**Dr. RAHUL SASIDHARAN PILLAI**

Assistant Professor

Research and Post Graduate Department of Chemistry,

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**Curriculum Vitae**

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| PERSONAL INFORMATION | Rahul Sasidharan Pillai |
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|  | Kusasthaly, Kattanam  Pallickal (PO), Alappuzha.  Kerala, 690503 |
| +91 9496330686, 0479-2332644 |
| [kattanamrahul@gmail.com](mailto:kattanamrahul@gmail.com)  Skype: [kattanamrahul](mailto:kattanamrahul@gmail.com) |
| Sex Male |Date of birth 31-05-1987 | Nationality: Indian |

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| Areas of Interest | * Biomaterial chemistry * High temperature ceramics coatings * Ceramic Biomaterials and Tissue Engineering * Functional coatings and composites * Process Engineering. |
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| WORK EXPERIENCE |  |

June 2015 – Present : Assistant Professor, Mahatma Gandhi College, University of Kerala, Thiruvananthapuram, Kerala, India.

(<http://mgcollegetvm.ac.in/departments/chemistry/department-of-chemistry/>)

(Area of Research: Inorganic hybrid materials for biomedical applications)

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| January 2012 - April 2015 : | PhD Graduated on April 16, 2015. |
| 27th cycle ( 2012 January to 2014 December)  Department of Industrial Engineering, UNITN, Trento, Italy  Topics: “*Synthesis and Characterization of calcium phosphate powders for biomedical applications by plasma spray coatings”.*  *(****Collaborated with Eurocoating S.P.A, Italy)*** |
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| March 2010 – December 2012 : | Junior Project fellow |
| National Institute for Inter disciplinary Science and Technology- CSIR, India ([www.niist.res.in](http://www.niist.res.in) ) |
| Topic*: “Synthesis and Characterization of ZnO nano- micro powders for energy and environment.”* |
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| |  |  | | --- | --- | | EDUCATIONAL QUALIFICATIONS  2007 – 2009  2004 - 2007 |  | | Master of Science in Chemistry (2009 June)  NSS college, Pandalam, (University of Kerala) India  Bachelor of Science in Chemistry (2007 March)  NSS college, Pandalam, (University of Kerala), India |

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| PERSONAL SKILLS |  |

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| Mother tongue(s) | Malayalam | | | | |
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| Other language(s) | UNDERSTANDING | | SPEAKING | | WRITING |
| Listening | Reading | Spoken interaction | Spoken production |  |
| English | C2 | C2 | C2 | C2 | C2 |
|  | Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user  Common European Framework of Reference for Languages | | | | |

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| Analytical Instrumentation skills | Operating Instruments and characterisation known :   * X- Ray diffractometer (XRD) (Rigaku D- max) * Scanning Electron Microscope (SEM) ( Jeol, JSM 5500) * ICP * FT-IR spectroscopy (Perkin-Elmer, Spectrum 2) * TG/DTA, DSC thermal analysis (Netzsch, STA409) * UV-Visible spectro - photometer. (Perkin Elmer) * Raman spectroscopy * BET surface area measurements * Transmission electron microscopy (TEM) | |

