RESUME

Name : Dr. C. Kannan M.Sc., Ph.D.,

Designation : Professor and Head

Address : Department of Chemistry

Manonmaniam Sundaranar University

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Date of birth : 03.05.1970

Distinction

Two papers are listed in Top 20 article, BioMedLib LLC, Virginea, USA

- a. Environmentally stable adsorbent of tetrahedral silica and non-tetrahedral alumina for the recovery of malachite green dye from aqueous solution, *Journal of Hazard Mater*; 2008 Aug 30; 157(1):137-145
- b. Adsorption of cationic and anionic organic dyes from aqueous solution using silica, *Journal of Environmental science and Engineering*, 2010,Oct., 52(4), 361-6.

Patent

1. Switch operator

The Switch protects people from LPG cylinder explosion, patent was granted for this invention in the year 2008, Patent no. 216644

2. Dye gas (Novel fuel gas)

Conversion of dye molecules into Dye gas to eradicate the dye effluent pollution – published in official journal of the patent office for granting patent. Issue no.45/2012 dated 09.11.2012.

Invention

1. Novel Shaving Lubricant

A new natural shaving Lubricant was invented and published in all newspapers and online. The chemicals present in the conventional shaving creams induce gray hair / silver hair formation in face in young age. To avoid these problems, a novel shaving lubricant was invented by using **natural products.** This lubricant is environmentally friendly and also very cheap compare to the conventional shaving cream. This will reduce the saving cost of each person throughout the world. In our country, it will save minimum 20,000 crores per year.

2. High energetic materials

High energy Polyepichlorohydrin (PECH) has been synthesized than the conventional PECH.

Foreign travel awards

- 1. Foreign Travel grant was awarded by Centre for International Co-operation in Science (CICS) to participate the conference of International Congress of Chemistry and Environment (ICCE-2011) in Malaysia held on May-2011.
- 2. Foreign Travel grant was awarded by Centre for International Co-operation in Science (CICS) to participate the conference of ICGTCS-2014 in Hong Kong held on Oct-2014.
- 3. **International Conference:** Science and Engineering Research Board (SERB) sanctioned Rs. 100000/- one Lakh for financial assistance for organizing International Conference on "International conference on Advanced Materials

Chemistry at the Interfaces of Energy, Environment and Medicine (AMCI-2019) 30-31 January 2019.

Best paper awards

- 1. Best paper award was awarded by Sathyabama University, Chennai in association with Department of Science and Technology (SERB), New Delhi in National conference on new vistas and challenges in chemistry **Paper title:** Kinetic and thermodynamic studies for removal of congored on mesoporous aluminophosphate molecular sieves
- 2. Best paper award, National seminar on newer innovation in chemistry, 30th and 31st January 2014, Annai Velankanni College, Tholayavattam, Tamilnadu, India. **Paper title:** A study on distribution of natural radionuclides ²²⁶Ra, ²³⁸U, ²²⁸Th and ⁴⁰K in rock samples of western ghats, Tamilnadu, India
- 3. Best paper award, International conference on Advanced Materials Chemistry at the Interfaces of energy, environment and medicine (AMCI-2019), M.S.University, Tirunelveli-12. **Paper title:** Synthesis and characterization of AlPO₄ and ZnAlPO₄ and its catalytic application on carbon dioxide decomposition.
- 4. Best paper award, International conference on Advanced Materials Chemistry at the Interfaces of energy, environment and medicine (AMCI-2019), M.S.University, Tirunelveli-12. **Paper title:** Green approach for the synthesis of biodiesel by using solid acid catalyst.
- 5. Best paper award, International conference on Advanced Materials Chemistry at the Interfaces of energy, environment and medicine (AMCI-2019), M.S.University, Tirunelveli-12. **Paper title:** The catalytic conversion of CO₂ on nanoporous AlSiO₄-14 and AlSiO₄-16 for diminishing the effect of global warmsing.

