

CURRICULUM VITAE OF Dr.HELEN KALAVATHY M

Name : HELEN KALAVATHY M
Position : Assistant Professor
Year of Experience : 17 years
Education : Ph.D (Chemical Engg), Anna University, INDIA
M.Tech (Chem. Engg), Anna University, INDIA
B.Tech (Chemical and Electro Chemical. Engg),
Madurai Kamarajar University, INDIA



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Employment Record:

Period	Designation and Address	Nature of Job
Dec 2014 - Till date	Assistant Professor, Department of Chemical Engineering, A.C.Tech Campus, Anna University, Chennai-600 025.	Teaching and Research
June 2010 – Dec 2014	Professor, Department of Chemical Engineering, Sriram Engineering College Perumalpattu, Thiruvallur Dist.	Teaching and Administration
Aug 2008 – Dec 2008	Teaching Research Associate, Department of Chemical Engineering, A.C.Tech Campus, Anna University, Chennai-600 025.	Teaching and Research
Sep 2007 – Aug 2008	UGC Fellowship, Department of Chemical Engineering, A.C.Tech Campus, Anna University, Chennai-600 025.	Teaching and Research
March 2006– Sep 2007	Assistant Professor, Department of Chemical Engineering, Sriram Engineering College Perumalpattu, Thiruvallur Dist.	Teaching

June 2004 – Feb 2006	Senior Lecturer, Department of Chemical Engineering, Sriram Engineering College Perumalpattu, Thiruvallur Dist.	Teaching
Dec 1997 – July 2002	Lecturer, Department of Chemical Engineering, Sriram Engineering College, Perumalpattu, Thiruvallur Dist.	Teaching

Abroad Assignment:

Nil

Area of Expertise:

- Mass transfer
- Nano-particle synthesis and Development of nano-composites
- Pollution control and Effluent treatment

Membership of professional bodies:

- Life member in “The Indian Society for Technical Education”, India.
- Life member in “Indian Institute of Chemical Engineers”, India.

Awards/Honors:

- **Gold Medalist in M.Tech.**, Department of Chemical Engineering, A.C.College of Technology, Anna University, Chennai.
- Recipient of **UGC Research Fellowship in Science for Meritorious student** in the year 2007, A.C.College of Technology, Anna University, Chennai.

Ongoing Projects:

- Carbon based novel material from biomass for the recovery of heavy metals
- Development of carbon nanostructures for energy storage
- Synthesis and characterization of membranes for environmental applications

National /International Collaboration:

Nil

Thesis guided:

Ph.D : 02(Ongoing) MS/MTech : 13 (Completed)

PUBLICATIONS

No of Book/Book Chapter written : 0
No of papers published in National journal : 0
No of papers published in International journal : 15

List of papers published

1. **M. Helen Kalavathy**, T. Karthikeyan, S. Rajgopal, Lima Rose Miranda, "Kinetic and isotherm studies of Cu(II) adsorption onto H₃PO₄-activated rubber wood sawdust", Journal of Colloid and Interface Science, published by Elsevier. Vol. 292, Issue 2, pp. 354-368 (2005).
2. Padmini.E, **Helen Kalavathy.M**, Lima Rose Miranda, "Surface modified Agave sisalana as an adsorbent for the removal of nickel from aqueous solutions – Kinetic and Equilibrium studies", Carbon letters, Vol. 9, Issue 2, pp. 97-104 (2008).
3. Magesh Ganesa pillai, I. Regupathi , **M. Helen Kalavathy**, T. Murugesan, Lima Rose Miranda, "Optimization and analysis of nickel adsorption on microwave irradiated rice husk using Response Surface Methodology (RSM)", J. Chem. Tech & Biotechnol., Vol. 84, Issue 2, pp. 291-301 (2009).
4. **Helen Kalavathy M.**, Iyyaswami Regupathi, Magesh Ganesa Pillai, Lima Rose Miranda, "Modelling, analysis and optimization of adsorption parameters for H₃PO₄ activated rubber wood sawdust using response surface methodology (RSM)", Colloids and Surfaces B: Biointerfaces, Vol. 70, Issue 1, pp. 35 - 45 (2009).
5. **Helen Kalavathy M**, G.Swaroop, Padmini.E, Lima Rose Miranda, "Moringa oleifera, a biosorbent for resorcinol adsorption -Isotherm and kinetic studies ", Carbon letters, Vol. 10, Issue 1, pp. 23 - 32 (2009).
6. Michael Angelo Miranda, Dhandapani P, **Helen Kalavathy M**, Lima Rose Miranda, "Chemically Activated Ipomoea carnea as an adsorbent for the copper sorption from synthetic solutions", Adsorption, Vol. 16, Issue 1, pp. 75-84 (2010).
7. **Helen Kalavathy M**, B.Karthik, Lima Rose Miranda, "Removal and recovery of Ni and Zn from aqueous solution using activated carbon from Hevea brasiliensis: Batch and column studies", Colloids and Surfaces B: Biointerfaces, Vol. 7, Issue 2, pp. 291 - 302 (2010).

8. **Helen Kalavathy M**, Lima Rose Miranda, "Comparison of copper adsorption from aqueous solution using modified and unmodified Hevea brasiliensis saw dust ", *Desalination*, Vol. 255, Issue 1, pp. 165-174 (2010).
9. **Helen Kalavathy M**, Lima Rose Miranda, "Moringa oleifera-A solid phase extractant for the removal of copper, nickel and zinc from aqueous solutions ", *Chemical Engineering Journal*, Vol. 158, Issue 2, pp. 188 - 199 (2010).
10. Smila Jenifer, M. Srihari, V. Shanmugam, **Helen Kalavathy.M**, Lima Rose Miranda,, "Production of Activated Carbon from Biomass Residues", *International Journal of Bioprocess Technology*, Vol. 2, pp. 1-9 (2014).
11. **Helen Kalavathy.M** and Lima Rose Miranda, "A Study on the Removal of Zinc from Aqueous Solution using Chemically Activated Agave Sisalana Fibre ", *International Journal of ChemTech Research*, Vol. 6, Issue 9, pp. 4397-4411 (2014).
12. Devi AS, **Helen Kalavathy M** and Miranda LR, "Optimization of the Process Parameters for the Preparation of Activated Carbon from Low Cost Phoenix Dactylifera Using Response Surface Methodology", *Austin Chemical Engineering*, Vol. 2, Issue 2, pp. 1021 (2015).
13. J.B. Mathangi, **M. Helen Kalavathy**, "Optimization of process parameters for the adsorption of nickel onto activated carbon using response surface methodology", *Desalination and Water Treatment*, Vol. 115, pp. 115 – 125, (2018).
14. J.B. Mathangi, **M. Helen Kalavathy** "Study of mathematical models for the removal of Ni²⁺ from aqueous solutions using Citrullus lanatus rind, an agro-based waste, *Water and Environment Journal*, pp. 1–16, (2018).
15. Mathangi J.B., Sadeesh Sharma M., Mercy Jacqueline B., **Helen Kalavathy M**, "Development of carbon-based material from biomass for the removal of Ni²⁺ and CO₂ from fluid phase", *Vacuum*, Vol. 158 pp. 236–248, (2018).