

## PROFILE

**Name:** Dr.Y.Brightson Arul Jacob

**Designation:** Assistant Professor

**Department:** PG & Research Department of Chemistry

**Date of Joining:** 10-7-2014 (SF)  
05-02-2016(Aided)

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### Educational qualification:

Degree	Subject	College / University & Place	Course Completed
B.Sc	Chemistry(spl)	THE AMERICAN COLLEGE, MADURAI	2004
M.Sc	CHEMISTRY(spl)	THIAGARAJAR COLLEGE, MADURAI	2006
B.Ed	PHYSICAL SCIENCE	CSI COLLEGE OF EDUCATION, MADURAI	2008
M.Phil	CHEMISTRY	THIAGARAJAR COLLEGE, MADURAI	2009
Ph.D	CHEMISTRY	MADURAI KAMARAJ UNIVERSITY, MADURAI	2013

### Specialisation in Teaching

- Physical Chemistry

### Specialisation in Research:

#### M.Phil

- Isolation And Characterization Of Biodiesel From Three Different Species

#### Ph.D

- Synergistic And Development Of New Anticorrosive Inhibitors For Mild Steel

**Research Interests:**

- Nano chemistry
- Medicinal Chemistry
- Corrosion Chemistry

**Work Experience:**

Designation	Institution / Company	Year - From (month/year) To (month/year)
Teacher	Keswick Public School, Madurai	1 <sup>st</sup> June 2009 to 30 <sup>th</sup> April 2010
Lecturer	NMSSVN College (Autonomous), Nagamalai, Madurai	6 <sup>th</sup> December 2010 to 9 <sup>th</sup> July 2014
Lecturer	The American College, (Autonomous), Madurai	10 <sup>th</sup> July 2014 to 31 <sup>st</sup> January 2016
Assistant Professor	The American College, (Autonomous), Madurai	5 <sup>th</sup> February 2016 to till date

**Administrative /Academic Position/s (held / currently holding):**

S.No	Positions held / currently holding	Year - From (month/year) To month/year)
1	UG Chemistry Association :Vice President	June 2017-May 2019
2	UG Chemistry Library: In charge	June 2016-May 2020
3	PG Chemistry Library: In Charge	January 2021-till date
4	Service learning programme Village Ecology: Health on Hygiene : Project Associate	June 2015-till date
5	Department of applied science: Member	June 2016-till date
6	NAAC committee –Criterion 2 : Member	June 2019-till date
7	International Conference (ICFAC 2018): Organising committee member	17 <sup>th</sup> to 19 <sup>th</sup> July 2018

**Research Paper Publications:****Articles Published in national Journals:**

1. Corrosion Behaviour of Mild Steel In The Presence Of TIPA and Zn<sup>2+</sup>,  
Y.Brightson Arul Jacob<sup>1,\*</sup>, R.Sayee Kannan<sup>2</sup>, J.Jeyasundari<sup>1</sup>, IOSR Journal of  
Applied Chemistry 1(5) (2012) 01-06

