Curriculum Vitae

Dr. Sonaimuthu Mohandoss

Research Professor

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I. Career Objective

I would like to make efforts for my rich exposure through diverse assignments and working with people of high calibre. I would constantly look out for challenges, which would help me to achieve my personal and professional goals.

II. Research interest

- **2 Dimensional materials with biomolecules detection** (Nanosheets-Nanoclusters; Carbohydrates, Proteins, Amino acids)
- **Synthesis of Cyclodextrins and its derivatives using inclusion complexes** (Polycyclic aromatic hydrocarbons, Polymers, Biocatalyst, Amino acids, Polysaccharides & drugs)
- **Chemosensors applications** (cations, anions and amino acids using drugs and synthesized materials with Cyclodextrins inclusion complexes)
- **Computational applications** (Semi-empirical, Energy optimization, Molecular docking; Protein-Protein, Ligand-Ligand and Protein-Ligand interactions).

III. Academic Qualifications

- **Principal Investigator** Sep-2021-Till date (Ongoing). School of Chemical Engineering, Yeungnam University, Gyeongsan, South Korea.
- **International Research Professor (Assistant Professor)** 2020-Till date (Ongoing). School of Chemical Engineering, Yeungnam University, Gyeongsan, South Korea.
- **Post Doctoral Fellow (PDF).** 2018-2020. **Drug analysis**. School of Chemical Engineering, Yeungnam University, Gyeongsan, South Korea.
- **Post Doctoral Fellow (PDF).** 2017-2018. **A Novel Fluorescent Nanomaterial Synthesized and Biomarkers detection**. National Sun Yat-Sen University, Kaohsiung, Taiwan.
- **Doctor of Philosophy (Ph.D) in Chemistry.** 2010-2016. Title: **"*Study on host-guest inclusion complexes and their colorimetric and fluorescent chemosensors applications*"** Alagappa University, Karaikudi, Tamilnadu, India.
- **Bachelor of Education (B.Ed) in Physical Science.** 2008-2009. Vivekananda College of Education, Affiliated to Tamilnadu Teacher Education University, Tamilnadu, India.
- **Master of Science (M.S) in Industrial Chemistry.** 2006-2008. Title: **"Synthesis and Characterization of Phenanthridine alkaloids"** A.V.V.M. Sri Puspam college, Poondi, Thanjavur. Affiliated to Bharathidasan University, Trichy, Tamilnadu , India.
- **Bachelor of Science (B.S) in Chemistry.** 2002-2005. Raja Duriasingam Govt. Arts College, Sivagangai, Affiliated to Madurai Kamraj University, Madurai, Tamilnadu-India.

IV. Awards & affiliations

Positions	Year	Institutions	Funding resources
Principal Investigator	2021-2024	Yeungnam University, South Korea.	National Research Foundation (NRF) of Korea, South Korea.
Post Doctoral Fellow (PDF)	2018-2020	Yeungnam University, South Korea.	National Research Foundation (NRF) of Korea, South Korea.
Post Doctoral Fellow (PDF)	2017-2018	National Sun Yat-Sen University, Taiwan.	Ministry of Science and Technology (MOST), Taiwan.
Senior Research Fellow (SRF)	2014-2015	Alagappa University, Tamilnadu, India.	Basic Scientific Research Fellow, University Grants Commissions (UGC), India.
Junior Research Fellow (JRF)	2011-2013	Alagappa University, Tamilnadu, India.	Basic Scientific Research Fellow, UGC, India.

V. Awards & Achievements

Excellence Poster Award - Awarded by KCS-2022 (ICC Jeju & South Korea).

VI. Project ongoing (June 2021 onwards)

Title of the project	Principal Investigator	Funding Agency	Period	Total Grant
Study of antiviral drugs used to treat COVID-19	**Dr. Sonaimuthu Mohandoss**	KRF-NRF	June 2021-Feb 2024	(184 million KRW)

