



## PROFILE

Name		Dr K KOMBAIAH
Department	Chemistry	
Designation	Assistant Professor	
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Google Scholar ID	<a href="https://scholar.google.com/citations?user=W Mz3IfUAAAAJ&amp;hl=en&amp;authuser=1">https://scholar.google.com/citations?user=W Mz3IfUAAAAJ&amp;hl=en&amp;authuser=1</a>	
Teaching Experience	UG: 2 years	PG: 2 year



**// ACADEMIC CHRONICLE**    M.Sc., Ph.D., NET.,

S. No.	QUALIFICATION	INSTITUTION	BOARD/UNIVERSITY	YEAR OF PASSING
1	Ph.D. Chemistry	Loyola College (Autonomous), Chennai-34	University of Madras, Chennai-5	2019
2	CSIR- NET	Joint CSIR-UGC, New Delhi		2018 (Rank-61)
3	M.Sc. Chemistry	Loyola College (Autonomous), Chennai-34	University of Madras, Chennai-5	2014
5	B.Sc. Chemistry	Loyola College (Autonomous), Chennai-34	University of Madras, Chennai-5	2012

## // PROFESSIONAL EXPERIENCE

INSTITUTION	DESIGNATION	DURATION OF SERVICE	DESCRIPTION
Loyola College (Autonomous), Chennai	Assistant Professor (Self-Finance)	10/06/2019 - 27/03/2021	UG and PG teaching
Arul Anandar College (Autonomous), Karumathur	Assistant Professor (Self-Finance)	19/07/2021 - Till date	UG & PG teaching

## // RESEARCH PROFILE

Research Area : Materials Science

Title of Ph.D. thesis : Comparative studies on the catalytic and biomedical applications of magnetic metal ferrite ( $MFe_2O_4$ ,  $M=Zn, Co, Cu, Ni$ ) nanoparticles prepared by conventional and microwave combustion method

Number of Research Publication: 16 International articles

Total Impact factor : 57.948

h-index : 13

Number of citations : 708 (Google scholar)

## // HONOURS AND AWARDS

2019 **Prof. Ganguly Research Award**  
Outstanding contribution in the field of Chemistry  
Loyola College, Chennai, India.

2019 Invited as an **external member to evaluate Inspire Award Science Exhibition**  
2018-2019 organized by the Department of School Education, Govt. of Tamil Nadu, India

2019 **Loyola Research Day Award**  
Highest Impact of Research Papers  
Loyola College, Chennai, India

2017 **Best Oral Presentation (National Conference)**  
Queen Mary's College  
Chennai, Tamilnadu, India

2016 **Best Oral Presentation (International Conference)**  
St. Joseph's College  
Cuddalore, Tamilnadu, India

