

1. **Name**

Dr.P.Wilson

2. **Designation**

Associate Professor & Head

3. **Educational Qualification**

Post-Doc (2002-2003) - Acetylation of Anisole using Solid acids,
Blechnercentre for Industrial catalysis and process development ,
Ben-Gurion University of the Negev: Beer-Sheva, Southern, Israel

Ph.D (Chemistry) (1994- 2000) -Physico-Chemical Investigations on Supported
Chromia Catalysts
Indian Institute of Technology Madras: Chennai, Tamil Nadu, India

Bachelor of Christian Studies (2009)
Serampore University: Kolkata, West Bengal, India

4. **Courses taught at MCC**

Group theory
Electrochemistry
Statistical Thermodynamics
Chemical Kinetics
Surface Chemistry
Nuclear Chemistry

5. **Administrative Experience, if any, in MCC**

Head of the Department (Since 2015)
Member Disciplinary Committee (2013-2014)
Cultural coordinator for Quarters Sept Centennial Celebration (2012)
Staff Advisor SCM (2008-2013)
Programme officer NSS (2007- 2014)
Member Anti Ragging Committee (2005-2007)
Honorary faculty Institute for Advanced Christian Studies (since 2007)

6. **Orientation and Refresher Courses Attended**

UGC sponsored Refresher Course in Chemistry- Batch XVII held from 17.08.2005 to
06.09.2005
UGC Sponsored Orientation Course (General)- Batch 83 held from 01.02.2008 to
28.02.2008
UGC sponsored Refresher Course in NanoScience (Interdisciplinary)-Batch V held
from 19.11.2013 to 09.12.2013

7. Papers presented in National & International Seminars / Conferences

- 1. Wilson, P.** MadhusudhanRao, B. Viswanathan and R. P. Viswanath, Presented a Poster entitled “Catalytic Combustion of Coal on Supported Oxides” for the Thirteenth National Symposium on catalysis, held at *Indian Institute of Petroleum, Dehradun, from April 2nd to 4th, 1997.*
- 2. Wilson, P.,** P. MadhusudhanRao, and R. P. Viswanath, Characterisation of Supported Chromium Catalysts. Presented in *National Workshop on Catalysis, RRL Trivandrum 11 – 13th Dec., 1997.*
- 3. Viswanath, R. P., P. Wilson,** P. MadhusudhanRao, and A. Mahajabeen, Characterisation and Catalytic studies of supported chromium catalysts. Presented in 14th *National symposium on Catalysis. Anna University, Madras, 16 – 19 th Dec., 1998.*
- 4. P. Wilson** and R. P. Viswanath, Physico-Chemical Investigations on Titania supported chromia catalysts. *presented in TOPCAT held in July 2002, Japan.*
- 5. Wilson, P.,** Kaliya, M and Landau. M.V., Comparison of performance of Lewis and Solid acid catalysts in acylation of anisole, toluene and naphthalene presented in *The 6th International Symposium on Catalysis Applied to Fine Chemicals April 6 - 10, 2003 in Delft, The Netherlands.*
- 6. Roshan Thomas,** Mohandoss, K, **Wilson.P,** Sathish M. and Viswanath, R.P, Synthesis and catalytic studies of magnesia supported chromia catalysts derived from sonochemico-aerogel route presented in *17th National symposium on Catalysis held at CSMCRI Bhavnagar during 18th –20th January 2005.*
- 7. SujayPrabakar** and **Wilson. P,** Navaladian. S and Viswanath R. P, Dehydration of cyclohexanol over novel sonochemico-aerogel derived magnesia supported chromia catalysts presented in *17th National symposium on Catalysis held at CSMCRI Bhavnagar during 18th –20th January 2005.*
- 8. M.V. Landau,** L. Titelman, A.M. Shapira-Tchelet, **P.Wilson,** D. Tavor, L. Vradman and A. Wolfson *Stud.suf.sci.catal.* 156 (2005) 385-392 Effect of Nanoporous ZrO₂ Crystal Size on the Surface Sulphur Capacity and Performance of Sulfated Zirconia as an Acidic Catalytic Material. Nanoporous materials IV A. Sayari and M. Jaroniec (eds). Presented in *Proceedings of the 4th international symposium on nanoporous materials, Niagara Falls, Ontario, Canada, June 7-10, 2005.*
- 9. Wilson. P,** Roshan Thomas, SujayPrabakar, Mohandoss. K, Viswanath R.P, Navaladian and Sathish. M., Spectroscopic characterization of activated and spent nanocrystalline magnesia supported chromia catalysts prepared by sonochemico-aerogel route presented in *State level Seminar on recent trends in chemistry, held at New College, Chennai on 25th January, 2006.*