VII. List of Publications

1. **S. Mohandoss*** and Y.R. Lee, Fabrication and Characterization of Ag Nanoparticle-embedded κ-Carrageenan-Sodium Alginate Nanocomposite Hydrogels with Potential Antibacterial and Cytotoxic Activities, ***Journal of Biomaterials Science, Polymer Edition, (2022) Accepted. (I.F = 3.682)***
2. R. Sukanya, **S. Mohandoss**, and Y.R. Lee, Synthesis of active-site rich molybdenum-doped manganese tungstate nanocubes for effective electrochemical sensing of the antiviral drug (COVID-19) nitazoxanide, ***Chemosphere, (2022) Accepted. (I.F = 8.943)***
3. R. Rajamohan, **S. Mohandoss**, S. Ashokkumar, F. Madi, N. Leila, K. Murugavel, Y.R. Lee, A novel and water-soluble material for coronavirus inactivation from oseltamivir in the cavity of methyl and sulfated-β-cyclodextrins through inclusion complexation, ***Journal of Pharmaceutical and Biomedical Analysis, 221 (2022) 115057. (I.F = 3.571)***
4. R. Rajamohan, **S. Mohandoss**, S. Ashokkumar, E.H. Choi, F. Madi, N. Leila, Y.R. Lee, Water-soluble inclusion complexes for a novel anti-viral agent with low toxicity; Oseltamivir with the β-cyclodextrins, ***Journal of Molecular Liquids, 366 (2022) 120297. (I.F = 6.633)***
5. K. Velsankar, G. Parvathy, **S. Mohandoss**, G. Ravi, S. Sudhahar, Echinochloa frumentacea grains extract mediated synthesis and characterization of iron oxide nanoparticles: A greener nano drug for potential biomedical applications, ***Journal of Drug Delivery Science and Technology, 76 (2022) 103799. (I.F = 5.062)***
6. **S. Mohandoss***, R. Sukanya, S. Ganesan, F.H. Alkallas, A.B.G. Trabelsi, F.V. Kusmartsev, K. Sakthi Velu, T. Stalin, H-Mu Lo, Y.R. Lee, SARS-CoV-2 main protease (3CLpro) interaction with acyclovir antiviral drug/methyl-b-cyclodextrin complex: Physiochemical characterization and molecular docking, ***Journal of Molecular Liquids, 366 (2022) 120292. (I.F = 6.633)***
7. R. Anjali, S. Palanisamy, M. Vinosha, A. Muthamil Selvi, G. Sathiyaraj, T.Marudhupandi, **S. Mohandoss**, N.M. Prabhu, S. You, Fabrication of silver nanoparticles from marine macro algae Caulerpa sertularioides: Characterization,

antioxidant and antimicrobial activity, ***Process Biochemistry*****, 121** ***(2022) 601-618***. ***(I.F = 4.885)***

8. K. Velsankar, G. Parvathy, **S. Mohandoss**, and S. Sudhahar, Green synthesis of silver oxide nanoparticles using Panicum miliaceum grains extract for biological applications, ***Advanced Powder Technology*****, 33** ***(2022) 103645***. ***(I.F = 4.969)***
9. K. Velsankar, G. Parvathy, **S. Mohandoss**, and S. Sudhahar, Effect of green synthesized ZnO nanoparticles using Paspalum scrobiculatum grains extract in biological applications, ***Microscopy Research and Technique*****, 85** ***(2022) 3069-3094. (I.F = 2.893)***
10. **S. Mohandoss*****,** S. Palanisamy, S. You, and YR. Lee, Synthesis of cyclodextrin functionalized photoluminescent metal nanoclusters for chemoselective Fe3+ ion detection in aqueous medium and its applications of paper sensors and cell imaging, ***Journal of Molecular Liquids, 356 (2022) 118999. (I.F = 6.633)***
11. E.S. Yun, M.S. Akhtar, **S. Mohandoss**, and YR. Lee, Microwave-assisted annulation for the construction of pyridofused heterocycles and their application as photoluminescent chemosensors, ***Organic & Biomolecular Chemistry, 20 (2022) 3397–3407. (I.F = 3.890)***
12. K. Velsankar, G. Parvathy, **S. Mohandoss**, R. Mohan Kumar and S. Sudhahar, Green synthesis and characterization of CuO nanoparticles using Panicum sumatrense grains extract for biological applications, ***Applied Nanoscience, 12 (2022) 1993–2021. (I.F = 3.869)***
13. R.S. Thombal, M. Aslam, **S. Mohandoss**, and YR. Lee, Rhodium-catalyzed cascade C−H activation/annulation/1,6-acyl migration: Direct construction of free N−H indoles under mild conditions, ***New Journal of Chemistry, 46 (2022) 6126–6133. (I.F = 3.925)***
14. **S. Mohandoss***, R. Pandimurugan, Y.R. Lee, S. Palanisamy and M. Senthilkumar, In situ synthesis and characterization of colloidal AuNPs capped nano-chitosan containing poly(2,5-dimethoxyaniline) nanocomposites for biomedical applications, ***Journal of Biomaterials Science, Polymer Edition,*** **33** ***(2022) 1083–1101. (I.F = 3.682)***