## // RESEARCH PUBLICATIONS

- 2020 An efficient miniaturized flow cell loaded with magnetic nanoparticles for continuous removal of heavy metal ions, Hayat Abdulla Yusuf, Zainab Mohammed Redha, Sundus Zia, Zohair Sohail, **K Kombaiah**, M Bououdina, J Judith Vijaya, **Desalination and Water Treatment** 204 (2020) 189-203 (Q3)
- 2019 Catalytic studies of NiFe<sub>2</sub>O<sub>4</sub> nanoparticles prepared by conventional and microwave combustion method, **K. Kombaiah**, J. Judith Vijaya, L. John Kennedy, K. Kaviyarasu, **Materials Chemistry and Physics** 221 (2019) 11-28. **Impact Factor: 4.094 (Q2)**
- 2018 Green synthesis of Co<sub>3</sub>O<sub>4</sub> nanorods for highly efficient catalytic, photocatalytic and antibacterial activities, **K. Kombaiah**, J. Judith Vijaya, L. John Kennedy, K. Kaviyarasu, R. Jothi Ramalingam, Hamad A. Al-Lohedan, **Journal of Nanoscience and Nanotechnology** 18 (2018) 1-9. **Impact Factor: 1.354 (Q3)**
- 2018 Conventional and microwave combustion synthesis of optomagnetic CuFe<sub>2</sub>O<sub>4</sub> nanoparticles for hyperthermia studies, **K. Kombaiah**, J. Judith Vijaya, L. John Kennedy, M. Bououdina, Basma Al Najar, **Journal of Physics and chemistry of solids** 115 (2018) 162-171. **Impact Factor: 3.995 (Q2)**
- 2018 Self-heating efficiency of CoFe<sub>2</sub>O<sub>4</sub> nanoparticles: A comparative investigation on the conventional and microwave combustion method, **K. Kombaiah**, J. Judith Vijaya, L. John Kennedy, M. Bououdina, Basma Al Najar, **Journal of Alloys and compounds**, 735 (2018) 1536-1545. **Impact Factor: 5.316 (Q1)**
- 2017 A Green approach: synthesis, characterization and opto-magnetic properties of Mg<sub>x</sub>Mn<sub>1-x</sub>Fe<sub>2</sub>O<sub>4</sub> spinel nanoparticles, **K. Kombaiah**, J. Judith Vijaya, L. John Kennedy, M. Bououdina, K. Kaviyarasu, **Journal of Materials Science: Materials in Electronics**, 28 (2017) 1-9. **Impact Factor: 2.478 (Q2)**
- 2017 Comparative investigation on the structural, morphological, optical, and magnetic properties of CoFe<sub>2</sub>O<sub>4</sub> nanoparticles, **K. Kombaiah**, J. Judith Vijaya, L. John Kennedy, M. Bououdina, R. Jothi Ramalingam, Hamad A. Al-Lohedan, **Ceramics International** 43 (2017) 7682-7689. **Impact Factor: 4.527 (Q1)**
- 2017 Bioreduction potentials of dried root of Zingiber officinale for a simple green synthesis of silver nanoparticles: Antibacterial studies, J. Judith Vijaya, N. Jayaprakash, **K. Kombaiah**, K. Kaviyarasu, L. John Kennedy, **Journal of Photochemistry and Photobiology B: Biology** 167 (2017) 62-68. **Impact Factor: 6.252 (Q1)**
- 2017 Green synthesis of Ag nanoparticles using Tamarind fruit extract for the antibacterial studies, N. Jayaprakash, J. Judith Vijaya, K. Kaviyarasu, **K. Kombaiah**, L. John Kennedy, R. Jothi Ramalingam, Murugan A. Munusamy,

- Hamad A. Al-Lohedan, **Journal of Photochemistry & Photobiology, B: Biology**, 169 (2017) 178-185. **Impact Factor: 6.252 (Q1)**
- 2017 Okra extract-assisted green synthesis of  $\text{CoFe}_2\text{O}_4$  nanoparticles and their optical, magnetic, and antimicrobial properties, **K. Kombaiah**, J. Judith Vijaya, L. John Kennedy, M. Bououdina, R. Jothi Ramalingam, **Materials Chemistry and Physics** 204 (2017) 410-419. **Impact Factor: 4.094 (Q2)**
- 2017 Synthesis, characterization and optical properties of sulfur and fluorine doped  $\text{ZnO}$  nanostructures for visible light utilized catalysis, R. Jothi Ramalingam, A.K. Shukla, **K. Kombaiah**, J. Judith Vijaya, A.M. Tawfeek, **Optik-International Journal for Light and Electron Optics** 148 (2017) 325-331. **Impact Factor: 2.443 (Q2)**
- 2017 Optical, magnetic and structural properties of  $\text{ZnFe}_2\text{O}_4$  nanoparticles synthesized by conventional and microwave assisted combustion method: A comparative investigation, **K. Kombaiah**, J. Judith Vijaya, L. John Kennedy, M. Bououdina, **Optik-International Journal for Light and Electron Optics** 129 (2017) 57-68. **Impact Factor: 2.443 (Q2)**
- 2017 Studies on *Opuntia dillenii* haw mediated multifunctional  $\text{ZnFe}_2\text{O}_4$  nanoparticles: Optical, magnetic and catalytic applications, **K. Kombaiah**, J. Judith Vijaya, L. John Kennedy, M. Bououdina, Hamad A. Al-Lohedan, R. Jothi Ramalingam, **Materials Chemistry and Physics** 194 (2017) 153-164. **Impact Factor: 4.094 (Q2)**
- 2017 Effect of  $\text{Cd}^{2+}$  concentration on  $\text{ZnFe}_2\text{O}_4$  nanoparticles on the structural, optical and magnetic properties, **K. Kombaiah**, J. Judith Vijaya, L. John Kennedy, M. Bououdina, K. Kaviyarasu, R. Jothi Ramalingam, Murugan A. Munusamy, Abdullah A Alarfaj, **Optik-International Journal for Light and Electron Optics** 135 (2017) 190-199. **Impact Factor: 2.443 (Q2)**
- 2016 Effects of Ba doping on structural, morphological, optical, and photocatalytic properties of self-assembled  $\text{ZnO}$  nanospheres, S.K. Jesudoss, J. Judith Vijaya, N. Clament Sagaya Selvam, **K. Kombaiah**, M. Sivachidambaram, T. Adinaveen, L. John Kennedy, **Clean Technologies and Environmental Policy** 18 (2016) 729-741. **Impact Factor: 3.636 (Q2)**
- 2016 Studies on the microwave assisted and conventional combustion synthesis of *Hibiscus rosa-sinensis* plant extract based  $\text{ZnFe}_2\text{O}_4$  nanoparticles and their optical and magnetic properties, **K. Kombaiah**, J. Judith Vijaya, L. John Kennedy, M. Bououdina, **Ceramics International** 42 (2016) 2741-2749. **Impact Factor: 4.527 (Q1)**

