arica, Chile* | *Assitant Professor in Research**Dept. Mechanical Engg*  | *May2020- April 2022* | *Research & Project handling department* |
| *University of Tarapaca, Arica, Chile* | *Research Professor* | *Dec 2017- June 2020* | *CONICYT-FONDECYT- Initiation Project* |
| *SERC, University of Chile, Santiago, Chile* | *Postdoc*  | *June 2014- oct 2017**August 2018- April 2020* | *CONICYT-FONDECYT- SERC project* |
| *Future CAE(UK)- Multinational company, UK* | *Advisor for Materials engineering Department* | *July 2015- till date* | *Project handling department* |
| *St. Andrews University, UK****Prof. John Irvine group*** | *Postdoctoral Research Fellow* | *Sep 2017 – August 2018* | *EPSRC PROJECT* |
| *University of Chile, Santiago, Chile* | *Post Doctoral Fellow**(Grant No:3150631)* | *Nov 2014 – oct 2017* | *CONICYT-FONDECYT International Post Doctoral Fellow* |
| *Dhanalakshmi College of Engineering - Anna University, Chennai, India* | *Assistant Professor**Dept of Science aand Humanities*  | *Jan 2013 to April 2014* | *Teaching and practical explanation of physics for Undergraduate Engineering students* |
| *Innovative Health care Pvt Ltd, Chennai, India* | *Project Analyst* | *September 2008- Feb 2009* | *Testing Food products*  |

**Educational Qualifications**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***Certification*** | ***Subject*** | ***University/ Location*** | ***Duration*** | ***Percentage (%)*** | ***Classification*** |
| ***Ph.D*** | *Materials Science-Physics* | *University of Madras, Chennai, India* | *July 2009-July 2013* | *Highly recommended thesis by the reviewers.* | ***Highly recommended thesis by the reviewers.*** |
| ***M.Phil.*** | *Nuclear Physics* | *University of Madras, Chennai, India* | *June 2007- Aug 2008* | 71.94 | *First Class* |
| ***M.Sc.*** | *Physics* | *Thiruvalluvar University, Vellore, India* | *June2005-April 2007* | *70.08* | *First Class* ***(University Rank holder)*** |
| ***B.Ed*** | *Physical Science* | *Annamalai Uiversity, Chidambaram, India* | *June2004-April 2005* | *59.68* | *Second Class* |
| ***B.Sc.*** | *Physics* | *Periyar University, Salem, India* | *June2001-April 2004* | *65.68* | *First Class* |

**Awards / Achievements**

* *Name in 2% top scientists (2019 and 2020 list)*

[*https://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.3000918*](https://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.3000918)

[*https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/3*](https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/3)

* *Post Doctoral Fellow, ( Prof. John Irvine group) St. Andrews University, UK*
* *SERC- Post Doctoral Fellow, Universidad de Chile, Santiago, Chile*
* *CONICYT-FONDECYT Post Doctoral Fellow, Chilean Government. Chile*
* *FONDECYT INICIACION EN INVESTIGACION 2017*
* *Fondecyt Regular 2022*
* *Advisor for Materials engineering Department in Future CAE(UK)*

*http://futurecae.com/Home/Team*

* *University Research Fellow (URF) – UGC, University of Madras, Chennai, India*
* *M.Sc. University Rank Holder - Thiruvalluvar University, Vellore, India*
* *Selected as one of the young scientist to present paper at ICONSAT 2012 – Hyderabad, India*
* *Selected for 5th DST workshop (Only 40 were selected among applicants from throughout India) – IISc Bangalore, India*
* *Selected for “List of Most Downloaded and most cited Article” in various journals*
* *Outstanding reviewer for varies journals*
* *Recognized reviewer and editorial board for several International journals*

**Publication Details**

* *Scopus/Web of science indexed International Journals -158+,* ***First/Main author: 90+***
* *Edit 13+ books for springer; one book in science direct and CRC*
* *Internationa/National Book Chapter – 20+*
* *Internationa/National Proceedings -8+*
* *Presented papers in International/National Conferences -49*
* *Participated in Workshops/Seminars -6*

**Citation Details**

* *Scopus Author ID: 7004886581 Documents:150+; (need to update +10)*

*No. of Citation: 9400+, h-index: 41*

*57442111800*

* *Google Scholar:* [*https://scholar.google.co.in/citations?user=Uc0yu3EAAAAJ&hl=en*](https://scholar.google.co.in/citations?user=Uc0yu3EAAAAJ&hl=en) *No. of citation :11124+; h-index:45*

***Editorial board member:***

* *Associate Editor- IJEST- Springer international (Scopus,  Web of science indexed)*

[*https://www.springer.com/environment/journal/13762/PSE?detailsPage=editorialBoard*](https://www.springer.com/environment/journal/13762/PSE?detailsPage=editorialBoard)

* *Analytical and Bioanalytical Electrochemistry (Scopus,  Web of science indexed)*

[*http://www.abechem.com/index.php?option=com\_content&view=article&id=2&Itemid=2*](http://www.abechem.com/index.php?option=com_content&view=article&id=2&Itemid=2)

* Eurasian Chemical Communications (*Web of science indexed)*

[*http://www.echemcom.com/journal/editorial.board*](http://www.echemcom.com/journal/editorial.board)

* *Journal of Chemistry Letters*

[*http://www.jchemlett.com/journal/editorial.board*](http://www.jchemlett.com/journal/editorial.board)

* *Journal of Composites and Compounds (Jourcc)*

[*https://www.jourcc.com/index.php/jourcc/about/editorialTeam*](https://www.jourcc.com/index.php/jourcc/about/editorialTeam)

* *Nano Progress*

[*http://www.ariviyalpublishing.com/nanoprogress/editorial-board.php*](http://www.ariviyalpublishing.com/nanoprogress/editorial-board.php)

* *Industrial Chemistry:Open access (July 2015 Onwards)*

*(*[*http://www.omicsonline.org/editorialboard-industrial-chemistry.php*](http://www.omicsonline.org/editorialboard-industrial-chemistry.php)*)*

* *Elyns Journal of Material Science and Techniques (July 2016 Onwards)*

*(*[*http://www.elynsgroup.com/journal/ely-j-mat-sci-tech/ebm/Saravanan*](http://www.elynsgroup.com/journal/ely-j-mat-sci-tech/ebm/Saravanan)*)*

* *Journal of Industrial and Environmental Chemistry(August 2017 Onwards)*

*(*[*http://www.alliedacademies.org/journal-industrial-environmental-chemistry/editors.php*](http://www.alliedacademies.org/journal-industrial-environmental-chemistry/editors.php)*)*

* [*http://www.ijnc.ir/journal/editorial.board*](http://www.ijnc.ir/journal/editorial.board)
* [*http://jaoc.samipubco.com/journal/editorial.board*](http://jaoc.samipubco.com/journal/editorial.board)

***Special issue Guest Editor***

* ***Special Issue title "Nanomaterials for Environmental Remediation"***

*A special issue of*[*International Journal of Environmental Research and Public Health*](http://www.mdpi.com/journal/ijerph)*(ISSN 1660-4601). (impact factor 2.849)*

[*https://www.mdpi.com/journal/ijerph/special\_issues/nanoremediation*](https://www.mdpi.com/journal/ijerph/special_issues/nanoremediation)

* ***Special Issue title*** *– “Advanced Thermochemical and Biochemical Processes for Biomass Transformation to Biofuels and Biochemicals”*

*Jounal: Biomass Conversion and Biorefinery Processing of Biogenic Material for Energy and Chemistry (impact factor 2.602)*

[*https://www.springer.com/journal/13399/updates/18771040*](https://www.springer.com/journal/13399/updates/18771040)

* ***Special Issue title "*** ***Innovative Nanomaterials for Hydrogen Economy"***

*A special issue of* [*Materials Letters: X*](http://www.mdpi.com/journal/ijerph)*. (impact factor 1.3)*

<https://www.journals.elsevier.com/materials-letters-x/call-for-papers/innovative-nanomaterials-for-hydrogen>

* *Special issue Title: Recent Advances in Biomass, Waste and Solid Recovered Biofuels Production towards Circular Bioeconomy*

*Fuel (Impact Factor 6.609)*

[*https://www.journals.elsevier.com/fuel/call-for-papers/call-for-papers-on-special-issue-recent-advances-in-biomass-waste-and-solid-recovered-biofuels-production-towards-circular-bioeconomy*](https://www.journals.elsevier.com/fuel/call-for-papers/call-for-papers-on-special-issue-recent-advances-in-biomass-waste-and-solid-recovered-biofuels-production-towards-circular-bioeconomy)

* *Special Issue on “Realizing Green Hydrogen as the Major Fuel”*

*Fuel (Impact Factor 6.609)*

[*https://www.journals.elsevier.com/fuel/call-for-papers/special-issue-on-realizing-green-*](https://www.journals.elsevier.com/fuel/call-for-papers/special-issue-on-realizing-green-)*hydrogen-as-the-major-fuel*

* [*https://www.journals.elsevier.com/case-studies-in-chemical-and-environmental-engineering/call-for-papers/advanced-smart-materials-for-water-and-soil-remediation*](https://www.journals.elsevier.com/case-studies-in-chemical-and-environmental-engineering/call-for-papers/advanced-smart-materials-for-water-and-soil-remediation)
* [*https://www.journals.elsevier.com/journal-of-water-process-engineering/call-for-papers/nanoporous-materials-for-water-and-wastewater-treatment-applications*](https://www.journals.elsevier.com/journal-of-water-process-engineering/call-for-papers/nanoporous-materials-for-water-and-wastewater-treatment-applications)
* *Metal-based materials in photo/electrocatalytic applications*

*Molecular Catalysis (ISSN: 2468-8231, Impact Factor: 5.089)*

*edited :Prof. Hassan Karimi-Maleh, Prof. Yasser Vasseghian, Prof. Saravanan Rajendran, and Prof. Farooq Sher.*

***INVITED TALK:***

1. *Synthesis and Characterization of Different Metal Ferrites/ Titania For Photocatalytic Application*

*Saravanan Rajendran*

*India-Uk Second International Conference On Advanced Nanomaterials For Energy, Environment And Healthcare Applications*

*Venue: Pg & Research Department Of Physics, Bishop Heber College, Tiruchirappalli, India*

*4th To 6th February 2019.*

1. *Synthesis and characterization of TiO2/MFe2O3 (M= Co, Mg, Cu, Ni and Zn) for photocatalytic application*

*Saravanan Rajendran*

*6th Iranian National Zeollite conference*

*Venue: Quchan University of Technology, Quchan, Iraq*

*17-18 September 2019*

***Project PI and co PI:***

* *Fondecyt Regular 2022* ***Nº1220663 (2022- 2024)***

*Title: “SYNTHESIS AND CHARACTERIZATION*

*OF MAGNETICALLY SEPARABLE TI3C2/G-C3N4 SUPPORTED TIO2/M-FERRITES (M=BA, SR,*

*CO AND NI) NANO CORE-SHELL FOR THE PHOTODEGRADATION OF ORGANIC AND*

*INORGANIC POLLUTANTS UNDER NATURAL SUNLIGHT IRRADIATION.”,*

***Role: Principal Investigator (project 2022-2024)***

* *FONDECYT INICIACION EN INVESTIGACION 2017*

*Conicyt Fondecyt Grant no: 11170414 (2017-2020.*

Title: Synthesis and Characterization of Magnetically Separable Photocatalyst for the Degradation of Textile Effluent under Visible light irradiation.