15. **S. Mohandoss,** S. Palanisamy, S. You, M. Vinosha, P. Rajasekar, K. Sakthi Velu, YR. Lee, N.M. Prabhu, Nanofibers from Hydroxypropyl β-cyclodextrin/Pantothenic acid supramolecular complexes: Physicochemical characterization and potential biomedical applications, ***Journal of Industrial Textiles,*** **51** ***(2022) 6276S - 6297S. (I.F = 2.926)***

16. S. Devkota, **S. Mohandoss**, and Y.R. Lee, Indium(III)-catalyzed efficient synthesis of 3-arylhydrazonoindolin-2-ones and their fluorescent metal sensing studies, ***New Journal of Chemistry, 46 (2022) 3640–3644. (I.F = 3.925)***

17. K. Velsankar, A. Venkatesan, P. Muthumari, S. Suganya, **S. Mohandoss**, and S. Sudhahar, Green inspired synthesis of ZnO nanoparticles and its characterizations with biofilm, antioxidant, anti-inflammatory, and anti-diabetic activities, ***Journal of Molecular Structure, 1255 (2022) 132420. (I.F = 3.841)***

18. **S. Mohandoss,** H.D. Khanal, S. Palanisamy, S. You, JJ. Shim, YR. Lee, Multiple heteroatom-doped photoluminescent carbon dots for ratiometric detection of Hg^{2+} ions in cell imaging and environmental applications, ***Analytical Methods 14 (2022) 635–642. (I.F = 3.532)***

19. **S. Mohandoss,** S. Palanisamy, S. You, JJ. Shim, YR. Lee, Supramolecular nanogels based on gelatin–cyclodextrin-stabilized silver nanocomposites with antibacterial and anticancer properties, ***Journal of Biomaterials Science, Polymer Edition 33(6) (2022) 689–704. (I.F = 3.682)***

20. **S. Mohandoss,** S. Palanisamy, S. You, JJ. Shim, YR. Lee, Rapid detection of silver ions based on luminescent carbon nanodots for multicolor patterning, smartphone sensors, and bioimaging applications, ***Analytical Methods 13 (2021) 5719–5726. (I.F = 3.532)***

21. K. Velsankar, S. Suganya, P. Muthumari, **S. Mohandoss**, and S. Sudhahar, Ecofriendly green synthesis, characterization and biomedical applications of CuO nanoparticles synthesized using leaf extract of Capsicum frutescens, ***Journal of Environmental Chemical Engineering, 9 (2021) 106299. (I.F = 7.968)***

22. M. Senthilkumar, R. Pandimurugan, S. Palanisamy and **S. Mohandoss***, Facile synthesis of metal nanoparticle-loaded polymer nanocomposite with highly efficient an optically enhanced biocidal and anticancer agents, ***Journal of Biomaterials Science, Polymer Edition 32(17) (2021) 2210–2226. (I.F = 3.682)***

23. M. Aslam, **S. Mohandoss**, and Y.R. Lee, Chemoselective Installation of Diverse Succinimides on Fused Benzimidazoles via Rhodium-Catalyzed C–H Activation/Annulation: Chemosensor for Heavy Metals, ***Organic Letter 23(16) (2021) 6206–6211. (I.F = 6.072)***

24. K. Velsankar, G. Parvathy, **S. Mohandoss**, M. Krishna Kumar and S. Sudhahar, Celosia argentea leaf extract-mediated green synthesized iron oxide nanoparticles for bio-applications, ***Journal of Nanostructure in Chemistry,*** **(2021) 1-16.** ***(I.F = 8.000)***

25. S. Devkota, S. Kim, S.Y. Yoo, **S. Mohandoss**, M.H. Baik and YR. Lee, Ruthenium(II)-catalyzed regioselective direct C4– and C5–diamidation of indoles and mechanistic studies, ***Chemical Science, 12 (2021) 11427–11437. (I.F = 9.969)***

26. Sana Jamshaid, **S. Mohandoss**, and YR. Lee, Indium(III)-catalyzed solvent-free multicomponent [2+2+1+1]-annulation to polycyclic functionalized fused pyridines as potential optical chemosensors, ***Green Chemistry, 23 (2021) 5113-5119. (I.F = 11.034)***

27. **S. Mohandoss**, S. Palanisamy, V.Vishnu Priya, S. Krishna Mohan, JJ. Shim, K. Yelithao, S. You, YR. Lee, Excitation-dependent multiple luminescence emission of nitrogen and sulfur co-doped carbon dots for cysteine sensing, bioimaging, and photoluminescent ink applications, ***Microchemical Journal, 167 (2021) 106280. (I.F = 5.304)***

