

## Significant Summary of Scientific Activities

**Dr. A. JAGADEESH KUMAR, M.Sc, Ph.D.**

Current Position

**Post-Doctoral Research Associate**

**School of Chemistry and Chemical Engineering**

**Jiangsu University**

**Zhenjiang, P.R. China.**

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### **Previous Research Employment**

**Post-Doctoral Researcher/** (Jan 2016 to March 2018): Dept. of Municipal Engineering, Southeast University, Nanjing, Jiangsu Province, 210096, P. R. China.

**Instructor of Advanced Water Chemistry/** (August 2017- Feb 2018): Southeast University - Monash University Joint Training Course on Civil Engineering (Suzhou), P.R. China.

**Visiting Research Scientist** (June, 2017): **Fukuoka University, Research University in Fukuoka, Japan.**

**Visiting Research Scientist (Nov 2018): Khalifa University, UAE**

### **Academic Qualifications**

**Doctor of Philosophy (Ph. D) (2010 to 2015)** - Thesis Title "A Comparative Study on Removal of Organic Dyes on Thermal and Chemical Activated Mesoporous Carbon developed From Jatropha Husk, an Agricultural Solid Waste: Adsorption Dynamics and Kinetics Studies".

Branch : **Environmental Sciences** (Specialization Environmental Chemistry)

PhD awarded : December 2015

University : Bharathiar University, Coimbatore -641046, Tamil Nadu, India.

Advisors : **Prof. Chinnaiya Namasivayam**

**Master of Science (M. Sc)**

Branch : **Environmental Sciences** (Specialization Environmental Chemistry)

M. Sc awarded : June 2008 – April 2010

Total Marks : 70 %

University : Bharathiar University, Coimbatore- 641046, Tamil Nadu, India.

Thesis Title : Adsorption of Endocrine -Active Compound Bisphenol A on Sulphuric Acid Activated Carbon Developed From Coir Pith an Agro industrial, Solid Waste: Equilibrium and Kinetic Studies

Advisors : **Prof. Chinnaiya Namasivayam**

**Bachelor of Science (B. Sc)**

Branch : **Environment and Water Management**  
B. Sc awarded : June 2004 - April 2007  
Total Marks : 65 %  
University : Bharathiar University, Coimbatore, Tamil Nadu, India.

**Specific experience relevant to this project:**  
**Projects & Fellowships**

1. I have awarded research project entitle “Evaluation of Novel Filter Media in Bioretention Systems with References to Clogging and Plant Growth”, **Jiangsu Provincial Postdoctoral Research Funding Program (80000 RMB) in 2016-2018.**

2. I have been awarded for University Research Fellowship (From December 2010 to December 2013) at Bharathiar University, Coimbatore -641046.

**Peer reviewer**

- ❖ RSC - Physical Chemistry Chemical Physics (PCCP)
- ❖ Bioresource Technology
- ❖ Environmental Technology
- ❖ Chemosphere
- ❖ Journal of Photochemistry and Photobiology A: Chemistry
- ❖ Journal of Environmental Management
- ❖ Environmental Science and Pollution Research
- ❖ Science of the Total Environment
- ❖ Desalination and Water Treatment
- ❖ Journal of Performance of Constructed Facilities
- ❖ Land Degradation & Development

**Research Interests**

- ❖ Water and wastewater Treatment
- ❖ Activated Carbon, Bio surfactant and Nanomaterials
- ❖ Electrochemistry and Adsorption
- ❖ Water Splitting, supercapacitor and HER, OER

**Analytic Skills**

- ❖ HPLC, FT-IR, Raman, XRD, ICP-MS and FESEM
- ❖ Liquid/gas chromatography and mass spectrometry

**Teaching Experience**  
**(Supervising, mentoring activities)**

1. Instructor of Advanced Water Chemistry- 2017-2018 Autumn Semester Southeast University - Monash University Joint Training Course on Civil Engineering, Suzhou Education Industrial Park.
2. Teaching in Environmental chemistry and Advanced Water chemistry related laboratories. (Basics of physical-chemical properties, Climate change, Stormwater Management, Wastewater Treatment, Environmental Pollution and treatment applications, materials characterization and environmental technology).
3. Assisted 3 PhD and 10 Master students during my PhD period (India).

4. I have been proven to be working as a team leader and establishing various research collaborations with various research institutions during my period of stay in China and India.
5. I would be in cloud nine to work, teach and guide young researchers with extra-ordinary outcomes of high-quality and quantity of international SCI papers.

#### Other Activities

- ❖ Academic Syllabus preparations and study plans for B.E/ M.E/ B.S / M.S in Nano science and Technology and Allied subjects for various courses.
- ❖ Involving Department and University curriculum developments in various organizations and colleges
- ❖ Materials synthesis and characterizations Laboratory developments
- ❖ Developing collaborations with various research groups
- ❖ Preparing many good quality research project proposals and producing funds from government organizations, research institutions and industries.
- ❖ Research and Developments (R&D)
- ❖ Organizing Workshop, National/International conferences