***Role: Principal Investigator (project 2017 to 2020)***

* ***Postdoctoral fellow***

*Funding source: Conicyt/Fondecyt- Grant no: 3150631 (2015-2017)*

*Title:Degradation of Textile Effluent Using Polymer Based Nanocomposite Materials*

***Role:Principal Investigator***

* ***UTAMAYOR 2020 (4 million)***

*Funding Source: University of Tarapacá, Chile*

*Title:*Photo responsive 2D-reduced graphene oxide (rGO) supported TiO2-CuO, and TiO2-Fe2O3 nanomaterials for the degradation of emerging organic and inorganic pollutants

***Role:Principal Investigator***

* ***FONDECYT Regular 2020****(Conicyt Fondecyt Grant no: 1201314 (2020-2023)*

*Title: Simultaneous removal of contaminants of emerging concern and inorganic arsenic*

*present in natural waters by solar advanced oxidation processes: Laboratory and pilot scale studies*

***Role: Co-PI investigator***

* ***SERC- FONDAP/15110019.***

*Solar energy Research Centre (2013-2018- Etapa 1)*

*Role: Investigador Asociado*

* ***SERC- FONDAP/15110019.***

*Solar energy Research Centre (2018-2022- Etapa 2)*

*Role: Investigador Asociado*

* ***Peruvian Project: Universidad Nacional Jorge Basadre Grohmann and it's funds from the canon on canon and mining royalties***

*Title:Photocatalytic and photo-electrocatalytic hydrogen generation in Tacna region using pure and doped NiTiO3 nanoparticles*

*Funds: 800000 soles aprox 200000 USD*

*Role: International Collaborator*

* ***UTAMAYOR 2021 (codigo.8751-21)***

*Funding Source: University of Tarapacá, Chile*

***Title: Synthesis and Characterization of Magnetically Separable Ti3C2/g-C3N4 supported TiO2/MFe2O4(M=Co and Ni) nanocatalysts for the Photodegradation of organic pollutant under natural sunlight irradiation.***

***Role:Principal Investigator***

* ***Peruvian Project: Universidad Nacional Jorge Basadre Grohmann and it's funds from the canon on canon and mining royalties***

***project name: Microbial Nanotechnology: Green Synthesis of Nanomaterials***

***FOUNDS: S/. 800000.00 AROUND 209000 USD***

***ROLE: COLABORATOR RESEARCHER***

* ***Concurso Fondo de Investigación Estratégica en Sequía 2021, ANID (FSEQ 210016- Amount: ~ 296 Mchilean peso)***

***Title: Efficient use of water resources in arid and semi-arid zones: Integral solutions based on solar energy to promote the development of the agri-food production sector.
Role: Directora Alterna***

* ***APOYO A LA FORMACIÓN DE REDES INTERNACIONALES ENTRE CENTROS DE INVESTIGACIÓN CONVOCATORIA 2018 – PCI (ANID/REDES/180149)***

***Iberoamerican Solar Water Treatment Network (UMASOLAR)***

***Role: INVESTIGATOR***

 ***Research work***

* *PDF Funding source: Conicyt/Fondecyt- Grant no: 3150631 (2015-2017) Amount: ~72 Million Chilean Peso)*

*Title:Degradation of Textile Effluent Using Polymer Based Nanocomposite Materials*

***Role:Principal Investigator and Post-doctoral researcher (Novemeber 2014 to October 2017)***

* *Ph.D thesis on “Synthesis and Characterization of ZnO based Binary and Ternary Nanocomposites for Photocatalytic Applications” Under the guidance of Dr. A. Stephen, Department of Nuclear Physics, University of Madras, Chennai.*

***Role: Researcher***

* *M.Phil. project on “Synthesis and Characterization of Titania loaded Ni-MCM-41” Under the guidance of Dr. A. Stephen, Department of Nuclear Physics, University of Madras, Chennai.*

***Role: Researcher***

* *M.Sc project on “Study of Nuclear Forces by Numerical Evaluation of Empirical Mass Formula of the Liquid Drop Model” under the guidance of Mr. R. Sivaramakrishnan M.Sc., M.Phil., Sacred Heart College, Tirupattur.*

***Role: Researcher***

Book Editor:

1. Book title: Metal, Metal-Oxides and Metal Sulfides for Batteries, Fuel Cells, Solar Cells, Photocatalysis and Health Sensors

Editors: Saravanan Rajendran, H. Karimi-Maleh, Qin, J., Lichtfouse, E

DOI: 10.1007/978-3-030-63791-0

ISBN 978-3-030-63790-3

Publisher: Springer International Publishing, Total Pages: 360 pages

1. Book title: Metal, Metal Oxides and Metal Sulphides for Biomedical Applications

Editors: Saravanan Rajendran, Naushad, M., Durgalakshmi, D., Lichtfouse, E

DOI: 10.1007/978-3-030-56413-1

ISBN 978-3-030-56413-1

Publisher: Springer International Publishing, Total Pages: 365 pages

1. Book title: Metal and Metal Oxides for Energy and Electronics

Editors: Saravanan Rajendran, Qin, J., Gracia, F., Lichtfouse, E.

DOI: 10.1007/978-3-030-53065-5

ISBN 978-3-030-53065-5

Publisher: Springer International Publishing, Total Pages: 402 pages

1. Book Title: Nanomaterials for Sustainable Energy and Environmental Remediation

Editors: Mu. Naushad R. Saravanan Raju Kumar

Paperback ISBN: 9780128193556, eBook ISBN: 9780128193563

Publisher: Elsevier, Year/ Pages: 2020/402

DOI: [10.1016/C2018-0-02280-X](https://doi.org/10.1016/C2018-0-02280-X)

Series: Materials Today

1. Book Title: Emerging Nanostructured Materials for Energy and Environmental Science

Editors: Saravanan Rajendran, Mu. Naushad, R. Kumar and R. Boukherroub

eBook ISBN 978-3-030-04474-9, Hardcover ISBN 978-3-030-04473-2

Publisher: Springer-Nature international, printed: Springer Nature Switzerland AG

Year/Total Pages: 2019/565 pages

DOI: 10.1007/978-3-030-04474-9

URL: <https://www.springer.com/us/book/9783030044732>

1. Book Title: Nanostructured Materials for Energy Related Applications

Editors: Saravanan Rajendran, Mu. Naushad, and  S. Balakumar

eBook ISBN 978-3-030-04500-5, Hardcover ISBN 978-3-030-04499-2

Publisher: Springer-Nature international, printed: Springer Nature Switzerland AG

DOI: 10.1007/978-3-030-04500-5

Year/Total Pages: 2019/297 pages

URL: <https://www.springer.com/la/book/9783030044992>

1. Book Title Advanced Nanostructured Materials for Environmental Remediation

Editors: Mu. Naushad, Saravanan Rajendran, and  F. Gracia

eBook ISBN 978-3-030-04477-0, Hardcover ISBN 978-3-030-04476-3

Publisher: Springer-Nature international, printed: Springer Nature Switzerland AG

DOI: 10.1007/978-3-030-04477-0

Year/Total Pages: 2019/391 pages

URL: <https://www.springer.com/gp/book/9783030044763>

1. Book Title Green Photocatalysts

Editors: Mu. Naushad, Saravanan Rajendran and Eric Lichtfouse

eBook ISBN 978-3-030-15608-4 , Hardcover ISBN 978-3-030-15607-7

Publisher: Springer-Nature international, printed: Springer Nature Switzerland AG

DOI: 10.1007/978-3-030-15608-4

Year/Total Pages: 2020/287 pages

URL: <https://www.springer.com/gp/book/9783030156077>

1. Book Title Green Methods for Wastewater Treatment

Editors: Mu. Naushad, R. Saravanan and Eric Lichtfouse

eBook ISBN 978-3-030-16427-0, Hardcover ISBN 978-3-030-16426-3

Publisher: Springer-Nature international, printed: Springer Nature Switzerland AG

DOI: 10.1007/978-3-030-16427-0

Year/Total Pages: 2020/292 pages

URL: <https://www.springer.com/gp/book/9783030164263>

1. Book Title Green Photocatalysts for Energy and Environmental Process

Editors: Saravanan Rajendran, Mu. Naushad, L.C. Ponce and Eric Lichtfouse

eBook ISBN 978-3-030-17638-9, Hardcover ISBN 978-3-030-17637-2

Publisher: Springer-Nature international, printed: Springer Nature Switzerland AG

DOI: 10.1007/978-3-030-17638-9

Year/Total Pages: 2020/324 pages

URL: <https://www.springer.com/gp/book/9783030164263>

1. Book title: New Technologies for Electrochemical Applications

Editors: Mu. Naushad, R. Saravanan, Abdullah M. Al-Enizi

ISBN 9780367190675,

DOI: [10.1201/9780429200205](https://www.researchgate.net/deref/http%3A//dx.doi.org/10.1201/9780429200205?_sg%5B0%5D=KeEKziltXXRhZADJ7b7T-pyTtF8CLY58NFrsHNXnwCOZUURUTDyxO_79_MFzv04CgrnhH10W1gOFSntpNk3tJlHA0g.94ibQDxL-VnGwsoOPODSoTBIgaKi0WeuJcXSepRRLiEGpkSQAnd9pveZUaScBW0ConzLU0j1_PJ9Tyfn1mrr5A)

Publisher: CRC group

Year/Total Pages: 2020/296 pages

URL: <https://www.crcpress.com/New-Technologies-for-Electrochemical-Applications/Naushad-Saravanan-Al-Enizi/p/book/9780367190675>

1. Book title: Metal, Metal-Oxides and Metal-Organic Frameworks for Environmental Remediation

Editors: Saravanan Rajendran, Mu. Naushad, L.C. Ponce and Eric Lichtfouse

DOI: 10.1007/978-3-030-68976-6

ISBN 978-3-030-68975-9

Publisher: Springer International Publishing, Total Pages: 285 pages

1. Book title: Inorganic Materials for Energy, Medicine and Environmental Remediation

Editors: Rajendran, S., Naushad, M., Vo, D.-V.N., Lichtfouse, E.

DOI: 10.1007/978-3-030-79899-4

ISBN 978-3-030-79898-7

Publisher: Springer International Publishing, Total Pages: 390 pages

***International (ISI) publications***

***2023***

1. Utilizing the built-in electric field of p-n heterojunction to spatially separate the photogenerated charges in C, N co-doped Co3O4/CdS photocatalysts

Tingzhen Chen, Chengwu Yanga, Saravanan Rajendran, Montree Sawangphruk, Xinyu Zhang, Jiaqian Qin

Fuel 331 (2023) 125594

DOI: doi.org/10.1016/j.fuel.2022.125594

1. Promoting a well-dispersion of MoO3 nanoparticles on fibrous silica catalyst via one-pot synthesis for enhanced photoredox environmental pollutants efficiency,

Chemosphere (accepted)

***2022***

1. A critical review on relationship of CeO2-based photocatalyst towards mechanistic degradation of organic pollutant

A.A. Fauzi, A.A.Jalila, N.S.Hassan, F.F.A.Aziz, M.S.Azami, I.Hussain, R.Saravanan, D.-V.N.Vo

Chemosphere 286 (2022) 131651

DOI: 10.1016/j.chemosphere.2021.131651

1. Investigation of mechanism of heavy metals (Cr6+, Pb2+& Zn2+) adsorption from aqueous medium using rice husk ash: Kinetic and thermodynamic approach

A.K. Priya, V. Yogeshwaran, Saravanan Rajendran , Tuan K.A. Hoang , Matias Soto-Moscoso, Ayman A. Ghfar , Chinna Bathula

Chemosphere 286 (2022) 131796

DOI: 10.1016/j.chemosphere.2021.131796

1. Current advances in microbial fuel cell technology toward removal of organic contaminants – A review

R.Suresh, Saravanan Rajendran, P. Senthil Kumar, King shuk Dutta, Dai-Viet N.Vo

Chemosphere 287 (2022) 132186

DOI: 10.1016/j.chemosphere.2021.132186

1. Recent Advances in Carbon Nitride-based Nanomaterials for Hydrogen Production and Storage

Rekha Pachaiappan,, Saravanan Rajendran, P. Senthil Kumar,Dai-Viet N. Vo,, Tuan K.A. Hoang, Lorena Cornejo-Ponce

International Journal of Hydrogen Energy (accepted)

DOI: 10.1016/j.ijhydene.2021.09.062

1. Effective degradation of aqueous bisphenol-A by novel Ag2C2O4/Ag@GNS photocatalyst

Sethumathavan Vadivel, Metwally Madkour, Saravanan Rajendran, Chinnasamy Sengottaiyan

International Journal of Hydrogen Energy (accepted)

DOI: 10.1016/j.ijhydene.2021.09.118

1. A critical review on various remediation approaches for heavy metal contaminants removal from contaminated soils

Saravanan Rajendran, A.K.Priya, Kuan Shiong Khoo, Tuan K.A.Hoang, Hui-Suan Ng, Heli Siti Halimatul Munawaroh, Ceren Karaman, Yasin Orooji, Pau Loke Show

Chemosphere 287 (2022) 132369

DOI: 10.1016/j.chemosphere.2021.132369

1. Hybrid Metal Organic Frameworks as an Exotic Material for the Photocatalytic Degradation of Pollutants Present in Wastewater: A Review

Gomathi Ramalingam , Rekha Pachaiappan , P Senthil Kumar, Shanmugapriya Dharani , Saravanan Rajendran, Dai-Viet N Vo , Tuan K A Hoang,

Chemosphere 288(2022) 132448

DOI: 10.1016/j.chemosphere.2021.132448

1. A facile template synthesis of phosphorus-doped graphitic carbon nitride hollow structures with high photocatalytic hydrogen production activity
Caidong Wang, Chengwu Yang , [Jiaqian Qin,](https://www.sciencedirect.com/science/article/pii/S0254058421010828?dgcid=coauthor#!) [Saravanan Rajendran,](https://www.sciencedirect.com/science/article/pii/S0254058421010828?dgcid=coauthor#!) Xinyu Zhang

Materials Chemistry and Physics 275 (2022) 125299

DOI: 10.1016/j.matchemphys.2021.125299

1. Electrodeposition of the manganese-doped nickel-phosphorus catalyst with enhanced hydrogen evolution reaction activity and durability

Xinbao Liu, Jingjing Niu, Saravanan Rajendran, Yongpeng Lei, Jiaqian Qin, Xinyu Zhang

International Journal of Hydrogen Energy (accepted)

DOI: 10.1016/j.ijhydene.2021.10.105

1. Generation of novel n-p-n (CeO2-PPy-ZnO) heterojunction for photocatalytic degradation of micro-organic pollutants

Saravanan Rajendran, Tuan KA Hoang, Michel L Trudeau, AA Jalil, Mu Naushad, Md Rabiul Awual

Environmental pollution 292 (2022) 118375

DOI:10.1016/j.envpol.2021.118375.