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| Awards and Honours | UNITN - ITALY Research scholarship 2011 November.  IASc-INSA-NASI, Govt of India - Summer Research Fellowship 2016.  FLAIR - Govt. of Kerala Internship for Nano Fabrication at IISc, Bangalore, India, January 2017. |
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| Publications  Journal Articles  Conference Papers | 1. **Rahul Sasidharan Pillai,** Vincenzo M. Sglavo, “Plasma sprayed HA-βTCP coatings for biomedical applications”. *(* Accepted manuscript on  *Ceramic international*- 2017 ) 2. **Rahul Sasidharan Pillai,** Vincenzo M. Sglavo.”Effect of MgO doping on the lattice of beta tricalciumphosphate (*beta-*TCP)”.*Journal of the academy of Chemistry Teachers*. 2, 12 (2016) 3. **Rahul Sasidharan Pillai,** Vincenzo M. Sglavo, “Effect of MgO incorporation and synthesis temperature on phase stability of beta tricalciumphosphate”. *Ceramic international*, 41, (2015), 2512-2518. 4. Anas S, **Rahul Sasidharan**, Babitha K B, Mangalraja R Viswanathan and S. Ananthakumar, “Microwave Accelerated Synthesis of UV and Visible Light Active ZnO Nanoplates”, *Appl. Surf. Sci*., 355 (2015) 98-103. 5. **Sasidharan Pillai Rahul,** K.V. Mahesh, S. Sujith, Jeen M and S. Ananthakumar, “Processing of La2O3 based Rare Earth Non-Linear Resistors via Combustion Synthesis”. *J. Electroceramics*, 32, (2014), 292-300. 6. F. Munarin, P. Petrini, P.F. Robotti, **R.S. Pillai,** S. Dirè, M.C. Tanzi, V.M. Sglavo, “Micro- and Nano- Hydroxyapatite as Active Reinforcement for Soft Biocomposites”. *Int. J. Biol. Macromol*. 72 (2014) 199-209. 7. K.V. Mahesh, S. Anas, **S. Rahul**, and S. Ananthakumar, “Effect of two-step sintering on rare earth (RE- Y2O3, Pr6O11) doped ZnO-Bi2O3 varistors processed from, ‘nano- precursor’ powders”. *J. mater. Sci: Mater.Electron*, 24 (2013) 1495-1504. 8. **R. Sasidharan Pillai** and V.M. Sglavo, “Effect of MgO Incorporation and Synthesis Temperature on Phase Stability of Beta Tricalciumphosphate”, **Oral poster presentation**, Euromate-2014, Lausanne, Switzerland, July 21- 25, 2014. 9. **Sasidharan Pillai Rahul**, John down, S. Dirè, V.M. Sglavo. “Mg incorporation into beta tricalciumphosphate (*β*TCP) powder for high temperature phase stability”, **Oral communication**, ICACC-2014, Dyatona beach, Florida, USA. January 24 -29, 2014. 10. **Sasidharan Pillai Rahul**, S. Dirè, V.M. Sglavo, “Synthesis and Characterization of Phase Stabilized HA/*β*TCP Composite Powder”, **Oral communication**, Summer school on Biomaterials and Regenerative Medicine, Riva Del Garda, Italy, July 08th – 12th , 2013 11. F. Munarin, P. Petrini, S. Dirè, M.C. Tanzi, P.F. Robotti, **R S. Pillai**, V.M. Sglavo. "Injectable nano HA particles-containing pectin composite gels", **Oral communication**, Nanotechnologies for Health Care, Trento, May 25th -26th, 2012. 12. **Rahul S**, Mahesh K.V, Ananthakumar S. “Solar thermal control ZnO/SiO2 ceramic- polymer hybrid coatings for energy efficient buildings”, **Oral communication**, 73rd Indian Ceramic Society Conference, December 19th -22nd , 2011 13. **Rahul S**, Mahesh K.V, Ananthakumar S. “ Rare-earth oxide varistors for surge- protection application”, **Poster communication**, Rare Earth International Conference (STAR -2011), August-2011. 14. Suchithra, P. S., **Rahul S,** Sankar, S., Sreeremya, T. S., Peer Mohamed, Ananthakumar, S. Sol gel synthesis of mesoporous SiO2-PEG intercalated clay hybrid frame works as an energy storage material, International Conference on Energy Efficient Materials, 73rd Indian Ceramic Society Conference, December 19th -22nd , 2011. |

References

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| 1. **Prof. Vincenzo Maria Sglavo** Department of Industrial Engineering, University of Trento, Italy. Email: [vincenzo.sglavo@unitn.it](mailto:vincenzo.sglavo@unitn.it) Phone: +38 0461 282468 2. **Dr. K G K Warrier** Emeritus Scientist (Rtd), Material science and Technology division, National Institute for Interdisciplinary Science and Technology- CSIR (NIIST-CSIR), Thiruvananthapuram, Kerala, India Email: [kgkwarrier@gmail.com](mailto:kgkwarrier@gmail.com) Phone: +91 9447115280. 3. **Dr. U S Hareesh**   Scientist E II Material science and Technology division, National Institute for Interdisciplinary Science and Technology- CSIR (NIIST-CSIR), Thiruvananthapuram, Kerala, India Email: [hareesh@niist.res.in](mailto:hareesh@niist.res.in)  Phone: +91 9446337222. |
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