28. **S. Mohandoss,** S. Palanisamy, S. You, JJ. Shim, YR. Lee, Ultrasonication-assisted host-guest inclusion complexes of β-cyclodextrins and 5-hydroxytryptophan: Enhancement of water solubility, thermal stability, and in vitro

anticancer activity, ***Journal of Molecular Liquids, 336 (2021) 116172. (I.F = 6.633)***

29. RJI. Tamargo, PYM. Rubio, **S. Mohandoss**, JJ Shim, YR. Lee, Cyrene™ as a Neoteric Bio-based Solvent for Catalyst-free Microwave-Assisted Construction of Diverse Bipyridine Analogues for Heavy-Metal Sensing, ***ChemSusChem 2021, 14, 1– 9. (I.F = 9.140)***

30. G. Sathiyaraj, M. Vinosha, D. Sangeetha, M. Manikandakrishnan, S. Palanisamy, **S. Mohandoss**, R. Manikandan, S. You, NM. Prabhu, Bio-directed synthesis of Pt-nanoparticles from aqueous extract of red algae Halymenia dilatata and their biomedical applications, ***Colloids and Surfaces A: Physicochemical and Engineering Aspects 618 (2021) 126434. (I.F = 5.518)***

31. K. Sakthi Velu, M. Alam, N. Ahmad, S. Esakkimuthu, G. Vignesh Kumar, **S. Mohandoss,** J. Anandha Raj, K. Selvam, Golap Kalita, T. Stalin, Photo-anode surface modification using novel graphene oxide integrated with methylammonium lead iodide in organic-inorganic perovskite solar cells, ***Journal of Physics and Chemistry of Solids 154 (2021) 110036. (I.F = 4.383)***

32. M. Aslam, **S. Mohandoss**, Palanisamy Subramanian, SangGuan You, Won-Guen Yang, Sung Hong Kim, and YR. Lee, Indium-Catalyzed Aromative Spiro Coupling of Quinones with Oxindoles for Highly Functionalized Xanthenes as Efficient Fluorophores, ***Organic Letter 23(4) (2021) 1383–1387. (I.F = 6.072)***

33. S. Mohandoss, T.N. Jebakumar Immanuel Edison, R. Atchudan, S. Palanisamy, NM. Prabhu, AA. Napoleon, S. You, YR. Lee, Ultrasonic-assisted efficient synthesis of inclusion complexes of salsalate drug and β-cyclodextrin derivatives for potent biomedical applications, ***Journal of Molecular Liquids 319 (2020) 114358. (I.F = 6.633)***

34. S. Mohandoss, Y. Nerthigan, N. Swaminathan, N. Sharma, HF. Wu, Photoluminescent hydrophilic cyclodextrin-stabilized cysteine-protected copper nanoclusters for detecting lysozyme, ***Analytical and Bioanalytical Chemistry 412, 7141–7154 (2020). (I.F = 4.478)***

35. M.R. Shrestha, H.D. Khanal, PYM. Rubio, **S. Mohandoss,** and YR. Lee, Base-Mediated Denitrogenative Sulfonylation/Benzannulation of Conjugated N-Sulfonylhydrazones with 3-Formylchromones for the Construction of Polyfunctionalized Biaryl Sulfones, ***Organic Letter 22(19) (2020) 7531–7536. (I.F = 6.072)***

36. S. Jayaraman, V. Veeraraghavan, RN. Sreekandan, S. Krishna Mohan, SSD. Suga, D. Kamaraj, **S. Mohandoss**, P. Rajagopal, Molecular docking analysis of compounds from Justica adhatoda L with glycogen synthase kinase-3 β, ***Bioinformation 16(11), 893-899 (2020).***

37. S. Jayaraman, V. Veeraraghavan, RN. Sreekandan, S. Krishna Mohan, SSD. Suga, D. Kamaraj, **S. Mohandoss**, S. Koora, Molecular docking analysis of the BRCA1 protein with compounds from Justica adhatoda L, ***Bioinformation 16(11), 888-892 (2020).***

38. AM. Selvi, S. Palanisamy, S. Jeyanthi, M. Vinosha, **S. Mohandoss,** M. Tabarsa, S. You, E. Kannapiran, NM. Prabhu, Synthesis of Tragia involucrata mediated platinum nanoparticles for comprehensive therapeutic applications: Antioxidant, antibacterial and mitochondria-associated apoptosis in HeLa cells, ***Process Biochemistry 98 (2020) 21–33. (I.F = 4.885)***

39. K. Velsankar, V. Vinothini, S. Sudhahar, M. Krishna Kumar and **S. Mohandoss,** Green Synthesis of CuO nanoparticles via Plectranthus amboinicus leaves extract with its characterization on structural, morphological, and biological properties, ***Applied Nanoscience 10 (2020) 3953–3971. (I.F = 3.869)***