#### List of Selected Publications

- ✚ **Alagarasan Jagadeesh Kumar**, Rajendra Prasad Singh, Dafang Fu\* and Chinnaiya Namasivayam: Comparison of physical and chemical activated Jatropha Curcas husk carbon as an adsorbent for the adsorption of Reactive Red 2 from aqueous solution. *Desalination and Water Treatment*. 95 (2017) 308–318.
- ✚ **Alagarasan Jagadeesh Kumar**, Rajendra Prasad Singh, and Dafang Fu\* and Chinnaiya Namasivayam: Low Cost Meso-porous Carbon developed from Jatropha husk, an Bio-diesel by product Waste for adsorption of MB. *Fresenius Environmental Bulletin*. 26 (10), (2017), 5723-5731.
- ✚ **Alagarasan Jagadeesh Kumar** and Chinnaiya Namasivayam\*: Uptake of endocrine disruptor bisphenol-A onto Sulphuric acid activated carbon developed from biomass: Equilibrium and kinetic studies. *Sustainable Environment Research*. 24(1), (2014) 73-80.
- ✚ G. Bharath, **A. Jagadeesh Kumar**, K. Karthick, D. Mangalaraj, C. Viswanathan and N. Ponpandian\*: Shape evolution and size controlled synthesis of mesoporous hydroxyapatite nanostructures and their morphology dependent Pb(II) removal from waste water. *RSC Advances*. 2014 (4), 37446-37457.
- ✚ Dafang Fu, Rajendra Prasad Singh\*, Xinde Yang, C.S.P. Ojha, Rao Y. Surampalli, **Alagarasan Jagadeesh Kumar**: Sediment in-situ bioremediation by immobilized microbial activated beads:Pilot-scale study. *Journal of Environmental Management* 226 (2018) 62-69.
- ✚ Kaliannan Durairaj, Palaninaicker Senthilkumar\*, Velayutham Priya, Palanivel Velmurugan, **Alagarasan Jagadeesh Kumar**: Novel synthesis of Chrysanthemum Indicum flower as an adsorbent for the removal of direct Congo red from aqueous solution. *Desalination and Water Treatment*. 2018 (113), 270–280.
- ✚ Rajendra Prasad Singh\*, Jiaguo Wu, **Alagarasan Jagadeesh Kumar** and Dafang Fu. Study on Mercury Distribution and Speciation in Urban Road Run-off in Nanjing City, China. *Water* 2017, 9, 779.

- ✦ Zhengzhao Li , Mingjing Dong , Tony Wong , Jianbin Wang, **Alagarasan Jagadeesh Kumar**, Rajendra Prasad Singh\*. Objectives and an Index System for the Implementation of Sponge Cities-A Case Study of Changzhou City, China. [Water 2018, 10, 623.](#)
- ✦ Rajendra Prasad Singh\*, Dafang Fu\*, Jiaguo Wu and **Alagarasan Jagadeesh Kumar**. Evaluation of various mercury forms in the urban road runoff sediments" [Desalination and Water Treatment 2018, 135, 210-220.](#)

### Specific Conference Proceedings

- ❖ Presented a Paper in International Conference "10<sup>th</sup> International Conference Challenges in Environmental Science & Engineering, CESE - 2017, was held from [November 11 to 15, 2017 in Kunming, China.](#) **Alagarasan Jagadeesh Kumar\***, RP SinghI, Dafang Fu\* and Chinnaiya Namasivayam. "Advanced Carbon-based Nanomaterials for Wastewater Treatment Applications: Adsorption Dynamics and Kinetics Studies".
- ❖ Presented a Poster in "1st International conference on Eco technologies for Controlling Non-Point Source Pollution and Protecting Aquatic Ecosystem (ENPE)", Van Tai Tang, Rajendra Prasad Singh, **Alagarasan Jagadeesh Kumar** and Dafang Fu. "Performance and structure of ecological revetment in subtropical-high rain fall area, [26-28 March 2017, Nanjing, China.](#)
- ❖ Presented a paper in National Seminar on "Green chemistry – its impact on environmental production" Conducted by Dept. of chemistry, Sir C.R Reddy Autonomous College, Eluru, West Godavari, Andra Pradesh on 6th February, 2014. **Alagarasan Jagadeesh Kumar\*** & Chinnaiya Namasivayam: Adsorption of Methylene Blue onto ZnCl<sub>2</sub> Activated Carbon developed from Jatropa Husk, an agriculture solid waste: Equilibrium and kinetics studies on [6th February, 2014, Andra Pradesh, India.](#)
- ❖ Presented a paper in National Seminar on "Biodiversity – Sustainable Management and Development" Organized by Dept. of Zoology, Sadakathullah Appa College, Tirunelveli on 3rd February, 2015. **Alagarasan Jagadeesh Kumar\***, and C. Namasivayam: Adsorption of Direct Yellow 12 onto ZnCl<sub>2</sub> Activated Carbon developed from Jatropa Husk, an agriculture solid waste: Equilibrium and kinetics studies on [3rd February, 2015 Tirunelveli, India.](#)
- ❖ Participated in "Chemical Weapons Convention (CWC) Awareness Programme" Jointly organized by the Dept. of Chemical and Petrochemicals, Ministry of Chemical & Fertilizers, Govt. of India and Indian Chemical Council, Southern Region, on 4th December, 2014 at Coimbatore.

### Personal Details:

Name : A. Jagadeesh Kumar  
 DOB : 07-05-1986  
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### References

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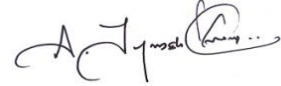
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### Declaration

I do hereby confirm that the information furnished above is true to the best of my knowledge and belief.



[A. JAGADEESH KUMAR]

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