10. SujayPrabakar and **Wilson. P** Supercritical-microemulsion route for the synthesis of SBA-15 and MCM-41 supported nanoscale Metal Sulphides, presented in State level Seminar on recent trends in chemistry, held at *New College, Chennai on 25th January, 2006.*
11. R. Ramakrishnan, S. Navaladian,**P. Wilson** and R. P. Viswanath, Vapour phase dehydration and dehydrogenation of cyclohexanol over copper modified hydroxyapatite (HAP) catalyst presented in National Level conference on Recent trends in Chemistry, held in *Bishop Heber College, Trichy, during October 2007.*
12. E.Iyyappan and **P. Wilson**, ‘Synthesis and characterization of hydroxyapatite particles by a template assisted route’ presented in International conference on *Frontiers in Chemical Sciences conducted by Department of Chemistry, MCC during October 2 – 4, 2008.*
13. E.Iyyappan and **P. Wilson**, “ Synthesis and Characterization of Nano-scale Carbonated Hydroxyapatite Particles through Surfactant Assisted Hydrothermal Treatment” presented in 20th National Symposium on “Catalysis for Energy Conversion and Conservation of Environment “ organized on behalf of the Catalysis Society of India by the *National Centre for Catalysis Research, IIT Madras, during December 19-22, 2010.*
14. E.Iyyappan and **P.Wilson**, M.TamilMalar, G.Jayadurga, P.Kathiravan, R.V.Prithviraj, P.Senbagaraman and M.Yamini , “The effect of Triton X-100 as a organic modifier on the morphological features of hydroxyapatite particles derived from Hen Egg Shell”, presented in a National seminar on Green Analytical Techniques(NASGAT-2015) organized by Post graduate & Research the Department of Chemistry, D.B.College, Sasthamcotta, Kollam,Kerala during September 09-10, 2015
15. M.RebecaSofiyaJoice, T.Manovah David and **P.Wilson**, “Surface characterization of Tungsten Oxide(WO₃) nanostructures prepared through electrochemical anodization” presented in a National seminar on Green Analytical Techniques(NASGAT-2015) organized by Post graduate & Research the Department of Chemistry, D.B.College, Sasthamcotta, Kollam,Kerala during September 09-10, 2015
16. E.Iyyappan and **P. Wilson** , “Aspect ratio as a function of ultrasonication time in triton X-100 mediated synthesis of nanoscaleHydroxyapatyite”, presented in a seminar on Environment and Sustainable Development organized by the Department of Chemistry, SRM University in association with IRD India on 3rd June 2016.
17. S.Saranya , S.J.Samuel Justin, JerrinAnto and **P.Wilson** , “Synthesis of Hydroxyapatite nanorods as heavy metal adsorbent via L-Arginine assisted ultrasonicated route”, presented in a seminar on Environment and Sustainable Development organized by Department of Chemistry, SRM University in association with IRD India on 3rd June 2016.

18. E.Iyyappan and **P. Wilson** ,“Investigation on the structural and morphological variations of nanoscale hydroxyapatite particles synthesized as a function of oxyethylene units in PEG-6000 and Triton X-100" presented in 53rd Annual Convention of Chemists, conducted by Indian Chemical Society at GITAM University, Visakhapatnam, Andhra Pradesh, during Dec 27-29, 2016.
19. M.RebecaSofiyaJoice and **P.Wilson**, “Role of precursor in modifying the morphological features of WO₃ nanostructures through hydrothermal synthetic protocol” presented in the NCNSNT - 2017 conducted by Regional Centre for Nanoscience and nanotechnology, University of Madras, during February 7th and 8th 2017
20. Nimmy Edwin, S.J.Samuel Justin, and **P.Wilson** “Synthesis of Graphene Oxide/Strontium incorporated Hydroxyapatite Reinforced Bone Cement with Enhanced Mechanical Properties,” presented inthe NCNSNT - 2017 conducted by Regional Centre for Nanoscience and nanotechnology, University of Madras, during February 7th and 8th 2017
21. S.Kaladevi, **P.Wilson** and K.Pandian, “Insitu Interfacial Synthesis of polypyrrole protected silver nanoparticles doped graphene oxide and study of its application on electrochemical detection of hydrazine,” presented in the National Conference on Emerging Biomaterials organized by the Department of Nanoscience and Naotechnology, Bharathiyar University, Coimbatore – 641 046, India.
22. G. Kaladevi, **P. Wilson** and K. Pandian, “Single pot synthesis of silver nanoparticles dispersed polyaniline protected cellulose nanofiber derived from aquatic weed and its application on catalytic reduction of 4- nitrophenol” presented in International conference on Emerging Trends In Nano world (ICETN 2017)- during 27th to 28th February 2017 organized by Vels university,Pallavaram,Chennai
23. S.Saranya , S.J.Samuel Justin, and **P.Wilson**, “Ultrasonically aided and pH directed growth of hydroxyapatite nanoparticles in the presence of a crystal growth modifier, presented in 3rd Asia-Oceania Sonochemical Society conference (aoss-3) during 14th to 16thseptember 2017 , organized by SRM university, kattankulathur- 603 203.
24. Nimmy Edwin, and **P.Wilson**, Investigations on Sonofragmentation of Hydroxyapatite Crystals as a function of Strontium Incorporation, presented in 3rd Asia-Oceania Sonochemical Society conference (aoss-3) during 14th to 16thseptember 2017 , organized by SRM university, kattankulathur- 603 203.
25. G.Kaladevi, **P.Wilson** and K. Pandian, “Synthesis of Silver nanoparticles dispersed polypyrrole / graphenenanocomposite by an interfacial polymerization method and study of its application on voltammetry detection of mercury in water samples” presented in Advances in Innovative Materials for Energy and Environment (AIMEE-2017) during 13th October 2017 organized by SRM University, Ramapuram Campus.