40. **S. Mohandoss**, R. Atchudan, T.N. Jebakumar Immanuel Edison, K. Mishra, RJI. Tamargo, S. Palanisamy, K. Yelithao, S. You**,** AA Napoleon, YR. Lee, Enhancement of solubility, antibiofilm, and antioxidant activity of uridine by inclusion in β-cyclodextrin derivatives, ***Journal of Molecular Liquids 306 (2020) 112849. (I.F = 6.633)***

41. M. Alagumuthu, V. Srivastava, M. Shah, S. Arumugam, **S. Mohandoss** and AA. Napoleon, Pro- and Anti-Inflammatory Cytokine Expression Levels in

Macrophages; An Approach to Develop Indazolpyridin-Methanones as a Novel Inflammation Medication, ***Anti-Inflammatory & Anti-Allergy Agents in Medicinal Chemistry, 19 (2020) 1-11.***

42. **S. Mohandoss**, R. Atchudan, T.N. Jebakumar Immanuel Edison, K. Mishra, RJI. Tamargo, S. Palanisamy, K. Yelithao, S. You**,** YR. Lee, Rapid response and highly selective sensing of adenosine based on novel photoluminescent vanadium nanoclusters anchored on MoS_2 nanosheets, ***Sensors and Actuators B: Chemical 306 (2020) 127581. (I.F = 9.221)***

43. TK. Mandal, N. Parvin, K. Mishra, **S. Mohandoss** and YR Lee, Sensitive and selective fluorometric determination of DNA by using layered hexagonal nanosheets of a covalent organic framework prepared from p-phenylenediamine and benzene-1,3,5-tricarboxaldehyde, ***Microchimica Acta 186 (2019) 833–840. (I.F = 6.408)***

44. M. Manikandakrishnan, S. Palanisamy, M. Vinosha, B. Kalanjiaraja, **S. Mohandoss**, R. Manikandan, M. Tabarsa, S. You, NM. Prabhu, Facile green route synthesis of gold nanoparticles using Caulerpa racemose for biomedical applications, ***Journal of Drug Delivery Science and Technology 54 (2019) 101345. (I.F = 5.062)***

45. **S. Mohandoss,** R. Atchudan, T.N. Jebakumar Immanuel Edison, TK. Mandal, S. Palanisamy, S. You, AA Napoleon, JJ Shim, YR. Lee, Enhanced solubility of guanosine by inclusion complexes with cyclodextrin derivatives: Preparation, characterization, and evaluation, ***Carbohydrate Polymers 224 (2019) 115166. (I.F = 10.723)***

46. K. Sakthi Velu, J. Anandha Raj, P. Sathappan, B. Suganya Bharathi, **S. Mohandoss,** S. Selvam, P. Manisankar, T. Stalin, Poly (ethylene glycol) stabilized synthesis of inorganic cesium lead iodide polycrystalline light-absorber for perovskite solar cell, ***Materials Letters 240 (2019) 132–135. (I.F = 3.574)***

47. **S. Mohandoss,** V.E. Ihuomah, T.C. Ihuoma, Electrochemical detection of picric acid using glassy carbon electrode modified reduced graphene oxide by single-

drop microextraction method, ***International Journal of Advanced Research, 6(9), 1025-1032.***

48. **S. Mohandoss,** B. Suganya Bharathi, K. Sakthi Velu, V. Giri Babu and T. Stalin, Spectral and proton transfer behavior of 1,4-dihydroxylanthraquinone in aqueous and confined media; molecular modelling strategy, ***Journal of Molecular Liquids 259 (2018) 186–198. (I.F = 6.633)***

49. **S. Mohandoss** and T. Stalin, A new fluorescent PET sensor probe for Co^{2+} ions detection; computational, logic device and living cell imaging applications, ***RSC Advances, 7 (2017) 16581–16593. (I.F = 4.036)***

50. **S. Mohandoss** and T. Stalin, Photochemical and computational studies of inclusion complexes between β-cyclodextrin and 1,2-Dihydroxyanthraquinone. ***Photochemical & Photobiological Sciences, 16 (2017) 476–488. (I.F = 4.328)***

51. **S. Mohandoss,** J. Sivakamavalli, B. Vaseeharan and T. Stalin, Host-guest molecular recognition based fluorescence On-Off-On chemosensor for nanomolar level detection of Cu^{2+} and $Cr_2O_7^{2-}$ ions: application in XNOR logic gate and human lung cancer living cell imaging. ***Sensors and actuators B. Chemical, 234 (2016) 300–315. (I.F = 9.221)***