List of conferences/ workshop/ seminar organized

1. National symposium on newer horizons in Chemistry (NSNHC) - 09 March 2012 (Secretary)

- 2. National conference on Chemistry for Sustainable energy, clean environment and health (CEEH)- 21 & 22 January 2015 (secretary)
- 3. International workshop on Advanced Functional materials and devices 8 to 12 January 2017. (**Secretary**)
- 4. UGC Research Innovation Programme, Invited talk on Entrepreneurial University and Research driven Innovation by Prof. Gunnar Landgren, Sweden on March 8th & 9th 2017 organized by Centre for International Affairs & Dept of Chemistry. (Co-ordinator)
- 5. National conference on Advanced materials in Chemistry at the interfaces of Energy, Environment and Medicine (AMCI-2018) 21 & 23 February 2018. (Convener)
- 6. International conference on Advanced materials in Chemistry at the interfaces of Energy, Environment and Medicine (AMCI-2019) 30 & 31 January 2019. (Convener)

Important Positions

- 1. Dean additional charge, college development council, M.S. University, 2011 to 2012. (8 months)
- 2. Faculty in charge for Chemistry, DD&CE, M.S. University, 2008 to till date.
- 3. Head in-Charge for the chemistry deportment, M.S. University, 2013 (3 months)
- 4. Chief superintendent for conducting examination, department of Chemistry, 2014-2015

Honor

- a) Chief guest for the inauguration function and advisory speech in A.P.A College, Nanguneri, Tirunelveli.
- b) Chief guest for the National workshop on Education through information and communication technology & E-content development for college teachers, G. Venkataswamy naidu college, Kovilpatti.
- c) Chief Guest for the inaugural functions of College Day, Science exhibition and food festival at Muslim arts college, Nagercoil.

Position held in various committees – 70

List of Some committees

- 1. Selection committee member for Principal post for the Manonmaniam Sundaranar, University colleges.
- 2. Selection Committee University Nominee for the selection of lecturer (FIP) MDT Hindu College, Tirunelveli.
- 3. Lecturer selection committee member, SCAD group of institutions, Tirunelveli.
- 4. Convener of the physical verification committee for the UGC sponsored women's hostel in Sree Ayyappa College for women, Nagercoil, Kanyakumari district.
- 5. Convener of the physical verification committee for the UGC sponsored women's hostel in V.O.C College, Tuticorin.
- 6. Chairman of Ph.D., open defense committee, Department of chemistry, Kerala University, Trivandrum.
- 7. Chairman-board of study-M.Sc chemistry syllabus designing for Distance Education, Manonmaniam Sundaranar University, Tirunelveli.
- 8. One man Inspection commission for new study centre for Distance Education, Manonmaniam Sundaranar University, Tirunelveli.
 - i. Boys Info Software Training & Development, Puliangudi.
 - ii. Shree institute of software Education and Training, Kovilpatti.
- 9. Organizing secretary in UGC sponsored National symposium on newer horizons in chemistry, Manonmaniam Sundaranar University, Tirunelveli.
- 10. University Nominee for Board of study, St. Xavier's College, Tirunelveli.
- 11. Vice Chancellor nominee for the selection of the post of Assistant professor(temporary), Department of Chemistry, Manonmaniam Sundaranar University, Tirunelveli. (2013)
- 12. Observer for conducting Ph.D., Viva-voce examination on 19.11.2014.

- 13. Vice-chancellor's nominee as a member of the local selection committee for appointment of temporary assistant professor in chemistry (2014).
- 14. Assistant professor (FDP) Selection committee member, Aditanar college of Arts and science, 2015, Tiruchendur.
- 15. Chairperson for PG- Board of Studies, Department of Chemistry, M.S.University, 2018.
- 16. Appointed as University Representative to the Lekshmipuram college of Arts and Science, Neyyoor, 2019.