8. Publications&Books Authored

1. Contributed a chapter in a book on **Peace Education** published by UBCHEA on *Peace and Multiculturalism*
2. Viswanath, R. P. and **P. Wilson** Characterization of ceria supported chromia catalysts. *Appl. Catal. A General* 201, (2000) 23 - 35.
3. Viswanath, R. P., **Wilson. P.**, MadhusudhanRao. P and A. Mahajabeen, Characterisation and Catalytic studies of supported chromium catalyst, pp. 142 – 149. In V. Murugesan, B. Arabindoo and M. Palanichamy (Eds), *Recent Trends in Catalysis*, Narosa Publications, India, 1999.
4. Viswanath R.P. and **Wilson P.** Catalytic combustion of carbon, *Eurasian Chem Tech journal* 3 (2001)167-171
5. **Wilson, P.**, and R. P. Viswanath ,Characterization of surface chromia species on CrO_x/TiO₂ catalysts *Eurasian Chem Tech journal* 4, (2002) 249-252
6. Landau. M.V., Titelman. L, Vradman. L and **Wilson. P.**, Thermostablesulphated 2-4 nm tetragonal ZrO₂ with high loading in nanotubes of SBA-15: a superior acidic catalytic material *Chem. Comm* 594 (2003)
7. **Wilson, P.**, MadhusudhanRao. P and R. P. ViswanathThermoanalytical investigations on supported chromia catalysts *ThermochimicaActa*399 (2003) 109–120.
8. **Wilson. P.**, MadhusudhanRao. P and R. P. Viswanath, Structural Properties and Catalytic Behaviour of CrO_x/TiO₂ Systems , *Eurasian Chem Tech journal* 6 (2004)79-90.
9. **P. Wilson**, M.L. Kaliya, M.V. Landau and M. Herskowitz Acylation of aromatics with lewis and solid acids-a comparative appraisal, *Eurasian Chem Tech journal* 6 (2004)193-200
10. M.V. Landau, L. Titelman, A.M. Shapira-Tchelet, **P.Wilson**, D. Tavor, L. Vradman and A. Wolfson, Effect of Nanoporous ZrO₂Crystal Size on the Surface SulphurCapacity and Performance of Sulfated Zirconia as an Acidic Catalytic Material. *Stud.Surf.Sci.Catal.* 156 (2005) 385-392.
11. E. Iyyappan and **P. Wilson**, Synthesis of nanoscale hydroxyapatite particles using triton X-100 as an organic modifier, *Ceramics International* 39 (2013) 771–777.