1. Nanoflower-like Ti3CN@TiO2/CdS heterojunction photocatalyst for efficient photocatalytic water splitting

Dingyu Li, Cheng wu Yang, Saravanan Rajendran, Jiaqian Qin, Xinyu Zhang

International Journal of Hydrogen Energy (accepted)

DOI: 10.1016/j.ijhydene.2021.11.044

1. Occurrences and removal of pharmaceutical and personal care products from aquatic systems using advanced treatment- A review

A.K.Priya, Lalitha Gnanasekaran, Saravanan Rajendran, Jiaqian Qin, Yasser Vasseghian

Environmental Research 204 (2022) 112298

DOI: 10.1016/j.envres.2021.112298

1. Hierarchical TiO2 spheroids decorated g-C3N4 nanocomposite for solar driven hydrogen

production and water depollution

Induja M. Sundaram, Sivaprakash Kalimuthu, Gomathi Priya P , Karthikeyan Sekar , Saravanan Rajendran

International Journal of Hydrogen Energy 47 (2022) 3709-3721

DOI: 10.1016/j.ijhydene.2021.10.261

1. A Review of Recent Progress on Photocatalytic Carbon dioxide Reduction into Sustainable Energy Products using Carbon Nitride

Rekha Pachaiappan, Saravanan Rajendran, P.Senthil Kumar, Dai-Viet N.Vo, Tuan K.A.Hoang

Chemical Engineering Research and Design 177 (2022) 304-320.

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1. Using Functionalized Asphaltenes as Effective Adsorbents for the Removal of Chromium and Lead Metal Ions from Aqueous Solution

Shamsh Pervez, Indrapal Karbhal, Princy Dugga, Saravanan Rajendran, Yasmeen Fatima Pervez, Mohammad Nahid Siddiqui

Environmental Research 204 (2022) 112361

DOI: 10.1016/j.envres.2021.112361

1. Synthesis, characterization, and application of MOF@clay composite as a visible light-driven photocatalyst for Rhodamine B degradation

Radheshyam Rama Pawar, Chitiphon Chuaicham, Karthikeyan Sekar, Saravanan Rajendran , Keiko Sasaki,

Chemosphere 291 (2022) 132922

DOI: 10.1016/j.chemosphere.2021.132922

1. Recent Strategies onhybrid Inorganic‑Graphene Materials forenhancing theelectrocatalytic activity towards heavy metal detection

Devaraj Manoj, Rajendran Saravanan, Lorena Cornejo Ponce

Topics in Catalysis

DOI: 10.1007/s11244-021-01475-4

1. A long-standing polarized electric field in TiO2@BaTiO3/CdS nanocomposite for effective photocatalytic hydrogen evolution

Chengwu Yang, Yibo Chen, Tingzhen Chen, Saravanan Rajendran, Zhiyuan Zeng, Jiaqian Qin, Xinyu Zhang,

Fuel 314 (2021) 122758

DOI: 10.1016/j.fuel.2021.122758

1. Advanced integrated nanocatalytic routes for converting biomass to biofuels: A comprehensive review

Hassan Karimi-Maleh, Saravanan Rajendran, Yasser Vasseghian, Elena-Niculina Dragoi

Fuel 314 (2022) 122762

DOI: 10.1016/j.fuel.2021.122762

1. Defective Ce3+associated CeO2 nanoleaves for enhanced CO oxidation

M. Romero-Sáez; R. Suresh; N. Benito; Saravanan R; F. Gracia; Carlos Navas-Cárdenas; A.K. Priya; Matias Soto-Moscoso

Fuel 315 (2021) 122822

DOI: 10.1016/j.fuel.2021.122822

1. Engineering strategies and opportunities of next generation biofuel from microalgae: A perspective review on the potential bioenergy feedstock

S.Thanigaivel, A.K.Priya, Kingshuk Dutta, Saravanan Rajendran, Yasser Vasseghian

Fuel 312 (2022) 122827

DOI: 10.1016/j.fuel.2021.122827

1. Combined Sedimentation, Electrocoagulation and Ozone processes for the wastewater treatment in an Ecuadorian MDF panel industry

C. Navas-Cárdenas, S. Rajendran, T. Ramírez & F. Muñoz

International Journal of Environmental Science and Technology (accepted)

DOI: https://doi.org/10.1007/s13762-022-03961-y

1. Boosting visible-light hydrogen evolution on CdS hollow nanospheres with CoN as cocatalyst

Tingzhen Chen, Chengwu Yang, Saravanan Rajendran, Yong peng Lei, Xinyu Zhang, Jiaqian Qin

Fuel 316 (2022) 123307

DOI: 10.1016/j.fuel.2022.123307

1. Bi-based photocatalysts for bacterial inactivation in water: inactivation mechanisms, challenges, and

strategies to improve the photocatalytic activity

Michael Zuarez-Chamba, Saravanan Rajendran , Miguel Herrera-Robledo , A.K. Priya, Carlos Navas-Cárdenas

Environmental Research 209 (2022) 112834

DOI: 10.1016/j.envres.2022.112834

1. Influence of TiO2 dispersion on silica support toward enhanced amine assisted CO2 photoconversion to methanol

N.F.Khusnun, A.A.Jalil, T.A.T.Abdullah,S.S.M.Latip, C.N.C.Hitam, A.A.Fauzi, N.S.Hassan, M.A.H.Aziz, A.F.A.Rahman, F.F.A.Aziz, M.Bahari, R.H.Adnan, R.Saravanan

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1. Enhanced photooxidative desulphurization of dibenzothiophene over fibrous silica tantalum: Influence of metal-disturbance electronic band structure

N.S.Hassan, A.A.Jalil, C.N.C.Hitam, M.H.Sawala, M.N.S.RahimaI.Hussain, N.W.C.Jusoh, R.Saravanan, D.Prasetyoko

IJHE (accepted)

1. Advancements on sustainable microbial fuel cells and their future prospects: A review

A.K. Priya, C. Subha,P. Senthil Kumar,, R. Suresh, Saravanan Rajendran,Yasser Vasseghian,, Matias Soto-Moscoso

Environmental Research 210 (2022) 112930

DOI: 10.1016/j.envres.2022.112930

1. Electrochemical sensing system for the analysis of emerging contaminants in aquatic environment: A review

R.Sivaranjanee, P.Senthil Kumar, R.Saravanan, M.Govarthanan

Chemosphere 294 (2022) 133779

DOI: 10.1016/j.chemosphere.2022.133779

1. Hybrid ZnO nanostructures modified graphite electrode as an efficient urea sensor for environmental pollution monitoring

D.Durgalakshmi, S.Prabha, J.Mohan raj,R. Ajay Rakkesh, R.Saravanan

Chemosphere 296 (2022) 133918

DOI: 10.1016/j.chemosphere.2022.133918

1. A review on bioremediation approach for heavy metal detoxification and accumulation in plants

R.Yaashikaa, P. SenthilKumar, S.Jeevanantham, R.Saravanan

Environmental pollution 301 (2022) 119035

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1. Functionalization of MXene-based nanomaterials for the treatment of micropollutants in aquatic system: A review

Karthik Velusamy, Padmanaban Velayudhaperumal Chellam, P.SenthilKumar, Jeyamanikandan Venkatachalam, Selvakumar Periyasamy, R.Saravanan

Environmental pollution 301 (2022) 119034

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1. Microplastics in the environment: Recent developments in characteristic, occurrence, identification and ecological risk

A.K.Priya, A.A.Jalil, Kingshuk Dutta, Saravanan Rajendran, Yasser Vasseghian, Jiaqian Qin, Matias Soto-Moscoso

Chemosphere 298 (2022) 134161.

DOI: 10.1016/j.chemosphere.2022.134161

1. Visible light stimulated binary nanostructure and defect enriched TiO2-SnO2 for photocatalysis and antibacterial activity

Lalitha Gnanasekaran, Saravanan Rajendran, P.Senthil Kumar, A.K.Priya, F.Gracia, Mohamed A.Habila, Karunamoorthy Saravanakumar

Materials Letters. 316 (2022) 131998

1. Insights on synthesis and applications of graphene based materials in waste water treatment- A review

A.Saravanan, P. SenthilKumar, S.Srinivasan, S.Jeevanantham, M.Vishnu, K.Vishal Amith, R.Sruthi, R.Saravanan, Dai-Viet N.Vo

Chemosphere 298 (2022) 134284.

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1. Recent development on core-shell photo(electro)catalysts for elimination of organic compounds from pharmaceutical wastewater

Surendar Balu, Chitiphon Chuaicham, Vellaichamy Balakumar, Saravanan Rajendran, Keiko Sasaki, Karthikeyan Sekaran, Arthanareeswari Maruthapillai

Chemosphere 298 (2022) 134311

DOI: 10.1016/j.chemosphere.2022.134311

1. Halides and oxyhalides-based photocatalysts for abatement of organic water contaminants – An overview

R.Suresh, Saravanan Rajendran, P. SenthilKumar, Tuan K.A.Hoang, MatiasSoto-Moscoso

Environmental Research 212 (2022) 113149

DOI: doi.org/10.1016/j.envres.2022.113149

1. A Review of Graphene-Based Semiconductors for Photocatalytic Degradation of Pollutants in Wastewater

Gomathi Ramalingam, P.Nagapandi selvi, A.K.Priya, Saravanan Rajendran

Chemosphere 300 (2022) 134391

DOI: 10.1016/j.chemosphere.2022.134391

1. Nanochemistry approach for the fabrication of Fe and N co-decorated biomass-derived activated carbon frameworks: a promising oxygen reduction reaction electrocatalyst in neutral media

Hassan Karimi-Maleh, Ceren Karaman, Onur Karaman, Fatemeh Karimi, Yasser Vasseghian, Li Fu, Mehdi Baghayeri, Jalal Rouhi, P. Senthil Kumar, Pau-Loke Show, Saravanan Rajendran, Afsaneh L. Sanati & Ali Mirabi

Journal of Nanostructure in Chemistry

DOI: 10.1007/s40097-022-00492-3

1. Recent advances in carbon nanomaterials-based electrochemical sensors for food azo dyes detection

HassanKarimi-Maleh, Hadi Beitollahi, P.Senthil Kumar, Somayeh Tajik, Peyman Mohammadzadeh Jahani, Fatemeh Karimi, Ceren Karaman, Yasser Vasseghian, Mehdi Baghayeri, Jalal Rouhi, Pau LokeShow, Saravanan Rajendran, Li Fu, Najmeh Zare

Food and Chemical Toxicology 164 (2022) 112961

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1. Nanoflower shaped NiO/CeO2 p-n junction material for the degradation of pollutant under visible light

Lalitha Gnanasekaran, A.A.Jalil, Senthil Kumar, Saravanan Rajendran, F.Gracia, Matias Soto-Moscoso, Mohamed A.Habila, Karunamoorthy Saravanakumar

Materials Letters 317 (2022) 132122

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1. The role of MOF based nanocomposites in the detection of phenolic compounds for environmental remediation- A review

Devaraj Manoj, SaravananRajendranaTuan K.A.HoangbMatiasSoto-Moscosoc

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1. Surface modification of TiO2 by adding V2O5 nanocatalytic system for hydrogen generation

Lalitha Gnanasekaran, Saravanan Rajendran, Hassan Karimi-Maleh, A.K.Priya, Jiaqian Qin, Matias Soto-Moscoso, Sabah Ansar, Chinna Bathula

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1. Recent development of organic inorganic hybrid photocatalysts for biomass conversion into hydrogen production