## // CONFERENCE PRESENTATION AND PARTICIPATION

- 2017 Green synthesis of  $\text{CuFe}_2\text{O}_4$  nanoparticles and investigation of their optical and magnetic properties, National conference on “**Recent Trends in Materials Chemistry**”, St. Xavier’s College, Palayamkottai, Tirunelveli, India, 23 -24, February, 2017.
- 2017 Synthesis and structural characterization of  $\text{CoFe}_2\text{O}_4$  nanoparticles for their optical and magnetic properties, National conference on **Integrating Bioinformatics and Nanotechnology in Drug Discovery**, Queen Mary’s College, Chennai, India 20 -22, February, 2017.
- 2017 Conventional and microwave preparation of  $\text{CuFe}_2\text{O}_4$  Nanoparticles for efficient opto-magnetic properties, International Conference on **Nanotechnology-The Fruition of Science (ICON-2017)**, Nesamony Memorial Christian College, Marthandam, India, 15-16, February, 2017.
- 2017 Green synthesis, characterization, optical and magnetic properties of  $\text{ZnFe}_2\text{O}_4$  nanoparticles and its comparative investigation”, National Conference on **Nanoscience and Nanobiotechnology-CNGNN-17** University of Madras, Guindy Campus, Chennai, India 07 -08, February, 2017.
- 2016 Environmentally benign synthesis of zinc ferrite nanoparticles: Structural, morphological, optical and magnetic properties and its comparative investigation”, International Conference on **Nanomaterials and molecular Research (ICNMR-2016)**, St. Joseph’s College of Arts & Science, Cuddalore, India, 08 -09, December, 2016.

## // WORKSHOP PARTICIPATION

- 2020 Attended workshop on “**Recent Trends in Electrochemistry for Societal Applications**” organized by the Department of Chemistry, Loyola College, Chennai, Tamilnadu, India, 31<sup>st</sup> January 2020.
- 2017 Attended “UGC XII Plan Short term course on ‘**State of the art Analytical Equipment**’” organized by Crystal Growth Centre (UGC-National Facility) Anna University, Chennai, on 09-10 January 2017.
- 2017 Attended workshop on “**Dengue Awareness**” organized by Loyola Community Radio & Office of the Dean of Research in collaboration with Govt. of Tamil Nadu on 01, December, 2017.
- 2017 Attended National level advanced workshop on “**Effective Strategies in Research Proposal Writing and Linking Funding Agencies**” organized by Loyola Institute of Frontier Energy (LIFE) and CAAS Research Foundation, Chennai, 23-24, October, 2017.

- 2016 Attended National workshop on “**Innovations in Water Resources Management in Educational Institutions**” organized by Loyola Institute of Frontier Energy (LIFE), Loyola College (Autonomous), Chennai, on 24-25, November, 2016.
- 2016 Attended workshop on “**Principles and Applications of Nanoscience and Nanotechnology**” organized by Science City, Chennai, Department of Higher Education, Government of Tamilnadu & National Centre for Nanoscience and Nanotechnology, University of Madras, Chennai, 07-09, September, 2016.
- 2013 Completed “**Summer Training Programme**” held at Central Leather Research Institute (CLRI-CSIR), Chennai during 2013.
- 2012 Attended workshop on “**Hands-on Training in Biotechnology**” organized by Department of Chemistry, Loyola College, Chennai on 17th March, 2012.