Academic Interaction

Teaching Experience: 19 years

- ✓ Professor and Head, Department of Chemistry, Manonmaniam Sundaranar University, Tirunelveli (2017 to till date)
- ✓ Associate Professor, Department of Chemistry, Manonmaniam Sundaranar University, Tirunelveli (2011 to 2014)
- ✓ Reader, Department of Chemistry, Manonmaniam Sundaranar University, Tirunelveli (2008 to 2011)
- ✓ Assistant Professor, Department of Chemistry, Periyar University, Salem (2004 2008)
- ✓ Assistant Professor in Chemistry, APA College, Nanguneri, Tirunelveli (2001 2004)

Industrial research – TPL (Quasi Government)

Research Trainee, Research and Development (DSIR approved centre), Tamilnadu Petro product Limited, Chennai (1999- 2001)

Research Interaction

Research area: Green chemistry - Energy, Heterogeneous catalysis, Nano porous solid acid catalyst synthesis and Environmental science.

Research Experience : 19 years

Inventions : 4

International & National Publications : 93

Research article presented in : 106

International & National Conference

Funded major projects Completed : 3 (UGC, DRDO and DBT)

Ph.D. guidance : 17 (Awarded-8, Thesis submitted-2,

Ongoing-7)

M. Phil. Guidance : 30 (Awarded-28, Ongoing-2)

M.Sc., : 36 (Awarded : 33 ongoing : 03)

Total no of publications: 93

Some important publications

- 1. **C.Kannan**, T.T.Sundaram and T.Palvannan, Environmentally stable adsorbent of tetrahedral silica and non tetrahedral alumina for removal and recovery of malachite green dye from aqueous solution, *J.Hazardous materials*, 157 (2008) 137-145.
- 2. **C.Kannan**, N.Buvaneswari, Plant poisoning organic dyes adsorption on tomato plant root and green carbon from aqueous solution, *Desalination*, 249 (**2009**)1132-1138.
- 3. **C. Kannan**, B. Sivakumar, S. Karthikeyan, Film and pore diffusion modeling for the adsorption of direct red 81 on activated carbon prepared from balsamodendron caudatum wood waste, *Digest Journal of Nanomaterials and Biostructures*, Vol. 5, No 3, **July 2010**, p. 911 919
- 4. Natesan Buvaneswari, **Chellapandian Kannan**, Plant toxic and non-toxic nature of organic dyes through adsorption mechanism on cellulose surface, *Journal of Hazardous materials*, 189 (**2011**) 294–300.
- 5. Natesan Buvaneswari, **Chellapandian Kannan**, Adsorption of cationic and anionic organic dyes from aqueous solution using Silica, *J. Environmental Science and Engineering*, volume 52, No.4 (**2010**) 361-366

- 6. **Chellapandian Kannan**, Kumarasamy Muthuraja, Murugan R. Devi, Hazardous dyes removal from aqueous solution over mesoporous aluminophosphate molecular sieves with textural porosity by adsorption, Journal of Hazardous Materials 244– 245 (**2013**) 10–20.
- 7. Chellapandian Kannan, Sivagami K., Ilavarasi Jeyamalar J., A Simple Method for the Synthesis of Thermally Stable Large Pore Mesoporous Aluminophosphate Molecular Sieves, Materials letters, 113 (**2013**) 93–95.
- 8. Mary Thangam and Chellapandian Kannan "A Novel Ironsilicate mesoporous material synthesis and its characterization" Advanced Science letters (1936-6612: print) EISSN :1936-7317 online), 2018 volume 24, Issue 08, p.no 5532-5536 (5).
- 9. K. Sivakami, K. Muthuraja and C. Kannan "Adsorptive removal of anionic dyes from aqueous solution using nanoporous magnesium aluminophosphate material" Materials Today Proceedings, Volume 5, Issue 2, Part 3, 2018, Pages 8812 8817.
- 10. S.P. Elangoven, C. Kannan, Banumathi Arabindoo and V. Murugesan, Aniline methylation over AFI and AEL type molecular sieves, *App. Catal.*, Vol. 174, **1998**, 213.

Country visited

2011 - Malaysia

2014 - Hong Kong and China

Academic Front

Educational Qualifications

1999 Ph.D. Annan University, Chennai

1994 M.Sc. University of Madras, Chennai

(DR. C. KANNAN)