Ashil Augustin, Chitiphon Chuaicham, Mariyappan Shanmugam, Balakumar Vellaichamy, Saravanan Rajendran, Tuan K. A. Hoang, Keiko Sasaki and Karthikeyan Sekar

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1. Advances in preparation, mechanism and applications of various carbon materials in environmental applications: A review

P.Baraneedharan, Sethumathavan Vadivel, Anil C A , S. Beer Mohamed, Saravanan Rajendran

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1. Role of nanotechnology for the conversion of lignocellulosic biomass into biopotent energy: A biorefinery approach for waste to value-added products

S.Thanigaivel, A.K.Priya, Kingshuk Dutta, Saravanan Rajendran, Karthikeyan Sekar, A.A.Jalil. Matias Soto-Moscoso

fuel 322 (2022) 124236

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1. Hydrogen Generation from CO2 Reforming of Biomass-Derived Methanol on Ni/SiO2 Catalyst

Pham Thi Thuy Phuong, Nguyen Nguyen Phuong, P. Senthil Kumar, Nguyen Phuc Hoang Duy,

Quyet Van Le, Le Thi Bao Ngoc, A. A. Jalil, Saravanan Rajendran, Chin Kui Cheng, Thanh-Huong Nguyen, Minh Tuan Nguyen Dinh & Dai-Viet N. Vo

Topics in Catalysis (2022)

DOI: 10.1007/s11244-022-01621-6

1. Removal of harmful algae in natural water by semiconductor photocatalysis- A critical review

Harshavardhan Mohan, Sethumathavan Vadivel and Saravanan Rajendran

Chemosphere 302 (2022) 134827

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1. Immobilization of enzymes for bioremediation: A future remedial and mitigating strategy

Prathap Somu, Saranya Narayanasamy,, Levin Anbu Gome, Saravanan Rajendran, Yong Rok Lee, Balakrishnan Deepanraj

Environmental Research 212 (2022) 113411

DOI: 10.1016/j.envres.2022.113411

1. A review on MXene and its nanocomposites for the detection of toxic

inorganic gases

Manoj Devaraj, Saravanan Rajendran , Tuan K.A. Hoang , Matias Soto-Moscoso

Chemosphere 302 (2022) 134933

DOI: 10.1016/j.chemosphere.2022.134933

1. In-situ growth of 3D Cu-MOF on 1D halloysite nanotubes/reduced graphene oxide nanocomposite for simultaneous sensing of dopamine and paracetamol

DevarajManoj, Saravanan Rajedran, Tuan K.A.Hoang, Sabah Ansar, Sang-Woo Joo, Yasser Vasseghian, MatiasSoto-Moscoso

Journal of Industrial and Engineering Chemistry 112 (2022) 287-295

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1. Recent developments on graphene and its derivatives based electrochemical sensors for determinations of food contaminants

R.Suresh, Saravanan Rajendran, P. SenthilKumar, Tuan K.A.Hoang, Matias Soto-Moscoso, A.A.Jalil

Food and Chemical Toxicology 165 (2022) 113169

DOI: 10.1016/j.fct.2022.113169

1. A critical and Recent developments on adsorption technique for removal of heavy metals from wastewater-A review

Saravanan Rajendran, A.K. Priya, P. Senthil Kumar, Tuan K.A. Hoang, Karthikeyan Sekar, Kar Yeen Chong, Kuan Shiong Khoo, Hui Suan Ng, Pau Loke Show

Chemosphere 303 (2022) 135146

DOI: 10.1016/j.chemosphere.2022.135146

1. Tailoring the heterojunction of TiO2 with multivalence CeO2 nanocrystals - for detection of toxic 2-aminophenol

Devaraj Manoj, Saravanan Rajendran, Yasser Vasseghian, Sabah Ansar, F.Gracia, Matias Soto-Moscoso

Food and Chemical Toxicology 165 (2022) 113182

DOI: 10.1016/j.fct.2022.113182

1. Recent trends and advancements in nanoporous membranes for water purification

A.K.Priya, LalithaGnanasekaran, P. SenthilKumar, A.A.Jalil, Tuan K.A.Hoang, Saravanan Rajendran, Matias Soto-Moscoso, Deepanraj Balakrishnani

Chemosphere 303 (2022) 135205

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1. Conducting polymeric nanocomposites: A review in solar fuel applications

Mariyappan Shanmugam, Ashil Augustin, Sathya Mohan, Brahmari Honnappa, Chitiphon Chuaicham , Saravanan Rajendran, Tuan K.A. Hoang , Keiko Sasaki,Karthikeyan Sekar

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1. Heavy metal remediation from wastewater using microalgae: Recent advances and future trends

A.K.Priya, A.A.Jalil, Sethumathavan Vadivel, Kingshuk Dutta, Saravanan Rajendran, Manabu Fujii, Matias Soto-Moscoso

Chemosphere 305 (2022) 135375

DOI: 10.1016/j.chemosphere.2022.135375

1. Altered zirconium dioxide based photocatalyst for enhancement of organic pollutants degradation: A review

E.M. Sharaf Aldeen, A.A.Jalil, R.S.Mim, A.Alhebshi, N.S.Hassan, R.Saravanan

Chemosphere 304 (2022) 135349

DOI: 10.1016/j.chemosphere.2022.135349

1. Insight on recent development in metallic biomaterials: Strategies involving synthesis, types and surface modification for advanced therapeutic and biomedical applications

S.Thanigaivel, A.K.Priya, Deepanraj Bala krshnan, Kingshuk Dutta, Saravanan Rajendran, Matias Soto-Moscoso

Biochemical Engineering Journal (accepted)

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1. Novel S-scheme 2D/2D Bi4O5Br2 nanoplatelets /g-C3N5 heterojunctions with enhanced photocatalytic activity towards organic pollutants removal

Sethumathavan Vadivel, Manabu Fujii; Saravanan Rajendran

Environmental Research 213 (2022) 113736

DOI: 10.1016/j.envres.2022.113736

1. Exploration of effective biorefinery approach to obtain the commercial value-added products from algae

S.Thanigaivel, A.K.Priya, P.Senthil Kumar, Khoo Kuan Shiong, Tuan K.A.Hoang, Saravanan Rajendran, Matias Soto-Moscoso
Sustainable Energy Technologies and Assessments 53 (2022)102450

DOI: 10.1016/j.seta.2022.102450

1. Sustainable applicability and environmental impact of wastewater treatment by emerging nanobiotechnological approach: Future strategy for efficient removal of contaminants and water purification

S.Thanigaivel, A.K.Priya, Lalitha Gnanasekaran, Tuan K.A.Hoang, Saravanan Rajendran, Matias Soto-Moscoso,

Sustainable Energy Technologies and Assessments 53 ( 2022) 102484

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1. Experimental Assessment and Multi-Objective Optimization on the Engine Characteristics of Reactivity Controlled Compression Ignition Engine Powered by Ternary Fuel

Athmakuri Ashok. Santhosh Kumar Gugulothu, Ragireddy Venkat Reddy, Balakrishnan Deepanraj, Saravanan Rajendran, Manivannan Arthi

Fuel 328 (2022) 125260

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1. Facile synthesis of broom stick like FeOCl/g-C3N5 nanocomposite as novel Z-scheme photocatalysts for rapid degradation of pollutants

Sethumathavan Vadivel, Manabu Fujii, Saravanan Rajendran

Chemosphere 307 (2022) 135716

DOI: 10.1016/j.chemosphere.2022.135716

1. A review on synthesis methods and recent applications of nanomaterial in wastewater treatment: Challenges and future perspectives

A.Saravanan, P. SenthilKumar, R.V.Hemavathy, S.Jeevanantham, Marie Jyotsna Jawahar, J.P. Neshaanthini, R.Saravanan

Chemosphere 307 (2022) 135713

DOI: 10.1016/j.chemosphere.2022.135713

1. Optimal Parameter Estimation of Proton Exchange Membrane Fuel Cell using Improved Red Fox Optimizer for Sustainable Energy Management

B. Deepanraj, S.K. Gugulothu, R. Ramaraj, M. Arthi, R. Saravanan

Journal of Cleaner Production 369 (2022) 133385

DOI: 10.1016/j.jclepro.2022.133385

1. Electrochemical Detection of Hydrogen Peroxide using Micro and Nanoporous CeO2 Catalysts

Saravanan Rajendran, Devaraj Manoj, R.Suresh, Yasser Vasseghian, Ayman A.Ghfar, Gaurav Sharma, Matias Soto-Moscoso

Environmental Research 214 (2022) 113961

DOI: 10.1016/j.envres.2022.113961

1. Biosorption of heavy metals by microorganisms: Evaluation of different underlying mechanisms

A K Priya, Lalitha Gnanasekaran, Kingshuk Dutta, Saravanan Rajendran, Deepanraj Balakrishnan, Matias Soto-Moscoso

Chemosphere 307 (2022) 135957

DOI: 10.1016/j.chemosphere.2022.135957

1. Twin boundaries boost the hydrogen evolution reaction on the solid solution of nickel and tungsten

Jiuchao Tang,, Jingjing Niu,, Chengwu Yang ,, Saravanan Rajendran , , Yongpeng Lei, Montree Sawangphruk, Xinyu Zhang , Jiaqian Qin

Fuel 330 (2022) 125510

DOI: 10.1016/j.fuel.2022.125510

1. Remediation techniques for elimination of heavy metal pollutants from soil: A review

Umair Azhar, Huma Ahmad, Hafsa Shafqata, Muhammad Babar, Hafiz Muhammad Shahzad Munir, Muhammad Sagir, Muhammad Arif, Afaq Hassan, Nova Rachmadon, Saravanan Rajendran, Muhammad Mubashire, Kuan Shiong Khoo

Environmental Research 214 (2022) 113918

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1. Engineering ZnO nanocrystals anchored on mesoporous TiO2 for simultaneous detection of vitamins

DevarajManoj, SaravananRajendran, F.Gracia, M.Naushad, Madhappan Santhamoorthy, Matias Soto-Moscoso, M.A.Gracia-Pinilla

Biochemical Engineering Journal 186 (2022) 108585

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1. Advancement of renewable energy technologies via artificial and microalgae photosynthesis

Youping Xie, Kuan Shiong Khoo, Kit Wayne Chew, Vishno Vardhan Devadas, Sue Jiun Phang, Hooi Ren Lim, Saravanan Rajendran, Pau Loke Show

Bioresource Technology 363 (2022) 127830

DOI: 10.1016/j.biortech.2022.127830

1. Thermal Conductivity and Mechanical Characterization of Bamboo Fiber and Rice Husk/MWCNT Filler Epoxy Hybrid Composite

S. Ramu, N. Senthilkumar , Saravanan Rajendran, B. Deepanraj , Prabhu Paramasivam

 Journal of Nanomaterials Volume 2022, Article ID 5343461, 10 pages

DOI: 10.1155/2022/5343461

1. Physical and Mechanical Characterization of Bamboo Fiber/Groundnut Shell/Copper Particle/MWCNT-Filled Epoxy Hybrid Polymer Nanocomposites

S. Ramu, N. Senthilkumar, Saravanan Rajendran, B. Deepanraj and Dereje Bayisa Abdeta

Journal of Nanomaterials Volume 2022 | Article ID 3026881

DOI: 10.1155/2022/3026881

1. Algal degradation of microplastic from the environment: Mechanism, challenges, and future prospects

A.K. Priya, A.A. Jalil, Kingshuk Dutta, Saravanan Rajendran, Yasser Vasseghian , Hassan Karimi-Maleh, Matias Soto-Moscoso

Algal Research 67 (2022) 102848

DOI: 10.1016/j.algal.2022.102848

1. Metal-organic framework-enabled pesticides are an emerging tool for sustainable cleaner production and environmental hazard reduction

Yasser Vasseghian, Priya Arunkumar, Sang-Woo Jooa, Lalitha Gnanasekaran, Hesam Kamyab,Saravanan Rajendran,Deepanraj Balakrishnan, Shreeshivadasan Chelliapanh, Jiří Jaromír Klemeši

Cleaner Production 373 (2022) 133966

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1. Advancement of renewable energy technologies via artificial and microalgae photosynthesis

Youping Xie, Kuan Shiong Khoo, Kit Wayne Chew Vishno Vardhan Devadas, Sue Jiun Phang , Hooi Ren Lim. Saravanan Rajendran, Pau Loke Show

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1. Dual pretreatment of mixing H2O2 followed by torrefaction to upgrade spent coffee grounds for fuel production and upgrade level identification of H2O2 pretreatment

Wei-Hsin Chen, Kuan-Yu Ho, Kuan-Ting Lee, Lu Ding, Kun-Yi Andrew Lin, Saravanan Rajendran, Yashvir Singh, Jo-Shu Chang

Environmental Research 215 (2022) 114016

DOI: 10.1016/j.envres.2022.114016

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1. Metal/Metal Oxide Nanocomposites for Bactericidal Effect: A Review

Rekha Pachaiappan, **Saravanan Rajendran**, Pau Loke Show, Kovendhan Manavalan, Mu. Naushad
Chemosphere 272 (2021) 128607

[DOI: 10.1016/j.chemosphere.2020.128607](https://doi.org/10.1016/j.chemosphere.2020.128607)

1. Plant-derived silica nanoparticles and composites for biosensors, bioimaging, drug delivery and supercapacitors: a review

S. Prabha, D. Durgalakshmi, **Saravanan Rajendran**, Eric Lichtfouse

Environmental Chemistry Letter 19 (2021) 1667–1691

DOI: 10.1007/s10311-020-01123-5

1. Water-soluble graphitic carbon nitride for clean Environmental applications

J. Mohanraja, D. Durgalakshmia and **Saravanan Rajendran**

Environmental pollutation 269 (2021) 116172

[DOI: 10.1016/j.envpol.2020.116172](https://doi.org/10.1016/j.envpol.2020.116172)

1. High-performance and stable Ru-Pd nanosphere catalyst supported on two-dimensional

boron nitride nanosheets for the hydrogenation of furfural via water-mediated protonation

G.Bharath, K.Rambabu, Abdul Hai, Fawzi Banat, **Saravanan Rajendran**, Dionysios.D.Dionysiou, Pau Loke Show.