12. R. Ramakrishnan, **P. Wilson**, T. Sivakumar and I. Jemina; A comparative study of hydroxyapatites synthesized using various fuels through aqueous and alcohol mediated combustion routes, *Ceramics International* 39 (2013) 3519–3532.
13. T. Manovah David, **P. Wilson**, Shibu Joseph, C. Ramesh and P. Sagayaraj, Rapid growth of highly ordered TiO₂ nanotube arrays assisted by field supporting effect of weak organic acids *International Journal of ChemTech Research* Vol .6, No.6, (2014) pp 3412.
14. T. Manovah David, **P. Wilson**, C. Ramesh, P. Sagayaraj, A comparative study on the morphological features of highly ordered titania nanotube arrays prepared via galvanostatic and potentiostatic modes, *Current Applied Physics* 14 (2014) 868.
15. T. Manovah David, P. Sagayaraj, **P. Wilson**, C. Ramesh, N. Murugesan, E. Prabhu, A. Sree Rama Murthy and S. Annapoorani, Room Temperature Hydrogen Sensing of Pt Loaded TiO₂ Nanotubes Powders Prepared via Rapid Breakdown Anodization, *J. Electrochem. Soc.* 163 (2016) issue 3, B15-B18
16. E Iyyappan, **P Wilson**, K Sheela, R Ramya, Role of triton X-100 and hydrothermal treatment on the morphological features of nanoporous hydroxyapatite nanorods., *J.Mater.Sci.Engg.C* 63(2016) 554-562.
17. S.Saranya, S.J.Samuel Justin, Jerrin Anto and **P.Wilson**, Synthesis of Hydroxyapatite nanorods as heavy metal adsorbent via L-Arginine assisted ultrasonicated route, *International Journal of Advanced Chemical Science and Applications*, 3(4) (2016) 39-47.
18. T. Manovah David, **P. Wilson**, V. Manju, A. Palaniappan, P. Sagayaraj, and C. Ramesh, Electro-catalytic Investigation of Group X Metal Nanoparticles Loaded TiO₂ Nanotubes Powder Prepared by Rapid Breakdown Anodization for Selective H₂O₂ Sensing, *Journal of Electrochemical Society*, 164 (2017) B356- B365.
19. T. Manovah David, **Wilson Paul**, Mahesh R, Dhanavel Swaminathan, Shamima Hussain, S. Jacob Melvin Bobby, Arumainathan Stephen, C. Ramesh & Sagayaraj Pappu, Investigating the photocatalytic degradation property of Pt, Pd and Ni nanoparticles-loaded TiO₂ nanotubes powder prepared via rapid breakdown anodization, *Environmental Technology* DOI:10.1080/09593330.2017.1371248.
20. G. Kaladevi, S. Meenakshi, K. Pandian, and **P. Wilson**, Synthesis of Well-Dispersed Silver Nanoparticles on Polypyrrole/Reduced Graphene Oxide Nanocomposite for Simultaneous Detection of Toxic Hydrazine and Nitrite in Water Sources, *Journal of The Electrochemical Society*, **164** (13) B1-B12 (2017).

9. Resource Person in Conferences/Workshops etc.

Sessions Chaired in the National/ International Conferences

1. National seminar on **Green Analytical Techniques (NASGAT-2015)** organized by Post graduate & Research the Department of Chemistry, D.B.College, Sasthamcotta, Kollam,Kerala during September 09-10, 2015.
2. **3rdAsia-Oceania Sono-chemical Society conference (AOSS-3)** during 14th to 16thSeptember 2017 , organized by SRM university, Kattankulathur- 603 203
3. National conference on **“Advances in Innovative Materials for Energy and Environment (AIMEE-2017)** held at SRM University Ramapuram campus, Chennai on 13th October 2017.

Invited Lectures /Delivered lectures

4. *“Discovering careers for your future: Initiatives on Basic Sciences by Ministry of Science and Technology”* at St. John’s Public School, Medavakkam.
5. *Emerging Trends in Science and Technology with a special reference to NANOTECHNOLOGY* at St. John’s Public School, Medavakkam.
6. *Chemistry of Nano-membrane materials for Desalinationof Water* at St.Joseph’s College of Engineering, Chennai.
7. **“Peace with nature: Anthropogenic interferences and their consequences”**for the students of MSW in the Department of Social Work, (Intracollegiate lecture) Madras Christian College.
8. **“Indigenous faith expressions in India”** Christian Rethinking in Mission conference at Bangalore.
9. **“Project Based Learning”** in the Faculty Development Programme on ‘Pedagogy & Research’ conducted by VELS UNIVERSITY during 30th June and 1st July 2017.
10. **“Personality development and career advancement”** for the students of the arts and science at A.P.A College for Women, Palani on 18th September, 2017.

10. Recognition as Research Supervisor for M.Phil. and Ph.D.

1. Recognized as a supervisor for Ph.D Degree in Chemistry under University of Madras (D.2/Ph.D/GUODE/MGS-RECOGN/2010/775).
2. Recognized as a supervisor for M.Phil Degree course in Chemistry under University of Madras(D.2/M.PHIL/GUIDESHIP/DEPT.OF CHEMISTRY/MADRAS CHRISTIAN COLLEGE/CHENNAI-59/11/2004/641)

11. Other Distinctions

1. Receipt of the **GATE 94** (Graduate Aptitude Test in Engineering) fellowship to pursue Ph.D in IIT Madras, India from 1994 –2000
2. Life member of the *Catalysis Society of India*
3. Life member of *Association of Chemistry Teachers*, India
4. Life member of the **Society For Advancement Of Chemical Sciences and Education**, IGCAR, Kalpakkam
5. Served as one of the **advisors (subject expert)** in the interview board constituted by **Staff Selection Commission** (Southern Region), Government of India, Chennai.
6. Serving as one of the **reviewers** for the following International Journals
“**Corrosion Science**”published by **Elsevier** publications
“**Surfaces and Interfaces**”published by **Elsevier** publications
“**Journal of Cluster Science**” published by **Springer** publications

12. Recent Passport size photograph