52. **S. Mohandoss,** J. Sivakamavalli, B. Vaseeharan and T. Stalin, Fluorometric sensing of Pb^{2+} and CrO_4^{2-} ions through host–guest inclusion for human lung cancer live cell imaging, ***RSC Advances, 5 (2015) 101802–101818. (I.F = 4.036)***

53. **S. Mohandoss,** M.Maniyazagan and T. Stalin, A highly selective dual mode detection of Fe^{3+} ion sensing based on 1,5-dihydroxyanthraquinone in the presence of β-cyclodextrin. ***Materials Science and Engineering C, 48 (2015) 94–102. (I.F = 8.321)***

54. M. Maniyazagan**, S. Mohandoss,** and T. Stalin, N-phenyl-1-naphthylamine/β-cyclodextrin inclusion complex as a new fluorescent probe for rapid and visual detection of Pd^{2+}. ***Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy 133 (2014) 73-79. (I.F = 4.831)***

55. **S. Mohandoss** and T. Stalin, Study on inclusion complex behaviours of L-Tyrosine and β-Cyclodextrin by Cyclic Voltammetric technique using Glassy carbon electrode. ***International Journal of Advanced Research, 1 (2013) 381-396.***

VIII. List of Publications in Books/Conferences

1. **S. Mohandoss** and T. Stalin, **Inclusion complex of 1,8-Dihydroxyanthraquinone with β-cyclodextrin: Spectral and molecular modeling studies.** "Frontier Areas in Chemical Technologies" (FACTs-2016) held on March 21-23, 2016 at Department of Industrial Chemistry, Alagappa University, Karaikudi. **ISBN: 978-81-928690-7-0.**
2. **S. Mohandoss** and T. Stalin, **Supramolecular inclusion complex interaction studies between L-histidine and β-cyclodextrin by Electrochemical and Spectrophotometric techniques.** "Advanced Materials" (NCAM-2013) held on January 23 – 25, 2013 at School of Basic Engineering and Sciences, PSN College of Engineering and Technology, Thirunelveli. **ISBN: 978-93-82062-86-8.**
3. **S. Mohandoss** and T. Stalin, **Intramolecular charge transfer associated with hydrogen bonding effects on L-Tyrosine;Photophysical Spectral studies,** "Advanced Materials and Applications" (ICAMA-2011) held on March 4-5, 2011 at Department of Physics & Department of Chemistry, Kalasalingam University, Srivilliputur. **ISBN: 978-81-921249-0-2.**

IX. List of Publications in Conferences

1. **S. Mohandoss** and T. Stalin, **Photochemical studies of inclusion complexes between β-cyclodextrin and 1,4-Dihydroxyanthraquinone,** "Current trends in nanomaterial for various applications" (NSNVA-2017) held on 27th January 2017 at Department of Chemistry, Ananda college, Alagappa University, Karaikudi.
2. **S. Mohandoss** and T. Stalin, **Theoretical investigations of β-cyclodextrin and Quinizarin inclusion complex by molecular docking and semi empirical approach.** "National seminar on Recent Trends in Organic Synthesis and

Chemical Biology" (RTSB 2015) held on 9–10 October 2015 at Department of Chemistry, Annamalai University.

3. **S. Mohandoss** and T. Stalin, **Spectral Investigation of Host–Guest inclusion complexes between β-cyclodextrin and 1-Aminoanthraquinone,** National Symposium on Radiation and Photochemistry (NSRP), held on March 9-11, 2015 at Department of Chemistry, IIT Kanpur, Kanpur.
4. **S. Mohandoss,** G.Vanitha, A.Subbulakshmi and T. Stalin, **Electrocatalytic voltammetric determination of Chrysazin employing β-cyclodextrin/multiwalled carbon nanotube in the presence of ascorbic acid and uric acid.** "Frontier Areas in Chemical Technologies" (FACTs 2014) held on 21–22 February 2014 at Department of Industrial Chemistry, Alagappa University, Karaikudi.
5. **S. Mohandoss,** G. Vanitha, A. Subbulakshmi and T. Stalin, **Electroanalytical method for the determination of Chrysazin using the β-cyclodextrin and polyvinylpyrrolidone modified electrode in the presence of ascorbic acid and uric acid.** "Frontier Areas in Chemical Technologies" (FACTs 2014) held on 21–22 February 2014 at Department of Industrial Chemistry, Alagappa University, Karaikudi.
6. **S. Mohandoss** and T. Stalin, **Supramolecular inclusion complexes between 1, 2-DHAQ:β-CD and its analytical application as Colorimetric Chemosensor for the selective sensing of Zr^{2+}, K^{+} and Pb^{2+},** "National Conference on Chemosensors" (NCC-2013) held on September 19-20th 2013 at Department of Chemistry, National Institute of Technology, Tiruchirappalli.
7. **S. Mohandoss** and T. Stalin, **Investigation of host–guest inclusion complexation between β-cyclodextrin and Alizarin by spectroscopic and electrochemical methods.** "Recent Advances in Textile and Electrochemical Sciences" (RATES -2013) held on 21-23 March 2013 at Department of Industrial Chemistry, Alagappa University, Karaikudi.
8. **S. Mohandoss,** S. Karpakavalli and T. Stalin, **Study on solubility enhancement of 1-Aminoanthraquinone and β-Cyclodextrin complexation.** "Recent Advances in Textile and Electrochemical Sciences" (RATES -2013) held on 21-