Fuel 290 (2021) 119826

DOI: [10.1016/j.fuel.2020.119826](https://doi.org/10.1016/j.fuel.2020.119826)

1. Magnetically recoverable graphene oxide wrapped CuCo2S4/ iron oxides composites for supercapacitor application and Fenton degradation of organic molecules

S. Hariganesh, S. Vadivel, Bappi Paul, M. Kumaravel, **Saravanan Rajendran**, N. Balasubramanian & Siddhartha Sankar Dhar

[*Journal of Inorganic and Organometallic Polymers and Materials*](https://link.springer.com/journal/10904)  31 (2021) 1978–1991

DOI: 10.1007/s10904-020-01840-y

1. Metal Organic Framework derived magnetically recoverable CuFe2O4 porous cubes for efficient photocatalytic application

S. Hariganesh, S. Vadivel[Bappi paul](https://www.sciencedirect.com/science/article/pii/S1387700320309953#!), [M. Kumaravel, N. Bala subramanian](https://www.sciencedirect.com/science/article/pii/S1387700320309953#!), [**Saravanan Rajendran** Siddhartha Sankar Dhar](https://www.sciencedirect.com/science/article/pii/S1387700320309953#!)

[**Inorganic Chemistry Communications**](https://www.sciencedirect.com/science/journal/13877003) 125 (2021) 108405

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1. Guanine-Based DNA Biosensor Amplified with Pt/SWCNTs Nanocomposite as Analytical Tool for Nanomolar Determination of Daunorubicin as an Anticancer Drug: A Docking/Experimental Investigation

Hassan Karimi-Maleh, Marzieh Alizadeh, Yasin Orooji, Fatemeh Karimi, Mehdi Baghayeri, Jalal Rouhi, Somayeh Tajik, Hadi Beitollahi, Shilpi Agarwal, Vinod K. Gupta, **Saravanan Rajendran**, Sadegh Rostamnia, Li Fu, Farshad Saberi-Movahed, and Samira Malekmohammadi

Ind. Eng. Chem. Res. 60(2) (2021) 816–823

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1. Green synthesis of white light emitting carbon quantum dots: fabrication of white fluorescent film and optical sensor applications

Jagannathan Mohanraj, Dhinasekaran Durgalakshmi, Soundharraj Prabha, Rajendran Saravanan, Dai-Viet N. Vo, Prakasarao Aruna, Singaravelu Ganesan

Journal of Hazardous Materials 416 (2021)125091

DOI: [10.1016/j.jhazmat.2021.125091](https://doi.org/10.1016/j.jhazmat.2021.125091)

1. Effective removal of malachite green dye from aqueous solution in hybrid system utilizing agricultural waste as particle electrodes

Annam Renita, Kilaru Harsha Vardhan, P. Senthil Kumar, P. Tsopbou Ngueagni, A .Abilarasu, Subi Nath, Pallavi Kumari, **R.Saravanan**

Chemosphere 273 (2021) 129634.

DOI: [10.1016/j.chemosphere.2021.129634](https://doi.org/10.1016/j.chemosphere.2021.129634)

1. Green Synthesis of Zinc Oxide Nanoparticles by Justicia Adhatoda Leaf and Its Antimicrobial Activity

Rekha Pachaiappan, Saravanan Rajendran, Gomathi Ramalingam, Dai-Viet N. Vo, P. Mohana Priya

Matias Soto-Moscoso

Chem. Eng. Technol. 44(3) (2021) 1–9.

DOI: 10.1002/ceat.202000470

1. Recent advancements of spinel ferrite based binary nanocomposite photocatalysts in wastewater treatment

R. Suresh, Saravanan Rajendran, P. Senthil Kumar, Dai-Viet N.Vo, Lorena Cornejo-Ponce

Chemosphere 274 (2021) 129734

DOI: [10.1016/j.chemosphere.2021.129734](https://doi.org/10.1016/j.chemosphere.2021.129734)

1. The War using microbes: A sustainable approach for wastewater management

[A.K.Priya,](https://www.sciencedirect.com/science/article/abs/pii/S0269749121001767%22%20%5Cl%20%22%21) [Rekha Pachaiappan,](https://www.sciencedirect.com/science/article/abs/pii/S0269749121001767%22%20%5Cl%20%22%21) [P. Senthil Kumar,](https://www.sciencedirect.com/science/article/abs/pii/S0269749121001767#!) [A.A.Jalil,](https://www.sciencedirect.com/science/article/abs/pii/S0269749121001767#!) [Dai-Viet N.Vo](https://www.sciencedirect.com/science/article/abs/pii/S0269749121001767#!), [Saravanan Rajendran](https://www.sciencedirect.com/science/article/abs/pii/S0269749121001767#!)

Environemtnal pollution 275 (2021) 116598

DOI: [10.1016/j.envpol.2021.116598](https://doi.org/10.1016/j.envpol.2021.116598)

1. Photocatalytic degradation of 2,4-Dichlorophenol using bio-green assisted TiO2-CeO2 nanocomposite system

Lalitha Gnanasekaran, Saravanan Rajendran, A.K.Priya, D.Durgalakshmi, Dai-Viet N.Vo, Lorena Cornejo-Ponce, F.Gracia, Matias Soto-Moscoso

Environmental Research 195 (2021) 110852

DOI: 10.1016/j.envres.2021.110852

1. Review—Metal Organic Framework Based Nanomaterials for Electrochemical Sensing of Toxic Heavy Metal Ions: Progress and Their Prospects

Manoj Devaraj, Sasikumar Yesudass, Saravanan Rajendran and Lorena Cornejo Ponce

Journal of The Electrochemical Society 168 (2021) 037513

DOI: 10.1149/1945-7111/abec97

1. Self-assembled dendrite-like 3D-CeO2 nanostructures for non-enzymatic Vitamin B2 sensor

D Manoj, R Manigandan, S Rajendran, LC Ponce

Materials Letters 295 (2021) 129834

DOI: 10.1016/j.matlet.2021.129834

1. Microbial degradation of recalcitrant pesticides: a review

Sanchali Bose, P. Senthil Kumar, Dai-Viet N. Vo, N. Rajamohan, R. Saravanan

Environmental Chemistry Letters 19 (2021) 3209–3228

DOI: 10.1007/s10311-021-01236-5

1. A critical review on the use of potentiometric based biosensors for biomarkers detection

Hassan Karimi Maleh, Yasin Orooji, Fateme Karimi, Marzieh Alizad, Mehdi Baghayeri, Jalal Rouhi Somayeh Tajik, Hadi Beitollahi, Shilpi Agarwal, Vinod Gupta, Saravanan Rajendran, Ali Ayati, Li Fu, Afsaneh L. Sanati, Bahareh Tanhaei, Fatih Sen, Mehdi shabani nooshabadi, Padideh Naderi Asrami, Amani Al-Othman

Biosensors and Bioelectronics 184 (2021) 113252

DOI: 10.1016/j.bios.2021.113252

1. Visible light driven exotic p (CuO) - n (TiO2) heterojunction for the photodegradation of 4-chlorophenol and antibacterial activity

Lalitha Gnanasekaran, RekhaPachaiappan, P. SenthilKumar, Tuan K.A.Hoang, Saravanan Rajendran, D.Durgalakshmi, Matias Soto-Moscoso, Lorena Cornejo-Ponce, F.Gracia

Environmental Pollution 287 (2021) 117304

DOI: 10.1016/j.envpol.2021.117304

1. CuO-ZnO-PANI a lethal p-n-p combination in degradation of 4-chlorophenol under visible light

Saravanan Rajendran, Rekha Pachaiappan, Tuan K.A.Hoang, Sekar Karthikeyan, Lalitha Gnanasekaran, S.Vadivel, Matias Soto-Moscoso, M.A.Gracia-Pinilla

Journal of Hazardous Materials (2021) 125989

DOI: 10.1016/j.jhazmat.2021.125989

1. Intensification of toxic chlorophenolic compounds degradation over efficient microwave-dried silica-doped tetragonal zirconia nanocatalysts

N.S.Hassan, A.A.Jalil I.Hussain, A.A.Fauzi, M.S.Azami, R.Saravanan, N.H.H.Hairom

Chemical Engineering and Processing - Process Intensification 165 (2021) 108469

DOI: 10.1016/j.cep.2021.108469

1. Recent progress in green and biopolymer based photocatalysts for the abatement of aquatic pollutants

R.Suresh, Saravanan Rajendran, Tuan K.A.Hoang, Dai-Viet N.Vo, Mohammad Nahid Siddiqui, LorenaCornejo-Poncea

Environmental Research 199 (2021) 111324

DOI: 10.1016/j.envres.2021.111324

1. A review on recent advancements in photocatalytic remediation for harmful inorganic and organic gases

A.K. Priya, R. Suresh , P. Senthil Kumar , Saravanan Rajendran, Dai-Viet N. Vo , Matias Soto-Moscoso

Chemosphere 284 (2021) 131344

DOI: 10.1016/j.chemosphere.2021.131344

1. Cultivation of Chlorella vulgaris on dairy waste using vision imaging for biomass growth monitoring

Angela Paul Peter, Kit Wayne Chew, Apurav Krishna Koyande, Sia Yuk-Heng, Huong YongTing, Saravanan Rajendran, Heli Siti Halimatul Munawaroh, Chang Kyoo Yoo, Pau Loke Show

Bioresource Technology 341 (2021) 125892

DOI: 10.1016/j.biortech.2021.125892

***2020 (11 scopus)***

1. Synthesis of novel AgCl loaded g-C3N5 with ultrahigh activity as visible light photocatalyst for pollutants degradation

[S. Vadivel,](https://www.sciencedirect.com/science/article/pii/S0009261419308437#!) [S. Hariganesh,](https://www.sciencedirect.com/science/article/pii/S0009261419308437%22%20%5Cl%20%22%21) Bappi Paul, [Saravanan Rajendran,](https://www.sciencedirect.com/science/article/pii/S0009261419308437#!) [Aziz Habibi-Yangjeh,](https://www.sciencedirect.com/science/article/pii/S0009261419308437%22%20%5Cl%20%22%21) D.Maruthamani, M.Kumaravel

[Chemical Physics Letters](https://www.sciencedirect.com/science/journal/00092614) 738 (2020) 136862.

[DOI: 10.1016/j.cplett.2019.136862](https://doi.org/10.1016/j.cplett.2019.136862)

1. Low cost and quick time absorption of organic dye pollutants under ambient condition using partially exfoliated graphite

J.Mohanraj, D.Durgalakshmi, S.Balakumar, P.Aruna, S.Ganesan, Saravanan Rajendran, Mu.Naushad

Journal of Water Process Engineering [34](https://www.sciencedirect.com/science/journal/22147144/34/supp/C) (2020) 101078

DOI: [10.1016/j.jwpe.2019.101078](https://doi.org/10.1016/j.jwpe.2019.101078).

1. Facile synthesis of paper based graphene electrodes for point of care devices: A double stranded DNA (dsDNA) biosensor

Mohanraj, J., Durgalakshmi, D., Rakkesh, R.A., Balakumar, S., Rajendran, S., Karimi-Maleh, H.