2. Inhibitive Properties of MB –Zn<sup>2+</sup> System and Its Synergism With SPT, Y.Brightson Arul Jacob<sup>1,\*</sup>, J.Jeyasundari<sup>1</sup>, R.Sayee Kannan<sup>2</sup>, International Journal of Engineering Research & Technology, 1(9) (2012) 1-10.
3. Corrosion Behavior of Carbon Steel In Presence of THAM and Citrate Ions, J.Jeyasundari<sup>1,\*</sup>, Y.Brightson Arul Jacob<sup>1</sup>, S.Rajendran<sup>2</sup>, Journal of Chemical, Biological and Physical Sciences, 3(1) (2012) 58-70.
4. Inhibitive properties of THAM-Zn<sup>2+</sup> system and its synergism with ST, J. Jeyasundari<sup>1,\*</sup>, Y. Brightson Arul Jacob<sup>1</sup>, S. Rajendran<sup>2</sup>, Journal of Chemical and Pharmaceutical Research, 4(10) (2012) 4657-4664.
5. Synergistic Effect of THAM- Molybdate and Zn<sup>2+</sup> on the Inhibition of Corrosion of Mild Steel in Aqueous Environment, J. Jeyasundari\*, Y. Brightson Arul Jacob, Oriental Journal of Chemistry, 28(3) (2012)1463-1469.
6. Synergistic Effect of Triisopropanolamine in Aqueous Solution by St–Zn<sup>2+</sup> System, Y.Brightson Arul Jacob<sup>1,\*</sup>, R.Sayee Kannan<sup>2</sup>, J.Jeyasundari<sup>1</sup>, Research Journal of Chemical Sciences, 3(4)(2013)1-4.
7. Inhibition effect of glycine towards the corrosion of mild steel, Y. Brightson Arul Jacob<sup>a</sup>, J. Jeyasundari<sup>a\*</sup>, R. Sayee Kannan<sup>b</sup> A. Jawahar<sup>a</sup>, J. Indian Chem. Soc., 90 (2013)1-6.
8. Influence of the TSC(Trisodium citrate) on the corrosion inhibition of mild steel in MGD-Zn<sup>2+</sup>, J. Jeyasundari,<sup>[1]\*</sup> Y. Brightson Arul Jacob<sup>[1]</sup>, J.Arockia Selvi<sup>[2]</sup>, Research & Reviews in Electrochemistry, 4(3) (2013) 81-86.
9. Synthesis Of Silver Phyto Nanoparticles And Their Antibacterial Efficacy, P.Shanmugaprabha<sup>1</sup>, J.JeyaSundari<sup>\*,1</sup>, Y.Brightson Arul Jacob<sup>2</sup>, S. Stephen Rajkumar Inbanathan<sup>3</sup>, Roots international journal of multidisciplinary researches, 1(2) (2015) 103-108.
10. Interaction of Anticancer Drug Letrozole with Ds-DNA Analyzed by Electrochemical Methods, Y. Brightson Arul Jacob<sup>1,\*</sup>, J. Jeyasundari<sup>2</sup>, Journal of Pharmaceutical, Chemical and Biological Sciences, 3(2) (2015) 221-229.
11. Bio Inspired Synthesis of Gold Nanoparticles using Psidium guajava Leaf Extract and its Anti Bacterial Activity, P. Shanmuga Praba<sup>1</sup>, J. Jeyasundari<sup>1</sup>,

D. Renuga<sup>2</sup> and Y. Brightson Arul Jacob<sup>3</sup>. Journal of Chemistry and Chemical Sciences, 6(7) (2016) 624-633.

12. Significant capacitance performance and corrosion inhibition of mild steel in presence of TIPA-Zn<sup>2+</sup>-SS (Sodium Sulphite), Y. Brightson Arul Jacob<sup>[a]</sup>, J. Jeyasundari<sup>[b]\*</sup>, S. Rajendran<sup>[c]</sup>. International journal of nano-corrosion science and Engineering, 3(4)(2016), 628 – 650