23 March 2013 at Department of Industrial Chemistry, Alagappa University, Karaikudi.

9. **S. Mohandoss,** D. Sindhu and T. Stalin, **Enhanced the solubility and salvation behavior of poorly soluble Anthrarufin assist with β-cyclodextrin**, "Recent Advances in Textile and Electrochemical Sciences" (RATES -2013) held on 21-23 March 2013 at Department of Industrial Chemistry, Alagappa University, Karaikudi.
10. **S. Mohandoss** and T. Stalin, **A cyclic voltammetric study of inclusion complex behavior for L-Tyrosine with β-Cyclodextrin and Surfactants using Glassy carbon electrode,** "International Conference on Vistas Chemistry" (ICVC 2011) held on 11-13, October 2011 at Indra Gandhi for Atomic Research, Kalpakkam, Chennai.
11. **S. Mohandoss,** A. Shanmugapriya and T. Stalin, **Electrochemical behaviors of inclusion complex between L-Tyrosine and β-Cyclodextrin using Glassy carbon electrode**. "Recent Trends in Chemical Sciences: Frontiers and Challenges" (RTCSFC 2011) held on August 25-26, 2011 at Department of Chemistry, University of Kerala, Trivandrum.
12. **S. Mohandoss** and T. Stalin, **Host-Guest interaction of L-Histidine with β-cyclodextrin**, "Recent Trends In Green Synthesis" (RTGS-2011) held on August 5-6, 2011 at Department of Industrial Chemistry, Alagappa University, Karaikudi.
13. **S. Mohandoss,** A. Shanmugapriya and T. Stalin, **Study on the multirecognition mechanism of supramolecular interaction in the Pyrogallol and β-cyclodextrin with respect Triton X-100**, "Recent Trends In Green Synthesis" (RTGS-2011) held on August 5-6, 2011 at Dept. of Industrial Chemistry, Alagappa University, Karaikudi.
14. **S. Mohandoss** and T. Stalin, **Spectral and photophysical properties of β-Cyclodextrin with Pyrogallol inclusion complex**, "Emerging Trends in Chemistry" (ETC-2011) held on 28-29 July 2011 at Department of Chemistry, V.H.N.S.N. College, Virudhunagar.
15. **S. Mohandoss** and T. Stalin, **Study on the photoelectrochemical recognition mechanism of supramolecular interaction in the L-Tyrosine/ β-**

Cyclodextrin/Triton X-100, "Novel Synthetic and Computational Strategies in Chemical Sciences" (SCCS-2011) held on 28-29 March 2011 at Department of Chemistry, Annamalai University, Annamalainagar.

16. **S. Mohandoss** and T. Stalin, **Spectroscopic properties of β-Cyclodextrin with 4-Dimethylaminopyridine inclusion complex**, "International Conference on Supramolecular Chemistry and Nanomaterials" (ICSN 2011) held on 14-16 February 2011 at Department of Chemistry, University of Mumbai, Mumbai.

X. List of Conferences/Symposium/Seminar/Workshop

Conferences

1. **S. Mohandoss** Participated in National Conference on **"Recent Advances in Textile and Electrochemical Science (RATES-2012)"** held on March 22 - 23, 2012 at Department of Industrial Chemistry, Alagappa University, Karaikudi.
2. **S. Mohandoss** Participated in National Conference on **"Recent Advancements in nanomaterials for sensor applications"** held on March 8 – 9, 2012 at Department of Bioelectronics & Biosensors, Alagappa University, Karaikudi.
3. **S. Mohandoss** Participated in National Conference on **"Recent Advances in Nanotechnology and Biosensors"** held on March 3 – 4, 2011 at Department of Bioelectronics & Biosensors, Alagappa University, Karaikudi.
4. **S. Mohandoss** Participated in National Conference on **"Recent Advances in Textile and Electrochemical Science" (RATES-2009*)*** held on December 4 - 5, 2009 at Department of Industrial Chemistry, Alagappa University, Karaikudi.