Colloidal and interface science 566 (2020) 463-472.

DOI: [10.1016/j.jcis.2020.01.089](https://doi.org/10.1016/j.jcis.2020.01.089)

1. Facile synthesis of YbVO4, and YVO4 nanostructures through MOF route for photocatalytic applications

S.Vadivel, Bappi Paul, M.Kumaravel, S.Hari ganesh, [Saravanan Rajendran,](https://www.sciencedirect.com/science/article/abs/pii/S1387700319312882#!) M.M.M.G. Prasanga Gayanath Mantilaka, Gcina Mamba, P.Puviarasu

[Inorganic Chemistry Communications](https://www.sciencedirect.com/science/journal/13877003), 115 (2020) 107855

DOI: [10.1016/j.inoche.2020.107855](https://doi.org/10.1016/j.inoche.2020.107855)

1. Photocatalytic degradation of organic dyes using nickel oxide incorporated titania nanocatalyst

Lalitha Gnanasekaran, R. Hemamalini, Saravanan Rajendran, Mu. Naushad, Jiaqian Qin, F. Gracia, Lorena Cornejo

Desalination and Water Treatment 182 (2020) 359-364

DOI: [10.5004/dwt.2020.25168](https://doi.org/10.5004/dwt.2020.25168)

1. An amplified voltammetric sensor based on platinum nanoparticle/polyoxometalate/two-dimensional hexagonal boron nitride nanosheets composite and ionic liquid for determination of N-hydroxysuccinimide in water samples

Hassan Karimi-Maleh, Fatemeh Karimi, Samira Malekmohammadi, Nilofar Zakariae, Roghayeh Esmaeili, Sadegh Rostamnia, Mehmet Lütfi Yola, Necip Atar, Shirin Movagharnezhad, Saravanan Rajendran, Amir Razmjou, Yasin Orooji, Shilpi Agarwal, Vinod Kumar Gupta

[Journal of Molecular Liquids](https://www.sciencedirect.com/science/journal/01677322) [310](https://www.sciencedirect.com/science/journal/01677322/310/supp/C) (2020) 113185

DOI: [10.1016/j.molliq.2020.113185](https://doi.org/10.1016/j.molliq.2020.113185)

1. Photosynthesis of H2 and its storage on the Bandgap Engineered Mesoporous (Ni2+/Ni3+)O @ TiO2 heterostructure

Kumar Raju, Saravanan Rajendran, Tuan K.A. Hoang, D. Durgalakshmi, Jiaqian Qin, D. E. Diaz-Droguett, F. Gracia, M.A. Gracia-Pinilla

Journal of Power Sources 466 (2020) 228305

DOI: [10.1016/j.jpowsour.2020.228305](https://doi.org/10.1016/j.jpowsour.2020.228305)

1. Nanosized Titania-Nickel mixed oxide for visible light photocatalytic activity

Saravanan Rajendran, Devaraj Manoj, J Nimita Jebaranjitham, Baskaran Ganesh Kumar, G Bharath, Fawzi Banat, Jiaqian Qin, S Vadivel, F Gracia

[Journal of Molecular Liquids](https://www.sciencedirect.com/science/journal/01677322) 311 (2020) 113328

DOI: [10.1016/j.molliq.2020.113328](https://doi.org/10.1016/j.molliq.2020.113328)

1. Green polymeric nanomaterials for the photocatalytic degradation of dyes: a review

Shrabana Sarkar, Nidia Torres Ponce, Aparna Banerjee, Rajib Bandopadhyay, Saravanan Rajendran, Eric Lichtfouse

Environmental Chemistry Letters 18 (2020) 1569 -1580

DOI: [10.1007/s10311-020-01021-w](https://doi.org/10.1007/s10311-020-01021-w)

1. Tuning of metal oxides photocatalytic performance using Ag nanoparticles integration

Hassan Karimi-Maleh, Baskaran Ganesh Kumar, Saravanan Rajendran, Jiaqian Qin, S Vadivel, D Durgalakshmi, F Gracia, Matias Soto-Moscoso, Yasin Orooji, Fatemeh Karimi

Journal of Molecular Liquids 314 (2020) 113588

[DOI: 10.1016/j.molliq.2020.113588](https://doi.org/10.1016/j.molliq.2020.113588)

1. Horseradish peroxidase-immobilized graphene oxide-chitosan gold nanocomposites as highly sensitive electrochemical biosensor for detection of hydrogen peroxide

Devaraj, Manoj; Rajendran, Saravanan; J, Nimita Jebaranjitham; Deivasigamani, Ranjithkumar ; Manickam , Sathiyaraj ;  Manokaran , Janakiraman; Elumalai , Sundaravadivel ; Jayadevan, Santhanalakshmi; Cornejo Ponce , Lorena

Journal of The Electrochemical Society 167 (2020) 147517

DOI: 10.1149/1945-7111/abc35e

**2019 (7 scopus)**

1. Fabrication of amine functionalized graphene oxide – AgNPs nanocomposite with improved dispersibility for reduction of 4-nitrophenol

J. Nimita Jebaranjitham, C. Mageshwari , Rajendran Saravanan, Naushad Mu

[Composites Part B: Engineering](https://www.sciencedirect.com/science/journal/13598368) 171 (2019) 302–309

[DOI: 10.1016/j.compositesb.2019.05.018](https://doi.org/10.1016/j.compositesb.2019.05.018)

1. Heterostructures of mesoporous TiO2 and SnO2 nanocatalyst for improved electrochemical oxidation ability of vitamin B6 in pharmaceutical tablets

Devaraj Manoj, Saravanan Rajendran, Jiaqian Qin, Elumalai Sundaravadivel, Mehmet Lütfi Yola, Necip Atar, F. Gracia, Rabah Boukherroub, M.A. Gracia-Pinilla, Vinod Kumar Gupta.

Journal of Colloid and Interface Science 542 (2019) 45–53

[DOI: 10.1016/j.jcis.2019.01.118](https://doi.org/10.1016/j.jcis.2019.01.118)

1. Visible-light Driven Photocatalytic H2 Generation and Mechanism Insights on Bi2O2CO3/G-C3N4 Z-scheme Photocatalyst

[Chengwu Yang](https://pubs.acs.org/author/Yang%2C%2BChengwu), [Zhe Xue](https://pubs.acs.org/author/Xue%2C%2BZhe), [Jiaqian Qin](https://pubs.acs.org/author/Qin%2C%2BJiaqian), [Montree Sawangphruk](https://pubs.acs.org/author/Sawangphruk%2C%2BMontree), [Saravanan Rajendran](https://pubs.acs.org/author/Rajendran%2C%2BSaravanan), [Xinyu Zhang](https://pubs.acs.org/author/Zhang%2C%2BXinyu), and [Riping Liu](https://pubs.acs.org/author/Liu%2C%2BRiping)

[J. Phys. Chem. C 123 (2019) 4795-4804](https://pubs.acs.org/action/showCitFormats?doi=10.1021%2Facs.jpcc.8b10604)

DOI: 10.1021/acs.jpcc.8b10604

1. Green synthesis of silver nanoparticle from Datura inoxia flower extract and its cytotoxic activity

Babu Gajendran, Prabhu Durai, Krishnapriya M. Varier, Wuling Liu, Yanmei Li, Saravanan Rajendran, Radhakrishnan Nagarathnam, Arulvasu Chinnasamy

BioNanoScience 9 (2019)  564–572

DOI: [10.1007/s12668-019-00645-9](https://doi.org/10.1007/s12668-019-00645-9)

1. Nanosized Fe3O4 incorporated on a TiO2 surface for the enhanced photocatalytic degradation of organic pollutants

[Lalitha Gnanasekaran](https://www.sciencedirect.com/science/article/pii/S0167732218368843%22%20%5Cl%20%22%21), R .Hemamalini, Saravanan Rajendran, Jiaqian Qin, Mehmet Lütfi Yola, Necip Atar,F.Gracia

Journal of Molecular Liquids 287 (2019) 110967(1-7)

DOI: [10.1016/j.molliq.2019.110967](https://doi.org/10.1016/j.molliq.2019.110967)

1. SiCx/TiCx Nanostructured Material from Ti3SiC2 for High Rate Performance of Lithium Storage

Chenyang Li Zhe Xue, Jiaqian Qin, Montree Sawangphruk, Saravanan Rajendran, Xinyu Zhang, Riping Liu.

Chemistryselect 4(26) (2019) 7766-7772.

[DOI: 10.1002/slct.201901318](https://doi.org/10.1002/slct.201901318)

1. Enhanced photo-induced catalytic activity of Cu ion doped ZnO - Graphene ternary nanocomposite for degrading organic dyes

Rosalin Beura, Saravanan Rajendran, M. A. Gracia Pinilla, Paramasivam Thangadurai

Journal of Water Process Engineering [32](https://www.sciencedirect.com/science/journal/22147144/32/supp/C) (2019) 100966

[DOI: 10.1016/j.jwpe.2019.100966](https://doi.org/10.1016/j.jwpe.2019.100966)

**2018 (12 scopus)**

1. Heterostructured d‐Ti3C2/TiO2/g‐C3N4 nanocomposites with enhanced visible‐light photocatalytic hydrogen production activity

M Zhang, J Qin, S Rajendran, X Zhang, R Liu

ChemSusChem 11(24) (2018) 4226-4236

DOI: [10.1002/cssc.201802284](https://onlinelibrary.wiley.com/doi/abs/10.1002/cssc.201802284)

1. WS2 and C‐TiO2 Nanorods Acting as Effective Charge Separators on g‐C3N4 to Boost Visible‐Light Activated Hydrogen Production from Seawater

C Yang, J Qin, S Rajendran, X Zhang, R Liu

ChemSusChem 11(23) (2018) 4077-4085

DOI:  [10.1002/cssc.201801819](https://doi.org/10.1002/cssc.201801819)

1. [Influence of mesoporous defect induced mixed-valent NiO (Ni2+/ Ni3+)-TiO2 nanocomposite for non-enzymatic glucose biosensors](https://www.researchgate.net/publication/323392137_Influence_of_mesoporous_defect_induced_mixed-valent_NiO_Ni_2_Ni_3_-TiO_2_nanocomposite_for_non-enzymatic_glucose_biosensors?_iepl%5BviewId%5D=5MFyBu5ukczafnWGAKk7CCsw&_iepl%5BsingleItemViewId%5D=qYeurcsUjfzwnh1NjSg1M9IA&_iepl%5BpositionInFeed%5D=11&_iepl%5BhomeFeedVariantCode%5D=nb_EU&_iepl%5BactivityId%5D=944667181064196-944667181064197&_iepl%5BactivityType%5D=person_add_publication&_iepl%5BactivityTimestamp%5D=1519667407&_iepl%5Bcontexts%5D%5B0%5D=homeFeed&_iepl%5BtargetEntityId%5D=PB%3A323392137&_iepl%5BinteractionType%5D=publicationTitle).

Saravanan Rajendran, D. Manoj, K. Raju, [D.D.Dionysiou,](https://www.sciencedirect.com/science/article/pii/S0925400518304507#!) [Mu.Naushad,](https://www.sciencedirect.com/science/article/pii/S0925400518304507#!) [F.Gracia,](https://www.sciencedirect.com/science/article/pii/S0925400518304507#!) [L. Cornejo](https://www.sciencedirect.com/science/article/pii/S0925400518304507#!), [M.A.Gracia-Pinilla,](https://www.sciencedirect.com/science/article/pii/S0925400518304507#!) [T. Ahamad](https://www.sciencedirect.com/science/article/pii/S0925400518304507#!)

Sensors-and-actuators-b-chemical [264](https://www.sciencedirect.com/science/journal/09254005/264/supp/C) (2018) 27-37.