**Articles published in International Journals:**

13. Electrochemical and surface analysis studies on corrosion inhibition of carbon steel, J. Jeyasundari,<sup>[a]\*</sup> S. Rajendran,<sup>[b]</sup> R. Sayee Kannan,<sup>[c]</sup> Y. Brightson Arul Jacob<sup>[a]</sup>, Eur. Chem. Bull., 2(9) (2013) 585-591.
14. Effect of citrate ions on the electrochemical behaviour of mild steel in TIPA – Zn<sup>2+</sup> system, Y. Brightson Arul Jacob<sup>[a],\*</sup>, R. Sayee Kannan<sup>[b]</sup>, J. Jeyasundari<sup>[c]</sup>, Eur. Chem. Bull. 2(5) (2013) 293-297
15. Synthesis of Silver Nano particles using Piper Betle and its Antibacterial activity, P. Shanmuga Praba<sup>[a]</sup> J. Jeyasundari<sup>[a]\*</sup> and Y. Brightson Arul Jacob<sup>[b]</sup>, Eur. Chem. Bull. 3(10) (2014) 1014-1016.
16. Synthesis Of Plant-Mediated Silver Nanoparticles Using Ficus Microcarpa Leaf Extract And Evaluation Of Their Antibacterial Activities, P. Shanmuga Praba,<sup>[a]</sup> V.S.Vasanth,<sup>[b]</sup> J. Jeyasundari<sup>[a]\*</sup> and Y. Brightson Arul Jacob<sup>[c]</sup>, Eur. Chem. Bull. 4(3) (2015) 116-120.
17. Green synthesis and characterization of silver nanoparticles using Mimuscopselengi flower extract and its synergistic antimicrobial potential, J. Jeyasundari<sup>1</sup>, P. Shanmuga Praba<sup>1</sup>, Y. Brightson Arul Jacob<sup>2\*</sup>, S. Rajendran<sup>3</sup> and K. Kaleeswari<sup>1</sup>. American Chemical Science Journal. 12(3) (2016) 1-11.
18. Green Synthesis and Characterization of Zero Valent Iron Nanoparticles from the Leaf Extract of Psidium Guajava Plant and Their Antibacterial Activity, J. Jeyasundari<sup>1\*</sup>, P. Shanmuga Praba<sup>1</sup>, Y. Brightson Arul Jacob<sup>2</sup>, V. S. Vasanth<sup>3</sup> and V. Shanmugaiah<sup>4</sup>. Chemical Science Review and Letters, 6(22)(2017), 1244-1252
19. Biosynthesis and characterisation of zinc doped iron oxide nanoparticles from pedaliu murex and its new avenues in pharmacological applications, K.Krishnaveni<sup>1</sup>, A.S. Sakthi athithan<sup>1</sup>, J.Jeyasundari<sup>1\*</sup>, Y.Brightson Arul Jacob<sup>2</sup>, D.Renuga<sup>3</sup>, IOSR Journal of Pharmacy and Biological Sciences, 13(6)

(2018),67-74, e-ISSN:2278-3008, p-ISSN:2319-7676, DOI: 10.9790/3008-1306016774

20. Synthesis and characterisation of Co doped Fe<sub>2</sub>O<sub>3</sub> nanoparticles using pedaliu murex leaf and its biomedical application, A.S. Sakthi athithan<sup>1</sup>, D.Renuga<sup>1</sup>, Y.Brightson Arul Jacob<sup>2</sup>, J.Jeyasundari<sup>2\*</sup>, sasikala, Journal of Emerging Technologies and Innovative Research 5(11) (2018), 545-552 (ISSN-2349-5162).
21. D Renuga<sup>1</sup>, J Jeyasundari<sup>2</sup>, AS Shakthi Athithan<sup>2</sup> and Y Brightson Arul Jacob<sup>3</sup>, Synthesis and characterization of copper oxide nanoparticles using Brassica oleracea var. italic extract for its antifungal application, Mater. Res. Express, 1-6, 7, (2020), 045007,
22. A.S.Sakthi Athithan<sup>1</sup>, J.Jeyasundari<sup>2\*</sup>, D.Renuga<sup>3</sup> and Y. Brightson Arul Jacob<sup>4</sup>, Annona muricata fruit mediated biosynthesis, Physicochemical characterization of Magnetite (Fe<sub>3</sub>O<sub>4</sub>) nanoparticles and assessment of its in vitro antidiabetic activity, RASĀYAN Journal of Chemistry, 13(3), 1759-1766(2020).