Symposium

1. **S. Mohandoss** Participated in 5th National Symposium cum Workshop on **"Recent Trends in Structural Bioinformatics and Computer Aided Drug Design"** held on February 19- 22, 2013 at Department of Bioinformatics, Alagappa University, Karaikudi.

Seminar

1. **S. Mohandoss** Participated in National Seminar on **"Frontier Areas in Chemical Technologies -2015" (FACTs-2015)** organized by Department of Industrial Chemistry, School of Chemical Sciences, Alagappa University, Karaikudi on February 6-7th, 2015.
2. **S. Mohandoss** Participated in National Seminar on **"Emerging Research Trends in Basic Sciences"** organized by Department of Science and Humanities, SCSVMV University, Kanchipuram on March 19th 2010.

Workshop

1. **S. Mohandoss** Participated in International **"Workshop on Frontier Areas in Chemical Technologies -2014 (FACTs-2014)**, organized by Department of Industrial Chemistry, School of Chemical Sciences, Alagappa University, Karaikudi on February 21-22nd , 2014.
2. **S. Mohandoss** Participated in National **"Workshop on Advances in Chemistry"** organized by Department of Industrial Chemistry, School of Chemical Sciences, Alagappa University, Karaikudi on September 20-21th , 2013.
3. **S. Mohandoss** Participated in National **"Workshop on Innovative and Creative Approaches for Sustainable Development of India"** organized by Industry and Consultancy Cell, Alagappa University, Karaikudi on April 30th, 2013.
4. **S. Mohandoss** Participated in National Workshop on **"Writing Scientific Proposals and Papers for Quality Research"** organized by Department of Science and Humanities, SCSVMV University, Kanchipuram on February 14th , 2013.
5. **S. Mohandoss** Participated in **"International Year of Chemistry 2011: Chemistry- Our Life, Our Future"** organized by Department of Industrial Chemistry, Alagappa University, Karaikudi on December 22-23rd, 2011.

6. **S. Mohandoss** Participated in National Workshop on **"Structure Solving by Power X-Ray Diffraction"** organized by Department of Physics, Alagappa University, Karaikudi on July 26-27, 2011.
7. **S. Mohandoss** Participated in National Workshop on **"Recent Trends in Electrochemistry"** organized by CSIR- CECRI, Karaikudi on April 28, 2011.
8. **S. Mohandoss** Participated in National Workshop on **"Modern Techniques in Analytical Chemistry"** organized by Department of Science and Humanities, SCSVMV University, Kanchipuram on February 10-11, 2011.
9. **S. Mohandoss** Participated in **"Commemoration of the International Year of Biodiversity 2010"** organized by Alagappa University, Karaikudi on December 21, 2010.
10. **S. Mohandoss** Participated in National Workshop on **"Electro analytical Techniques"** organized by Department of Industrial Chemistry, Alagappa University, Karaikudi on October 11- 13, 2010.
11. **S. Mohandoss** Participated in National Workshop on **"Placement Training"** organized by Alagappa University, Karaikudi on March 2, 2010.

XI. Instruments Handling

- X-Ray Diffractometer (XRD)
- Field Emission Scanning Electron Microscope (FESEM)
- Thermogravimetric analysis (TGA) – Differential Scanning Calorimetry (DSC)
- Fourier Transform Infrared Spectrometer (FTIR)- Perkin Elmer
- Atomic Adsorption Spectrometer (AAS)- Perkin Elmer
- UV-Visible - Shimadzu- UV-2401PC & Double beem Spectrophotometer
- Spectrofluorometer - JASCO – FP-8200
- Electrochemical workstation- Autolab CHI1102A (GPES Software)

XII. Softwares

- PatchDock server
- FireDock server
- UCSF Chimera 1.8.1 & 1.9 server

- ArgusLab
- Gaussian 09W programmer
- Schrodinger 2014-3/Maestro Material Science (Trial version)

XIII. Address for communications

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XIV. Personal Information

Name	:	Sonaimuthu Mohandoss
Age & Date of Birth	:	38 & 25/05/1984
Nationality	:	Indian
Marital Status	:	Married

XV. References

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I am keen to continue my career and prepared to work hard in order to achieve my organization objectives and I hereby declare that the information furnished above is true to the best of my knowledge.

Dr. Sonaimuthu Mohandoss