DOI: [10.1016/j.snb.2018.02.165](https://doi.org/10.1016/j.snb.2018.02.165%C2%A0)

1. Line defect Ce3+ induced Ag/CeO2/ZnO nanostructure for visible-light photocatalytic activity

R. Saravanan, Shilpi Agarwal, Vinod Kumar Gupta, Mohammad Mansoob Khan, F. Gracia, E. Mosquera,

V. Narayanan, A. Stephen.

Journal of Photochemistry and Photobiology A: Chemistry 353 (2018) 499-506

DOI: [10.1016/j.jphotochem.2017.12.011](https://doi.org/10.1016/j.jphotochem.2017.12.011)

1. [Crystallinity and lowering band gap induced visible light photocatalytic activity of TiO2/CS (Chitosan) nanocomposites](https://www.researchgate.net/publication/321273964_Crystallinity_and_lowering_band_gap_induced_visible_light_photocatalytic_activity_of_TiO_2_CS_Chitosan_nanocomposites?_iepl%5BviewId%5D=gBUcebJtG7nyE9mJcnbOQ50N&_iepl%5BprofilePublicationItemVariant%5D=default&_iepl%5Bcontexts%5D%5B0%5D=prfpi&_iepl%5BtargetEntityId%5D=PB%3A321273964&_iepl%5BinteractionType%5D=publicationTitle)

[R. Saravanan](http://www.sciencedirect.com/science/article/pii/S0141813017323450),  [J. Aviles](http://www.sciencedirect.com/science/article/pii/S0141813017323450),  [F. Gracia](http://www.sciencedirect.com/science/article/pii/S0141813017323450) [E. Mosquera](http://www.sciencedirect.com/science/article/pii/S0141813017323450), [Vinod Kumar Gupta](http://www.sciencedirect.com/science/article/pii/S0141813017323450)

[International Journal of Biological Macromolecules](http://www.sciencedirect.com/science/journal/01418130) 109 (2018) 1239-1245

DOI: [10.1016/j.ijbiomac.2017.11.125](https://doi.org/10.1016/j.ijbiomac.2017.11.125)

1. Hydrogen Adsorption Properties Of Ag Decorated TiO2 Nanomaterials

[Saravanan Rajendran](https://www.sciencedirect.com/science/article/pii/S0360319917347195#!), [Tuan K.A.Hoang, Rabah Boukherroub](https://www.sciencedirect.com/science/article/pii/S0360319917347195#!), [D.E.Diaz-Droguett](https://www.sciencedirect.com/science/article/pii/S0360319917347195#!), [F.Gracia,](https://www.sciencedirect.com/science/article/pii/S0360319917347195#!) [M.A.Gracia-Pinilla, A.Akbari-Fakhrabadi, Vinod KumarGupta](https://www.sciencedirect.com/science/article/pii/S0360319917347195#!)

International Journal of Hydrogen Energy 43(5)( 2018) 2861-2868

DOI[: 10.1016/j.ijhydene.2017.12.080](https://doi.org/10.1016/j.ijhydene.2017.12.080)

1. Facile synthesis of graphene-AgVO nanocomposite with excellent supercapacitor performance
Jiaqian Qin, Mengyuan Zhang, Saravanan Rajendran, Xinyu Zhang, Riping Liu

[Materials Chemistry and Physics](https://www.sciencedirect.com/science/journal/02540584), [212](https://www.sciencedirect.com/science/journal/02540584/212/supp/C) (2018) 30-34.

DOI: [10.1016/j.matchemphys.2018.01.040](https://doi.org/10.1016/j.matchemphys.2018.01.040)

1. Adsorptive removal of Pb(II) metal from aqueous medium using biogenically synthesized & magnetically recoverable core-shell structured AM@Cu/Fe3O4 nanocomposite.
Desalination of Water Treatment 111 (2018) 278–285

DOI: 10.5004/dwt.2018.22200

1. Towards green synthesis of monodisperse Cu nanoparticles: An efficient and high sensitive electrochemical nitrite sensor

Devaraj Manoj, R. Saravanan, Jayadevan Santhanalakshmi, Shilpi Agarwal, Vinod Kumar Gupta, Rabah Boukherroub.

Sensors and Actuators B 266 (2018) 873–882

DOI: [10.1016/j.snb.2018.03.141](https://doi.org/10.1016/j.snb.2018.03.141)

1. DNA binding and cleavage studies of copper(II) complex containing N2O2 Schiff base ligand

E. Sundaravadivel, G. R. Reddy, D. Manoj, Saravanan Rajendran, M. Kandaswamy, M. Janakiraman.

Inorganica Chimica Acta 482 (2018) 170–178

DOI: [10.1016/j.ica.2018.06.002](https://doi.org/10.1016/j.ica.2018.06.002)

1. [Mechanothermal synthesis of Ag/TiO2 for photocatalytic methyl orange degradation and hydrogen production](https://www.sciencedirect.com/science/article/pii/S0957582018303902)

R.Saravanan, Devaraj Manoj, Jiaqian Qin, Mu.Naushad, F.Gracia, Adam F.Lee, Mohammad MansoobKhan, M.A.Gracia-Pinilla

Process Safety and Environmental Protection 120 (2018) 339-347

DOI: [10.1016/j.psep.2018.09.015](https://doi.org/10.1016/j.psep.2018.09.015)

1. Core–Shell Nanostructured Fe3O4–Poly(styrene-co-vinylbenzyl chloride) Grafted PPI Dendrimers Stabilized with AuNPs/PdNPs for Efficient Nuclease Activity

[Eagambaram Murugan](https://pubs.acs.org/author/Murugan%2C%2BEagambaram), [Nimita Jebaranjitham J](https://pubs.acs.org/author/J%2C%2BNimita%2BJebaranjitham), [Mathivathanan Ariraman](https://pubs.acs.org/author/Ariraman%2C%2BMathivathanan),  [Saravanan Rajendran](https://pubs.acs.org/author/Rajendran%2C%2BSaravanan), [Janankiraman Kathirvel](https://pubs.acs.org/author/Kathirvel%2C%2BJanankiraman), [C. R. Akshata](https://pubs.acs.org/author/Akshata%2C%2BC%2BR), and [Kalpana Kumar](https://pubs.acs.org/author/Kumar%2C%2BKalpana)

ACS Omega, 3 (10) (2018) 13685–13693

DOI: [10.1021/acsomega.8b01326](https://pubs.acs.org/doi/10.1021/acsomega.8b01326)

1. **(5 Scopus)**
2. Degradation of azo dyes under different wavelengths of UV light with chitosan-SnO2

nanocomposites

V. K. Gupta, R. Saravanan, S. Agarwal, F. Gracia, M. M. Khan, J. Qin, R.V. Mangalaraja

Journal of Molecular Liquids 232 (2017) 423-430.

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1. Sonochemical synthesis of CuO nanostructures and their morphology dependent optical and visible light driven photocatalytic properties

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1. Synthesis and characterization of ZnO nano particles prepared by two different methods for environment application

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Venue: **Mahatma Gandhi University,** Kottayam, Kerala, India, January 7 – 9 (2011) P. 183

1. Synthesis and characterization of Ag/ZnO nanocomposite materials by thermal decomposition method

**R. Saravanan**, B. Aazaad, V. Narayanan, A. Stephen

International Conference and Workshop on New Materials and Devices for Photovoltaic Applications (ICWNMDP-2011)

Venue: Madurai Kamaraj University, Madurai, India, February 10 -12 (2011) P. 48

 16. Synthesis and characterization of Ag/ZnO nanorods for environmental applications

**R. Saravanan**, B. Aazaad, V. Narayanan, A. Stephen

International Conference on Nanomaterials and Nanotechnology (ICNN-2011)
Venue: Coimbatore Institute of Technology jointly with Centre for Research and Advanced Studies of IPN-Mexico, Coimbatore, India

July 6-8 (2011) P.43 **(ORAL presentation)**

17. Synthesis and characterization of ZnO/Mn2O3 nanocomposite materials

**R. Saravanan**, V. Narayanan, A. Stephen

National Conference on Nanoscience and Nanotechnology (NCNN-2011)

Venue: Madras University, Chennai, India

August 25 - 27 (2011) P.106

18. Synthesis and characterization of spherical shaped Nano-titania

N. Karthikeyan, **R. Saravanan,** V. Narayanan, A. Stephen

National Conference on Nanoscience and Nanotechnology (NCNN-2011)

Venue: Madras University, Chennai, India

 August 25 - 27 (2011) P.129

19. Synthesis and characterization of nano-chitosan using different method

S. Govindan, E. A. K. Nivethaa, **R. Saravanan,** V. Narayanan, A. Stephen

National Conference on Nanoscience and Nanotechnology (NCNN-2011),

Venue: Madras University, Chennai, India

August 25 - 27 (2011) P.106

1. Preparation and characterization of Hg doped ZnO Nanorods

**R. Saravanan**, M. Kumaresan, T. Prakash, V. Narayananand A. Stephen

 **“**International Conference on Nanoscience, Engineering and Technology” (ICONSET 2011) Venue: Sathyabama University in association with Indira Gandhi Centre for Atomic Research (IGCAR), Kalpakkam, Chennai, India

 November 28 - 30 (2011) P.296

21. Effect of Copper oxide on conductivity of polyindole based composite polymer electrolytes.

G. Rajasudha, R. **Saravanan**, V. Narayanan, A. Stephen

2nd International Conference on Advanced Nanomaterials and Nanotechnology (ICANN-2011)

Venue: IIT, Guwahati, India

December 8 -10 (2011) P.356

22. Synthesis and characterization of chitosan-Ag nanocomposite

S. Govindan, E. A. K. Nivethaa, **R. Saravanan,** V. Narayanan, A. Stephen

2 nd International Conference on Advanced Nanomaterials and Nanotechnology (ICANN-2011), Venue: IIT, Guwahati, India

December 8 -10 (2011) P.318

23. Photocatalytic degradation of aqueous methylene blue by ZnO/Ag nanocomposite materials undervisible light

**R. Saravanan**, B. Aazaad, V. Narayanan, A. Stephen

International Conference on Advances in Materials and Materials Processing (ICAMMP-2011) Venue: Department of metallurgical and materials engineering, IIT Kharagpur, India

December 9 -11 (2011) P.59 (**ORAL presentation)**

 24. Photocatalytic applications of nano-titania phases
 N. Karthikeyan, **R. Saravanan,** A. Stephen

International Conference on Advances in Materials and Materials processing (ICAMMP-2011) Venue: Department of metallurgical and materials engineering, IIT Kharagpur, India

December 9 -11 (2011) P.188

1. Pyramid shaped nano CdO: synthesis, charcterization and application of photocatlytic activity under UV Light

**R. Saravanan**, N. Karthikeyan, T. Prakash, V. Narayananand A. Stephen

International Conference on Advanced Materials (ICAM-2011)

Venue: Department of Physics, PSG College of Technology, Coimbatore, India

December 12 - 16 (2011) P.173

1. TiO2 and ZnO nanomaterials: A comparison of photocatalytic degradation efficiency of AZO dye.
N. Karthikeyan, **R. Saravanan,** A. Stephen

International Conference on Advanced Materials (ICAM-2011)

Venue: Department of Physics, PSG College of Technology, Coimbatore, India

December 12 - 16 (2011) P.173

1. Photocatalytic degradation of Methylene Blue using ZnO/Ag/CdO under visible light

**R. Saravanan**, K. Dhanapal, V. Narayanan, A. Stephen

International Conference on Frontiers in Materials Science for Energy and Environment

(ICFMS 2012)

Venue: Loyola College, Chennai, India

January 11 -13 (2012) P. 52 (**ORAL presentation)**

1. Photocatalytic degradation of organic dye using ZnO/Ag/CuO under visible light

**R. Saravanan**, V. Narayanan, A. Stephen

International Conference on Nano Science and Technology (ICONSAT-2012)

Venue: Hyderabad, India

January 20 - 23 (2012) P.297

1. Photocatalytic degradation of organic dye using ZnO/CeO2 nanocomposite material under visible light

**R. Saravanan**, N. Karthikeyan, S. Govindan, V. Narayananand A. Stephen

International Conference on Recent trends in Advanced Materials (ICRAM-2012)

Venue: School of Advanced Sciences, VIT University, Vellore, India

February 20 - 22 (2012) P.64 (**ORAL presentation)**

1. Synthesis and characterization of cerium dioxide (CeO2) nanoparticles by chemical precipitation method

**R. Saravanan**, S. Joicy, V. Narayanan, A. Stephen

IUPAC-Sponsored International Symposium On Macro- and Supramolecular Architectures and Materials (MAM-12)

Venue: K.S. R. College of Technology, Tiruchengode, Tamil Nadu, India

November 21 - 25 (2012) (**ORAL presentation)**

31. Synthesis of V2O5/ZnO nanocomposites for photocatalytic degradation application

**R. Saravanan,** S.Joicy, V. Narayanan, A. Stephen,

International Symposium for Research Scholars (ISRS-2012) on Metallurgy, Materials Science & Engineering

Venue: Indian Institute of Technology Madras, Chennai, India

December 13-15 (2012) P. 130

32. Synthesis of rod shaped vanadium pentoxide (V2O5) using thermal decomposition method

 **R. Saravanan**, S. Joicy, V. Narayanan, A. Stephen

Second International Conference on Advances in Materials Processing and Characterisation (AMPC-2013)

 Venue: Anna University, Chennai, India

February 06-08 (2013) P. 1142.