#### **Conference / Seminar Presentations:**

1. **Presented a talk** in American College Chemistry Webinar Series-III on “Lithium-ion batteries and beyond” held on 5<sup>th</sup> June 2020 at The American College
2. **Participated** in four days Faculty development programme on “Emerging leaders of service learning programme” held on 13<sup>th</sup> to 16<sup>th</sup> February 2020 at Holiday Home , Kodaikanal, organised by The American College and funded by UBCHE
3. **Participated** in two days National workshop on “Recent technological innovations in teaching , learning and evaluation for quality higher education” held on 18 & 19<sup>th</sup> March 2019 at Nesamony Memorial Christian College, Marthandam and funded by UBCHE

4. **Participated** in Five days training programme on “young faculty towards effective teaching” held on 23<sup>rd</sup> March 2018 to 27<sup>th</sup> March 2018 organized by St. Christopher's College of Education , Chennai and funded by UBCHE
5. **Participated** in one day International Conference on” Frontier areas in chemistry (ICFAC 2019)” held on **5<sup>th</sup> July 2019** organized by department of chemistry, The American College, Madurai.
6. **Participated** in three days International Conference on” Frontier areas in chemistry (ICFAC 2018)” held on **17<sup>th</sup> to 19<sup>th</sup> July 2018** organized by PG & Research Department of chemistry, The American College, Madurai.
7. **Participated** in one day “Faculty development programme” on **22<sup>nd</sup> March 2014** organized by internal quality assurance cell, NMSSVN College, Madurai.
8. **Participated** in one day national seminar on” Selected topics in chemistry” held on **4<sup>th</sup> march 2014** organized by department of chemistry, NMSSVN College, Madurai.
9. **Participated** in one day UGC sponsored seminar on” Examination Reforms 2014” held on **22<sup>nd</sup> February 2014** organized by NMSSVN College, Madurai.
10. **Presented a paper** on the title “Inhibitive properties of TIPA-Zn<sup>2+</sup> system and its synergism with ST” in national level seminar on Futuristic trends in chemistry held on **6<sup>th</sup> February 2013** organized by department of chemistry, Sri Meenakshi College, Madurai.
11. **Presented a paper** on the title “Effect of NH<sub>4</sub>VO<sub>3</sub> on the electro chemical behavior of mild steel”National Conference on Recent Advances in Surface

Science (Rass 2013), held on **14&15<sup>th</sup> February 2013** organized by Gandhigram Rural Institute – Deemed University

12. **Participated** in one day national level seminar on “Chemistry and solar technology” on **18<sup>th</sup> March 2013** organized by department of chemistry, NMSSVN College, Madurai.
13. **Participated** in orientation programme held on **16<sup>th</sup> March 2013** organized by NMSSVN College, Madurai
14. **Presented** a seminar on the title “Research problem, objectives, Data collection, Analysis, Tools Employed and salient inferences” held on **27<sup>th</sup> January 2012** at the Department of chemistry, Thiagarajar College, Madurai.
15. **Participated** in one day national seminar on “Intricacies of inorganic chemistry and power storage” held on **6<sup>th</sup> march 2012** organized by department of chemistry, NMSSVN College, Madurai.
16. **Presented** a paper in National level seminar on “Topical drifts in Nanotechnology and Bio-Inorganic chemistry” held on **7<sup>th</sup> September 2012** organized by department of chemistry, NS College of Arts and Science, Theni.
17. **Participated** in national seminar on “Recent trends in chemistry” held on **18<sup>th</sup> September 2012** organized by department of chemistry, Fatima College, Madurai.
18. **Presented a paper** on the title “Influence of trisodium citrate on the inhibition efficiency of TIPA – Zn<sup>2+</sup> ,system in national level seminar on Emerging trends in chemistry held on **4&5<sup>th</sup>October 2012** organized by department of chemistry, CPA college, Bodinayakanur.

19. **Participated** in one day workshop on polychem-held on **28<sup>th</sup> January, 2011** Organized by Department Of polymer technology, Kamaraj college of Engineering, Virudhunagar.
20. **Participated** in one day seminar on “Recent trends in green chemistry” held on **20<sup>th</sup> February 2009** organized by Thiagarajar college of Engineering, Madurai.
21. **Participated** in one day workshop on “Environmental consciousness workshop” held on **30<sup>th</sup> January 2008** organized by CSI College of Education, Madurai.