33. Visible light induced degradation of organic dye using nanosized ZnO/Ag/CdO catalyst

**R. Saravanan,** V. Narayanan, A. Stephen

National Conference on Advanced Materials and Applications-NCAMA 2013p 98

Venue: NIT, Trichy, India

April 04-05 (2013) P.98

34. Synthesis and characterization of V2O5/CuO nanocomposites for by thermal decomposition method

S. Joicy, **R. Saravanan**

International Conference on Nanomaterials for Frontier Applications and Indo-Norwegian Workshop on Advanced Materials for Solar cell Applications (ICNFA 2013)

Venue: Coimbatore Institute of Technology, Coimbatore, India

July 10–12 ( 2013) P. 110

35. Degradation of textile effluent using ZnO nanomaterials

K. Suganya, G. Ganesh Raja, **R.Saravanan**

National Symposium on Nanoscience and Nanotechnology (NSNN)

*Venue: Karunya University, Coimbatore, India*

September 30- October 1 (2013) P.35

36.Synthesis, characterization and antibacterial activities of CuO nanoleaves

 G. Rubasri and **R.Saravanan**

11th IAAM National Conference on Recent Developments in Microbiology, Biochemistry & Biotechnology,

 Venue: PSG College of Arts & Science, Coimbatore, India

 November 29-30 (2013) P.44

37. Synthesis and Characterization of Mn doped ZnO nanorods by chemical co-precipitation method for spintronics application

K. Karthick Pandian, K. Suganya, B. Gomathi, A. Stephen, **R.Saravanan**

International Conference on Magnetic Materials and Applications (MagMA-2013)
Venue: IIT, Guwahati, India

December 5 -7 (2013) P.129.

38. Síntesis de nanocompositos de ZnO/CuO usando PVA como red polimérica: Propiedades estructurales y ópticas
Alexis Lavin, Carolina Rojas, Mauricio Morel, **R.Saravanan**, Edgar Mosquera
Primer taller de conversión de energía solar y térmica
Venue: Universidad Catolica del Norte (UCN), Antofagasta, Chile.
October 9-10, (2014)

39. Preparation of zinc oxide (ZnO) quantum dots for solar cell application
E. Sacari, **R.Saravanan**, Alexis Lavin, F. Gracia, E.Mosquera
Primer taller de conversión de energía solar y térmica
Venue: Universidad Catolica del Norte (UCN), Antofagasta, Chile.
October 9-10, (2014)

40. Nanomaterials for clean energy : impact on health and the environment

Mauricio Morel Escobar, Edgar Mosquera Vargas, **Saravanan Rajendran,** Francisco Gracia Caroca.
IV Escuela NANOANDES Venezuela 2014

Venue:Merida, Venezuela
October 20-24, (2014)
(http://redvnano.org/nanoandes2014/images/pdf/Mauricio%20Morel.pdf)

41. Photocatalytic degradation of methylene blue using ZnO/CuO nanocomposites under visible light

A.Lavin, C.Rojas, M.Morel, **R.Saravanan,** F.Gracia, E. Mosquera

Workshop on nanostructured materials and surface engineering

Venue: Pontificia Universidad catolica de chile

November 10-11, 2014

42. Synthesis and characterization of ZnO/CuO nanocomposites applied to photocatalytic degradation of methylene blue.

Alexis Lavin, Carolina Rojas, Mauricio Morel, **R. Saravanan,** Francisco Gracia, Edgar Mosquera

VII Escuela de Nanoestructuras

Venue: Valparaíso, Chile

Janauary 6-9, 2015. P.64

43. Facile synthesis of ZnO nanoparticles

E. Sacari, **R.Saravanan**, Edgar Mosquera

VII Escuela de Nanoestructuras

Venue: Valparaíso, Chile

Janauary 6-9, 2015. P.74

44. Synthesis, characterization and visible light activity of ZnO/Polyaniline(PANI) nanocomposite systems

 **R. Saravanan,** E. Sacari, Fransico Gracia, Edgar Mosquera

 SBTMat Brazil-MRS 2015

 Venue: Rio de Janeiro, Brazil

 September 27-October 01, 2015. C.P2.53

45. TiO2 nanoparticles incorporated into natural diatomite for solar cell applicataions

E. Sacari, **R. Saravanan,** Fransico Gracia, Edgar Mosquera

 SBTMat Brazil-MRS 2015

 Venue: Rio de Janeiro, Brazil

 September 27-October 01, 2015. Q.P3.58

46. Different metals (Mn, Co and Zr) doped nanosized TiO2 semiconductor and their photocatalytic activity under visible light irradiation

G.Lalitha, **R. Saravanan,** Hemamalini. R, Fransico Gracia, Ravichandran.K

 SBTMat Brazil-MRS 2015

 Venue: Rio de Janeiro, Brazil

 September 27-October 01, 2015. X.P. 1.30

47. Synthesis of Mesoporous MCM-41 zeolite from natural diatomite.

E. Sacari, **R. Saravanan,** Fransico Gracia, Edgar Mosquera

CONAMET/SEM 15TH International conference for metallurgy and materials 2015

Venue: University of Concepcion, Concepcion, Chile.

November 17-20, 2015. P.285

48. Structural and optical properties of NiTiO3 perovskite for solar cell applications

 E. J. S. Sacari, **Saravanan R,** Francisco G, E. Mosquera, N. Pugazhenthiran, R. V. Mangalaraja

 XV Brazil-MRS 2015

 Venue: Rio de Janeiro, Brazil

 September 25- September 29, 2016. O.P. 1.28

49. Line defect induced strong absorption of TiO2/Ag nanostructure material for dssc application

 **Saravanan Rajendran**, Francisco Gracia, M. A. Gracia-Pinilla

 *XXVI International Materials Research Congress-2017*

 Venue: Cancun, Mexico

 August 20-25, 2017.

1. The visible light activity of lemon juice mediated CeO2-TiO2 photocatalysts for the organic pollutant degradation

Lalitha Gnanasekaran, **Saravanan Rajendran** and Lorena Cornejo-Ponce

Second International Virtual Conference On Recent Trends In “Clean Technologies For Sustainable Environment” (CTSE- 2021)

Venue: Sri Sivasubramaniya Nadar College of EngineeringChennai-603110, India

May 6-7, 2021. (Abstract No: CTSE-1026; Page No: 27)

1. Synthesis and characterization of surface plasmon resonance imparted large bandgap system for enhanced photocatalytic activity

Shanmugapriya Dharani, Gomathi Ramalingam, Rekha Pachaiappan, **Saravanan Rajendran**
Second International Virtual Conference On Recent Trends In “Clean Technologies For Sustainable Environment” (CTSE- 2021)

Venue: Sri Sivasubramaniya Nadar College of EngineeringChennai-603110, India

May 6-7, 2021. (Abstract No: CTSE-1032; Page No: 53).

1. Effect of Synthesis Temperature on Photocatalytic activity of ZnO Nanostructures

R. Suresh, **Saravanan Rajendran**, Lorena Cornejo-Ponce

Second International Virtual Conference On Recent Trends In “Clean Technologies For Sustainable Environment” (CTSE- 2021)

Venue: Sri Sivasubramaniya Nadar College of EngineeringChennai-603110, India

May 6-7, 2021. (Abstract No: CTSE-1033; Page No: 74).

1. A green surfactant assisted synthesis of self-assembled 3D dendrite-like CeO2 nanostructures

Devaraj Manoj, Ramadoss Manigandan, **Saravanan Rajendran** and Lorena Cornejo Ponce

Second International Virtual Conference On Recent Trends In “Clean Technologies For Sustainable Environment” (CTSE- 2021)

Venue: Sri Sivasubramaniya Nadar College of EngineeringChennai-603110, India

May 6-7, 2021. (Abstract No: CTSE-1027; Page No: 10).

1. Fabrication of Zinc Oxide Nanostructures Mediated by Nyctanthes arbor tristis Leaf and Flower Extracts from Different Zinc Precursors for its Dynamic Role in Bactericidal Application :A Comparative Study

Rekha Pachaiappan, **Saravanan Rajendran**, Lorena Cornejo-Ponce

Second International Virtual Conference On Recent Trends In “Clean Technologies For Sustainable Environment” (CTSE- 2021)

Venue: Sri Sivasubramaniya Nadar College of EngineeringChennai-603110, India

May 6-7, 2021. (Abstract No: CTSE-1028; Page No: 19).

**Participated in Conference/Workshops/Seminars**

1. “Nano Stuructured Materials”
July 4 - 5, 2008

Organized by: Department of Nuclear Physics, University of Madras, Chennai, India

Venue: University of Madras, Gunidy Campus, Chennai-600 025, India

1. “5th DST Advanced School on Nanoscience and Nanotechnology”
January 17- 23, 2011

Organized by: Indian Institute of Science and Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, India

Venue: Indian Institute of Science, Bangalore-560 012, India

1. “International workshop on advanced functional nanomaterials”

February 21 – 24, 2011

Organized by: Centre for Nanoscience and Technology, Crystal Growth Centre & Centre for International Affairs Anna University, Chennai, India

Venue: Anna University, Chennai- 600 025, India

1. Attended “WATER MANAGEMENT”

December 20, 2003

Organized by: Periyar University and rotary club, Salem, Tamilnadu, India

 Venue: Vysya Arts and Science College, Salem, Tamilnadu, India

1. Attended seminar on “Nanomaterials for Energy Technology”

February 26, 2013

Organized by: Science City, Chennai. Department of Higher Education, Government of India and National Center for Nanoscience & Nanotechnology, University of Madras, Chennai

 Venue: Science City, Chennai, India.

1. Attended “International Conference on Active/Smart Materials”

January 7-9, 2009

Organized by: Thiagarajar College of Engineering, Madurai, India

**Other Academic Experience**

* Assisted Project for Bachelor Masters and M. Phil Degree Students
* Served as resource person Summer Training Programme in Physics, 2009, 2010, 2011
* *Served as XRD Data analyzer for three years*
* **Reviewed several International journals**

ACS- Applied Materials & Interfaces, *Environmental Science & Technology,* RSC-Advances, Jounal Hazrodous Materials, Applied Catalysis A General, Applied Surface Science, Journal of Saudi Chemical Society, Journal of Inorganic and Organometallic Polymers and Materials, Journal of Molecular Catalysis A: Chemical, Environmental Science and Pollution Research, Sensor and Acc B: Chemical, Arabian Jouranal of Chemistry , Material science and Engg C, International Journal of Environmental Science and Technology, Thin Solid Film, Journal of Rare Earths, Journal of Alloys and Compounds, Journal of Taiwan Institute of Chemical Engineering, Desalination and Water Treatment, Data in brief, Materials chemistry and Physics, Journal of Industrial & Engineering Chemistry, Superlattices and Microstructures, Journal of Pharmaceutical and Biomedical Analysis, Journal of Molecular liquids, RSC-New Journal of Chemistry, Semiconducting Process, Water research, Nano Structure & Nano object, Nano,Materials Research Bulletin, Journal of Nanostructure in Chemistry, Nature-Scientific report and etc.,

**Research Experience**

* *Synthesis and Characterization of Metal & Metal oxide Nanomaterials by different chemical and physical methods.*
* *Synthesis and Characterization of Nanoporous & Nanocomposite materials by sol-gel*
* *Measurement and Data analysis for XRD, VSM, TGA/DSC, UV-Vis/PL/FT-IR spectrometer.*
* *Data analysis for HR-TEM and HR-XPS.*

**Area of interest**

* *Preparation of Nano metals, Nano semiconductors and Nanoporous materials,*
* *Magnetic and Spintronics Materials*
* *Photocatalytic activity & Water Spliting.*
* *Dye Sensitized Solar cell & Hydrogen Storage*

**Computer Skill / Experience in packages**

* *GATAN digital & Image J for analysis of HR-TEM image*
* *TOPAS, Xpert High Score, Match & XRDA 3.1 for analysis of XRD data.*
* *Casa XPS and Origin for XPS*
* *MS-Office, windows, origin etc.,*

**Extra-Curricular Activities**

* Served as **NSS & NCC** volunteer
* Attended **Yoga** courses
* Won prizes in Intra college Cultural Programme and Competitions

**References**

**Prof. Dionysios (Dion) D. Dionysiou, Ph.D.**

UNESCO Co-Chair Professor of “Water Access and Sustainability”

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705 Engineering Research Center

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<http://pang.univ-lille.fr/partners/nanobiointerfaces-team-nbi>

**Personal Profile**

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 Professor

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 Tamil nadu, India

**Declaration**

I hereby assure that all the above-furnished details are true to the best of my knowledge

Place: Santiago, Chile. **Dr. R. Saravanan**